CGI

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May 14, 2013

Mr. Vicente Azarcon,
Procurement Specialist,
State of New Jersey

Subject: Proposal for Sandy Integrated Recovery Operations and Management System
(SIROMS)

Dear Mr. Azarcon:

CGI Technologies and Solutions Inc., through its wholly owned subsidiary CGI Federal Inc.
(CGI) is pleased to submit our quote for services to support the New Jersey Department of
Community Affairs (NJDCA) in its Request for Quote Number RFQ776799S for Sandy
Integrated Recovery Operations and Management System (SIROMS) issued on April 25, 2013.
Our proposal is in accordance with CGI's General Services Administration (GSA) Information
Technology (IT) Schedule, Contract Number GS-35F-4797H, Special Item Number: 132-51,
132-52.

We look forward to working with you and supporting the SIROMS initiative. If you have any
questions, please contact Nawfel Elalami, Director Consulting at Nawfel.Elalami@cgi.com or
703-267-8230.

Thank you for your consideration.

Sincerely,

Mary Crigler
Director, Contracts
CGI Federal Inc

Tax Identification #

New Jersey Department of Community Affairs

Sandy Integrated Recovery Operations and Management System ("SIROMS")

Volume I – Technical Proposal

May 14, 2013

RFQ No: RFQ776799S

Submitted To:

State of New Jersey

Department of the Treasury

Division of Purchase and Property

Trenton, New Jersey 08625-0230

Submitted By:

CGI Federal Inc.

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CGI

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1. Executive Summary

The State of New Jersey (State) has faced massive property damage and loss of life due to the impact of Superstorm Sandy. The Department of Community Affairs (DCA) has been designated the lead agency for implementing an Action Plan to assist State residents and businesses in their recovery efforts in the aftermath of the storm. The State's action plan will be funded through Community Development Block Grants (CDBG) funding from the US Housing and Urban Development Agency (HUD).

The CGI Team (Team CGI) is privileged to be invited to provide this proposal to the State for the Sandy Integrated Recovery Operations and Management System (SIROMS) initiative. SIROMS will provide a comprehensive back-office technology platform that will help enable the State to effectively and efficiently implement the Action Plan, manage the flow of CDBG-DR funds and provide the tracking and oversight necessary as per CDBG-DR requirements.

> **NJDCA Satisfaction with CGI**
> NJDCA quote from CGI's February 2013 CSAP survey regarding CGI's commitment to NJDCA: "CGI's dedication to ensuring the final product meets DCA specifications is commendable."

CGI is distinctly qualified to support DCA on this important initiative for the following reasons:

Figure 1-1. Team CGI offers the right solution to the state for meeting SIROMS objectives.

Experience
Supporting Disaster Relief (DR) operations requires a unique combination of experience and skills. Team CGI brings in-depth experience providing DR support using CDBG-DR funds in the following States:

State	Team CGI Experience	Contract Value
Louisiana	5 years of DR operations support in the aftermath of Hurricanes Katrina, Gustav and Ike	$86M
Mississippi	5 years of CDBG-DR program support in the aftermath of Hurricane Katrina	$155M
Texas	1 year of CDBG-DR program support	$34.5M

In addition, Team CGI has many years of experience supporting large government programs like HUD Section 8, Troubled Asset Relief Program (TARP), Medicare and Medicaid and Workforce Investment Act (WIA). Our experience sets us apart from our competition. It enables us to bring highly qualified staff and targeted software solutions that can be deployed in a timely manner to enable DCA to provide assistance to the residents and businesses of New Jersey.

Solution

Our proposed SIROMS solution is comprised of the following key components:

- The industry leading Metastorm Business Process Management (BPM) solution,
- A Data warehouse and Reporting platform using SAP Business Objects, which is the standard platform in the State,
- CGI's cloud based integration engine that enables the state to achieve seamless integration across multiple systems
- A fully managed and secure government cloud based infrastructure in which the above solution will be hosted for the State
- A help desk for State users to receive infrastructure and application support

Our solution set has been architected to allow us to reuse software components from the Louisiana Road Home initiative. CGI's technical expertise is complemented by strong business domain expertise in the areas of DR and CDBG-DR processes. Our business experts will work closely with the State to validate that the technical solution is designed to help the State achieve the desired outcomes for the recovery effort. SIROMS is a large and complex project that requires rigorous management discipline and governance to make sure that project objectives are met. Team CGI led by Mr. Nawfel Elalami will deploy its proven Client Partnership Management Framework (CPMF) to provide the right level of oversight and client collaboration necessary to achieve success.

Team

Considering the complex nature of the SIROMS initiative, CGI has teamed with a group of highly successful organizations that have the right skills and experience to support the State on the SIROMS initiative. Our team is made up of the following organizations:

CGI: Prime Contractor

As prime contractor, CGI will provide and be responsible for overall project execution, management oversight and technical solution components. All the technical solution components will be hosted in CGI's secure cloud computing environment. CGI has been working with the State of Louisiana on the Road Home project, an initiative similar to the SIROMS initiative.

Horne, LLP: Subcontractor

Horne, LLP is a financial services firm specializing in CDBG-DR related business services. Horne will be providing subject matter expertise and financial services necessary as part of the SIROMS program. Horne has been supporting the States of Texas and Mississippi with CDBG-DR services and has extensive experience in CDBG-DR regulations and business processes. Horne will work with CGI to confirm that the SIROMS program is designed to achieve program integrity, transparency and audit compliance.

Blue Streak Technologies: Subcontractor

Blue Streak Technologies (Blue Streak) is a small business concern that specializes in the Metastorm BPM technology suite. Blue Streak is currently a CGI subcontractor on the LA Road Home project and will support CGI with Metastorm expertise on the SIROMS project.

GCR Inc.: Subcontractor

GCR is a IT consulting firm that specializes in Geospatial systems and data analytics. GCR is a subcontractor to CGI on the LA Road Home project. GCR has been working with the State of New Jersey on the recovery initiatives associated with Superstorm Sandy. GCR has also built the RebuildLA.gov website in partnership with CGI. GCR will provide GIS and data.

Organizational Strength

CGI, with its parent organization, is one of the largest IT and business consulting companies in the world with over 72,000 employees and $10B in annual revenues. We offer the full spectrum of services that are required for the SIROMS initiative and have the size, scale and depth necessary to undertake, manage and deliver large and complex engagements. Along with our team members, we are confident that Team CGI offers the highest quality, lowest risk, and best value to NJDCA for the SIROMS initiative.

Track Record with the State

CGI has been a partner to the State of New Jersey for over 15 years. Over these 15 years, we have been very successful in undertaking and delivering large initiatives to New Jersey Department of Community Affairs (DCA), New Jersey Department of Environmental Protection (NJDEP), New Jersey Department of Transportation (DOT), New Jersey Office of IT (OIT), and other state agencies. The State has been a highly satisfied client and our high Customer Satisfaction Scores (CSAP) have consistently reflected the value we have been delivering to the State.

Approach to Delivery

We will deliver the SIROMS solution to the State using our methodology described in the subsequent sections of this proposal. A high-level summary of the initial set of project tasks is summarized below:

- One week after contract signature, we will present a Gap Solution for the State to enable recovery operations to commence without having to wait for the full infrastructure to be built
- 15 days after contract signature, we will present a project plan to the State that details the overall project schedule for SIROMS with a specific focus on the tasks to be completed in the next 90 days.

- 45 days after contract signature, we will have the secure cloud infrastructure provisioned, the BPM solution installed, a Data warehouse solution installed and the integration engine installed.
- 45 days after contract signature, we will have "out-of-the-box" reusable components from the LA Road Home project installed in the secure cloud environment.

Management Approach

Team CGI will work closely with the State to manage the SIROMS engagement such that project objectives are achieved through effective and efficient use of project resources. In the first year after contract signature, we anticipate working with the State in a highly dynamic environment that requires a high-volume of work to be delivered to meet the needs of citizens and businesses. CGI will work closely with the State to determine Level of Effort (LoE) for each project need, prioritize each need and assign staff to complete the high priority needs first followed by lower priority needs.

Our project team will be led by Nawfel Elalami, who has managed CGI's portfolio of services in the State of New Jersey for the past 5 years. Nawfel will be supported by an experienced and qualified team of managers, subject matter experts and technologists who will work under Nawfel's overall direction to deliver SIROMS to the State.

Throughout the process, we will work in tandem with the State project manager and the State contract manager to meet the contractual obligations for the SIROMS project. We will present weekly status reports that provide detailed project information to the State. We will conduct weekly calls with the State team to keep them apprised of project issues and upcoming milestones. We will manage our services in accordance with the service level agreement (SLA) specified in the RFQ and final contract.

In summary, Team CGI provides the best combination of qualifications, experience and track record that together offer the lowest risk, highest quality and best value to the State.

2. Forms, Registrations and Certifications (Section 4.2.1)

2.1 MacBride Principles Certification

CGI has provided the MacBride Principles Certification form in **Appendix A.**

2.2 Non-Collusion

CGI certifies the following:

a. The price(s) and amount of its Quotation have been arrived at independently and without consultation, communication or agreement with any other Contractor, Bidder, or potential Bidder.

b. Neither the price(s) nor the amount of its Quotation, and neither the approximate price(s) nor approximate amount of this Quotation, have been disclosed to any other firm or person who is a Bidder or potential Bidder, and they shall not be disclosed before the Quotation submission.

c. No attempt has been made or shall be made to induce any firm or person to refrain from bidding on this contract, or to submit a Quotation higher than this Quotation, or to submit any intentionally high or noncompetitive Quotation or other form of complementary Quotation.

d. The Quotation of the firm is made in good faith and not pursuant to any agreement or discussion with, or inducement from to submit a complementary or other noncompetitive Quotation.

e. The Bidder, its affiliates, subsidiaries, officers, directors, and employees are not currently under investigation by any governmental agency and have not in the last four (4) years been convicted or found liable for any act prohibited by State or federal law in any jurisdiction, involving conspiracy or collusion with respect to bidding on any public contract.

2.3 New Jersey Business Ethics Guide Certification

CGI certifies that we have read the New Jersey Business Ethics Guide, understand its provisions and are in compliance with its provisions.

2.4 Ownership Disclosure Form

CGI has provided the Ownership Disclosure Form in **Appendix A.**

2.5 Certification of Non-Involvement in Prohibited Activities in Iran

Pursuant to N.J.S.A. 52:32-58, CGI certifies that neither CGI, nor one of its parents, subsidiaries, and/or affiliates (as defined in N.J.S.A. 52:32-56(e)(3)), is listed on the Department of the Treasury's List of Persons or Entities Engaging in Prohibited Investment Activities in Iran and that neither is involved in any of the investment activities set forth in N.J.S.A. 52:32-56(f).

2.6 Disclosure of Investigations and Actions Involving Bidder

CGI has provided the Disclosure of Investigations and Actions Involving Bidder form in **Appendix A**.

2.7 Subcontractor Utilization Plan

CGI has provided the Subcontractor Utilization Plan form in **Appendix A**.

2.8 Small Business Subcontracting Set-Aside Contracts

CGI will make good faith efforts to provide subcontracting opportunities to the following preferential subcontractor types: Small Businesses meeting the following definition specified in the RFQ

Definitions:

Small business means a business that:

- is independently owned and operated
- is incorporated or registered in and has its principal place of business located in the State of New Jersey.
- has 100 or fewer full-time employees
- has gross revenues falling in one of the following three categories:
    - 0 to $500,000 (Category I);
    - $500,001 to $5,000,000 (Category II);
    - $5,000,001 to $12,000,000, or the applicable federal revenue standards established at 13 CFR 121.201, whichever is higher (Category III);

It is important to emphasize that due to the level of expertise and experience necessary to perform the tasks outlined in the Scope of Work, subcontracting is not always possible. A large portion of the scope of work identified in this contract is specialized in nature which CGI is proposing to deliver using its existing workforce and infrastructure supplemented by 2 subcontractors that have significant experience in delivering such services. Our subcontractors are

- Blue Streak Technologies, a small business, and,
- Horne, LLP, a large business
- GCR, Inc., a large business

CGI has obtained consent from Blue Streak Technologies to use their name in its response to the SIROMS RFQ.

If the State of New Jersey (State) awards CGI the SIROMS contract, CGI makes the following commitments:

- Request list of eligible small businesses from the New Jersey Department of Revenue, Small Business Enterprise Unit and work with the State to identify small businesses that have the ability to offer services and solutions required as part of the SIROMS contract
- Meet with the representatives of the identified small businesses to make them aware of potential subcontract opportunities
- Provide the small businesses with information about the types of services and solutions required for the SIROMS project
- Invite small businesses to submit prices and information pertaining to the required services

- Engage with small business on subcontracts as opportunities emerge
- Maintain a small business register that keeps track of CGI's efforts to achieve set-aside subcontracting goals

If, during the period of contract performance, additional work is added to this project, CGI will make reasonable efforts to utilize its small business partners in performing this additional work.

The RFQ asks vendors to provide hourly rates for labor categories and pricing for software components. The estimate of hours provided in the RFQ is a ceiling. Based on the information available in the RFQ, CGI anticipates that, as of this date, we will be able to provide subcontract opportunities worth USD $800,000 to Blue Streak and $2,000,000 to Horne, LLP over the 2 year contract term. These subcontract amounts are dependent on the nature of tasks awarded to CGI by the State as part of the SIROMS contract. If the scope of work under this contract changes, it is possible that CGI's subcontracting plan will undergo a corresponding change. If, during the period of contract performance, additional work is added to this project, CGI will make reasonable efforts to utilize its small business partners in performing this additional work.

Description of the efforts CGI will make to offer small business concerns an equitable opportunity to compete for subcontracts:

It is CGI's policy that small business concerns will have an equitable opportunity to compete for, and perform efforts under, this contract. The CGI SIROMS Program Manager will implement management procedures to systematically consider qualified small business partners during any staffing considerations as this effort progresses. If any additional work is added to this contract during the period of performance, a good faith effort will be made to identify opportunities for the inclusion of preferential small businesses while executing this additional work.

The CGI Program Manager's responsibilities include (1) maintaining contact with small businesses and trade associations, (2) making good faith efforts to attend preferential procurement conferences and trade fairs including those sponsored by federal, state and local governments, (3) distribution to small businesses of opportunities under consideration by CGI; (4) sponsorship of Small Business Breakfasts where CGI learns about the small businesses and opportunities are shared.

2.9 HUD Section 3 Program Compliance

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CGI Federal

HUD Section 3 PLAN

DATED: May 14, 2013

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Agency: New Jersey Department of Treasury, New Jersey Department of Community Affairs

Solicitation Number: RFQ776799S for Sandy Integrated Recovery Operations and Management System (SIROMS)

Contract Number: TBD

While not a Section 3 Business Concern, CGI recognizes the value of Section 3 HUD requirements and is committed to creating sustainable employment and economic opportunities for New Jersey's residents. It is important to emphasize that due to the level of expertise and

experience necessary to perform the tasks outlined in the RFQ, Section 3 involvement is not always possible. CGI is open to examining the qualifications of Section 3 residents appearing on lists maintained by the State and reserves the right to determine whether a Section 3 resident would be an appropriate addition to the team based on the scope outlined in each task order, cost effectiveness, and level of experience necessary to complete the work.

If the opportunity presents itself during the course of this contract, CGI will contact a State representative directly to discuss anticipated employment needs and ask that the representative evaluate if CGI's needs could be met based on the current Section 3 database.

We would like to stress that CGI's consulting staff are employees of CGI. This sets us apart from the competition as we provide permanent full-time employment, paying a living wage with benefits including health insurance, retirement programs, holiday pay, vacations, and tuition reimbursement.

CGI is familiar with HUD Section 3 hiring, compliance and reporting requirements. CGI employs an in-house Section 3 Manager whose primary responsibility is to collaborate with Housing Authority Section 3 Coordinators to facilitate the identification of potential Section 3 candidates for employment and training opportunities. An additional responsibility includes Section 3 reporting to the PHA to document best efforts in meeting Section 3 goals.

Our commitment to hiring Section 3 candidates is evidenced by our hiring efforts with our current Oakland Housing Authority Back-Office contract: we interviewed 6 candidates, and were successful in hiring 1 candidate of the 2 that were offered positions. As a result of this individual securing employment with CGI and subsequent and economic independence, she has since voluntarily terminated her HCVP voucher so that another family could be admitted to the program.

Upon execution of the contract, our Human Resources staff will work with the State to identify any resident-owned businesses with applicable services that can be considered as members of the CGI team. If such businesses have appropriately qualified resources, CGI will work in good faith to enter into an appropriate subcontract agreement and subcontract out applicable services. CGI is committed to hiring Section 3 candidates and will interview those that meet our qualifications for open positions.

In the event that CGI cannot subcontract to resident-owned businesses, our Human Resources staff will begin an employment search to find residents who will join the CGI team. CGI will publicize the availability of positions and conduct outreach to Section 3 residents through various means including:

- Publicizing the availability of positions identifying the types of positions available, the commensurate CGI wages and benefits, and where to obtain additional information by
  - posting notices in common areas or other prominent areas
  - Contacting resident councils or other resident organizations, where they exist, requesting assistance identifying candidates and Section 3 business concerns
  - Contacting agencies administering HUD Youthbuild programs, and requesting their assistance in recruiting participants

- Arranging for a location in the housing development or developments where job applications may be delivered to and collected by a recipient or contractor representative
- Sponsor and conduct a job fair for Section 3 residents which will encompass an overview of CGI and our benefits package; an overview of the organizational structure for (proposed services); and an overview of job descriptions, responsibilities and qualifications.
    - We will also explain our application process and provide any assistance needed.
    - Following the staff job fair, we will conduct interviews.

CGI been recognized by many industry groups as an excellent employer paying living wages and it is our hope that New Jersey's residents will find employment with CGI to be rewarding and skill-enhancing. However CGI meets the requirements of Section 3, our team is committed to expanding the opportunities available to New Jersey residents and other low-and very-low income persons who are Section 3 eligible. We look forward to collaborating with the State using your knowledge and experience to assist us in making this a key component of our project plan.

2.10 Services Source Disclosure Certification Form

CGI has included the Services Disclosure Form in **Appendix A**.

Team CGI will perform the work associated with the SIROMS contract in one or more the following locations

- CGI Offices at 11325 Random Hills Road, Fairfax, VA 22030
- New Jersey Department of Community Affairs Offices at 101 South Broad Street, Trenton, NJ 08625
- Horne, LLP offices at 125 First Street, Grenada, MS 38901
- Blue Streak offices at 412 N. 4th Street, Suite 105, Baton Rouge, LA 70802
- GCR Offices at 2021 Lakeshore Drive, Suite 500, New Orleans, LA 70122

3. Technical Quotation (Section 4.2.3)

3.1 Management Overview

3.1.1 Solution Overview

Based on our understanding of the State's requirements for the SIROMS system, Team CGI has proposed a solution that will support the State and assist with the implementation of the Action Plan to deliver disaster recovery services in a flexible, scalable and efficient manner. Our solution, shown in **Figure 3.1.1-1** is based on our experience delivering disaster recovery services to other states, leveraging re-usable components from our prior implementations, as well as software components specific to the State's needs.
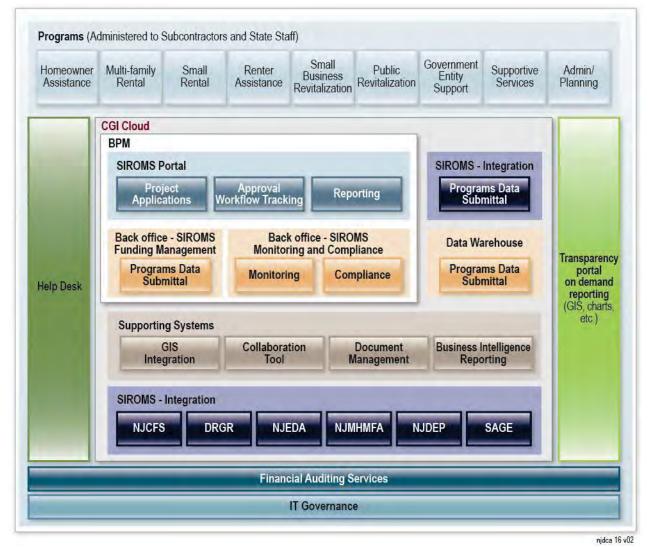
Figure 3.1.1-1. Solution Overview. *Our solution for SIROMS builds on our experience with other disaster recovery programs to help the State implement the Action Plan in a flexible, scalable and efficient manner.*

Our solution comprises the following functional and technical components:

- **CGI Cloud**: CGI will provide a fully managed software infrastructure platform based in its public sector cloud. The public sector cloud has been granted authority to operate by the U.S. Federal Government and has the security and scalability required to accommodate the needs of the SIROMS project. Our cloud solution is described in *Section 3.1.7* of the proposal.

- **Business Process Management (BPM)**: We will use the industry leading OpenText Metastorm BPM product for the SIROMS initiative. CGI has successfully used Metastorm on the LA Road Home project to help the State of Louisiana administer disaster recovery services. Metastorm facilitates rapid system design and development and allows us to re-use specific software solutions from the LA Road Home project. Our BPM solution is described in *Section 3.1.4* of the proposal.

- **Data Warehouse**: CGI will build a comprehensive data warehouse to support the reporting, monitoring and compliance objectives for the SIROMS initiative. We will use the combination of SAP Business Objects, SQL Server 2008 and CGI's Integration Engine to build and support the data warehouse. Our Data warehouse solution is described in *Section 3.1.5* of the proposal.

- **Business Intelligence Reporting**: Our solution will use SAP Business Objects and Web Intelligence to deliver data visualization, standard and ad hoc reporting for business intelligence. Our Business Intelligence Reporting solution is described in *Section 3.1.5* of the proposal.

- **Geospatial (GIS) Integration**: We will use the industry-leading ESRI ArcGIS server for integration with GeoSpatial data and/or systems. We envision GIS integration as a need to enable us to send data to transparency websites and other websites. Our GIS Integration solution is described in *Section 3.1.5* of the proposal.

- **Collaboration**: We will use Microsoft SharePoint as the collaboration tool to support the communication needs for the project. Based on our experience with the LA Road Home project, we believe some software components from the LA Road Home project can be used for SIROMS.

- **Document Management**: We are proposing the OpenText Content Server as the document management solution for SIROMS. Our solution integrates with the Metastorm BPM solution and has a robust repository to manage image data.

- **SIROMS Integration Engine**: We propose to use the cloud based CGI Integration Engine to construct and implement interfaces and integration across disparate systems without the need for tight coupling between systems. The RFQ specifies the use of technologies like Enterprise Service Bus (ESB), XML and other modern integration techniques to achieve systems integration. The CGI Integration Engine provides the right platform to establish integration between SIROMS and external systems including State systems and third party contractor systems. The engine also enables data to be sent to transparency portals. Our integration solution is described in *Section 3.1.6* of the proposal.

- **Help Desk**: Team CGI will use the BMC Remedy system to manage the service/help desk and ticketing process for the SIROMS contract. Remedy supports our ITIL-compliant incident and problem management processes. CGI offers the Remedy help desk system as part of its cloud offering. Our service/help desk solution is defined in *Section 3.1.8.1* of the proposal.

In addition to the above described solution components, Team CGI uses the following technical components to support the project:

- **MS SQL Server 2008**: provides the Database management underlying other components such as the BPM and data warehouse.
- **Microsoft Team Foundation Server**: provides application software Version Control / Configuration Management.

Achieving the SIROMS solution presented above requires structured management practices and people with the right skills and experience, specifically:
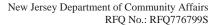
- **Contract Management**: Team CGI's services are governed through CGI's Client Partnership Management Framework (CPMF) under the guidance of our full-time program manager, Mr. Nawfel Elalami. Our contract management approach is defined in detail in *Section 3.2* of the proposal.
- **Professional Services**: Drawing from our experience delivering CDBG-DR services to governments, our expertise in IT services and our ability to mobilize the staff needed for SIROMS, Team CGI provides the professional services and expertise necessary to the State to achieve its program objectives. Our staff for SIROMS is comprised of subject matter experts, financial experts, managers, technical architects, developers, analysts, infrastructure specialists and other experts necessary to deliver the types of services necessary on the SIROMS contract. Our staffing chart and organizational structure are described in *Section 4* of the proposal.

SIROMS Task Order Delivery

Team CGI understands the urgency behind delivering much needed disaster relief to the citizens of New Jersey. To that effect, the State requires the completion of a set of initially identified SIROMS tasks that help establish the core infrastructure, processes and integration required for ongoing operations. As part of identifying tasks, the State identified specific task milestones to determine progress and capabilities toward delivering the Program.

Figure 3.1.1-2. SIROMS Task Milestone Schedule (below), presents the initial SIROMS milestone tasks, along with the State's expected completion date stated as "business days from contract signature". Team CGI based our SIROMS on delivering these tasks and milestones. While team CGI recognizes the aggressive schedules associated with the initial SIROMS tasks, it is important to note that many of the initial tasks may have predecessors and dependencies that are outside of the scope of the SIROMS contract. Additionally, new tasks may be uncovered or task priorities and schedules may change from the RFQ requirements.

Immediately after contract award, Team CGI will begin work with project stakeholders to finalize a Program Management Plan (PMP). We validate the requirements for each of the initial tasks, uncover any interdependencies and create a finalized PMP, which accurately and completely identifies our approach to meeting the deliverables and tasks, dependencies, organizational relationships, staff member responsibilities, and required tools. Our PMP also contains the Integrated Master Schedule (IMS) and Task project schedules, quality assurance, configuration management, and risk management plans. If Team CGI uncovers a risk associated with the completion of any task, it will immediately notify the State Contract manager and

present a risk mitigation plan to the State. *Section 3.2.3* of the proposal describes in detail the Task Order Management process that Team CGI will use to deliver SIROMS tasks.

In the following sections, Team CGI details our SIROMS solution that addresses the Task milestones, and describes in detail how we meet the States requirements for a solution enabling the State to track and disburse CDBG-DR funds to victims of Superstorm Sandy.

Initial Delivery Due, Business Days from Contract Signature

RFQ Section	Task	5 Days	10 Days	15 Days	30 Days	45 Days	50 Days	60 Days	75 Days	90 Days	Qtrly	Yrly
Task 1												
3.2.3.4.4	Submit weekly progress reports	↻										
3.2.3.1.1	Provide a gap solution	▲										
3.4.9	Meet with DCA and ARMS to determine requirements		▲									
3.2.3.1.2	Provide the ability to feed data to public facing websites			▲								
3.2.3.4.2	Develop and maintain a Project Plan			▲								
3.3.5	Provide design documentation			▲								
3.2.3.1.2 3.2.3.6.8	Develop, maintain and/or improve the interfaces to designated state systems				▲							
3.3.6	Develop a training plan to be approved by the SCM				▲							
3.2.3.1.2	BPM Components					▲						
3.2.3.1.1	Cloud Computing Business Process Management System					▲						
3.2.3.1.2 3.2.3.6.8	Devlop, maintain interfaces with NJHMFA; and other state contractors/ in the Action Plan as amended					▲						
3.2.3.4.5 3.2.3.4.7	Receive and store all information and data required by DRGR for all programs shown in the Action Plan					▲						
3.2.3.1.2	Develop and implement a portal					▲						
3.2.3.6.1 3.2.3.6.5	Develop the System to ensure that auditable records are created and preserved for future review					▲						
3.2.3.3.1	Create and manage a data repository (data warehouse)					▲						
Task 2												
3.4.9	Develop and administer a records retention plan				▲							
3.2.3.1.2	Investigate the feasibility of SAGE interface				▲							
3.3.4	Be responsible for maintaining quality assurance logs						▲					
3.2.3.1.2	Provide Helpdesk system for issues involving BPM system							▲				
3.2.3.1.2	Provide a system for tracking issues							▲				
3.2.3.2.4	Establish, manage and maintain the designated DB images							▲				
3.2.3.4.12	Provide standardized reports and ad hoc reporting capabilities							▲				
3.2.3.4.13	Create user documentation and provide training							▲				
3.2.3.4.14	Meet the Expected Service Levels							▲				
3.2.3.6.4	Implement resource tracking							▲				
3.4.7	Provide and implement a security plan							▲				
3.2.3.6.5	Implement tracking of designated processes							▲				
3.4.7	Submit Disaster Recovery Plan							▲				
3.2.3.4.7	Design system to comply with program requirements								▲			
Task 3												
3.2.3.1.2 3.2.3.6.8	Develop, maintain and/or improve DRGR interfaces									▲		
3.2.3.4.9	Train state staff									▲		
3.2.3.4.10	Outline a plan for ongoing system support									▲		
3.2.3.4.11	Contractor shall outline a plan for and provide software upgrades to core platform									▲		
3.2.3.4.14	Benchmark IT performance and propose a Performance Management Plan									▲		
3.2.3.6.11	Provide training and knowledge transfer services to state staff									▲		
3.4.7	Review the current Disaster Recovery Plan, update or rewrite the plan and submit									▲		
3.4.7	Conduct a quarterly media recovery test										↻	
Task 4												
3.4.7	Conduct a disaster recovery test annually											↻

njdca 15 v01

Figure 3.1.1-2. SIROMS Task Milestone Schedule

3.1.2 Functional Requirements (Section 3.2)

CGI's solution for SIROMS is a full IT shared services platform, which helps the State deliver disaster recovery services in a flexible, scalable, and efficient manner. The following sections describe the functional, technical and management components of our solution. **Figure 3.1.2-1** lists each functional requirement from Section 3.2 of the RFQ, and provides the proposal section in which we describe the solution element satisfying the requirement.

RFQ Requirement	Proposal Section
3.2.3.1. Cloud Computing Business Process Management ("BPM") System	
3.2.3.1.1. stand-up a full IT shared services platform including professional services and IT operating environment with application development, technical and business process support	
3.2.3.1.2. deliver a BPM system	
1. including all of the following components	3.1.4.1 Components in the BPM System
2. use industry standard techniques to exchange data	3.1.4.2 Industry Standard Techniques 3.1.6 System Integration / Interfaces
3. automated email notification capabilities	3.1.4.3 Automated E-mail Notification
4. capability to store the version history of documents	3.1.4.4 Version History of Documents
5. have an access control system that utilizes roles to control access to fields, pages, and documents	3.1.4.5 Access Control System that Utilizes Roles to Control Access to Fields, Pages, and Documents
6. feed data to a public facing website(s) transparency websites, internal and external dashboards	3.1.4.6 Feed Data
7. store data in a format similar to the State's existing systems	3.1.4.7 Store Data in a Format Similar to the State's Existing Systems
8. provide a pre-configured helpdesk system for tracking issues involving BPM system end-user issues to be resolved by helpdesk staff	3.1.4.8 Provide a Pre-configures Helpdesk System
9. maintain an IT service desk and incident management process, compliant with Infrastructure Technology Information Library ("ITIL")	3.1.8.1 IT Service Desk & Help Desk
10. provide a system for tracking issues identified by the State for resolution by the Contractor	3.1.4.9 System for Tracking Issues Identified by the State
3.2.3.2 IT Infrastructure	
3.2.3.2.1. Provide a cloud-based system	3.1.7 Cloud Based Infrastructure
3.2.3.2.2. Procure, build, manage and operate such hardware, software, licensing, and network(s) capacity	3.1.7 Cloud Based Infrastructure
3.2.3.2.3. Create an infrastructure for collaboration space and file manage	3.1.7 Cloud Based Infrastructure
3.2.3.2.4. Establish, manage and maintain the following images of the database	3.1.7 Cloud Based Infrastructure
3.2.3.2.5 The IT Infrastructure shall perform at service levels as set forth in the Service Metrics Table	3.1.7.1 Architecture 3.2.4 Service Level Management
3.2.3.3 Data Warehouse Environment	

RFQ Requirement	Proposal Section
3.2.3.3.1. Create and manage a data repository that is compatible with the State's enterprise data warehouse environment	3.1.5.1 Create and Manage a Data Repository
3.2.3.3.2. Provide Business Objects Cognos or the functional equivalent	3.1.5.2 Business Objects Cognos or the Functional Equivalent
3.2.3.3.3. Utilize a business intelligence tool such as SAP Business Objects, Cognos	3.1.5.3 Utilize a Business Intelligence Tool
3.2.3.3.4. The State has a formal information architecture that guides all information system initiatives that shall be followed by the Contractor as applicable and directed by the State Contract Manager	3.1.5.4 Formal Information Architecture 3.1.9 Application Management Methodology
3.2.3.4 Professional Services	
3.2.3.4.1 the capacity to provide professional services	4 Organizational Support and Experience
3.2.3.4.2 develop and maintain a Project plan	3.2.1 Project Management
3.2.3.4.3 develop procedures and systems in place to track level of effort ("LOE") and costs	3.1.9 Application Management Methodology
3.2.3.4.4 submit weekly progress reports	3.2.5 Documentation
3.2.3.4.5 provide the services of experienced Senior Business Systems Consultants	4 Organizational Support and Experience
3.2.3.4.6 utilize system designs, workflows, and technology from previous CDBG-DR programs	3.1.4 BPM System 3.2.1 Project Management
3.2.3.4.7 design the System to comply with CDBG-DR, State financial practices, government accounting standards, and program requirements	3.1.9 Application Management Methodology
3.2.3.4.8 develop a standard schema and methodology for data exchange	3.1.5.4 Formal Information Architecture 3.1.6 System Integration / Interfaces
3.2.3.4.9 perform data entry during initial roll out	3.1.3 Gap Solution
3.2.3.4.10 plan for ongoing system support	3.1.8.4 Configuration Management
3.2.3.4.11 plan for and provide software upgrades	3.1.8.4 Configuration Management
3.2.3.4.12 provide standardized reports and ad hoc reporting capabilities and data analytics	3.1.5 Data warehouse Environment
3.2.3.4.13 create user documentation and provide training	3.1.8.3 Training 3.2.5 Documentation
3.2.3.4.14 benchmark IT performance; Performance management	3.1.9 Application Management Methodology 3.2.4 Service Level Management
3.2.3.5 IT Practices, Data Security, and Integrity	
3.2.3.5.1. design the System to comply with Federal and New Jersey laws	3.1.7 Cloud Based Infrastructure 3.1.7.3 Security
3.2.3.5.2. use industry standard best practices for data integrity	3.1.7.4 Disaster Recovery 3.1.7.5 Contingency Plan

RFQ Requirement	Proposal Section
3.2.3.5.3. use industry standard best practices for encryption techniques	3.1.4.5 Access Control System that Utilizes Roles to Control Access to Fields, Pages, and Documents 3.1.7 Cloud Based Infrastructure
3.2.3.5.4. use industry standard best practices for operation of data centers	3.1.7 Cloud Based Infrastructure
3.2.3.6 Functional Requirements	
3.2.3.6.1 provide experienced business analysts skilled in the full range of facilitation techniques	4 Organizational Support and Experience
3.2.3.6.2 provide timely response to ongoing program requirements on short notice and rapid solutions development	3.1.9 Application Management Methodology 3.1.8.4 Configuration Management 3.2 Contract Management
3.2.3.6.3 implement the business and technical requirements utilizing their Business Process Management system	3.1.9 Application Management Methodology 3.1.4.1 Components in the BPM System
3.2.3.6.4 work with the State to create business and technical requirements and implement capabilities for resource tracking	3.1.4.1 Components in the BPM System 3.1.9 Application Management Methodology
3.2.3.6.5 work with the State to create business and technical requirements and implement capabilities for tracking of processes	3.1.4.1 Components in the BPM System 3.1.9 Application Management Methodology
3.2.3.6.6 work with the State to create business and technical requirements and implement capabilities that allow for the exchange of data	3.1.4.1 Components in the BPM System 3.1.9 Application Management Methodology
3.2.3.6.7 work with the State to modify business and technical requirements, implementation capabilities, and change system requirements	3.1.9 Application Management Methodology 3.1.8.4 Configuration Management
3.2.3.6.8 make minor modifications that are expected to occur based on the State's changing business needs	3.1.9 Application Management Methodology 3.1.8.4 Configuration Management
3.2.3.6.9 make minor adjustments that are expected to be made to the applications based on feedback	3.1.9 Application Management Methodology 3.1.8.4 Configuration Management
3.2.3.6.10 maintain System availability and functionality through any upgrade efforts	3.1.8.4 Configuration Management 3.1.7 Cloud Based Infrastructure
3.2.3.6.11 provide training and knowledge transfer services to State staff	3.2.1 Project Management
3.2.3.6.12 store all data within the United States and provide the State with a copy all data monthly	3.1.7 Cloud Based Infrastructure

Figure 3.1.2-1. Functional Requirements Cross-Reference

3.1.3   Gap Solution

In order to expedite the recovery efforts for the citizens of New Jersey, CGI will deliver a GAP Solution within 5 days of contract execution. The solution will allow DCA to process payments for beneficiaries, vendors, and sub recipients while complying with CDBG-DR regulations. CGI will work with DCA to identify the documentation required to make payments in accordance with the action plan, CDBG-DR regulations, and state requirements. The solution accommodates the data required to process payments and the documentation supporting pay requests. CGI's Gap Solution approach is shown in **Figure 3.1.3-1**.

Figure 3.1.3-1 Gap Solution. *Our Gap Solution enables the State to engage in recovery efforts while the permanent SIROMS system is being developed.*

The Gap Solution uses common software products to minimize the training burden and expedite deployment. The development team will provide ongoing technical assistance to DCA to confirm the tool's functionality and assist with ad hoc tool adjustments, as required. During the implementation of the GAP solution, CGI has the experienced staff needed to perform required data entry services during initial roll out phases or as required throughout the Program life.

CGI anticipates that the DCA will use the Gap Solution until the permanent SIROMS solution is developed and deployed. Once the SIROMS solution is deployed, CGI will migrate to SIROMS data collected in the Gap Solution and scan supporting documentation to the permanent document management tool.

3.1.4   BPM Solution

After the devastating impact of Hurricanes Katrina and Rita, eight years ago, the State of Louisiana needed a way to quickly deploy systems to enable business processes for the management of the recovery projects and distribution of funds. They chose to use OpenText MBPM (formerly Metastorm BPM) because of its abilities for delivering rapidly developed custom processes. OpenText MBPM continues today to be a major part of the delivery of key business process systems for the State of Louisiana for all disaster recovery related efforts.

Our BPM solution for the State of New Jersey uses the OpenText MBPM product, providing the State with a solution successfully proven for disaster recovery management. The source code from the State of Louisiana is available to speed the implementation of the solution for managing New Jersey's recovery projects. Because these applications are currently deployed and operational in a production system they are tested and ready for use - essential for mitigating risk to the State's implementation schedule. A description and list of functionality of these applications is described in *Section 3.1.4.1* of this response.

Overview of OpenText MBPM

The OpenText MBPM software suite provides a highly scalable enterprise platform on which solutions can be quickly and easily deployed and customized to meet the unique and dynamic process needs of any organization. OpenText MBPM supports both human-based and system-based processes across the full business process management life-cycle, including the design, automation, and management of multiple processes across an organization – with an emphasis on enabling real-time, round-trip process improvement through a combination of modeling, integration, execution, simulation and analytics technologies all orchestrated through a single interface.

The process suite is a leader in its class – supporting dynamic roles, advanced business rules definition, form creation and packaged high-performance integration to multiple back-end systems, regardless of platform. OpenText MBPM also provides powerful time-phased reporting, performance monitoring, and predictive analysis capabilities. OpenText's BPM software and methodologies enable quick implementation of complex processes and support rapid changes – delivering fast ROI and low total cost of ownership.

OpenText MBPM leverages an advanced, service-oriented and loosely coupled architecture to provide a highly distributed, scalable infrastructure that connects every member of the business process community. The .NET Process Engine provides a highly scalable platform for managing the authorization, roles, work assignment, and system integration for thousands of on-line users. OpenText MBPM automates and tracks the progress of all steps and activities in a process and organizes the work of process participants, both human and system. Using XML, Web Services, .NET, Java, and Messaging, OpenText MBPM enables the bi-directional exchange of business information, so people and processes can interact securely over Intranets and the Internet.

To provide user interfaces and dashboards, OpenText MBPM uses highly dynamic forms and portals. These forms and dashboards reflect a user's role in the process. The appearance and behavior of a single form or dashboard can alter based where the user is in a process, taking into account sophisticated business logic and rules without programming or scripting.

3.1.4.1 Components in the BPM System

To respond to increasing competitive pressures, regulatory changes, market conditions, and customer demands, organizations today are looking for ways to not only increase their effectiveness and efficiency but to become more capable of responding to on-going change. OpenText Metastorm Business Process Management Suite (MBPM) delivers a comprehensive solution that enables organizations to react to on-going regulatory and market changes by providing an agile, intelligent business process layer that integrates the underlying legacy systems, provides visibility across critical business processes, and gives the ability to design processes that deliver competitive differentiation, without the constraints imposed by legacy systems.

The OpenText MBPM suite consists of a graphical design studio, an application processing engine, a .Net web portal for both desktop and mobile browsers, integration tools for optional client development in .Net or Java, and components for use in SharePoint or JSR-168 portals.

a. A process management engine designed to drive the progression of work in structured or unstructured processes or cases;

The MBPM Process Engine runs as a service on a Microsoft Windows Server and is responsible for the execution of deployed processes. Processes modeled in the designer can be built to follow a structured set of business steps, or through the use of interactive and conditional actions and dynamic roles, can allow the end user to determine the path of a process. Once a process and its associated integration points have been designed and modeled in the designer, it is deployed to the repository. The process engine then automatically acts as the orchestrator of all human and system-based actions defined in the process. OpenText MBPM processes can be deployed either on their own, subject to whatever governance process is required, or can be scripted to automatically deploy in conjunction with other related system deployments. Once deployed, the process engine captures events and process-related data in the process repository, providing an essential inventory of information that serves as the foundation for compliance audits, reporting and analysis and process optimization.

OpenText MBPM is an enterprise-class, fully stateless system delivering scalability that meets the requirements of large, distributed organizations. The platform architecture scales "up" through symmetric multiprocessing (SMP) and faster CPUs, and it scales "out" linearly with the number of servers. Multiple MBPM Process Engines can run against a single database. All database accesses are performed using highly tuned .NET interfaces. Complex data processing occurs completely on the database server, minimizing database access and reducing the communication between the database and Process Engine. The database and MBPM Process Engine can reside on different servers with high performance.

OpenText MBPM load balances among multiple MBPM Process Engines by dispatching requests to each server using a dynamic, load-balancing algorithm. Additionally, the cluster configuration supports load-balancing features provided by the Microsoft Windows Server platform, as well as other hardware- and software- based load-balancing mechanisms. As the system load increases, the MBPM architecture enables the overall system to scale up optimally with the number of servers and the processing capacity of each server.

b. A graphical model-based environment for designing processes and supporting activities;

c. Capabilities to manage business rules to ensure regulatory and program compliance;

One key to the success of a BPM implementation is how quickly and easily a new process can be designed and implemented. The OpenText BPM process designer enables process owners, managers, and IT professionals to create rich, graphical models of their business processes as they are defining the process. These models provide detailed views of the process, and render insight into other relevant components accessible via one-click navigation. Within the same design environment users can rapidly create other components tied to the process, such as user interfaces, forms and business rules. Artifacts that are candidates for reuse can be easily stored in, and retrieved from, a common repository and associated process libraries, thereby supporting centers of excellence or less formal forms of enterprise collaboration.

The level of richness, unification and ease of use of OpenText MBPM's design environment enables speed and flexibility in designing, testing, and deploying business improvements and is one of the reasons why so many clients are self-sufficient, having improved hundreds of mission-critical business processes.

Tight integration with external applications and data sources is critical to achieving the high levels of business process improvement. Historically such integration has been complex, costly and largely the domain of the technician. OpenText MBPM takes integration to a new level. It allows users to "drag and auto bind" business friendly integration objects and visual integration models directly to a process model and its relevant components, such as user forms. These capabilities allow nontechnical business users to create external integrations in seconds rather than necessitating handoffs to IT staff to complete integrations in days, weeks or months. OpenText MBPM also supports the technical user where desired or appropriate, especially where highly complex or multi-platform application and data integration is required.

d. Content management capabilities to store files such as PDF documents and images in compliance with the record retention requirements established in 3.4.9 of this RFQ;

f. Ability to link processes to the resources they control such as proposals, grant activities, grantees and fund disbursements;

Data captured though form interaction is stored in the repository along with the relevant system generated information about the process such as status, current assignment, and event history. External files such as Microsoft Word and Adobe PDF documents can be uploaded and associated with the electronic folder of information that represents the work item. The uploaded document is stored in the repository or handed off via integration to a content management system. The link between the uploaded document and the electronic folder is maintained so that the attachments are associated for activities such as presenting them to an end user via a form.

e. Internet-based interaction portals that allow staff and grantees to interact with the processes they are involved on;

The presentation of information managed in an electronic folder can be rendered using several available clients or via a custom developed integration using Microsoft .Net or Java. Existing clients include a .Net portal and modules for exposing lists and forms in third party portals such as Microsoft SharePoint. The .Net client portal presents an interface that organizes work in ToDo and Watch lists. These lists help the end users understand what tasks are assigned and require action for continuation in a process. It also enables users to initiate processes by completing and

submitting process forms and to manage system features though administrative forms. The interface is designed in a generic way such that all processes can be interacted with from a common place.

g. Active analytics engine for monitoring performance in areas such as processes, resources, grant activities and fund balances;

h. Reporting to provide decision support for program stakeholders;

i. Exportable data in common formats for ETL processes and advanced analytics; and;

Strong process intelligence is needed in order to effectively manage processes as well as identify risks and opportunities within the program. OpenText MBPM delivers rapid time to value and flexibility with its predefined, yet highly customizable dashboards. Included in OpenText MBPM is a native, tightly integrated process intelligence capability which enables process owners, participants, executives, and managers to monitor and report on processes and act on process events. Customizable dashboards and reports can be tailored to display key performance indicators relevant to a specific person, department, or line of business. Powerful ad-hoc capabilities are also available, enabling users at any level to create dashboards and reports specific to their needs and provides the ability for time-phased trend analysis and predictive forecasting. Data can also be easily embedded with text, enabling process designers to create high quality documents for printing or delivery via e-mail for uses such as letters, invoices, contracts and more.

Advanced simulation drives process optimization and reduces risk by enabling organizations to test "what if" scenarios before making production process changes. Process owners can change the process model to reflect proposed or expected changes and then simulate how the new version of the process will perform, using historical process data from the process repository and/or business assumptions. Multiple changes can be simulated and compared, enabling process owners to identify changes that bring the most value and ease the change management burden on all parties.

All of the captured and the system generated data stored in the MBPM repository can be exposed and consumed by third party reporting, analytical, and data transfer tools. This allows for the use of industry leading Business Intelligence solutions, such as Oracle Business Intelligence and Cognos, to model and report information as an alternative or in addition to the native MBPM reporting. Data Transfer tools can be used to ETL data to external sources such as a data warehouse or external entities needing extracts of information.

j. Management and administration.

The OpenText MBPM solution includes a management portal for administering users, roles, and deployed processes. In addition to the existing management portal administrative forms can be built to enable custom management features. These administrative forms allow for the delivery of user supported business rule settings, search interfaces, management of lookup tables, etc.

OpenText MBPM feature summary

- Advanced Design Environment
  - **Collaborative integrated Design:** Use a single environment to design all aspects of your business process. Business analysts can design a process, user experiences, implement

rules, create process integration, and engage stakeholders and end users. Developers can focus and easily hand off more complex data access and integration tasks that can be leveraged by analysts.

- **Dynamically route work:** Leverage the enterprise- wide skills inventory to dynamically route work to the right employee to optimize work allocation and ensure the best business outcome.
- **Integrated Business Process Analysis:** Integrated, advanced business process analysis and simulation ensures ROI.
- **Highly extensible:** Add-in based infrastructure means that you can extend both the metamodel and corresponding design environment or use 3rd party frameworks that add additional functionality.

- Leading BPM Platform
  - **Stateless Design:** Process engine is based on proven technology and is capable of scaling up and out with the stateless design.
  - **Open Framework:** SOA-based design will allow you to utilize your existing infrastructure. Maintain users, roles, and groups natively within your existing directories or systems with our Open Authentication infrastructure, for example.
  - **Single Sign-On:** Out of the box integration with Microsoft Active Directory to support single sign-on within a Windows Domain.
  - **Open Repository:** Access to process data, runtime work items, and historical data is simple with our open and documented repository.
  - **Process intelligence:** Tightly integrated process intelligence capability provides insight into how your processes are performing.
  - **Social Capabilities:** Connect with employees across your organization with integrated chat associated to work items. Find the right employee to collaborate with leveraging enterprise-wide skill search.

- Support for Diverse Client Perspectives
  - **Mobile Device support:** Initiate or participate fully in any MBPM process with iPad®, iPhone®, Android® or Blackberry® devices.
  - **ASP.Net:** Highly customizable ASP.NET client is a fully featured, web-based interface enabling users access across all of their OpenText MBPM processes.
  - **SharePoint and JSR-168 Portals:** Quickly build robust portal pages that are specific to your process or user role with web parts for SharePoint or portlets for Java.
  - **Microsoft Office 2007 and 2010:** Unique Office client enables users to integrate process information and even initiate processes from Office applications.
  - **Any language:** Rapid deployment in any language, including those requiring right to left display.

OpenText MBPM Processes built for the State of Louisiana

Working with the state of Louisiana, CGI built numerous workflow driven applications which will form the foundation of our BPM solution. These applications can be implemented quickly and tailored to meet New Jersey's requirements. These applications align with the functional requirements described in section 3.2.3.6 of the RFQ.

- **GIOS**: This funds management and project approval application manages the application entry, review, and approval process for entities applying for funding from various recovery programs. It enables grantees or local entities to submit applications for individual projects and for overall funds management including payment draw requests. The system includes an Internet facing portal that allows entities throughout the state to manage and submit project applications, and submit draw requests for periodic project payments. It provides a rules-driven workflow from County to State officials for approval of applications and draw submittals. The user/owner is also able to perform the following functions: Manage Admin Project Types, Manage Allocations, Manage different Project Types, Assign Projects (Counties and Municipalities), Amend Original Proposals, Allows for versioning, Email Notification, Role Based security between County and State, Internal routing, Add Notes, Display Audit Trail, Tracking in stages of Workflow and Search features.

- **Recipient Auditing (A133)**: This application manages tasks for the auditing of recipients and sub-recipients at the parish level of funding over 500K based on the federal compliance requirements. The application includes audit findings and tracking of corrective actions and reporting of discrepancies to FAC.

- **Tracking & Reporting System (TRS)**: This application creates and assigns auditing tasks for monitoring each of the recovery programs. A variable sample of individual applications are selected on a recurring basis for review. These tasks prompt auditors for the proper collection of data by providing a checklist of questions and captured responses needed to meet state and federal audit guidelines. This system allows for the administration of over 100 combinations of checklists to accomplish the necessary financial, operations and program compliance requirements.

- **TRS [Streamline]**: Following an initial introduction of TRS and follow-up assessments of its operation and personnel usage, the administrative, reporting, and workflow functionality within the system is being further enhanced to better meet the overall needs of the agency organization. The enhanced system serves the need of centralizing tracking and reporting at the Office of Community Development/Disaster Recovery Unit (OCD/DRU) to help increase efficiencies and improve the effectiveness of compliance monitoring. TRS [Streamline] eliminates the one-to-one entity/program/category/type to an individual checklist, replacing it with an event based checklist. Using this new method allows for monitoring of multiple programs within a single monitoring record. This also reduced the amount of checklists created to a single checklist per event.

Grant Recovery (Recapture): This application manages recovery of funds due back to the State as a result of applicant non-compliance with defined covenants or other program requirements by distributing the proper notifications and tracking through an administrative judicial review including possible work assignment to the Attorney General or other appropriate law enforcement entity.

3.1.4.2   Industry Standard Techniques

CGI's solution supports data exchange using industry standard techniques. OpenText MBPM consumes data services using Metastorm Business Objects. Business Objects abstract access to data into a reusable object. Ways in which Metastorm Business Objects enable standardized data exchange are as follows:

- Connection to relational data sources uses industry standards such as: Open Database Connectivity (ODBC), Object Linking and Embedding Database (OLEDB) and ADO.NET.
- Directory Services can be consumed using Lightweight Directory Access Protocol (LDAP).
- Web services can be consumed using standardized messaging via Simple Object Access Protocol (SOAP) and Extensible Markup Language (XML). OpenText MBPM provides productivity tools that make the import of an external web service easy. Once a service has been imported it can easily be invoked from the process, allowing data to be consumed or exposed functions to be invoked.
- Scriptable code allows for custom developed data access leveraging the full power of the Microsoft .Net framework. A benefit of using the .NET framework is the ability for OpenText MBPM to use Windows Communication Foundation (WCF), Microsoft's unified programming model for building service-oriented applications.

Metastorm Business Objects integrate seamlessly with BPM's mechanisms for Form data binding, expressions and scripting. This allows the same data to be accessed in a variety of ways across the definition of the process, maximizing reuse.

Business objects are separated from connection definition and the same connection is shareable among multiple business objects. This allows processes with multiple business objects to be developed against test databases and then easily reconfigured to use a production database when the project is deployed.

3.1.4.3 Automated E-mail Notification

OpenText MBPM has a built-in ability to send email notifications as an activity of a business process. The function for sending an email is part of the core library of tools and is configurable to allow for email notifications to be distributed at any point in a process with customizations for the recipient list, subject line, contents of message body and included attachments.

The system is configurable to use a SMTP server installed on the same system as the application engine or a remote SMTP relay for the distribution of email messages generated in a process.

3.1.4.4 Version History of Documents

Our solution supports storing the version history of documents. Each document added with the same file name is automatically given a unique version number so that previous versions of the same document are retained. This capability can be overridden if versioning is not desired and the intent is to just retain the most current version of a document.

The default method of storage for document attachments is to retain the file in the core database along with the rest of the form data. In addition to this default method, there are components for storing documents in Microsoft SharePoint and OpenText Content Server repositories. Using the Document Management Service API a custom developed integration with other document management repositories can be scripted. All of these options allow for document versioning to be controlled by the document management system that is receiving the uploaded document.

3.1.4.5 Access Control System that Utilizes Roles to Control Access to Fields, Pages, and Documents

We recognize that security is a key concern for SIROMS. Data transmission, information storage, and transactions all need to be protected and kept confidential. The OpenText MBPM environment uses several key components to enable system protection, including role-based access control to fields, pages and documents.

Authentication: OpenText MBPM authenticates a user's identity through a private username and encrypted password. By default, users are authenticated by the engine against records in the runtime repository. Stronger forms of authentication via PKI, certificates, tokens and/or smartcards may be supported through integration with technology from other vendors. OpenText MBPM has a comprehensive Open Authentication Architecture that allows integration with a wide range of authorization systems including both server and client side security systems.

Authorization: OpenText MBPM supports strong role-based access control and session management. Access control, authentication, and authorization are closely linked on the Internet. Only when the identity of an object has been authenticated is that object granted access rights. OpenText MBPM provides a sophisticated and flexible enterprise roles-based access control model, with granular control down to the form field level.

Encryption: OpenText MBPM ensures that transmitted data is disclosed only to intended recipients through Internet encryption techniques. OpenText MBPM leverages industry-standard Secure Sockets Layer (SSL), Virtual Private Network (VPN), and X.509 on web browsers and servers.

Serving Lists: Folders, Reports, Blank Forms and Admin Forms are organized into lists on the client's main portal page and in other clients. The Engine, based on process metadata and state in the runtime repository, provides these lists.

Auditing: The Process Engine logs activity such as the transition of folders from one stage to another, with full audit information including the initiating user, timestamp information and the action taken.

3.1.4.6 Feed Data

Our solution will deploy integration technologies that enable feeding data to websites. We will work with the state to identify the websites and requirements for those websites.

3.1.4.7 Store Data in a Format Similar to the State's Existing Systems

CGI's solution for SIROMS will use Microsoft SQL Server to store data, which aligns with the State's storage technologies and formats.

3.1.4.8 Provide a Pre-configured Helpdesk System

CGI's pre-configured helpdesk system for SIROMS enables our Service Desk (helpdesk) to provide responsive service to end-user contacts (issues, requests, questions) so that end-users maintain high productivity. We employ our established production BMC Remedy application operating in the CGI data center. Setup of the helpdesk system only requires entering information about the SIROMS components, application support teams, email/SMS notifications, response time targets, and new users. Remedy provides a web-based interface that permits

authorized users to enter, track and report on issues. An email interface automatically creates Remedy tickets from emails. Remedy also is configured to provide emails to the ticket originators to keep users informed about their ticket status.

Remedy reports provide a wealth of data and metrics, giving the State Contract Manager direct line-of-sight visibility into helpdesk performance. See *Section 3.1.8.1* for details about the Service Desk (helpdesk) services we are providing to the State.

3.1.4.9   System for Tracking Issues Identified by the State

CGI's approach to tracking issues identified by the State, uses the same solution that we use for the Service Desk (see *Section 3.1.4.8*). Using a common process and tool to manage issues from all sources, drives efficient, responsive service. Isolated silos of information are eliminated, allowing easy reporting across all issues. Issue submitters benefit because regardless of their role or activity, they receive consistent service that meets or exceed service levels.

3.1.5 Data warehouse Environment

For SIROMS, Team CGI will leverage our proven Data Warehouse and Reporting architecture from the State of Louisiana Road Home Program. This enables us to accelerate implementation of the data warehouse with lower risk to the schedule. The Louisiana Data Warehouse and Reporting architecture aligns with the architecture that will be required for the SIROMS project. As we develop SIROMS, the State Architecture will inform our design decisions.

Team CGI will establish Microsoft SQL Server as the data repository. Business Objects ETL tools are used to assemble, normalize, and load the data from various program sources as well as the primary BPM system(s). Other than pre-configured, optimized queries in the BPM application itself, no direct reporting from the BPM system databases are used. By offloading the reporting workload from the BPM system we avoid slowing system performance that adversely impacts the productivity of BPM users.

We will define various Business Objects Universes to encapsulate program business rules, associate data from multiple systems. Team CGI will leverage as a foundation the following Business Objects Universes built for Louisiana:

- GIOS
- A133
- Grant Recovery
- Grant Repayment

The Web Intelligence (WebI) component of Business Objects enables TeamCGI to provide standardized reports as well as ad-hoc query and reporting capabilities. Using Business Objects we will schedule and produce standard reports on their required daily/weekly/other intervals.

To develop the SIROMS Data Warehouse and Reporting capabilities Team CGI will use our Business Intelligence/Data Warehousing (BI/DW) methodology that we have successfully followed for many similar projects. A key differentiator of this methodology is its focus on top-down business objectives to drive information needs and to develop vision while, in parallel, quantifying the available data and information assets to support the client's requirements (bottom-up).

The key steps in the methodology, as shown in **Figure 3.1.5-1**, are as follows:

- **Define the business objectives of the organization** – Our approach to business intelligence requires a definition of the key objectives for the organization for which the initiative is being developed. We typically work with the leadership of a given organization to identify and document these objectives. This step is critical to make certain that the overall initiative is scoped and focused correctly.
- **Define the key business decisions that must be made for operations and analysis** – Within all organizations, recurring decisions must be made for effective management. Our approach works with managers to define and document these business decisions.
- **Define performance measures** – A component of our BI approach is to define the performance measures for an organization. These should flow directly from the business objectives and recurring business decisions. Often this process helps a client organization

define new managerial techniques through the emphasis of knowledge based decision making.

- **Define information needs** – The performance measures enable definition of information needs. Our approach defines this information as questions that are answered to understand performance and to support decisions.
- **Understand data needs** – Once the information needs have been established, we then focus on the specific data elements required to answer the questions.
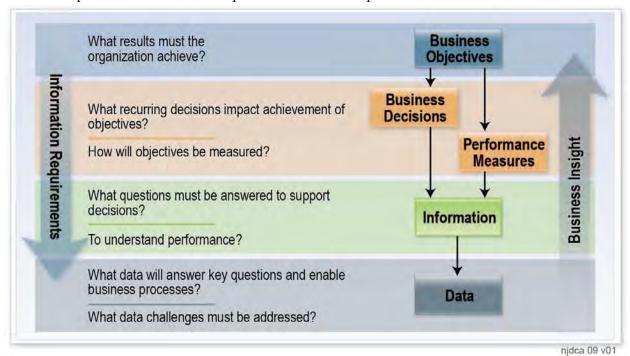
Figure 3.1.5-1. Business Intelligence/Data Warehousing (BI/DW) Methodology. *We use our BI/DW methodology that has been proven successful for many similar projects*

3.1.5.1   Create and Manage a Data Repository

CGI will implement a MS SQL Server Data Warehouse which uses Business Objects ETL and reporting tools. Interfaces will be built to various external program systems as well internal financial and other systems. Business Objects ETL tools are used to assemble, normalize, and load the data from various program sources as well as the primary BPM system(s).

3.1.5.2   Business Objects Cognos or the Functional Equivalent

Our solution uses SAP Business Objects including the Web Intelligence reporting tool. The Web Intelligence (WebI) component of Business Objects provides standardized reports as well as ad-hoc query and reporting capabilities. Using Business Objects we will schedule and produce standard reports on their required daily/weekly/other intervals.

3.1.5.3   Utilize a Business Intelligence Tool

Our solution uses SAP Business Objects including the Web Intelligence reporting tool.

3.1.5.4   Formal Information Architecture

With over a decade of experience working with the State, Team CGI understands the information architecture in New Jersey. We will take the following steps to work with the State and align the SIROMS data architecture with the State's overall information architecture.

- We will work with the State Contract Manager to establish meetings with NJOIT to coordinate work efforts between NJOIT and the SIROMS team.
- We will share artifacts from the LA Road Home project including but not limited to database designs, system architecture documents and other related artifacts with the State as required by the RFQ
- We will deploy our Integration Engine to achieve integration with other State systems and third-party applications. We will make use of modern interfacing approaches like XML, ESB etc in line with the State's information architecture guidelines
- We will coordinate with the State's Reference Data Store (RDS) team to use reference data from State repositories where possible
- We will work with the State Office of Geospatial Information System (OGIS) as needed for system design activities
- We will coordinate with the Office of Enterprise Data Systems (OEDS) to leverage Master Data to the extent possible.

Based on our experience working on CDBG-DR efforts with other States, we are proposing a high-level conceptual data architecture that will enable the State to achieve SIROMS objectives. This section of the proposal presents the high-level data groups that need to be collected from each of the programs outlined in the Action Plan.

Figure 3.1.5.4-1 presents data groups as they relate to the program areas in the Action Plan

Data Group	Program as listed in the Action Plan
Homeowner Assistance	• Reconstruction, Rehabilitation, Elevation and Mitigation Program (4.1.1) • Housing Resettlement Program (4.1.2)
Rental Housing	
Multi-family Rental	• Fund for Restoration of Large Multi-Family Housing (4.2.1) • Pre-development Fund (4.2.3.1) • Blight Reduction Pilot Program (4.2.3.2) • Sandy Special Needs Housing Fund (4.2.6)
Small Rental	• Small Rental Properties (4.2.2) • Incentives for Landlords (4.2.4.1)
Renter Support	• Sandy Home Buyer Assistance Program (4.2.5)
Economic Revitalization	
Small Business Revitalization	• Grants/Forgivable Loans to Small Businesses (4.3.1) • Direct Loans for Small Businesses (4.3.2)
Public Revitalization	• Neighborhood and Community Revitalization (4.3.3) • Tourism Marketing (4.3.4)
Support for Government Entities	• FEMA Match Program (4.4.1) • Continuation and Enhancement of Essential Public Services (4.4.2) • Code Enforcement (4.4.3)

Data Group	Program as listed in the Action Plan
Supportive Services	▪ Supportive Services Program (4.5.1)
Planning, Oversight and Monitoring	▪ Administrative/Planning (4.6)

Figure 3.1.5.4-1. Program Groupings.

Each program grouping requires a unique application-level development necessary to support the distinctive combination of workflow, data and applications. However, utilizing the cloud-based data warehousing solution, information from individual programs is available to be shared, combined, processed, monitored and reported across the entirety of SIROMS as required to support the overall disaster recovery Program.

The diagram shown in **Figure 3.1.5.4-2** depicts a conceptual data schema which could be implemented to support the program groupings listed above. These proposed data groupings are based upon HUD regulations and prior implementations of similar programs in the states of Louisiana, Mississippi and Texas. As the diagram suggests, data and documentation from each program grouping is available for centralized access and processing to support the requirements of the overall disaster recovery Program.

Homeowner Assistance

Applicant Data (Demographics)
Application Prioritization
Duplication of Benefits
Evidence of Eligibility
Applicant Agreements
Applicant Grant Compliance
Damage Assessment
Environmental
Contractor Performance
Requests for Payment and Closeout

Multi-family Rental

Application
Project Proposal
Duplication of Benefits
Project Selection
Developer Contracts
Financial Management
Construction Monitoring
Project Closeout
Affordable Housing Compliance

Small Rental

Application
Evidence of Eligibility
Application Prioritization
Damage Assessment
Duplication of Benefits
Applicant Agreements
Grant Management
Grant Closeout
Affordable Housing Compliance

Renter Support

Applicant Data (Demographics)
Evidence of Eligibility
Applicant Agreements
Grant Award Management
Grant Closeout
Forgiveness Period Compliance

CGI Cloud

Program-level Funding
Program-level Workflow
Program Performance
Applicant Compliance
Summaries
Program Compliance
Financial Auditing
Demographics Reporting
Transparency Data Sourcing

Admin/Planning

Cross-program DoB
Fraud Waste and Abuse
Monitoring
Environmental/Historical Oversight
URA Relocation Monitoring
Davis-Bacon Monitoring
FH Complaint and Appeals
Section 3 Monitoring
Part 85 Workflow
Program Planning
Grant Budgeting
Grantee Monitoring
Subcontractor Monitoring

Small Business Revitalization

Application Submission
Evidence of Eligibility
Needs Assessment
Underwriting
Applicant Agreements
Grant Management
Grant Closeout
Loan Repayment

Public Revitalization

Project Proposal
Project Eligibility
Project Selection
Grant Administration
Marketing Impact Monitoring
Project Closeout

Government Entities Support

Project Proposal
Project Eligibility
Project Selection
Grant Administration
Plan Review and Permitting
Project Closeout

Supportive Services

Project Proposal
Project Eligibility
Project Selection
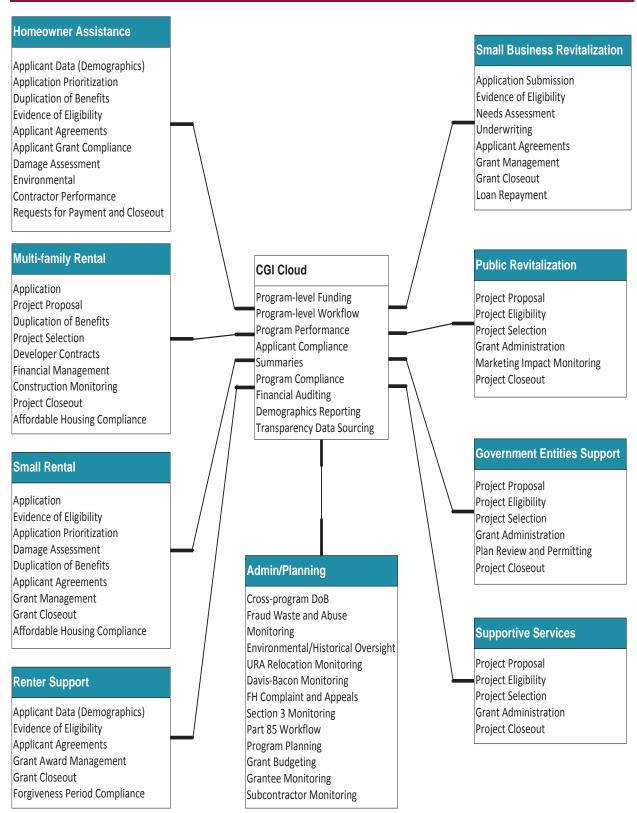Grant Administration
Project Closeout

Figure 3.1.5.4-2. Conceptual Data Schema. *Our data schema benefits from prior implementations of similar programs to helps the State quickly meet program requirements including HUD regulations.*

3.1.6   System Integration and Interfaces

As per the requirements set forth by the State in the RFQ, SIROMS will need to integrate with a number of disparate systems using a variety of integration techniques. These systems may have been built using different technologies with different types of databases, requiring a fully flexible and adaptable integration solution to simultaneously meet varying technical needs. Based upon these needs, CGI proposes to implement its Integration Engine solution as the integration hub for data exchange between SIROMS and other State systems.

CGI's cloud based Integration Engine was built to address system integration and data management challenges within the environmental health and safety domain. A .NET application proven to be an effective **all-purpose data exchange solution**, Integration Engine supports a wide range of data integration scenarios and is **fully configurable and adaptable** to any number of hardware and software environments.

Combining CGI's technology with more than 35 years of experience helping government and industry implement IT solutions, CGI and the Integration Engine deliver:

- Synchronization capabilities to propagate data changes in a source system to one or more destination systems
- An **extensible query framework** to allow data compilation, analytics and reporting from **multiple systems running different database engines** (Oracle, SQL Server, etc.)
- Extraction, transformation and load (ETL) capabilities within a **service-oriented architecture** to compile electronic data submissions quickly and efficiently
- Support for a variety of data exchange capabilities through open standards (**XML, SOAP, web services**)

CGI created Integration Engine as a comprehensive solution to replace disparate interface development techniques. The development and maintenance of multiple standalone SQL scripts, scheduled tasks, database triggers, and batch files – the necessary components of an integration solution – are streamlined within Integration Engine to reduce management costs. This centralized tool set provides a full collection of integration functions solution including:

- Single or multi-step processes
- Simple to complex, nested database queries
- Web service task implementation
- Administration of scheduled tasks
- Management of data format templates

CGI's Integration Engine functions as a "front door" for interfacing any number of applications, either complementing or replacing existing data exchange hubs. Integration Engine accommodates the flexibility demanded by complex enterprise systems integration by supporting a range of interface formats, including legacy (tab-delimited, fixed-width) and modern (XML, SOAP, DDL) formats. Its extensible framework promotes **rapid interface development**, which CGI understands is a significant priority for the State's implementation of SIROMS, as well as facilitating maintenance and reuse.

3.1.6.1 Capabilities

Figure 3.1.6.1-1 illustrates the range of capabilities provided by CGI's Integration Engine. Using a service-oriented architecture, Integration Engine supports real-time, near real-time, and scheduled interface processing. In addition to providing a platform on which custom integration processes may be built to meet specific interfacing requirements, it provides a collection of out-of-the-box processors to support common interfacing tasks. Based on this set of **reuse-oriented components**, tasks may be assembled with any combination of out-of-the-box and custom processors to achieve specific business requirements.
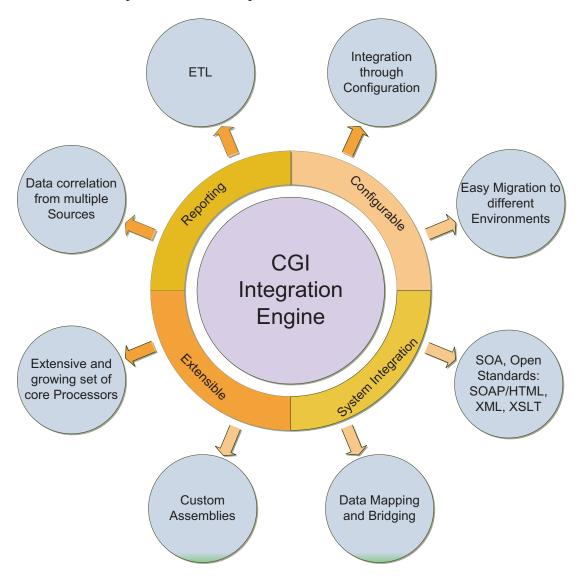

Figure 3.1.6.1-1. Integration Engine Capabilities

The Integration Engine query framework allows for **data extraction across multiple sources**. It provides capabilities for **data mapping and bridging between systems** for **defining format templates** for transforming extracted data.

3.1.6.2   Components

Figure 3.1.6.2-1 illustrates the conceptual architecture of Integration Engine components, which are defined as follows:

- A Task is a collection of Processors executed in sequence to perform a logical unit of work. A Task may be executed either as a web service or as a scheduled task.
- A Query is a specific type of Processor that executes master and detail (with a one-to-many relationship, i.e. parent and child) SQL queries and provides XML output which may then be transformed into a predefined format based on a format template.
- A Processor is comprised of one or more Assemblies executed as a step in a Task.
- An Assembly is an extension library containing managed code in .NET.
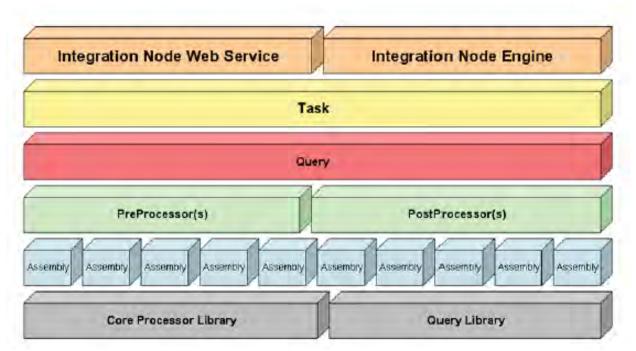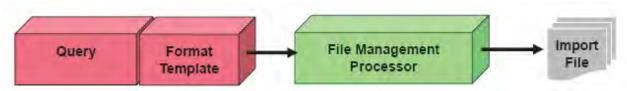
Figure 3.1.6.2-1. Integration Engine Architecture Components

In a scenario where a Task is implemented to extract data from NJCFS, for example, and to transform the data into the import format required for SIROMS, Integration Engine offers several alternatives for processing the extracted data. It may:

- Write the data file to a defined location for use by a SIROMS batch process
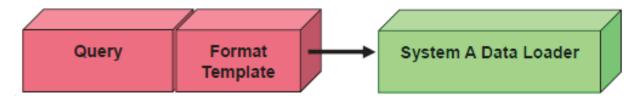
- Email specific users upon the success or error of generating the import file

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▪ Load the data directly into SIROMS using a custom processor

3.1.6.3 SIROMS Implementation

Based on the requirements set forth in the RFQ, CGI believes its Integration Engine solution is well-equipped to meet the diverse integration needs that will be required by SIROMS. CGI intends to meet the specific system integration/interface requirements for SIROMS discussed in the RFQ as follows:

| RFQ Item Reference	RFQ Item Text	CGI Solution
3.2.3.1.2, Point 2	As part of the Contract, the Contractor shall be responsible for developing, maintaining and improving the interfaces to the following: ▪ Accounts Receivable Cash Receipts Accounting System interface; ▪ New Jersey Comprehensive Financial System ("NJCFS"); ▪ HUD Disaster Recovery Grant Reporting system ("DRGR"); ▪ New Jersey Economic Development Authority ("NJEDA") ; ▪ New Jersey Housing Mortgage and Finance Authority ("NJMHMFA"); ▪ New Jersey Department of Environmental Protection ("NJDEP"); ▪ System For Administering Grants Electronically ("SAGE"); and ▪ Other State Contractors/Departments enumerated in the Action Plan. Those interfaces may include databases such as SQL or Oracle or the functional equivalent to be approved in advance by the State Contract Manager.	CGI's Integration Engine provides capabilities for creating interfaces to any number of applications and can either complement or replace existing data exchange hubs where needed.
3.2.3.3.4 (*use of XML*)	The State has adopted the Extensible Markup Language ("XML") as the standard for exchanging data (data in motion) with external partners (non-	CGI's Integration Engine supports a variety of data exchange capabilities through open standards, including XML.

RFQ Item Reference	RFQ Item Text	CGI Solution
	State systems). Where they exist, overarching government and industry exchange schemas such as the National Information Exchange Model ("NIEM") shall be used to define XML elements.	
3.2.3.3.4 (*use of State's ESB*)	The State has an enterprise service bus ("ESB") that serves as the transport mechanism for real-time web service-based exchange of operational data at the individual record level. The data objects in this exchange are defined by the State's enterprise reference data model and subject-area logical data models as appropriate. The Contractor shall be required to use the ESB between its system and other systems that are using the ESB or can use the ESB.	CGI's Integration Engine can function as the "front door" for SIROMS to interface with any number of applications, either complementing or replacing existing data exchange hubs. CGI will exploit plug-and-play opportunities where other system interfaces already exist, such as those on the State's ESB.
3.2.3.3.4 (*use of web services*)	Whether using the ESB or not, the Contractor shall be required to use web-services-based functionality to enable real-time exchange of record-level data.	CGI's Integration Engine provides the capability to define integration tasks to be executed as web services.
3.2.3.3.4, Point 1	Where batch data from other State systems is required by the Contractor's system for operational functionality, that data shall be routed through the enterprise data warehouse staging area by Contractor through an interface established by Contractor and approved by the State Contract Manager. Independent feeds of operational data from individual source systems are not permitted.	CGI's Integration Engine provides capabilities for creating interfaces to any number of applications and can either complement or replace existing data exchange hubs where needed. CGI assumes that any data that CGI and the State agree to be required for batch processing in SIROMS will be available in the State's existing enterprise data warehouse staging area.
3.2.3.3.4, Point 2	Where there is a need to combine data from the System with data from other systems, the Contractor shall create data integration where it does not exist and supply data to the enterprise data warehouse where that integration will occur.	The Integration Engine query framework allows for data extraction across multiple sources and provides capabilities for data mapping and bridging between systems.
3.2.3.3.4, Point 2	The System data stored in the System data warehouse will be required to be batch downloaded nightly into the State Data warehouse. This data will be integrated into a Sandy data warehouse established and maintained by the State (NJOIT). The interface and download process shall be created and maintained by the Contractor as well as the download system as approved by the State Contract Manager.	Tasks may be defined in Integration Engine to achieve the required nightly data warehouse batch processing required by the State. Integration has the ability to extract the data from the SIROMS data warehouse, transform it into the import format required by the State data warehouse.
3.2.3.3.4, Point 3	Independent data warehouse silos based upon a transactional system shall not be permitted. The Contractor shall be required to supply data from the System to the enterprise data warehouse on a nightly basis to support other State analytical needs.	Tasks may be defined in Integration Engine to achieve the required nightly data warehouse batch processing required by the State. Integration has the ability to extract the data from the SIROMS data warehouse, transform it into the import format required by the State data warehouse.

RFQ Item Reference	RFQ Item Text	CGI Solution
3.2.3.3.4 (*use of State's Reference Data Store*)	The State has a reference data program that provides controlled reference data sets governed by identified data stewards from the State's Reference Data Store ("RDS"). Any reference data required by the Contractor shall be sourced from the RDS. If the data is not yet available in the RDS, it shall first need to be brought into the RDS through an interface and system created and maintained by the Contractor and approved by the State Contract Manager. The Contractor shall identify such need(s) to the State Contract Manager when designing the work to be performed in each Task Order and the work will be approved by the State Contract Manager. Independent feeds of reference data from individual source systems are not permitted. The Contractor shall be required to coordinate these efforts with OEDS.	CGI's Integration Engine can provide the interface from SIROMS to the State's RDS. For data that CGI and State agree shall be required for SIROMS but is not available in the RDS, CGI will work with the State to determine most effective and cost-efficient means of interfacing between RDS and the appropriate source system. CGI and the State will determine whether the source system and/or RDS already provide interfaces that could be utilized with or without complementary interfacing by Integration Engine.

3.1.6.4   Advantages of CGI's Integration Solution

CGI's proposed integration solution offers the following key advantages for the State's SIROMS system:

- Extraction, transformation and load (ETL) capabilities within a **service-oriented architecture**
- Ability to interface a source system with **multiple systems running different database engines**
- Support for a variety of data exchange capabilities through open standards (**XML, SOAP, web services**)
- Support for a **range of interface formats**, including legacy (tab-delimited, fixed-width) and modern (XML, SOAP, DDL) formats
- **Extensible framework** promoting **rapid interface development**, maintenance, and reuse

3.1.7   Cloud Based Infrastructure

Our hosting solution for NJ-SIROMS is CGI's Government Cloud. We were competitively awarded the U.S. General Services Administration's Blanket Purchase Agreement (BPA) for Infrastructure as a Service (IaaS) on October 15, 2010. In August 2011, CGI was granted Authority to Operate (ATO) on the BPA. The ATO's Assessment & Accreditation process ensures that we meet all of the BPA security requirements, enabling users to rest assured that their data is safe and secure in CGI's cloud. CGI's Federal Cloud is FISMA (Federal Information Security Management Act) compliant for Low and Moderate Impact applications—representing 88% of the U.S. government's workload. This includes systems that process sensitive data such as personally identifiable information (PII), Confidential Business Information (CBI) and personal health information.

The ATO also provides for continuous monitoring and reporting and an annual audit of CGI's General Support System (GSS) controls associated with National Institute of Standards and Technology (NIST) 800-53 v3 for Moderate Impact baseline. Our system security plan and associated ATO demonstrate that our controls have been validated.

BPA holders also are required to meet the essential characteristics of cloud computing defined by

NIST as a model for enabling convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction.

By using the BPA, the State of New Jersey can be assured that their cloud provider is certified as secure and has an ATO.

We offer cloud services for NJ-SIROMS from two locations in the Continental United States (CONUS) – one in Philadelphia, PA, and the other in Phoenix, AZ. Those two locations are separated by two time zones, providing two different geographic locations within CONUS. In addition, our personnel managing and maintaining the cloud environment and providing contact and Help Desk services also reside in the CONUS.

CGI's Government Cloud includes the following controls shown in **Figure 3.1.7-1** to maintain data and network access integrity, reliability and availability:

Feature	Controls
Hosting Infrastructure	▪ **Redundant disk storage** - Storage Area Network (SAN) implements RAID 7+1, enabling applications to continue to operate even in the event of a disk failure. The SAN detects impending disk failures and automatically rebuilds data on a hot spare without affecting the application. ▪ **Redundant servers** - multiple servers running in parallel using clustering for non-stop operations. ▪ **Automated monitoring and alerting** - Server, network, and storage health continuously monitored by automated tools to detect error conditions and alert engineers via pager to correct problems before an outage occurs. Incidents automatically escalated to take corrective action before Service Level Agreements (SLAs) are impacted. ▪ **Server automated hardware fault reporting** - Diagnostic data is automatically uploaded to hardware vendor when hardware failures occur so technicians arrive onsite with the required parts for repair.

Feature	Controls
	▪ **24x7 support** - Our hardware vendors provide 24x7 support with on-site response in less than four hours. ▪ **Vendor SLAs** - We have SLAs with our vendors to provide rapid response to support requests.
Network Connectivity	▪ **Two telecommunication carriers -** connectivity to data centers is provisioned by two different telecommunications carriers entering the data center facility at separate points ▪ **Resilient local access -** SONET ring provides redundant network loop at the primary data center; Alternate data center has carrier POPs. ▪ **Multi Protocol Label Switching (MPLS) -** has high survivability due to its fully meshed nature. ▪ **Redundant network components -** All Local Area Network (LAN) components within the data centers are redundant with automatic failover. ▪ **Network management system -** dynamically establishes service networking components (VLANs, firewall policies), enable leveraging our existing network bandwidth as well as LAN infrastructure, including the network zones, firewalls, load balancers, core switching and IP address assignment. ▪ **Automated alerting -** Engineers are automatically notified of high priority incidents via pager. Automatic escalations occur to take corrective action before SLAs are impacted ▪ Bandwidth utilizing internet protocol (IP) transit to deliver content from the hosting infrastructure to the end-user flexible and scalable determined by the usage.
Data Center	▪ **Redundant systems** - N+1 redundant cooling, power, and telecommunications. ▪ **Backup power -** Uninterruptible Power Systems (UPS) prevent power spikes, brownouts and surges. Two diesel generators provide power in the event of a utility power outage. On site fuel is approximately 7,000 gallons, which can sustain the building for 10 to 12 days. ▪ **Automated monitoring -** Extensive monitoring process of network, servers and applications to detect problems, often before they affect availability and to support capacity-planning services to accurately distribute and accommodate load. ▪ Zoned dry pipe fire suppression system (pre-action), a zoned under floor fire suppression system, smoke and fire detection systems, independent heating, ventilation and air conditioning (HVAC). All systems operate independently ▪ We maintain and continuously monitor the redundant HVAC systems

Figure 3.1.7-1. Cloud Controls

We provide the NJ-SIROMS with 24/7/365 availability through server redundancy, and data replication; primary and secondary data centers provide disaster recovery (DR) and Continuity of Operations (COOP) with a Recovery Time Objective (RTO) of 24 hours and a Recovery Point Objective (RPO) of 4 Hours. Within the Cloud infrastructure resources can be instantiated and decommissioned within moments and in near real time through automated provisioning and change management of the portal.

Figure 3.1.7-2 provides a conceptual overview of CGI's Infrastructure as a Service (IaaS) offering, and identifies how our offering meeting the five "Essential Characteristics" as defined in the National Institute of Standards and Technology (NIST) Working Definition. As certified by the Federal government, our Cloud environment has been certified and accredited.
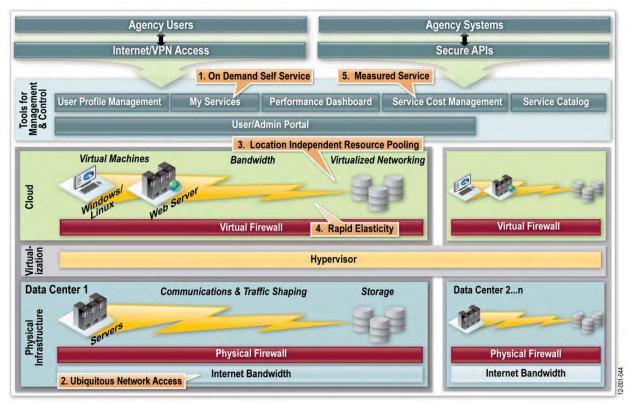
Figure 3.1.7-2. The CGI Cloud meets the 5 essential characteristics of the NIST working definition

3.1.7.1   Architecture

CGI's Cloud Service is scalable to allow a customer to request computing services and capacity on-demand and provision services and capacity dynamically. We provide a high-availability infrastructure through hardware with redundant internal components and a redundant architecture that enables automatic failover of the infrastructure components that operate the cloud.

CGI's IaaS Cloud meets the NIST definition of cloud computing by providing:

- On-demand self-service through CGI's automated Federal Cloud Portal
- Broad network access to the Portal via the Internet
- Resource pooling where users generally have no control or knowledge over the exact location of provided resources, but can specify location for Disaster Recovery/Continuity of Operations (DR/COOP) purposes
- Rapid elasticity where resources can be provisioned and de-provisioned within moments
- Measured service and resource usage that is monitored, controlled and reported, providing transparency for both CGI and the customer.

CGI's Federal Cloud IaaS complies with the BPA's technical requirements by providing:

- An automated system that adheres to ITIL-based IT Service Management
- FISMA Moderate Impact security as defined in NIST's Federal Information Processing Standard (FIPS) Publication 199
- 99.5% availability as standard, with higher availability as an optional service

- 1 Gigabit Internet access, with dedicated access available as an optional service
- Two (2) Tier III data centers in the continental United States, separated by multiple time zones
- A cloud available exclusively to U.S. federal, state, local and tribal entities and operated in the U.S. by personnel who have passed U.S. government background investigations
- Ability to track charges with a summary invoice, detailed breakdowns (providing the number, names and types of Virtual Machines, as well as data transferred I/O and additional storage purchased information), as well as a statement of the previous bill and the current bill, updated weekly

When provisioning a server bundle, customers may select a server software bundle from a range of available bundles. Bundles are charged based on utilization. Available bundles are provided below:

Sub CLIN Type	Content of Bundle
Windows OS Type/Version Option1	32-bit Windows 2003 Server Data Center Edition
Windows OS Type/Version Option2	64-bit Windows 2003 Server Data Center Edition
Windows OS Type/Version Option3	64-bit Windows 2008 R2 Server Data Center Edition
Optional Database 1	Microsoft SQL Server 2008 Enterprise Edition 64-bit
Windows IIS Web Server Software	Provides the default IIS bundle available on the version of the operating system chosen with the .Net packages installed
Linux OS Type/Version Option1	Red Hat Enterprise Linux 64bit version 5 with the base Red Hat packages
Linux OS Type/Version Option2	Red Hat Enterprise Linux version 5 64-bit with WebLogic Server for up to the 50 GB disk Web hosting bundle
Linux OS Type/Version Option3	Red Hat Enterprise Linux version 5 64-bit with the WebSphere Application Server for the 50 GB disk Web hosting bundle
Optional Database 1	MySQL with Basic Level of vendor support which includes no phone support and a limit of 12 incident reported to the vendor per year
Optional Database 2	MySQL with Silver Level of vendor support which provides 9-5 phone support and no limit on the number of incidents reported to the vendor
Optional Database 3	Oracle 11g Standard Edition 64bit for the 10 GB and 50GB disk Web hosting bundles with vendor support
Optional Database 4	Oracle 11g Standard Edition 64bit for the 150 GB disk Web hosting bundle with vendor support
Apache + PHP stack	Includes vendor support from Red Hat
Apache + TomCat stack	JBOSS (includes Tomcat, Apache) - JBoss Enterprise Middleware Subscriptions Platforms and Standards Support: JBoss Enterprise Web Server 1.0.x Component versions included ▪ Apache Tomcat 5.5 ▪ Apache Tomcat 6.0 ▪ Apache Tomcat Native 1.1
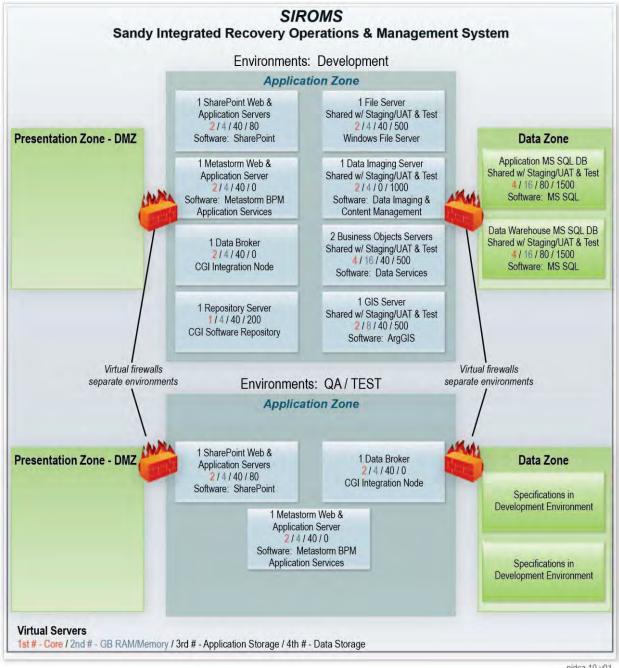
Sub CLIN Type	Content of Bundle
	▪ Apache Web Server 2.2 ▪ mod_jk 1.2.27 Includes vendor support from Red Hat

By supporting the State's requirements through the use CGI's accredited ATO Cloud, CGI not only meets the stringent security requirements, but also allows for more economical pricing versus a dedicated environment. Since the CGI Cloud supports multiple Federal and State entities, at contract end only the portions of the environment that carry the State's data, as per the agreed to close out plan, will be turned over to the State. This excludes the infrastructure and licensing.
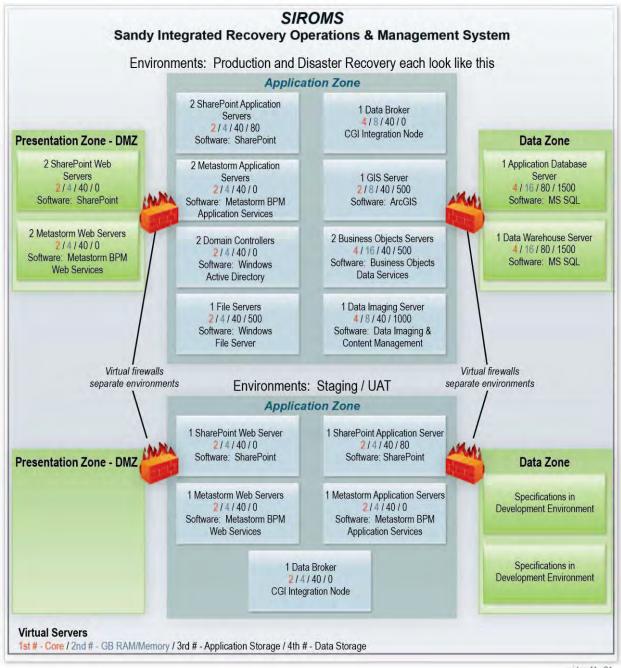
Provided below are two diagrams depicting the proposed environments for SIROMS. The first diagram includes the Development and QA/Test environments. The second diagram includes the Staging/UAT, Production and Disaster Recovery environments.

SIROMS
Sandy Integrated Recovery Operations & Management System

Environments: Development

Application Zone

1 SharePoint Web & Application Servers
2 / 4 / 40 / 80
Software: SharePoint

1 File Server
Shared w/ Staging/UAT & Test
2 / 4 / 40 / 500
Windows File Server

Presentation Zone - DMZ

1 Metastorm Web & Application Server
2 / 4 / 40 / 0
Software: Metastorm BPM Application Services

1 Data Imaging Server
Shared w/ Staging/UAT & Test
2 / 4 / 0 / 1000
Software: Data Imaging & Content Management

Data Zone

Application MS SQL DB
Shared w/ Staging/UAT & Test
4 / 16 / 80 / 1500
Software: MS SQL

1 Data Broker
2 / 4 / 40 / 0
CGI Integration Node

2 Business Objects Servers
Shared w/ Staging/UAT & Test
4 / 16 / 40 / 500
Software: Data Services

Data Warehouse MS SQL DB
Shared w/ Staging/UAT & Test
4 / 16 / 80 / 1500
Software: MS SQL

1 Repository Server
1 / 4 / 40 / 200
CGI Software Repository

1 GIS Server
Shared w/ Staging/UAT & Test
2 / 8 / 40 / 500
Software: ArgGIS

Virtual firewalls separate environments

Virtual firewalls separate environments

Environments: QA / TEST

Application Zone

Presentation Zone - DMZ

1 SharePoint Web & Application Servers
2 / 4 / 40 / 80
Software: SharePoint

1 Data Broker
2 / 4 / 40 / 0
CGI Integration Node

Data Zone

1 Metastorm Web & Application Server
2 / 4 / 40 / 0
Software: Metastorm BPM Application Services

Specifications in Development Environment

Specifications in Development Environment

Virtual Servers
1st # - Core / 2nd # - GB RAM/Memory / 3rd # - Application Storage / 4th # - Data Storage

njdca 10 v01

SIROMS
Sandy Integrated Recovery Operations & Management System

Environments: Production and Disaster Recovery each look like this

IT Service Management

CGI's Government Cloud includes automated procedures for alignment and accountability. The primary objective of service management is to ensure that IT services are aligned to, and actively support, the organization's needs. When IT processes and services are implemented, managed and supported appropriately, agencies will experience less disruption, reduce costs and better achieve mission objectives. We manage our network, storage, servers and virtualization using an integrated suite of service management tools designed to implement ITIL standards and processes. The tools enforce compliance with the processes, and automate operations for high

efficiency, reliability, security and availability. As an example, we use several tools to perform automated continuous monitoring. The tools are integrated with our incident management system so that monitoring alarms are automatically recorded as trouble tickets and referred to engineers for action. Our change management system controls the actions to resolve an incident, tracks change requests associated with the incident and deploys the changes. Our network management, server management and storage management systems are integrated using an orchestration engine that automates the administration and patching workflows for the network, storage, server and hypervisor layer.

Collectively, high-level information of the established policies, processes, procedures and the Support Model are reflected within the Operational Framework, focusing on defining specific roles and responsibilities along with clear accountability for each activity and task. We establish an environment to foster participation from NJ-SIROMS in developing the Operational Framework. We facilitate and conduct workshops to make sure NJ-SIROMS inputs and needs are addressed.

OS Patching

We provide a hardened version of the OS (Windows Server Data Center Edition or Red Hat Linux) including vendor support. We perform patching for the State. We create a service request notifying the State that patching is needed and requesting approval from the Service Delivery Manager representing the State and the security group. We patch on two different Saturday evenings/Sunday mornings each month. OS patches are applied using BMC BladeLogic for server automation, this automated process is repeatable, auditable, and allows for immediate back out if required. Applications are patched either manually or using JBoss Operations Network (JON). For databases, we provide quarterly patching of the database software. For other Web Hosting software, we provide quarterly patching.

Incident Management

We use a single incident management system. The system is integrated into the Portal Service Management system within the Government Cloud and provides trouble ticketing functionality to users. Tickets and requests associated with the NJ-SIROMS are viewable on the Portal, regardless of whether they are opened by the Help Desk, or directly by the NJ-SIROMS or by other sources. The Contact Center, Tier 1 Help Desk, or key State employees can update open tickets to provide additional information. The Portal allows for the support teams or contact center to enter trouble tickets directly as an alternative to contacting the Help Desk. The incident management system generates management reports such as the monthly Help Desk/Trouble Tickets Report.

Major Incident Management

Our incident response capability is managed by the Incident Management Center (IMC), which serves to facilitate communication and manage the response to security or other incidents related to the environment. In the event of an incident, the IMC communicates information as appropriate among stakeholders, and coordinates the effort of appropriate personnel to respond to the threat, including detection and analysis, containment, and eradication. Following eradication, the IMC coordinates the effort to restore and recover the system. Incident Management Center (IMC) staff meets personnel security requirements commensurate with the criticality/sensitivity of the information being processed, stored, and transmitted by the

information system. Forensics assistance and capability is provided by the IMC, including incident detection and recording to accurately record and recognize potential failures of services provided. The initial information needed to create an incident is collected and recorded within an incident ticket. The key to this activity is the accuracy and completeness of the information recorded within an incident ticket.

Following a major incident the IMC conducts incident reviews, the assigned Incident Manager builds and tracks action items and status, performs root cause analysis. When the cause is unknown, the problem management process is invoked. They also assess the performance of teams during recovery and provide constructive feedback. The major incident management provides input to the continuous service improvement processes as part of our ITIL best practices.

Problem Management

ITIL defines a 'problem' as the unknown cause of one or more incidents. Using these best practices we apply problem management from two perspectives:

- **Reactive** - following a major incident completion
- **Proactive** - by identifying and resolving problems before incidents occur

Reactive and proactive approaches are executed within a two-phase process:

- Problem control phase: the root cause is identified based on diagnostic investigations performed by multiple groups within our team, coordinated by a problem manager
- Known error management: once the root cause is known, operational teams are coordinated to identify permanent corrective action or an acceptable workaround

The resolution to a problem invokes the Change Management Process.

Change and Configuration Management

Our Asset and Configuration Management process enables the accuracy, validity, integrity and control of Configuration Item (CI) data, facilitating at the same time other IT service delivery processes. Configuration Management controls the Configuration Management Data Base (CMDB), the core of IT delivery services. Technical documentation is considered a CI and is controlled within this process. The main activities for the Configuration management process are:

- Configuration Management Planning and CMDB Structure Definition
- Create and Identify Configuration Items
- Control and Maintain Configuration Items
- Configuration Management Data verification and audit

Changes to configuration items are managed through our change management process. Changes are identified, recorded, managed and executed within the environment. Process starts when changes are identified through approved Service Requests or initiated by Operations Teams.

Service Level Management

Our service level management process provides specific targets against which the performance can be measured. It facilitates effective cost management of the services, monitors the service components and ensures that maximum value is delivered through monitoring, reporting, and

developing knowledge of the services offered. This process proactively prevents service failures, reduces service risks and improves the quality of service, in conjunction with other processes. Reporting and management of services and review of service level breaches and weaknesses takes place within this process as well. Service Level Management provides coordination of service improvement plans, planning and implementation of service and process improvements.

Scalability and Flexibility

CGI's Government Cloud meets the essential characteristics of cloud computing defined by NIST as a model for enabling convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction.

The network management system dynamically establishes service networking components (e.g., VLANs and firewall policies), enabling NJ-SIROMS to leverage our existing network bandwidth as well as LAN infrastructure, including the network zones, firewalls, load balancers, core switching and IP address assignment. Network infrastructure within the CGI cloud are deployed with features consistent to providing unified connectivity, throughput, scalability, ease of configuration, and secure or isolated access to hosting services. Within the CGI cloud computing services, we deploy infrastructure for optimal throughput based on unified connectivity and access to related services via aggregated high speed fiber links. Performance is essential within the data center as well as access to external interfaces and connection points for clients. Network and server features are consistent with some key elements below:

- High speed interfaces (Gig / 10 Gig)
- Port aggregation (i.e. ether or port-channel vPC)
- Cross-switch port aggregation (multi chassis ether channels)
- Support for trunk interfaces (802.1Q)
- Unified connectivity (chassis)
- Dual stack IP support (IPv4 & V6)
- Private VLAN support
- Virtual device contexts (firewalls, load balancers, VDC)
- Layer 2 / Layer 3 support (VRF,MPLS)
- Clustering (stackable, Virtual Switch Systems)
- Encryption (MAC level, IP SEC)
- Integration of Hypervisor, VMware, Vcenter, Vmotion ,partitions, and containers
- Ability to allocate CPU resources (network and servers)

Cloud Portal

CGI's Government Cloud Solution provides transparency through the Cloud Portal interface. Our support staff and specified NJ-SIROMS staff access the cloud through the portal to provision and de-provision cloud products and services. Those cloud products and services are instantiated as virtual servers, bandwidth and storage within the cloud. The cloud itself rests on a layer of virtualization software that separates the virtual devices from the underlying physical servers, bandwidth and storage. The portal provides the tools that the NJ-SIROMS uses for

managing and controlling products and services in the cloud environment (on-demand self-service).

Key tools in the portal are:

- **User Profile Management** – maintains information about the user.
- **My Services** – provides order management, including presenting the products and services the user has already provisioned, providing mechanisms for provisioning and de-provisioning services and providing a mechanism for powering up and powering down virtual machines and Web hosting servers.
- **Performance Dashboard** – provides a dashboard reporting on the use of provisioned products and services. The performance Dashboard works as a control panel to monitor the environment
- **Service Cost Management** – provides billing and invoice tracking.
- **Service Catalog** – provides a catalog of products and services from which the user can order.

Performance and Utilization Monitoring

We provide automated monitoring giving users visibility into near real time resource utilization and operational performance including metrics such as CPU utilization, memory utilization, disk utilization, network bandwidth utilization, and disk I/O. We also provide server instance operational status (such as pending, provisioning, powered on, powered off, and error).

Our approach is a secure cloud computing and services oriented solution for the on-demand self-service Exchange environment which will facilitate the building and support of the NJ-SIROMS for the required development, integration, system test, quality assurance/user acceptance testing, training and production environments during testing, production and post-production of the NJ-SIROMS

Service usage is monitored and usage units are accumulated and presented on a dashboard in the portal. Users can drill down on dashboard elements to see the underlying details. This provides users with visibility into service usage, enabling them to control and optimize resource usage. As illustrated in **Figure 3.1.7.1-1**, the dashboard offers visibility into service usage.
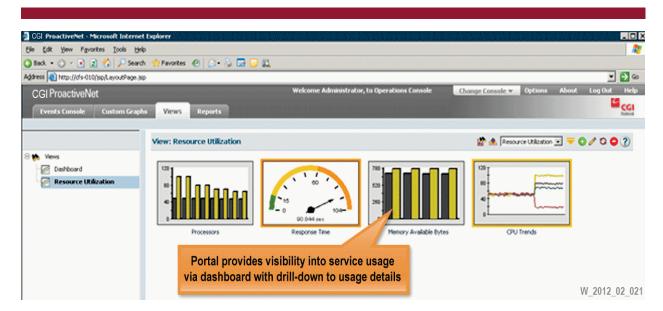
Figure 3.1.7.1-1. Metering Usage on the My Usage Page

CGI's Government Cloud includes the following performance utilization and monitoring capabilities provided via the Portal:

Monitoring activities include:

- **Server automated hardware fault reporting -** automatically uploads diagnostic data to the vendor when hardware failures occur so technicians arrive onsite with the required parts for repair.
- **Active security monitoring -** monitors across the infrastructure and performs real-time security alerting and analysis.
- **Network and host-based intrusion prevention -** 24x7x365 monitoring by both network and host-based Intrusion Prevention Systems (NIPS & HIPS).
- **Anti-Virus -** every server is protected against malicious software by anti-virus scanning.
- **Application Monitoring -** systems are monitored remotely and retrieves specific monitoring data for metrics such as central processing unit (CPU), disk, and log file monitors. It evaluates the data and sends alerts as needed.
- Clients served / supported
- Number of Servers, DASD

We use a comprehensive monitoring solution, called SIERA, to monitor the performance of systems like those proposed for NJ-SIROMS. SIERA provides monitoring for application components, and for the underlying hardware infrastructure. It tracks response times and system component availability using a series of service-oriented monitoring agents and integrated monitoring software products.

The service impact events generated by SIERA are integrated into our Incident Management process by generating incident records associated with the detected component in Remedy ITSM system. From there, the incidents are assigned to the appropriate team for action and disposition. SIERA, along with our IT Service Management solution, provides a historical record that allows

us to meet or exceed response time and technical infrastructure availability requirements defined in the OF and covered under the IT governance policies.

An overview of the SIERA solution is provided in **Figure 3.1.7.1-2**. The design of SIERA incorporates many years of experience delivering IT services, and was developed in concert with monitoring agent software vendors to provide a leading edge service management monitoring environment.
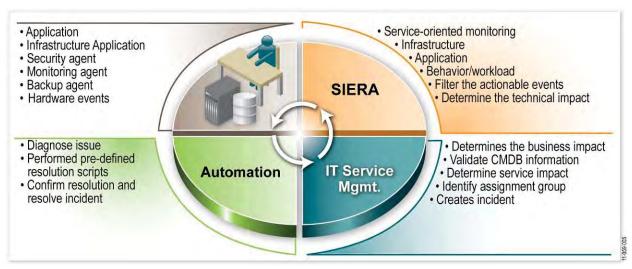

Figure 3.1.7.1-2. Integrated IT Service Management & Monitoring

For operation of the cloud, we have extensive automated monitoring of network, servers and storage infrastructure to detect conditions that might impact availability and performance. This is integrated with our incident management system for rapid notification to our engineers of monitoring alarms.

Our team provides on-going performance testing, performance monitoring and remediation of services. By nature, we are pro-active, anticipate performance issues and address them before they impact service.

High Availability

We achieve high availability as required by the State of NJ to meet **99.50%** through an infrastructure engineered with redundancy and automatic failover for critical devices including network and storage. Because CGI's Government Cloud is provided as a service, the state does not need to be concerned with replacement guarantees. We use highly reliable server hardware platforms with redundant components (such as power supplies), and fail-soft components (such as memory). In the event a physical server fails, VMs are automatically moved to another server – we maintain sufficient capacity to allow for failover. Our infrastructure is housed in data center facilities that are engineered to support high availability through N+1 redundant power and cooling, plus back-up power provided by batteries and diesel generators. We enable high availability with our extensive security and performance monitoring integrated with our trouble ticket system, allowing rapid response to monitoring alerts. We have a view of incidents across our data center through our 24/7 operations control center. As well, we check ourselves internally by conducting internal audits and validating that each of our processes are being

followed for each of our clients; audits ensure our processes are working correctly and change management ensures the environments are never touched without following the processes.

3.1.7.2   Connectivity / Communication

CGI will provide and maintain network services required for the operation of the NJ SIROMS network. CGI's data centers provide NJ with a highly secure and direct connection to the hosted applications for securely passing user credentials and integration with internal systems.
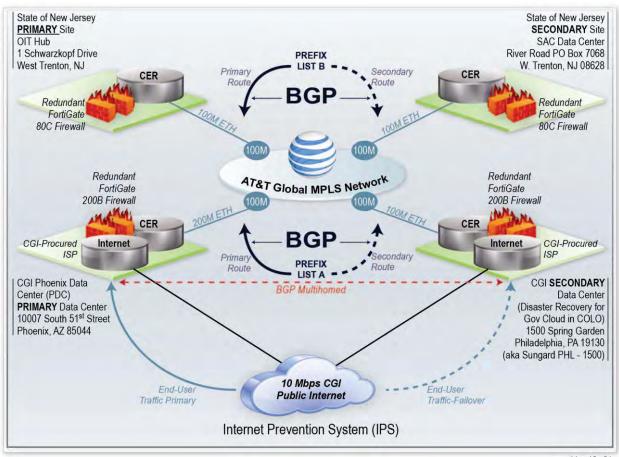
The client environments in the cloud must communicate using private IPv4 addressing within the clouds and to private IPv4 addressing used for management SSL VPN access. This means that the environments do not operate in isolation, but that any IPv4 addressing can be assigned to the NJ servers. The NJ servers are "tethered" to the management stacks of the cloud for service access like AD, DNS, Team CGI management, backup/restore, SSL VPN access, etc.

Only the servers necessary for application or reporting function will be exposed to the NJ's WAN. This simplifies the traffic patterns between NJ's network and the clouds and provides for effective security of management communications.

CGI's Cloud shared infrastructure including switches, routers, firewalls, has built in redundancy and FISMA compliant. Each client has network isolation where VLANs for each account logically separate each customer's network.

Figure 3.1.7.2-1 below provides a WAN network diagram of the proposed NJ SIROMS environment. The proposed SIROMS application is Internet-based. Internet connectivity is provided is support of end user connectivity to the system. A redundant MPLS Cloud network is included to provide connectivity to the necessary State of NJ agencies.

Figure 3.1.7.2-1. NJ SIROMS WAN Network Diagram.

3.1.7.3 Security

CGI's enterprise security management services encompass the governance, strategies, frameworks, plans and assessments necessary to create and manage an effective enterprise-wide security program. Our focus is to work with our customers to articulate the appropriate governance and policies to achieve enterprise goals. With our systematic approach, CGI establishes an overall risk management framework that takes into account the unique risk profile of the NJ SIROMS solution and the associated regulatory and privacy requirements.

Security management goes beyond the physical levels that provide the access and control mechanisms for the facilities or infrastructure. It applies to protection of the software, applications and data from corruption, or unauthorized intrusions, in order to maintain integrity. Dealing with these possibilities involves the analysis of potential threats and requirements surrounding the level of protection needed by the State to ensure data confidentiality and integrity as well as service availability.

The CGI Team proposes these services for analyzing, establishing and documenting security functions across the SIROMS IT environment:

- **Security planning**. During implementation, as part of the Operational Framework activities and system design, CGI will review the level of security that the State and Federal

Government requires, including N.J.S.A 56:8-161 through N.J.S.A 56:8-166 regarding Personally Identifiable Information ("PII") in IT systems, as well as the areas of potential attacks and risks (data, access, and systems). Planning will include an assessment of security changes and new requirements, highlighting the protection levels, risks, costs, effort and additional infrastructure dependencies.

- **Security validation** at the CGI Data Center. Once CGI assesses the level and degree of security required from the existing Security Policies, we will work to verify CGI's capabilities in achieving them.
- **Establishing the physical network infrastructure**. CGI will review the existing Security Policy to verify if the policy adequately addresses the physical and logical threats to the network which includes internal network monitoring, firewall issues, internet access and any other network access elements (CIs) that support the services. Following this review CGI will work to update the plan including the establishment of roles and responsibilities.
- **Ongoing security coordination**. Based on the roles and responsibilities determined during transition and documented in the Operational Framework, CGI will coordinate the established policies and procedures. These activities include monitoring, periodic audits and penetration testing.

Security planning activities will identify the roles and responsibilities for CGI, third party Contractors and state teams. Based on this determination, CGI will coordinate to ensure that either the existing Security Plan or gaps identified in the remediation plan (as a result of initial assessment) addresses the following practices and at a level or frequency as warranted:

- Real-time detection, alert and response capabilities for potential security breaches of high criticality computing and storage systems
- Security event logging
- Processing of logon/access requests and password resets, as per the security and application guidelines
- Performance of periodic testing on all managed computing components, technologies, and control measures impacted
- Identification of possible breaches, security violations or non-compliance to security policies
- Identification of changes to alleviate potential risks (e.g. additional protection methods, firewalls or software parameter changes)
- Performance of periodic security audits and reviews on all control measures, monitored elements, processes, or technologies
- Monitoring of security measures and element performance for security incidents, vs. the security goals, policies and service level requirements such as:
- LAN infrastructure (e.g. hardware, software, and environmental infrastructure components)
- ID and password standards, password resets
- Breaches, security violations or non-compliance to security policies
- Changes to alleviate known risks (e.g. additional protection methods, firewalls or software parameter changes)
- Performance information and recommendations based on the resulting data and analysis

Periodic Audits

Security management also goes beyond the physical levels that provide the access and control mechanisms for the facilities or infrastructure. This applies to protection of the software, applications and data from corruption, or unauthorized intrusions, in order to maintain integrity. Through regular security audits (internal and possibly by external sources) and reviews of security measures and analyzes of their effectiveness, various threats, risks and potential impacts will be uncovered. These may include internal and external threats, such as unauthorized access to the data or systems, or the corruption of software and data from intrusions, viruses or system outages. Dealing with these possibilities involves the analysis of potential threats and requirements surrounding the level of protection needed by the client to ensure data confidentiality and integrity as well as service availability.

Through firm controls and management that can be defined in structured SLAs, all efforts are made to apply preventive measures and maintain a secure and stable environment for IT infrastructure, systems, applications and data under CGI's and the contractor's responsibility.

Compliance and audit activities are performed at multiple levels:

- Self-audit process (automated and manual) is put in place to measure the effectiveness of controls and verify that security requirements have been met at the SLA level.
- Enterprise Security performs periodic assessment/review of security controls within the company.
- CGI Internal Audit performs security audits based on enterprise risks
- External auditors assess CGI for SOX compliancy and 5970/SAS 70 audits.

CGI has modeled its risk management framework on COSO (Committee of Sponsoring Organizations), which was established to help entities formulate their risk management process. Our risk management process will be used to third party contractors existing Security Policies and to identify risks in a timely manner.

Good enterprise security requires resources, diligence, common sense and, most of all, a clear realization by management that the integrity of their enterprise's infrastructure and the assurance of its assets are at stake. For this reason, a close and balanced relationship will be established between governance, best practices and security in order to manage risk and ensure that appropriate enterprise assurance levels are achieved and sustained.

CGI will be responsible for reviewing business and related information and security risks that could affect the ability of the State to achieve its business objectives that are outlined in an existing Security Policy and/or within existing SLAs. This review is performed via our Enterprise Risk Management process and commences with the evaluation which includes the following types of risks:

- **Environmental** – external factors such as legal, environmental, economic, customer and competitor that may influence operations and ability
- **Process** – operation, financial, integrity, technology risks impacting the ability to achieve existing plans
- **Information for decision making** – the risk that systems, structures, and processes do not provide timely, relevant and accurate information to support the measurement of success of a Service Level Agreement or business objectives.

CGI's risk management process is ongoing. The introduction of controls or strategies to ensure that we are able to meet our business objectives is an ongoing effort by Management. In general, changes to controls or introduction of new processes to reduce risks come in the form of the strategies developed by each organization as an output from the enterprise risk assessment, and from Internal Audit recommendations.

Third Party Intrusion Testing

Where contractually required or required by regulatory compliance, we work with third parties to have penetration tests performed against its hosted environments. The approach has three phases:

- Information gathering, where information about the application(s) and the infrastructure is collected to identify high level architecture and design weaknesses. As well, the third party identifies critical components of the environment. Also, we and the third party establish and agree on rules of engagement, to minimize the possibility of outages to production systems during the scanning.
- Vulnerability discovery phase, where the third party uses commercial, open-source tools, and manual testing to identify vulnerabilities. Automated tools are leveraged to map the application, determine the security posture, and quickly discover common vulnerabilities. Most of the vulnerabilities are discovered during manual testing. Both unauthenticated and authenticated testing can be performed to identify weaknesses within all components of the environment and application.
- Vulnerability analysis phase, where the third party validates the results of the automated tools with manual techniques and correlates with manual testing results. As many false positives as possible are removed from the final report, in this manner. Critical findings are normally delivered to us immediately for appropriate remediation.

Once the final report is delivered, we work with NJ-SIROMS to determine the action plan for the findings, based on the vulnerability rating assigned by the third party, as validated by us, considering mitigating safeguards. Changes to the environment and application are strictly processed in accordance with established Change Management processes.

Security Reporting

Finally, CGI consolidates and provides regular security reporting based on on-going performance and analysis, to include the following:

- Security monitoring results of the IT infrastructure and environment (e.g. number of incidents resulting from unauthorized accesses, intrusions, breaches, and data corruption)
- Risks and vulnerabilities of the environment, infrastructure, systems and people
- Countermeasures that have been implemented, with their success rates
- Recommendations to improve results
- Deviations from security policies and service level agreement requirements
- Deviations from contractual obligations by CGI or external vendors
- Changes or revisions made to security requirement

CGI is the final stages of obtaining PCI certification of the infrastructure layer of the CGI Phoenix Data Center. As a result of having a PCI certified infrastructure, CGI shall provide a secure environment that has been validated by a QSA (Qualified Security Assessor), allowing

merchants to establish a secure cardholder environment and to achieve their own certification, having confidence that their underlying technology infrastructure which CGI is providing is compliant. Achieving PCI DSS 2.0 validation for CGI helps our customers obtain their own PCI certification. Our PCI compliance demonstrates CGI commitment to information security at every level. Compliance with the DSS standard, validated by an independent third-party audit, confirms that our security management program is comprehensive and follows leading practices.

In regard to HIPAA compliance, as a foundation you must understand that CGI's IaaS Cloud service received Authorization to Operate from the Federal GSA Agency's Joint Authorization Board (JAB), which was based upon an assessment of security controls implementations as defined in NIST SP 800-53 rev3 (Recommended Security Controls for Federal Information Systems and Organizations). NIST SP 800-53 is the primary guidance for risk determination as defined in NIST SP 800-37 (Guide for Applying the Risk Management Framework [RMF] to Federal Information Systems).

All of the HIPAA Security Rule Standards aren't applicable to CGI IaaS Cloud environment/ NIST SP 800-53 security controls. Those exceptions are noted in the NIST SP 800-66, Appendix D as "Does not map". A thorough assessment of CGI IaaS Cloud System Security Plan (SSP) security controls implementations has been performed to ensure that all applicable Security Rule Standards were achieved and HIPAA compliance validated.

In support of the HIPAA compliance NIST developed NIST SP 800-66 rev1 (An Introductory Resource Guide for Implementing the HIPAA Security Rule) which states.. "The HIPAA Security Rule is all about implementing effective risk management to adequately and effectively protect EPHI" [Section 3]. And further states .. "The NIST RMF provides the covered entity with a disciplined, structured, extensible, and repeatable process for achieving risk-based protection related to the operation and use of information systems and the protection of EPHI." [Section 3.1].

The mapping of SP 800-53 security controls to HIPAA Security Rule standards and implementation specifications is of particular importance because it allows for the traceability of legislative and regulatory directives, such as HIPAA and FISMA, to underlying technical security configurations. NIST SP 800-66, Appendix D provides a catalog of the HIPAA Security Rule standards and implementation specifications within the Administrative, Physical, and Technical Safeguards sections of the Security Rule as mapped to 800-53.

CGI has been granted a cloud security Provisional Authority to Operate (P-ATO) by the Joint Authorization Board (JAB) of the Federal Risk and Authorization Management Program (FedRAMPSM). FedRAMP is a U.S. government-wide program that standardizes the approach to security assessment, authorization, and continuous monitoring for cloud products and services

For FISMA compliance the Enterprise Cloud is deployed in a "Federal-Only" pod. An integrated Cyber Defense strategy protects Cloud environments comprised of: virtualization tools to separate applications from hardware; a full suite of security products to monitor and protect both the infrastructure and virtual deployments from unauthorized internal or external use; and ongoing support, management and monitoring from a Security Operations Center (SOC). The Enterprise Cloud uses VMWare ESX 4.x for virtualization. Data isolation is performed at the OS Layer; no two client Operating Systems are shared. From a network perspective, each client is separated by use of private VLANs. The Enterprise Cloud has been audited against NIST 800-

53rev3 controls at the "Moderate Impact" level for FISMA compliance of existing federal clients.

At the network layer, we install firewalls and Intrusion Prevention Systems (IPS) to provide perimeter security control. At the hosting system layer, we harden servers, use anti-virus and anti-malware software and provide authentication for remote VPN access to the environment by administrators. When required, application communications can use Secure Sockets Layer (SSL) to authenticate data transmission using a mutually trusted certification authority to guard against a man-in-the-middle attack that alters data. At the management layer, Team CGI provides auditing, logging and Security Information and Event Management (SIEM) to detect malicious alteration of data or software hosted at our data centers. Upon request we will provide the State of NJ with documentation to support FISMA and audit and reporting requirements, including Certification and Accreditation (C&A) documentation. We have proven experience supporting security audits and A&A for the government as demonstrated by our support of GSA's audit of the IaaS platform to successfully achieve ATO.

Figure 3.1.7.3-1 summarizes the OS-related security services included with our cloud services.

Service	Description
Operating System	CGI provides a hardened version of the operating system (Windows Server Data Center Edition or Red Hat Linux) including vendor support.
Operating System Administration	This comprises hardened and patched OS images in our cloud library to be used to instantiate a VM. We provide patches as Change Requests to the customer. If the customer approves the application of the patch, we will apply the patch during the maintenance window selected by the customer. Customers have administrative access to the OS. Response to virtual machine and OS-level incidents is the responsibility of the customer, unless incidents are caused by our cloud infrastructure or an incident is the result of our action.
Antivirus	Anti-virus software with automatic updates of virus definitions. For Windows-based OS, this software also provides limited blocking of in-bound and out-bound email, by preventing unregistered applications from sending and receiving email. Applications that require email access can be registered with our Anti-Virus server by submitting a Change Request ticket.
System Information and Event Management	Signature-based periodic monitoring of syslogs on the operating system for malicious activity or errors. We maintain logs online for up to one year.
Security Incident Response	CGI provides security incident response to alerts from the antivirus, system information and event management reviews, vulnerability scans and other security incident reporting. Our response is described in our security incident response plan, which is available at the URL describing our service. CGI requests government customers provide a point of contact and escalation plan so that we can keep cognizant government staff informed during an incident response. CGI reserves the right to take a Web hosting bundle offline during a security incident response.
Advanced Operating System Monitoring	Monitoring of the health and availability of the operating system with alerts sent to the customer when there issues or incidents are found. This service includes dashboards of the environment showing a management view of the use and performance of the customer's services.
Quarterly OS Vulnerability Scanning	CGI performs quarterly vulnerability scanning of the operating system. CGI provides scan results to the government customer representative responsible for responding to the scan results and providing CGI with a response to each item for the quarterly POAM submission.

Service	Description
VPN Account with Dual Factor Authentication	CGI supplies one dual factor authenticated host-to-gateway VPN account with each Web hosting bundle for connectivity to the portal and to the customer's provisioned services in the cloud.

Figure 3.1.7.3-1. OS-Related Security Services for Web Hosting Bundles

3.1.7.4 Disaster Recovery

Given the mission of the NJ Sandy Integrated Recovery Operations and Management System (SIROMS), the Disaster Recovery (DR) Plan and Continuity of Operations Plans (COOP) must be considered fundamental and key to the overall success of the program. It is inherent that in time of natural or manmade disaster, SIROMS will be available to provide services to the citizens of New Jersey. The CGI team acknowledges that we will play a crucial role in providing Disaster Recovery services in support of the SIROMS environment. We are clear that we will be responsible for the Disaster Recovery Plan and the Continuity of Operations Plan. We are also clear that third party Contractors have significant roles and that CGI has a role to ensure that those parties execute their obligations to the satisfaction of the State and are compliant with their contracts.

CGI provides Disaster Recovery (DR) services to facilitate the process, policies and procedures related to preparing for recovery or continuation of a client's technology infrastructure critical to their organization after a natural or human-induced disaster. CGI has a Continuity of Operations Plan (COOP) for the Phoenix Data Center (PDC) and each individual Client's Disaster Recovery Plans are a component within the PDC's COOP.

Clients develop a Recovery Time Objective (RTO) and Recovery Point Objective (RPO) that meets their business continuity requirements necessary to protect the critical components of the business. This process will determine the priority in which applications are recovered. The proposed solution currently reflects a 4-hr RPO and a 24-hr RTO, however this is modifiable based on client requirements.

CGI has Enterprise Agreements with SunGard specifically developed for CGI's hosted Clients that subscribe to DR services. The agreement provides for integrated recovery capabilities and can include various hardware infrastructures to best address the requirements of those Clients requiring DR.

Disaster Recovery Services include the following:

- Develop a client's DR Plan
- Prepare and execute annual test of the DR Plan
- Document DR Test results, audit test results to client's business continuity requirements, recommend changes and adjustments to DR Plan as needed.
- Maintain and update the DR Plan to reflect any change in supported hardware and or software configuration. Verify DR Plan maintains alignment with client's business continuity requirements.
- Upon declaration of a disaster, execute the DR Plan including all operational and technical support necessary to meet documented objectives.

- Operation and maintenance of fault tolerant systems that in the case of component or hardware failure, should not be down for more than four hours; and the restored systems should have no more than 20% loss in performance or functionality, and no data loss should be observed
- Performance of system and data backups compliant with the States approved backup schedule
- Quarterly Media Integrity Recovery Tests
- File and Application Restores from Backup

Nightly automated backups to tape are performed each business day and include both customer web hosting environments and CGI Cloud management infrastructure. We administer, maintain and test virtual machine and system backups in accordance with the GSA IaaS BPA.

Tapes are stored both onsite and at an NARA-compliant offsite facility 25+ miles from the data center. Tapes are rotated offsite after each business day, and backups are retained for ten days. These backup tapes permit us to selectively recover infrastructure and web hosting environments. All SIROMS data is stored within the United States. When requested by the State Contractor Manager, CGI will develop a task LOE and plan for providing the State with a monthly copy all data. For web hosting services, a backup is performed for application disaster recovery that meets the specific requirements for each hosted website. For the databases, we perform a nightly incremental backup and a weekly full backup to tape. On a quarterly basis, representative sample tests are performed to recover virtual machines from backup. During the annual disaster recovery exercise, the recovery of virtual machines containing critical information, such as databases or document/indexed content, is validated.

CGI has extensive experience in the DR and COOP domains achieved from our delivery of these services to dozens of clients, including many Federal and state government customers. Additionally, CGI provides disaster recovery data center capability at each of our global data centers, including our data center in Phoenix Arizona. We have dedicated disaster recovery practitioners and will engage the appropriate resources to assist in conducting the DR and COOP assessment and in development of the plans and exercises. The result of our experience, knowledge and ownership of these responsibilities will be well documented, tested, and effective disaster recovery and continuity capabilities.

3.1.7.5   Contingency Plan

NIST Special Publication 800-53A - Guide for Assessing the Security Controls in Federal Information Systems and Organizations (http://csrc.nist.gov/publications/nistpubs/800-53-Rev3/sp800-53-rev3-final_updated-errata_05-01-2010.pdf)

The CGI Recovery Coordinator will work with the State of NJ Contract Manager to provide plans and technology solutions that provide for end-to-end contingency and recovery capability according to NIST 800-34 which conforms to NIST 800-53A. We work with the State of NJ, application owners, application maintenance teams, and other State of NJ contractors to develop and implement plans. We perform a Business Impact Analysis to assess component availability metrics, risk mitigation strategies, and costs options. The plan will provide recovery procedures in the event of catastrophic loss of single and/or multiple facilities and/or related services. Well-defined service levels, escalation procedures – response intervals and resource training create

accountability to security, service, and scalability for the life of a contract. The DR plan is executed annually to confirm recovery viability; the test results report will be published for NJ Management.

3.1.8   Support Services

Team CGI wil provide support services that are essential to effective and efficient implementation and operations of the SIROMS solution. These support services are:

- IT Service Desk & Help Desk
- Issue Tracking
- Training
- Configuration Management

3.1.8.1   IT Service Desk & Help Desk

Team CGI will provide highly responsive IT service desk (helpdesk) services that helps SIROMS end-users maintain their productivity and focus on their mission—assisting State residents impacted by Superstorm Sandy.

We model the SIROMS Service Desk after CGI's ISO/IEC 20000-1 certified service desks that globally handle over 4 million contacts annually for 2 million government and commercial users. These service desks use ITIL practices, supported by enterprise-class tools to manage call queues, route calls intelligently, log contacts, and manage the workforce. This has enabled CGI performance metrics for abandonment rate, speed to answer, first-call resolution and customer satisfaction to be consistently better than Gartner's industry averages.

Figure 3.1.8.1-1 shows how we structure the SIROMS service desk to efficiently provide users with highly responsive support.
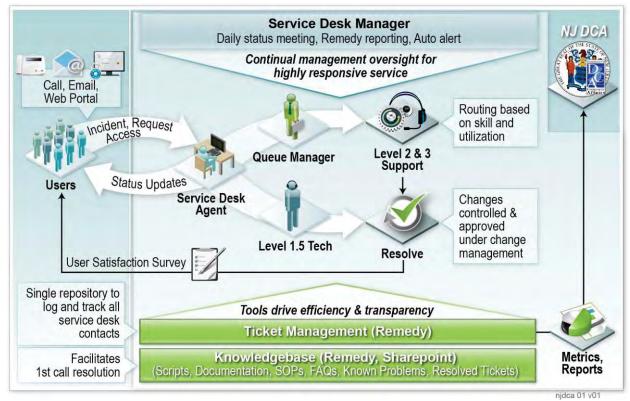

Figure 3.1.8.1-1. Service Desk. *Our team's service desk provides users with highly responsive support.*

Our approach for the SIROMS Service Desk has the following characteristics that in our experience contribute to achieving high service levels, while delivering cost savings:

- Locate the Service Desk on New Jersey DCA premises in Trenton, NJ. Collocation with other Team CGI personnel permits rapid scaling of the Service Desk in response to demand spikes and quick access to expertise for rapid resolution of end-user issues.
- Staff the Service Desk to handle 150 to 180 calls per day with ability to scale during outages and major releases. (Service Desk hours of operation are 7am to 6pm ET Monday through Friday except for State holidays.)
- Log all user contacts— phone, email—using BMC Remedy running at the CGI Data Center.
- Drive for high first-call resolution through:
  – Training Service Desk staff to understand the business functions provided by the system and the business processes that they support
  – Level 1.5 technician (senior level 1 technician) co-located with service desk personnel to immediately intervene when a level 1 technician cannot rapidly resolve a request.
  – Continual training and a rich knowledgebase to which service desk and other support personnel are empowered to contribute.
- Route tickets requiring escalation through a queue manager who matches each ticket to the right internal or external team and then monitors the tickets for timely resolution. For tickets handled by Team CGI, the queue manager routes the ticket to the person with the right skill level and availability to complete the task. The queue manager also provides feedback to the level 1 to improve first-call resolution.
- Configure the system to automatically alert the service desk manager when ticket response SLA is in jeopardy.
- Confirm the user agrees with the resolution before closing the ticket.
- Automatically send a survey to the user after a ticket is resolved. This provides an objective measure of performance and a basis for Continual Service Improvement (CSI). This also supports reporting end-user satisfaction to the State Contract Manager at least twice each year.
- Act as a communications conduit to the user community. This creates consistent, structured communication.
- Use metrics and reports from the ticketing system to continually monitor service desk performance and trends. This also supports reporting of actual performance against expected services level as set forth in the Service Metrics Table.

The processes and procedures followed by the Service Desk are based on ITIL Version 3 processes for Incident Management, Request Fulfillment, Access Management, and Problem Management. The Service Desk manager, as the process owner, is accountable for the development, documentation and continual improvement of these processes to maintain a highly effective service that strives to exceed service level agreements.

To establish the Service Desk we collaborate with the State to design the procedures. The procedures include the capability to pass incidents and support requests to subcontractors or to other State Contractors or Departments. The Service Desk documentation provides the following detail:

- Process flow diagrams with swim lanes to indicate responsibility for the activities
- A responsibility assignment matrix (RACI) to clarify interaction between the various groups involved in user support, incident management, and issue resolution
- Interface points with external groups and systems, including data required to be passed
- Instructions about the data required from the requestor to create a new ticket that has sufficient information for resolution
- Instructions about the data required to resolve a ticket, so that tickets have sufficient resolution information to support the knowledgebase and problem management

The State benefits from our use of Remedy to track each ticket from first contact with the Service Desk to resolution. Remedy provides real-time visibility into the status of each ticket. It also provides a rich source to mine for data about the performance and quality of our services through metrics such as response times, resolution times, defect counts, outage durations, etc. Metrics summarized from the tickets are presented in the weekly status meeting with the State.

Remedy data enables us to produce reports that help our team to effectively manage system capacity and performance, manage personnel and do problem management as part of continual service improvement.

To measure end-user satisfaction we use a tool to send a short survey to the ticket originator after we close the ticket. This enables us to continually monitor service desk performance and generate reports on user satisfaction to the State Contract Manager. The following industry standard questions are used in the survey.

1. The courtesy of the analyst?
2. The technical skills/knowledge of the analyst?
3. The timeliness of the service provided?
4. The quality of the service provided?
5. The overall service experience?

The end-user responds to each survey question by indicating satisfaction on a scale of 1 to 5, where 5 is extremely satisfied. Complaints receive a call from our quality analyst, so that a root cause is identified and the issue that caused the end-user to be less than satisfied is addressed.

Problem management is central to continual service improvement. Our Problem Manager within the Service Desk team is accountable for the problem management process shown in Figure 2. The problem manager does the following:

1. Mine resolved tickets to select individual tickets for Root Cause Analysis (RCA), and detect patterns for RCA.
2. Look at service level trends to identify threats requiring RCA.
3. Enter and assign problem tickets for RCA, and monitor through resolution.
4. Enter known errors into the known error database (knowledgebase used by service desk).
5. Make recommendations for improvements to the organization, procedures, tools, and hardware/software based on cost-benefit analysis.
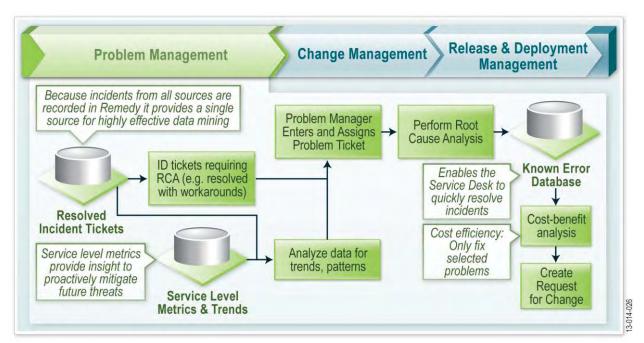
Figure 3.1.8.1-2. Problem Management. *Our problem management process promotes increased service quality by pro-actively addressing threats.*

3.1.8.2   Issue Tracking During Testing

Diligent tracking of issues found during User Acceptance Testing (UAT) helps acceptance testers efficiently validate software releases and provide the data necessary for the State Contract Manager to approve the release.

The tool we use for defect tracking throughout the system development lifecycle, including UAT, is Microsoft Team Foundation Server. This enables us to easily link defects and fixes to a specific software component and version, facilitating configuration management and UAT regression testing of fixes.

State acceptance testers log UAT issues in the test defect tracking tool. We monitor this and develop a plan to resolve each issue, based on priority and level of effort. When State acceptance testers receive a build with the fix, they rerun the test case to verify the fix and close the issue. The Team Foundation Server tool enables testers to view status of fixes and incorporate this information into their status reports.

Our preferred test support model is to work side-by-side with the State acceptance testers so that we can immediately analyze issues as soon as they occur to determine if the problem lies with the code, test case, data, or environment. This approach dramatically accelerates completion of testing.

3.1.8.3   Training

Training is key to enabling users and administrators to effectively and productively use SIROMS right from the start. To that end, Team CGI provides training as described in **Figure 3.1.8.3-1**.

Type of Training	Description	Audience
End User	Training on using the SIROMS application functions supporting the CDBG-DR Program	End users
Administrator (super-user)	Training on using the SIROMS application administration functions to manage data entities such as users, roles, processes, business rules and lookup tables.	Administrators
Reporting and BI	Train users to generate standard reports, create ad hoc reports and use the Business Intelligence tools to perform data analysis	Program analysts
Online Help	Materials viewable via a menu selection in the application user interface	Application users

Figure 3.1.8.3-1. Training. *Our training course enable users and administrators to be effective and productive right from the start.*

Team CGI will provide Train-the-Trainer sessions to deliver the training courses to State-designated personnel, who will deliver the training course to the intended audiences. We will train 100 DCA employees and 50 employees of other State Contractors and Departments in groups not to exceed 25 persons per session.

We develop highly effective training for the State by approaching course development with the rigor of a project. We plan the project, define requirements, design the curriculum, develop the materials, and test the end-product. This training development lifecycle is shown in **Figure 3.1.8.3-2**.
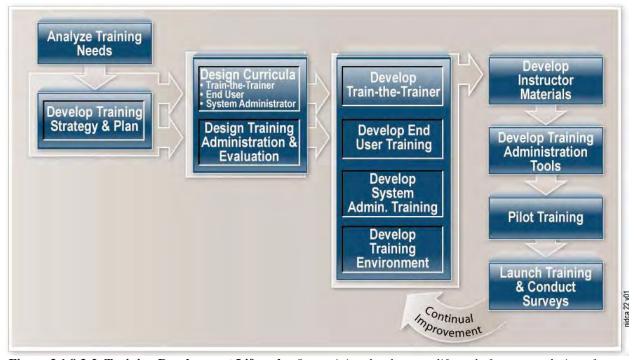
Figure 3.1.8.3-2. Training Development Lifecycle. *Our training development life cycle focuses on design of user-centric training with appropriate supporting tools that we continually improve through lessons learned.*

The steps of the lifecycle are as follows:

- **Plan the Training**—we develop a Training Plan that describes the objective, scope and schedule for training. Once approved by the State Contract Manager it becomes the guide for the development and delivery of training.
- **Design the Curricula**—each course is designed to define the topics, exercises, tests, format, delivery mediums and timeline. For SIROMS we will create courses for the following specific audiences: End users, super-users, and administrators.
- **Develop the Student Materials**—for each course we develop student materials to include: lectures, interactive simulations, tests and hands-on exercises.
- **Develop the Training Application Environment**—the training application environment allows students to practice what they learn, giving them a level of understanding not otherwise achievable. We load the environment with data tailored for the hand-on exercises. We refresh the data in the environment from a training baseline before each training session. The environment is kept up to date with production via the change management process. Team CGI and State Training leads will approve new releases to the training environment to prevent disruption during training sessions and permit any data updates to be synchronized with the release.
- **Develop Instructor Materials**—to aid the State trainers, we develop supporting materials that help them in the preparation and delivery of a session. Materials include how to setup the classroom/webinar, supplies and equipment required, instructor notes, and exam answers.
- **Develop Training Administration Tools**—tools facilitate managing and coordinating the training schedules, invitations, and rosters.
- **Deliver Pilot Training Course**—pilot training is an important element in the overall success of the training program. Pilot course attendees are hand-picked for their ability to constructively critique the course for improvement. Pilot training enables our team, including the training specialist, to identify both strengths and weaknesses in the training plan, curricula, training data, training scenarios, and delivery approach. We incorporate lessons learned from the pilot training into the training for roll-out.
- **Launch Training**—we provide training to State trainers on each of the courses we develop, by delivering the training to them as if they were the courses' target audience. Because State trainers may want additional information for in-depth understanding, our train-the-trainer courses include references to background documentation. We will deliver the training in a classroom located at a State facility. Our classroom training can be supplemented by Web conference should some students be unable to physically attend.

Team CGI administers the training program for sessions we deliver. Training administration includes managing areas such as training registration and cancellation, training credit, course evaluation and feedback. We will build the processes and tools for training administration with the needs of the State trainers in mind, providing them with capability to administer their training program.

- **Continual Improvement**—continual improvement hinges on the training evaluation process. Trainees are asked to anonymously fill out surveys to evaluate the quality of training content, knowledge level of the instructor, and overall satisfaction with the training course. Feedback from the students helps us improve the materials and subsequent training sessions.

We develop training status reports to capture the overall training program progress. Data – such as number of users trained, number of training classes conducted and training locations – is provided in the training report.

3.1.8.4 Configuration Management

Providing a reliable, secure, highly available service to the State requires strict management of configuration of the components making up SIROMS. We integrate configuration management with change and release management processes to achieve this. Team CGI brings extensive experience operating configuration and change management processes in a federated multi-vendor scenario. The approach, used by Team CGI in similar operational environments, focuses on communication and coordination to promote successful change.

We use the Configuration Management (CM) standards outlined in the Software Engineering Institute (SEI) CMMI Level 3 and the ITIL v3 Service Asset and Configuration Management (SACM) processes. Using these processes, we track and control services, hardware, infrastructure software, business applications, documentation, control data, and release packages. The information stored about these components or configuration items is used to do the following:

- Allow Team CGI to perform impact analysis and schedule changes safely, efficiently and effectively, thus reducing the risk of changes adversely affecting the production environment
- Provide problem management personnel with the understanding about the relationships of items they require for effective root cause analysis
- Facilitate adherence to legal obligations, for example, maintaining compliance with vendor license agreements
- Contribute to contingency planning for the restoring IT Services in the event of a disaster
- Improve security compliance by tracking the versions of configuration items in use

The features and benefits of our approach are shown in **Figure 3.1.8.4-1**.

Features	Benefits
Documented change and configuration management processes based on CMMI and ITIL	▪ Industry-standard approach with common terminology ▪ High availability and security through well-controlled changes to configurations
Tailored to integrate with the State environment comprising multiple contractors, departments and interfacing systems	▪ Supports control and coordination across the program
Explicit identification of stakeholders to review and approve each type of configuration change; engage stakeholders in planning, executing, and verifying each request for change	▪ Low-risk implementation of changes and releases ▪ Other contractors and departments are prepared for changes
Data center auto-discovery tools such as BMC Atrium Discovery and Dependency Mapping (ADDM)	▪ Maintain accurate Configuration Item (CI) records ▪ Maintain infrastructure compliance with security policies
Microsoft Visual SourceSafe for managing application software configuration	▪ Version control of software components protects the integrity of releases ▪ Rollback support to reverse changes in the event of problems to sustain high quality production services

Features	Benefits
	▪ Enables multiple application releases to be developed in parallel so that immediate business needs can be satisfied without jeopardizing longer terms needs

Figure 3.1.8.4-1. Change control and configuration management features and benefits.

We use a Configuration Management Data Base (CMDB) to create, store, and track the functional and physical characteristics of each configuration item (CI), including traceability of changes. We institute CM during our implementation and maintain steady-state operations as illustrated in **Figure 3.1.8.4-2**.

Figure 3.1.8.4-2. Configuration Management. *By controlling the components making up SIROMS, we sustain reliable, secure and highly available service for the State*

To maintain configuration accuracy and quality we tightly couple Configuration Management with Change Management. A Change/Modification Request is required for any change to the Production configuration. General examples of these types of changes include:

- Production fixes to resolve software, hardware, or configuration defects
- Application enhancements
- New reports or changes to existing reports
- New interfaces or changes to existing interfaces
- Updates to operating systems, middleware or database parameters
- Modifications to reflect new operations procedures
- Additions, removal, replacement or relocation of server hardware and/or software
- Network additions, deletions or reconfiguration
- Third-party software updates
- Changes to remediate security vulnerabilities

Figure 3.1.8.4-3 shows the overarching process we employ to funnel requested changes from many sources into a single stream of activities that coordinates and manages the activities, culminating in deployment of a release to production.
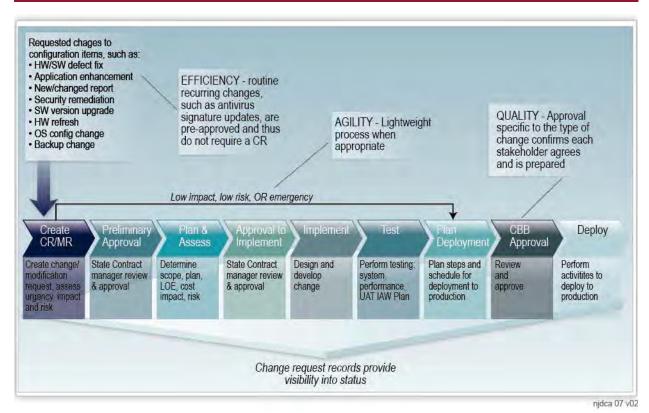
Figure 3.1.8.4-3. Change Management. *For every change to the baseline configuration, we follow a highly transparent change process that balances speed with risk, sustaining quality IT service*

The Change Control Board (CCB) reviews and approves each proposed change to the baseline configuration. This control mechanism is essential for maintaining alignment of services with the program objectives. The CCB is made up of stakeholders including the State Contract Manager, representatives from State Departments and other service providers (as necessary). By including all those potentially impacted by the changes, we maximize alignment and readiness across the program to sustain high quality services.

We coordinate the CCB meetings, keep meeting minutes, and prepare and distribute applicable documentation to members, and provide weekly briefings to the State on CCB and CM status.

3.1.9 Application Management Methodology

CGI uses a System Development Life Cycle (SDLC) specifically tailored for the SIROMS IT services environment. The SDLC is a comprehensive system engineering methodology for executing development enhancements for IT initiatives that is consistent with the concepts described in the Software Engineering Institute's Capability Maturity Model Integration (CMMI®) and the Information Technology Infrastructure Library (ITIL).

The SDLC methodology is used for all system development and enhancement initiatives undertaken and delivered to by CGI to the State of New Jersey. The specific participants in the life cycle process, and the necessary reviews and approvals, vary by project.

Our development methodology is intended to facilitate the active collaboration of all participants in the development process in order to efficiently create systems that meet or exceed client requirements. Roles and responsibilities are clearly defined. **Figure 3.1.9-1** shows how we engage the State at key decision points so that the release effectively supports the business needs.
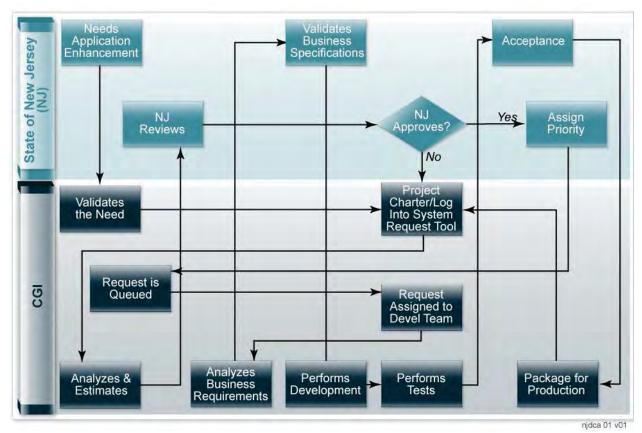
Figure 3.1.9-1. Application Development and Maintenance process. *To develop high quality application releases, we follow a process that includes the State at key decision points.*

The effectiveness of our approach derives from the following attributes:

▪ A phased approach to development. Each phase is designed such that the information required for decisions to be made is produced at the right time, to facilitate effective construction, which aligns with client requirements.

- Client participation is essential for successful development of an information system. Timely involvement in project activities is a critical success factor.
- A technology-neutral framework supports life cycle systems development regardless of the platform or the vendor.
- Clear identification of deliverables facilitates management and control of system development projects.

CGI understands that the SDLC must be flexible and tailored to the size, complexity, schedule and risk of the change that is being requested. That is, the greater the risk, the greater the rigor. The SIROMS IT services SLDC can be deployed either as a traditional "waterfall" approach or an agile approach depending on the needs of the project.

Waterfall Methodology

The phases of the traditional systems development lifecycle are as follows:

- **Planning**. The goal of the Planning phase is to obtain approval from the State to proceed with the project. Planning activities establish the business opportunity and value. Key stakeholders meet to clearly define the underlying business objectives – identify the need/opportunity, classify the current state, and outline the future state. The State validates that the proposed development/enhancement request meets the larger organizational goals and confirms that the high-level schedule, effort and cost estimates are approved by stakeholders. Upon approval from the State, CGI will proceed to the Analysis phase of the project.

- **Analysis**. In the Analysis Phase, business and functional requirements, an initial solution description, and a level of effort required to deliver the project are defined in the General Design. After the General Design is approved, detailed requirements are specified, documented, analyzed, and baselined. In addition to CDBG-DR requirements, we consider State financial practices, government accounting standards, and program requirements. The General Design is informed by the State IT Architecture so that the deployed system aligns with and integrates into the State's enterprise environment.

  Configuration management is established for applicable work products. The goal of this phase is that there is a common understanding of what is expected in the final deliverable(s).

- **Design**. CGI will document the design, including all necessary elements from which the actual solution components may be developed. The detailed design is the complete set of specifications for the components required to achieve the project objectives. Developing the detailed design includes creating, reviewing, and refining the components identified in the General Design to a level of detail such that the components can be acquired, modified, or constructed. The detailed design answers all substantive design questions to eliminate any significant risk of unplanned rework.

  Data modeling is based upon the State's enterprise reference data model, subject-area logical data models, and master data entities from the Master Data Management (MDM) program. Integration design uses State standards for data exchange, including XML and the State Enterprise Service Bus (ESB). The design also considers State common services such as the Geospatial Information System (GIS) and Reference Data Store (RDS).

- **Construction**. From the detailed design, individual components are developed by CGI . Coding of new components, conversion programs, creation of interface software for

integration of new and existing components, and development of documentation and training programs are all part of the construction effort. This phase is complete only after each individual component has successfully passed the unit test designed for it.

- **System Test.** The Systems Test phase is executed by the CGI QA Test Team and demonstrates that the developed system conforms to requirements as specified in the requirements documents by trying to discover every conceivable fault or weakness in a work product prior to its deployment into a Production environment. System testing occurs in an architectural environment that simulates or emulates the actual production environment into which the system will be installed. System testing exercises multiple components to simulate actual business scenarios. It may also incorporate various focused tests to validate specified system acceptance criteria.

  As components and subsystems are tested, they may be returned back to the development group for corrections or enhancements. After corrections are made, the components are migrated back to testing. Actual test results are documented and testing metrics are accumulated during the various phases of testing.

- **Regression testing** occurs in all testing phases. As defect fixes are applied to units of software and those units of software are introduced into test environments, regression testing is done to ensure that no additional errors have been introduced. This type of test verifies that a changed component does not adversely affect existing functionality in the changed component or the rest of the system. The regression test verifies that all earlier tests conducted on the component are still valid now that the component has changed. The scope of regression testing is determined by the testing team depending upon the scope of the change, the complexity of system functionality related to that change, and the urgency of the desired fix.

- **Performance** testing is conducted to make sure that the system meets the overall performance criteria established for the project. The CGI team develops and executes performance test scripts that exercise the system under pre-determined stress and load scenarios. Test results are documented and validated against performance criteria. If performance criteria are not satisfied, the CGI development team works with its DBAs and architects to tune the necessary system components to improve performance. There are two important considerations for performance testing:

  – Given the effort and cost it takes to conduct a performance test, CGI will work with the State to jointly determine which projects require performance testing.

  – When areas for potential improvements are identified, CGI will work with the State on balancing economy and improved performance. Application performance depends on a wide variety of factors, some of which are not related to the application. Performance testing is conducted on the applications within the scope of CGI's contract.

- **User Acceptance Test**. Acceptance testing is formal testing conducted by Program stakeholders to determine whether or not the system satisfies its acceptance criteria and to enable the Requestor to determine whether or not to accept the system

- **Deployment**. In this phase, the system or system modifications are installed and made operational in a production environment. This phase continues until the system is operating in production in accordance with the defined user requirements. The goal of this phase is the successful production launch of the system.

Agile Methodology

Team CGI uses the Agile version of its methodology on numerous contracts delivering accurate and timely enhancements in response to business, user and regulatory requirements. For example, we use our Agile methodology to respond to the continual changes in healthcare requirements and regulations that require rapid enhancements to the Centers for Medicare & Medicaid Services (CMS) systems we support. Because some of the systems are public websites (www.medicare.gov, www.mymedicare.gov, and www.cms.hhs.gov), the changes must be implemented on schedule and with high quality. To achieve this we use the Scrum agile methodology to deploy new releases monthly.

Agile software development is rapid and adaptive to change, focusing on customer satisfaction through quick and iterative delivery of production-ready code. Customer focus is inherent in the Agile software development methodology. Using the Agile methodology, we can:

- Facilitate quick understanding of requirements and refine designs through face-to-face collaboration with the users.
- Adapt quickly to frequent or significant changes and deliver production-ready software to provide business value to system users as rapidly as possible. Iterative releases of the system are completed to round out the intended feature set.
- Iteratively release system feature sets to customers for feedback and approval

The Agile software engineering model is well suited to the urgent and changing needs of the CDBG-DR program. Although the iterative methodology is rapid, it is still adheres to CMMI Level 3 processes to create deliverables that align with business, quality, and organizational objectives.

Throughout the maintenance, management and enhancement of the SIROMS applications, we will complete the planning and analysis phases to follow the State's processes for gaining approvals of cost estimates and technical approaches prior to undertaking any of development activities. We will then follow the Agile processes for the design, development and testing phases of projects. **Figure 3.1.9-2** conceptually shows the agile approach we take with software development and maintenance.
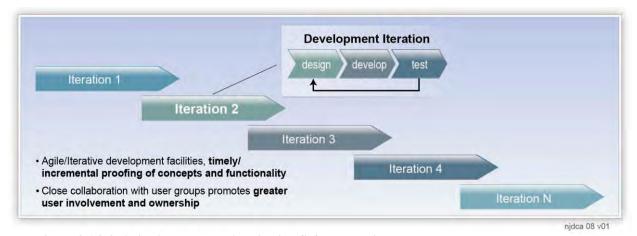
Figure 3.1.9-2. Agile Approach to Application Software Maintenance and Enhancement. *CGI's agile methodology approach delivers high quality releases rapidly*

An iteration is a version of the application we deliver to UAT. The iteration consists of one or more sprints depending on the amount of work required to produce the functionally in the iteration. A sprint is a cycle of design, build and unit test, which culminates in a working instance of the application that we demonstrate to the customer. Sprints are typically three weeks in duration so that the development team adopts a work rhythm that drives efficiency and productivity. To maintain the pace, daily scrum standup meetings focus on what was done yesterday, what is being worked on today, and any roadblocks. The sprint burn-down chart is updated from the daily meeting to provide visibility into progress. The iterations and sprints are driven by planning sessions we hold with the customer. In a session we review the backlog of items (defects, enhancements, etc) to be done, assess the scope of each item, prioritize the items and assign them to iterations and sprints based on the priority and the team capacity for the iteration/sprint.

3.1.10 Financial Services

In order to achieve the program integrity objectives pertaining to the SIROMS initiative, Team CGI understands the need to support the State with specific financial management services pertaining to CDBG-DR programs. Based on our experience supporting other States on CDBG-DR programs Team CGI has the experience and expertise to provide financial management services to the State as described below:

Funds Management
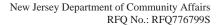
SIROMS protects taxpayer dollars though rigorous business rules that reflect the CDBG-DR regulatory requirements and continuous monitoring for fraud, waste and abuse. The SIROMS' business rules derive from the OMB circulars and disaster recovery regulations that promote transparency and good governance:

1. Cost Principles for State, Local and Indian Tribal Governments described in OMB Circular A-87,
2. Uniform Administrative Requirements for Grants & Cooperative Agreements with State and Local Governments outlined in OMB Circular A-102,
3. Uniform Administrative Requirements for Grants & Cooperative Agreement with institutions of Higher Education, Hospitals and Other Nonprofit Organizations outlined in A-110,
4. Cost Principles for Nonprofit Organizations or institutions of Higher Education discussed in OMB Circular A-122 and A-21,
5. Audits of States, Local Governments, and Nonprofit Organizations prescribed in OMB Circular A-133,
6. Davis Bacon Act,
7. Uniform Relocation Assistance and Real Property Acquisition Act of 1970,
8. National Environmental Policy Act, and
9. Robert T. Stafford Disaster Relief and Emergency Assistance Act.

If requested by the State, Team CGI can assist the State in developing payment guidelines that expedite recovery and ensure an auditable payment record. The team will work with DCA Program Managers to define program specific payment criteria and utilize best practices learned from previously implemented CDBG-DR programs. Best practices include processes that minimize administrative burdens and support the financial stewardship that the citizens of New Jersey demand. Team CGI will coordinate with the DCA Program Managers to develop supporting documentation and develop payment guidelines that outline expectations to vendors and subrecipients.

Audit Preparation

CGI will rely on OMB Circular A-133: Audits of States, Local Governments, and Nonprofit Organizations to guide the SIROMS' development. By developing a system with audit in mind, the SIROMS will assist DCA when HUD monitors or audits the program. The cloud capabilities of the system give DCA 24/7 access to program data and documentation that support the expenditures made by each program. By engaging DCA program managers in the system design, CGI will be able to build the SIROMS to document the beneficiary and program performance data often monitored by HUD.

To further prepare the State for audit, the CGI team will monitor sample data sets and assess the compliance of the documentation and data submitted by each program. The CGI team is accustomed to HUD disaster recovery monitoring routines and our data samples simulate HUD's common monitoring processes. Our CDBG-DR specialists and accountants will review the sampled data, confirm the data accuracy, and ensure cost reasonableness of each program's transactions. This added due diligence reduces the chance for monitoring findings and ensures that DCA is prepared for HUD's visit.

3.1.11   Records Management

Many different types of documents need to be managed under a CDBG-DR Program and each type of document must be retained in accordance with State and Federal policies, laws and regulations. Retention periods can vary widely—from days to decades.

Immediately upon contract signature, Team CGI will request the State contract manager to schedule a meeting with the Record Management Service Branch. The goal of this meeting is to seek advice and inputs from the Record Management Service regarding State and Federal policies, laws and regulations for Records Retention, records retention requirements as applicable to the SIROMS contract and general guidelines to create a records retention plan for the SIROMS contract.

Team CGI will create a records retention plan (RRP) that accommodates the following requirements at a minimum:

1. Confirming that documents are preserved and retained as required by law and/or sound business practices,
2. Maintaining adequate control over documents that may be required by Team CGI to support the State,
3. Confirming that documents are disposed of in a timely and appropriate manner in accordance with the plan
4. Managing information requests from the Open Public Records Act (OPRA) system to disseminate public information to those requesting access

If requested by the State, Team CGI will work with the OPRA Custodian and the State contract manager to establish a SIROMS interface with OPRA. Team CGI will retain records in electronic format. If paper records need to be retained, it is the responsibility of the State to retain paper records in accordance with the retention policies.

3.2 Contract Management

The SIROMS Program requires that a complex series of relationships, interactions, systems, and program requirements be provided. Managing environments of similar complexity has been the CGI hallmark through its projects across the U.S. and around the world.

The Services requested require both a project management orientation (for projects with deliverables such as specific application enhancements or new infrastructure configuration) and an IT Service Management orientation (for ongoing services managed with service level expectations). Thus, we propose continuing our proven management structure that relies on a focused Project Management Office to manage all IT services. Team CGI project management is supported by methodology designed for the service being delivered. Our program management approach - CGI's Client Partnership Management Framework (CPMF) - is built upon industry best practices and aligned with CGI processes tailored over 18 years of delivering services to the State. The State will receive the benefits of clear deliverables management and regular, systematic IT Service delivery in a mature, responsive and agile service management environment. In managing the SIROMS Program, we provide the following:

- We assign a dedicated Program Manager (PM), Mr. Nawfel Elalami as the State's primary point of contact
  - The PM coordinates and facilitates conference calls and meetings, including the weekly status and planning meeting.
  - The PM is responsible for all program management deliverables, progress reports, meeting agendas, meeting minutes and other any communications with the State.
- A PMO of Functional and Technical managers, aligned by tasks, support the PM.
- Team CGI executive management will monitor SIROMS program status and the State's satisfaction.
- We manage and operate SIROMS using the principals and methods of our CPMF tailored to the needs and requirements of the SIROMS Program and the State.

> **Effective low risk program management**
> Gartner G2 Research consistently recognizes CGI as having the lowest failure rate among major systems integrators. This finding attests to the effectiveness of our program, project, and IT Services management approaches and our staffing structure and quality.

- We provide rigorous Level of Effort (LOE) planning and Financial Management services working closely with the State on task LOE requirements and task priorities.
- We continuously communicate and collaborate with the State.

The Management approach detailed in the following sections demonstrates how Team CGI is uniquely qualified to meet the State's objective of quickly implementing the SIROMS CDBG-DR solutions to aid to citizens impacted by Superstorm Sandy.

3.2.1 Project Management

Our Team uses CGI's Client Partner Management Framework to manage its client engagements, delivering successful projects across more than 3,000 government and commercial clients around the world. To support high quality delivery, the CPMF:

- Provides Team CGI Program management with a practical, efficient, and immediately workable set of standardized processes, document templates, and reference materials to help support and maintain SIROMS.

> **NJDCA Satisfaction with CGI**
> NJDCA quote from CGI's February 2013 CSAP survey regarding CGI's commitment to NJDCA: "Outstanding. CGI is as dedicated to the successful deployment of this project at DCA."

- Facilitates effective communication among State stakeholders, and assists decision making by providing pertinent information via a framework of checkpoints.
- Maintains the quality of Team CGI services and awareness of State and Federal compliance requirements; aligns delivery and quality assurance; and provides for high long-term State satisfaction.

Figure 3.2.1-1 below illustrates the management components and relationships within the CPMF framework.
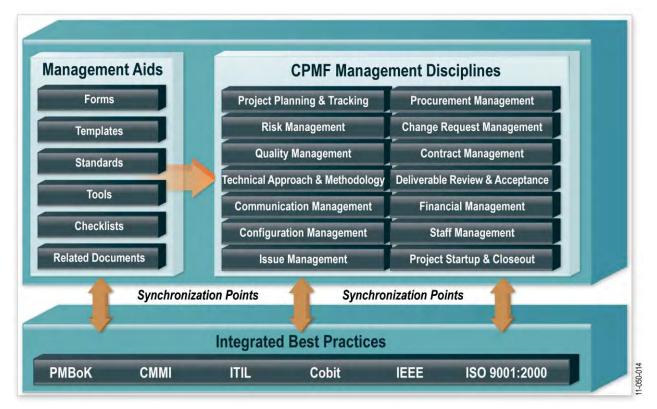
Figure 3.2.1-1. CGI CPMF Components and Relationships

Team CGI relies on the rigorous CPMF methodology to establish clarity around expectations and to manage risk. Our project management methodology combined with an experienced and committed Support Team will be the backbone of our project delivery capability. Our management framework and standards have enabled us to deliver many successful engagements, including projects for the State, other application CDBG-DR programs, application development and Cloud Services projects. Implementation of our project management framework is a required element for every engagement CGI undertakes and is included in our response. In addition to elements described elsewhere, our project management framework includes:

- **Adherence to identified standards for project management** – CGI's CPMF is International Organization for Standards (ISO) 9001:2000 (ISO 9001) certified and uses processes and methodologies drawn from established industry standards such as PMBoK, CMMI, ITIL Cobit, IEEE and ISO 9001:2000.

- **Apply a Collaborative Process** - To support and maintain SIROMS, Team CGI and the State must work together as a seamless and cohesive team. Team CGI is proficient in delivering application development, support and maintenance and our regulatory systems specialists have a deep understanding of government regulatory information management and the technologies used at NJDCA. However, Team CGI cannot be successful alone. Successful support and maintenance of SIROMS requires input and participation of the State's business owners, IT Staff and subject matter experts.

Rooted in quality processes and frameworks, CPMF enables Team CGI in our goal to fully satisfy the State's requirements and be a accountable, flexible and responsive partner. As demonstrated through past performance at NJDCA, the CPMF framework is structured but not rigid, providing the flexibility to adapt to changes in SIROMS requirements or State operations, procedures, and policies.

A key aspect to Team CGI's overall approach to executing the scope of work for the support and maintenance of SIROMS is to provide open and direct lines of communication to support on-going collaboration. As such, Team CGI assumes that our Project Manager and the State Contract Manager will have frequent contact to collaborate and to discuss issues and concerns.

Team CGI has assigned Mr. Nawfel Elalami as the Program Manager for SIROMS and its associated tasks. Mr. Elalami will function as the primary point of contact for the State on all matters pertaining to the Team CGI's work on SIROMS and will oversee all aspects of delivery for this project.

As the PM, Mr. Elalami will organize and conduct a SIROMS Project Kickoff Meeting with the State promptly after contract signature. This meeting should include key members of Team CGI and the State's team that will participate in this effort. The purpose of the meeting is to set mutual expectations, identify State business and IT contacts and discuss goals, vision and plans for the implementation and maintenance of the Gap and SIROMS solutions. After the kick-off meeting, our PM and State Contract Manager will work collaboratively to validate the initial list of tasks to be performed as well as finalizing the project schedule for the planned work. We will also work closely with project stakeholders to establish the priorities for the 2 year SIROMS initiative.

Communication and collaboration with the State will take place as needed daily and in formal weekly status meetings beginning immediately after the Project Kickoff.

Weekly status meetings will include:

- Provide the status of high-priority items (to be determined by the State Contract Manager)
- Progress reports to track and manage the execution of the scope of work.
- Discuss open questions or issues.
- Identify and discuss new issues or tasks, potential risks and mitigation plans.

- Collaboratively work with the State Contract Manager to define the scope of any new service request.
- Provide documentation containing finalized scope, estimated hours, and schedules for new tasks for the State Contract Manager to review, prioritize Projects and approve the request document. Team CGI understands the State Contract Manager must approve any Contract change orders.

Team CGI leverages our experience and partnership at NJDCA to manage and execute the tasks defined under the Scope of Work of the RFQ (Section 3.0 – Scope of Work). We are drawing from our extensive experience supporting other CDBG-DR Programs to provide processes, tools and procedures successfully used in the past. Using proven capabilities allows us to accelerate the implementation of SIROMS, while reducing risk and minimizing costs. **Figure 3.2.1-2** below illustrates the approach to providing Program Management using our CPMF.
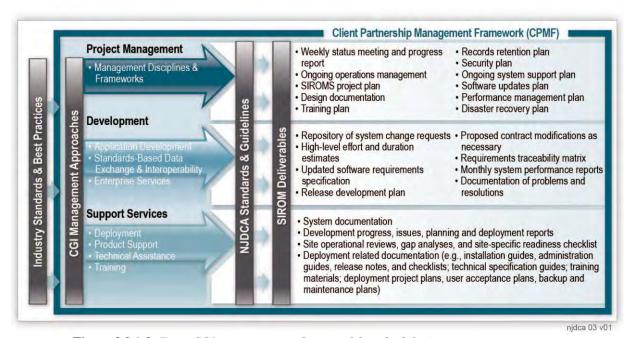
Figure 3.2.1-2. *Team CGI uses proven and successful methodologies to manage programs.*

Our PMO consists of leadership and oversight at the strategic level and operations at the tactical level. The PM, as the leader of the project, provides direct interaction with the PMO. The PMO focuses on defining the standard and procedures for project execution. Projects focus on activities that have defined times, are unique, and provide a measurable end deliverable or product. Project activities focus on new or enhancement activities. The PMO utilizes CGI's proven project management methodology to successfully manage all aspect of IT operations. The PMO also serves as the manager of the Change Request process. Change Requests in this environment serve as the vehicle for project initiation. The PMO monitors and tracks the status of all projects and prepares weekly and monthly status reports.

Tasks delivered under the program will be executed in phases as depicted in **Figure 3.2.1-3** below, enabling the lessons learned and proven methods to provide the most accurate LOE estimations for the State's review and acceptance.
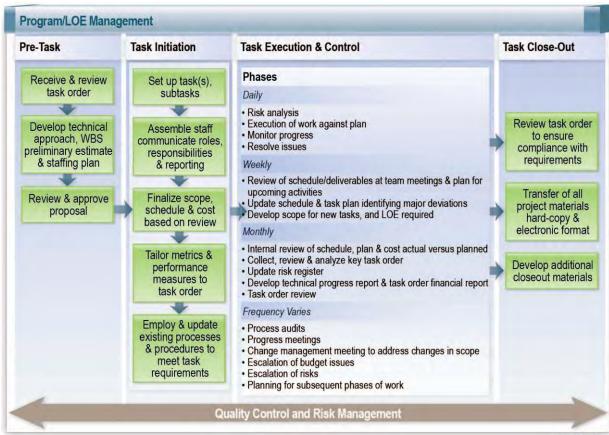
Figure 3.2.1-3 CGI Program Task Management

3.2.2   Quality Management

A key component of the CPMF, CGI's quality management approach includes the quality planning, assurance, and control activities necessary to maintain defined quality standards. In practical terms, this means that Team CGI has a set of quality standards that will govern deliverables for the support and maintenance of SIROMS. In addition, independent reviewers from within Team CGI will conduct internal reviews and provide feedback on all deliverables prior to delivery to the State. In this manner, Team CGI provides independent quality checkpoints prior to providing the deliverable. **Figure 3.2.2-1** below illustrates the Team CGI quality Methodology.
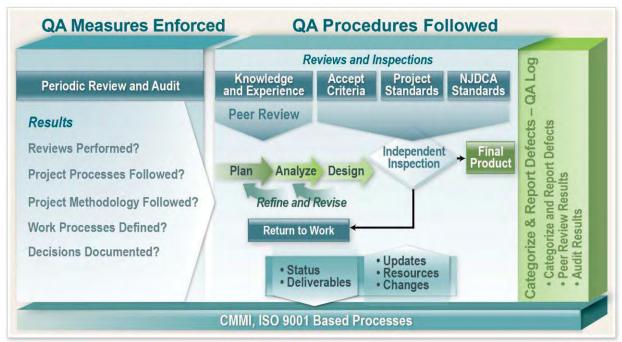
Figure 3.2.2-1. CGI Quality Methodology

3.2.3 Risk Management

Team CGI's investment and commitment to managing project risks has enabled us to be successful in delivering complex projects in the public sector domain. One of the key reasons why Team CGI has been so successful in executing complex projects is our understanding of and ability to effectively execute risk management processes. Our methodologies grounded in PMP processes in combination with our experience working with State regulators help us proactively evaluate and manage project risks. Our Project Management Team will work closely with the State to identify and manage risks related to the support and maintenance of SIROMS collaboratively in an on-going fashion.

Providing reliable support and maintenance for a key service like SIROMS will require meaningful experience with the technologies that support these systems and an extensive knowledge of the State's business processes and project management procedures. Team CGI's in-depth understanding of NJDCA's business and IT systems and our experience supporting and maintaining CDBG-DR Programs of similar size and scope significantly reduce the risk associated with supporting and maintaining SIROMS, and will allow us to respond quickly if potential problems do occur. Based on the qualifications of our proposed Support Team, we are confident that Team CGI offers the highest quality, lowest risk, and best value to NJDCA for the support and maintenance services.

Risk management is an integral part of Team CGI's program management process. Our risk management methodology provides a mechanism to identify and address project issues at any stage during a project life cycle. We incorporate risk identification into daily activities and the weekly status meetings. Our approach to risk management begins during the planning stages of the program and continues through program completion. From task planning through task execution, we assess the likelihood (probability) and potential consequences of discrete risks
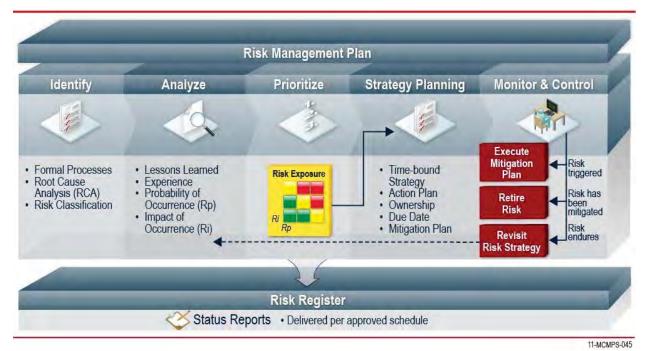
(impact) and develop mitigation strategies for high likelihood/severe consequence risks. As part of Team CGI's risk assessment, the PM places each risk on a risk register. These risks are continually evaluated as part of our Risk Management Plan (RMP). The risk register categorizes and describes each risk and its symptoms, and outlines prevention, mitigation, and control actions. Should any risk materialize, we notify the State Contract Manager immediately and communicate the prescribed mitigation strategy.

The **Figure 3.2.3-1 below** illustrates how we develop and execute the Risk Management Plan.

As part of our regular Weekly Status Meetings, the State and Team CGI will discuss potential risks and concerns. After identifying a risk, the State and our Project Managers will work collaboratively to evaluate the risk, assess the potential impact of the risk, create a mitigation plan against the risk, and track and present the risk at the Weekly Status Meetings until it has been fully mitigated or resolved.

3.2.3-1. Team CGI Risk Management Approach

3.2.4   Service Level Management

In seeking a fully functional turnkey IT solution, the State has defined service levels it requires from the solution, to meet the needs of State users and to provide accountability and evaluate successful IT services and program execution. Team CGI tracks our performance against the defined metrics on a daily, weekly, and monthly basis. The PM provides summaries of the performance metrics and detailed supporting data, to illustrate how Team CGI met (or exceeded) the thresholds on those metrics in the weekly status reports. We also use the performance data for analysis in identification of trends requiring corrective action; and the using the change management process, to develop, implement and monitor corrections for maintaining and improving system performance.

We derive Performance results against the SLAs from several sources supporting overall program monitoring, which include, but are not limited to:

- Quality Assurance Surveillance Plan (QASP): Captures the government's feedback, while monitoring Team CGI against SLAs.
- PMP Schedule: Schedule variances and risks area captured for trend analysis.
- Service Desk Reports: Identify trends in user defects and response times to help desk tickets.
- User Surveys (CSAP): Analyzed to identify performance improvement opportunities.

Team CGI has a company-wide focus on customer satisfaction, as can be seen through both the management processes to support client satisfaction and the eagerness of our clients to continue to work with us. Our program management methodology extends this process to a more integrated view of program and client success through the utilization of Client Satisfaction Assessment Program (CSAP).

The CSAP is used to understand the level of value that the State feels it is receiving from the engagement. This is completed through an interview process to discuss ten factors of successful program execution. The results will be documented and provided to high-level Team CGI executives to help them define areas for change and growth and continued success. Our CSAP process is conducted every six months to allow for feedback to be provided to enhance the services provided and to allow any needed changes to be made

We also understand that with the changing needs of the programs, areas that should be measured will likely change. The periodic review of business needs and translating those needs to staffing alignment and service levels that we propose below helps create an environment where service levels are more dynamic and performance is better aligned and focused on continuous improvement.

Team CGI provides the following Service Levels for SIROMS:

Service Metrics	Service Level
Environment Metrics	
Infrastructure Uptime	99.5%
Applications Uptime	99.5%
Help Desk Response	
Response to Tier 1 Issues	Target Status Update: 1 hour Target Resolution or Workaround: 95% of the issues within 24 hours
Response to Tier 2 Issues	Target Status Update: 2 hours Target Resolution or Workaround: 95% of the issues within 48 hours Reporting Requests
Reporting Requests - Response	
Critical Request	1 Business days
High Request	3 Business days
Medium Request	5 Business days
Low Request	10 Business days
Software Maintenance Requests (MR) - Response	

Service Metrics	Service Level
Critical MR – Conduct Analysis and Provide Level of effort	2 Business days
High MR – Conduct Analysis and Provide Level of effort	3 Business days
Medium MR – Conduct Analysis and Provide Level of effort	5 Business days
Low MR – Conduct Analysis and Provide Level of effort	10 Business days System change/configuration requests(CR) - Response
System change/configuration requests (CR) - Response	
Critical CR – Conduct Analysis and Provide Level of effort	2 Business days
High CR – Conduct Analysis and Provide Level of effort	3 Business days
Medium CR – Conduct Analysis and Provide Level of effort	5 Business days
Low CR – Conduct Analysis and Provide Level of effort	10 Business days

3.2.5   Documentation

Team CGI maintains constant clear communication, both directly and indirectly, using scheduled meetings and progress reports to inform the State of activity progress, status of open items, any new or closed items and items requiring their participation and approval, as part of the support and maintenance of SIROMS.

In addition to the daily collaboration and weekly status meeting between the State and Team CGI, we provide a weekly status report to the State Contract Manager. The weekly status report will include:

- Project activities for the previous week,
- Accomplishments and tasks planned for the following week.
- Any necessary revisions and updates to any active Project plans.

Complete and accurate documentation is a key component of our Program management, and we understand the critical need for substantiation of work in a program like SIROMS. To support NJDCA and for accurate planning and program management, we will provide the following Program Management and planning documentation to meet SIROMS requirements:

Within 15 days of contract signature, Team CGI will provide:

- Draft Project Management Plan (PMP) detailing specific tasks, milestone dates and deliverables for the GAP and Shared Service solutions. The PMP identifies our approach to meeting the deliverables and tasks, dependencies, organizational relationships, staff member responsibilities, and required tools. The PMP also defines the approach for the Integrated Master Schedule (IMS) and project schedule, quality assurance, configuration management, and risk management. Following State Contract Manager review and approval, we will revise and baseline the PMP, which will become the capstone document for project management in the SIROMS program.

- Proposed <u>System Design</u> documentation for review and approval by State Contract Manager.

Within 30 days of contract signature, Team CGI will provide:

- <u>Training Plan</u> describing the curricula, training location, and roles and numbers of trainees expected and all other requirements of RFQ section 3.3.6 – Training.
- <u>Records Retention Plan</u> for the short and long-term housing of physical documents and electronic images (i.e. paper documents, emails, correspondence, training material, and policy and procedures associated with the Program, etc.) to comply with State and federal record retention policies, regulations and laws.

Within 60 days of contract signature, Team CGI will provide:

- <u>Security Plan</u> which includes:
    – Facilities Physical Security and Environmental Protection
    – System Security
    – System Data Security
    – Network Security
    – Administrative and Personnel Security
    – Disaster Recovery Plan
    – Contingency Plan
- The <u>Disaster Recovery plan</u> details how, in the event of a disaster at the primary site, SIROMS would be made available to meet the 24 hour recovery time frame, including a DR test plan.

Within 90 days of contract signature, Team CGI will provide:

- <u>Support Plan</u> for ongoing system support
- Plans for providing software upgrades to core platform as needed based on final approved design
- IT Benchmark performance report and a proposed <u>Performance Management Plan</u> to maintain that performance.

Knowledge Transfer

Team CGI recognizes that we may be asked to create a Transition-Out Task plan at the end of the contract. The plan would detail Project Management activities and LOE required to transition and provide training and knowledge transfer services to State staff in order for State staff to continue to provide system administration, database administration, and in house development while maintaining full functionality of the system during the transition.

3.3 Potential Challenges

As an experienced service provider in delivery of CDBG-DR Programs to States, CGI has extensive experience with the types of issues that may present themselves in this dynamic environment. Drawing on our experience and lessons learned allow us to anticipate and mitigate or eliminate potential negative impacts through proactive management and robust agile service delivery. The following identify anticipated challenges facing the implementation and operation of SIROMS and our solutions:

Challenge - Rapid response and adaptability to new or changing requirements

Administering disaster relief is a highly visible and complex business process wherein administrators have to often manage conflicting expectations across the spectrum of stakeholders. For example impacted citizens demand quick disbursement of funds while regulations necessitate stringent eligibility checks that are time consuming. In addition, translating a high-level action plan into discrete process may necessitate changes to policies and procedures. The state of Louisiana has had over 100 policy changes over the course of the LA Road Home project. CGI sees changing requirements as the biggest challenge on the SIROMS project.

- **CGI Solution:** Team CGI understands the complexities associated with CDBG-DR projects. Though changes to requirements cannot be eliminated, we will work with the State in the following ways to minimize the impact of frequent changes to requirements
  - Assign a team of subject matter experts to work closely with stakeholders to identify requirements, review requirements against regulations and advise the State on any potential pitfalls associated with the requirements
  - Collaborate with the State to prioritize requirements such that the highest priority requirements can be automated before the low priority requirements
  - Document history of requirement changes to facilitate the State and Team CGI learning from the changes
  - Build automation in small progressive iterations instead of large projects to reduce waste resulting from changing requirements
  - Use system design practices that leverage standard frameworks and reusable code to minimize the impact of changes on systems

Challenge - Aggressive Timeframe for milestones

We recognize that if we are selected as the State's partner for the SIROMS initiative, we will have to deliver services and solutions under highly aggressive timeframes.

- **CGI Solution**: Team CGI is proposing the below approach to manage the aggressive timeframes that we will face on the SIROMS initiative.
  - Formulate a team of professionals that have experience with CDBG-DR programs, IT systems required for CDBG-DR programs and the ability to quickly understand the complex requirements of the State of New Jersey. This will enable us to reduce the learning curve required to be fully productive in delivering services and solutions
  - We plan to reuse successful process, procedures and tools proven in the delivery of other CDBG-DR projects such as the Louisiana Road-Home program combined with CGI project delivery methodologies.

– We will work closely with the State to manage expectations. We will serve as a trusted advisor to the State and provide realistic recommendations regarding delivery risks and alternative or workaround solutions to keep the program moving forward

– We will use an iterative delivery approach to deliver solutions in smaller chunks to achieve quick wins and mitigate delivery risks

Challenge – Coordination and Collaboration across multiple stakeholders

As stated in the RFQ, the SIROMS program spans multiple state agencies, the US Federal government, program contractors, citizens and other external organizations. The completion of certain business processes may be dependent on the actions of many stakeholders. Managing these interactions while still being accountable for delivering services and solutions is a challenge.

- **CGI Solution:** CGI has extensive experience working on contracts that involve a large number of stakeholders. For example the LA Road Home project involves a variety of stakeholders including program contractors, parishes, citizens, LA state agencies, HUD and others. CGI will bring a disciplined management process to manage stakeholder relationships to mitigate delivery risks

  – Clearly define roles and responsibilities for each stakeholder involved in a project

  – Conduct regular meetings with stakeholder groups to discuss project requirements, timelines and dependencies

  – Establish a commonly accessible collaboration platform where project information is disseminated to stakeholders

  – Conduct regular risk reviews and mitigation strategies with stakeholders to mitigate risk.

Providing reliable support and maintenance for a critical application such as SIROMS or its ancillary systems will require meaningful experience with the technologies that support these systems and an extensive knowledge of NJDCA's business processes and project management procedures. CGI's in-depth understanding of NJDCA's business and IT systems and our experience supporting and maintaining systems at regulatory agencies of similar size and scope will significantly reduce the risk associated with supporting and maintaining SIROMS and its ancillary systems, and will allow us to respond quickly if potential problems do occur. Based on the qualifications of our proposed Support Team (presented in *Section 4.1.2*), we are confident that CGI offers the highest quality, lowest risk, and best value to NJDCA for the support and maintenance services.

3.4 Assumptions

CGI's assumptions associated with our technical quotation in response to the SIROMS RFQ are stated below:

1. In developing the Gap Solution, Team CGI assumes that the DCA has adequately defined its payment procedures and program requirements to facilitate process documentation. Additionally, we assume that the DCA staff will be available to discuss payment procedures and program requirements during the Gap Solution deployment period.

2. We assume that the DCA will accept a Gap solution that is created using a combination of commonly available tools and some manual steps

3. DCA staff will attend training on the Gap Solution tool.

4. DCA provides scanning equipment located at a State facility.

5. The Louisiana BPM systems are built using Opentext MBPS version 7.6 which is not the latest version of the software. In order to keep up with evolving technology.CGI will upgrade the re-usable components from LA Road Home to Opentext MBPS version 9.0. This upgrade is not part of Task Order 1.

6. The SIROMS solution proposes re-use of software built for the LA Road Home project. The extent to which the software can be re-used for New Jersey has to be determined and modifications will be needed after defining the requirements.

7. The State will comply with BPM product requirements for desktop products and versions (e.g. Internet Explorer).

8. In the GIOS application, description entities are defined as Projects not as individual applicants (i.e. homeowner).

9. We assume all program areas and external systems will be able to exchange data with SIROMS using specified schemas.

10. We assume that the SIROMS data warehouse is not the system of record for source data that has been imported into SIROMS

11. The SIROMS data warehouse will be dependent on source systems for data quality and data availability

12. NJ systems and other contractors will permit integration with SIROMS using the technologies specified in the RFQ

13. ESRI licenses are not available for procurement by state customers via GSA Schedule. CGI assumes that the state will be able to provide CGI with ESRI licenses as needed for SIROMS.

14. The State will provide the support needed to establish connectivity to CGI Cloud Computing Environment and the State computing infrastructure. CGI will need support from the State in the following areas:

    a. A single point of contact for all matters related to the establishment of the cloud environment

    b. Allowing AT&T to set up the MPLS connections needed for the cloud based on the RFQ requirements including:

        i. Access and NJ Network engineer architect assistance with CGI installed Firewalls at both the State of NJ Primary and State of NJ Secondary sites.

        ii.   State of NJ engineer architect assistance with connectivity between State of NJ infrastructure and CGI Cloud environment

    c. Providing security, access and permissions as needed

15. Training courses will be delivered in Trenton, New Jersey. The DCA will provide facilities and equipment for the training courses.

16. For courses delivered by the State Trainers, the DCA will perform the scheduling, administration and preparation for the courses.

17. CGI will set up the SIROMS Help Desk in Trenton, NJ. The help desk will be staffed to attend to an average of 150 to 180 calls per day. In the event of call volumes exceed the average call volume, CGI will make voicemail access available to caller

18. NJDCA will be responsible for providing CGI, at no charge, the phone lines and voicemail in Trenton, NJ for setting up the help desk.

19. Interactive Voice Response (IVR) capability is not part of the scope of our Help Desk solution.

20. Training courses will be delivered in Trenton, New Jersey. The DCA will provide facilities and equipment for the training courses.

21. For courses delivered by the State Trainers, the DCA will perform the scheduling, administration and preparation for the courses.

22. An assumption that software solution components developed for Louisiana disaster relief programs using HUD and/or FEMA funds will be requested from Louisiana by the State of New Jersey and made available to CGI by the CGI contract execution date.

23. Individual Program Contractors will own the systems of records for individual applicants (homeowners or landlords)

24. NJDCA will appoint a State Contract Manager that serves as the single point of contact of all matters pertaining to the project. The NJDCA State Contract Manager will facilitate all final decisions regarding task orders and deliverables. This NJDCA Project Manager will also serve as the sole source of issue resolution during the engagement.

25. The NJDCA is responsible for any required system interface approvals or agreements necessary with external systems to achieve systems integration

26. The NJDCA is responsible for providing necessary space and equipment to CGI staff working on-site at NJDCA's Trenton, NJ offices

27. The State Contract Manager is responsible for coordinating with the NJ staff and other contractors to allow CGI timely access to personnel with appropriate expertise and knowledge in relevant functional and/or technical subject areas (e.g., for scheduled interviews, facilitated workshops, phone consultations, etc.).

28. All invoices related to the SIROMS contract will be submitted directly to the NJDCA Project Manager.

29. We assume the State Contract Manager has the authority to adjust task order due dates for reasons outside of CGI's control including but not limited to procurement timelines for items to be procured, availability of State staff or state contractors, regulatory/policy changes, access to state infrastructure and other similar reasons.

30. As per section 3.5.2 (ODCs) of the RFP, the State needs to approve every software or hardware purchase to made for the SIROMS contract. In order to complete Tasks 1 to 4

stated in Exhibit 3 of the RFQ, CGI assumes that NJDCA will either make software available to CGI or provide timely approval for CGI to acquire the necessary hardware and software items.

31. Regardless of the State or CGI procuring necessary hardware and software for the SIROMS contract, license agreements need to be signed with the providers of these items. CGI assumes that the State will consider the time required to complete license agreements with the providers as part of the task order due dates.

32. For all tasks that involve meetings and interactions between CGI, NJ personnel and other state contractors, CGI assumes that the required personnel will be available to meet with CGI staff as needed to meet task due dates.

33. For any interfaces required as part of the SIROMS contract including but not limited to NJ systems, other state contractor systems, federal government systems, other third party systems etc., CGI assumes that the State will obtain the approvals necessary to enable CGI to interface with these systems.

34. CGI assumes that the DCA intends to rely on SIROMS for audit support and the system of record.

35. CGI assumes that the DCA expects SIROMS to comply with state and federal financial regulations, as well as, comply with related regulations governing federal disaster recovery dollars such as Davis Bacon and the Stafford Act.

36. The CGI Project Manager and the State Contract Manager will have frequent contact to collaborate and to resolve issues and concerns

37. CGI staff will be provided adequate facilities (secure work area, desks, chairs, etc.) and technology (telephonic, network access etc.) when working on site with the State on this Program.

38. When required, the State will provide any information or approvals in time for us to meet all SIROMS project schedules.

39. SLA performance is measured monthly, and evaluated quarterly.

40. Environmental SLA performance is only evaluated on production environments.

41. As a standard part of the CGI Federal IaaS Cloud, CGI provides:
    a. Ability to scale up to 1 Gigabit Internet access
    b. VMs with minimum CPU speed of 1.1 GHz (2 GHz for Web Hosting)
    c. Each customer is provided with: 500 Mbps of inter-Virtual Local Area Network (VLAN) bandwidth on each physical server and 100 Mbps of Internet bandwidth.
    d. 99.5% availability for our Cloud infrastructure

42. For databases, CGI provides the license to use the database as well as database vendor support.

43. During backup periods, it is the customer's responsibility to ensure the database is in the proper mode for backup.

44. Standard Cloud service allows creation of VMs from standard template and locating VMs in a standard 3 (web, app, database) customer dedicated subnets.

45. Ownership of all customer data, VMs, templates, clones, scripts, customer-loaded software, and applications created by a client in CGI's Cloud environment, is retained by that client unless specifically provided by CGI as part of our Cloud services.

46. Data transmission within CGI's control, such as access to the portal or through VPNs, is encrypted. Customers are able to configure their own firewalls and are responsible for ensuring their data is properly encrypted when it leaves the Cloud.

47. Restores from backup are performed to return a system to the state it was in at the time of a scheduled backup. Restores are performed upon customer request. Customers may request one restore per VM per month.

48. CGI reserves the right to take a VM offline during a security incident response.

49. CGI provides text descriptions of major outages (including description of root-cause and fix) resulting in greater than 1-hour of unscheduled downtime per incident within a month.

50. Customer will have access to reporting portal for standard reports.

51. Backup storage capacity is estimated at 13,950GB.

52. We assume that all network bandwidth will be provided with the AT&T MPLS circuits.

53. Customer will designate a prime contact and backup for CGI to interact with as needed.

4. Organizational Support and Experience (Section 4.2.4)

CGI has created a team for the SIROMS project that is comprised of organizations with specific experience in CDBG-DR programs, the technology suite proposed for the SIROMS project as well as general IT and management expertise. Team CGI is comprised of the following organizations.

CGI (Prime Contractor) is a full-service IT and managed services provider with long-time government expertise and innovative service models that help our clients achieve their business goals. CGI has a comprehensive portfolio of services—consulting, systems integration, full management of end-to-end IT and business functions, and 100+ proprietary solutions—enabling us to serve as our clients' full-service provider by improving all facets of their operations. Founded in 1976, CGI Technologies and Solutions Inc., with its parent company, CGI Group Inc. is the 5th largest independent IT and business process services company in the world. Our 69,000 professionals in 40 countries across the Americas, Europe and Asia Pacific provide end-to-end IT and business process services that facilitate the ongoing evolution of our clients' businesses.

Blue Streak Technologies, LLC (Subcontractor) is a Baton Rouge-based software consulting company specializing in design and implementation of business process management and business intelligence solutions. Founded in 2003, Blue Streak has over five years of experience developing application solutions for Louisiana state agencies and is a current service provider for OCD/DRU Programs. Blue Streak will provide technical expertise on the Metastorm BPM platform.

HORNE, LLP (Subcontractor) is a leader in the CPA and business advisory industry. Emphasizing innovation and forward-looking ideas, HORNE is a top 100 firm in the nation and a top 10 firm in the Southeast. From office locations in Mississippi, Tennessee, Alabama, Louisiana and Texas, HORNE's team members deliver to clients across the United States.

As a team, we offer managed services knowledge and the strength of a large firm with decades of public sector service, combined with the experience of current partners and CGI consultants. Every firm in our Team offers a record of satisfied clients who find us easy to work with and who experience the benefits of partnership while achieving concrete, measurable results. HORNE will provide business expertise, domain knowledge and financial services on the SIROMS project

GCR Inc. (Subcontractor) Established in 1979, GCR Inc. (GCR) is an international professional services firm that partners with government and commercial clients to deliver consulting services and technology solutions in aviation, disaster recovery, elections, nuclear power, public safety, right-of-way and urban planning. At its core, GCR is a consulting firm. The tools, techniques and technologies developed in their consulting work have opened doors in other areas, including aviation consulting, right-of-way acquisition, disaster recovery, custom software development, utility and nuclear industry consulting, and jurisdictional analysis.

What differentiates GCR from other consulting firms is their deep focus on technology – and what sets them apart from other technology firms is that they see technology not as a goal in itself, but as a means of providing clients with the information necessary to create the best solutions to their problems. GCR will provide staff augmentation services as needed.

4.1 Location

CGI's business model is built on a client proximity model where we emphasize staffing and delivering projects with a local BU close to our client's center of operations. This model allows us to function as true business partners and offers the highest degree of responsiveness and efficiency. It is our expectation, unless otherwise agreed upon with NJDCA, that all work related to the SIROMS project will be performed on-site. However, our local team can be supported by subject matter experts from other CGI office locations and Centers of Excellence in the U.S. to take advantage of specialized experience and reduce project costs.

For the SIROMS project, the NJDCA Contract will be managed through the following location:

- CGI, 11325 Random Hills Road, Fairfax, VA 22030

Name, Title, is the principal contact for this account. If you have questions or require clarification on the information that has been provided, please contact him at:

Name: Nawfel Elalami
Title: Director, Consulting
Address: 11325 Random Hills Road
City, State ZIP: Fairfax, VA 22030
Telephone Number: (703)-267-8230
Fax Number: (703)-267-7286
Email Address: **nawfel.elalami@cgi.com**

4.2 Organization Charts

4.2.1 Contract-Specific Organization and Structure

CGI has assembled a team of innovative professionals who offer broad experience in state government as well as an understanding of disaster recovery projects. The CGI Team is composed of members from CGI, Blue Streak Technologies, LLC and HORNE, LLP.

We have also established an executive advisory board comprised of CGI senior executives from CGIs regulatory practice, the LA road home project and HORNE, LLP to support and guide the SIROMS project team. This team has extensive experience in delivering CDBG-DR solutions to multiple states.

The organization for our SIROMS project team is shown in **Figure 4.2.1-1**. Key resources are represented with an asterisk next to their names.
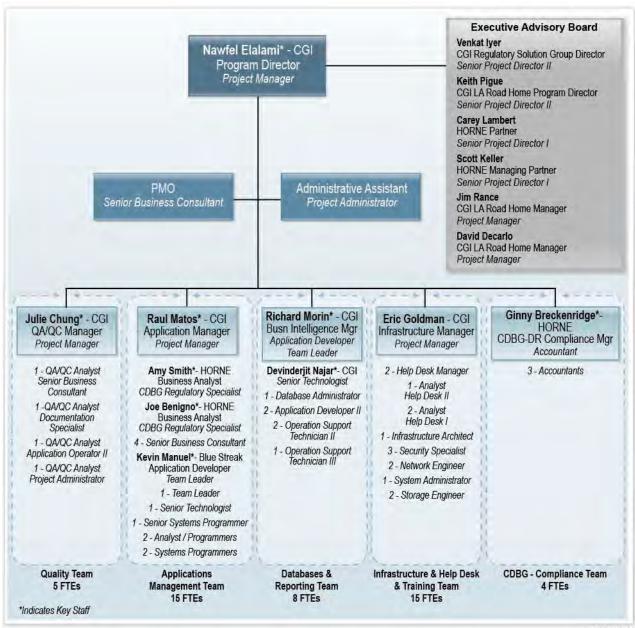
Figure 4.2.1-1. CGI Team SIROMS Organization Chart.

4.2.2   Corporate Organization and Structure

CGI Technologies and Solutions Inc. is a wholly owned subsidiary of CGI Group Inc. CGI is a Delaware corporation with headquarters in Fairfax, Virginia and is responsible for the U.S. operations of the global CGI Group Inc. CGI Technologies and Solutions Inc. was founded in 1970 as American Management Systems, Incorporated (AMS). In May 2004, AMS merged with, and became a wholly-owned subsidiary of CGI Group Inc., headquartered in Montreal, Canada.

Following the merger, AMS changed its name to CGI-AMS Inc. (CGI-AMS). In 2006, CGI-AMS changed its name to CGI Technologies and Solutions Inc. George Schindler, President of

CGI U.S., Europe, and Asia Pacific, reports directly to the President and CEO of CGI Group Inc., Michael Roach. CGI's corporate organization chart is illustrated in **Figure 4.2.2-1**.
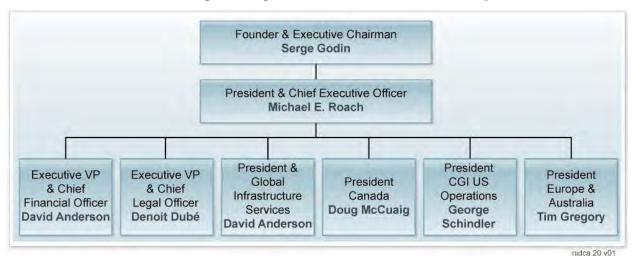
Figure 4.2.2-1. CGI Group Inc.

The US Enterprise Markets (USEM), which resides under George Schindler as part of CGI Technologies and Solutions Inc. will be responsible for the SIROMS project. The key element of our management structure is the business unit (BU) within the USEM structure. BUs are designed to respond effectively and efficiently to clients' demands. Based on our client proximity guiding principle, a BU has a geographic focus. In markets where CGI has a large presence and market share, a BU typically targets a geographical market. Each BU is responsible for managing its members and clients; marketing the company's services; following best practices; and administering and carrying out engagements. Every BU is empowered to manage its resources and to make decisions based on our global strategy, governance rules, policies, and management frameworks. The major units of operation and their respective leads are depicted in **Figure 4.2.2-2**.

Figure 4.2.2-2. CGI Technologies and Solutions Inc.

Within these major geographical units, CGI organizes operations around metro markets, allowing us to be deeply rooted within clients' business communities and accountable for project success. At the same time, CGI operates under a global delivery model which yields the best combination of quality, flexibility, and cost. In addition, to apply best practices and economies related to software product management, CGI groups its Intellectual Property (IP) Solutions under a single organizational unit, which works across the geographical units.

The SIROMS project is managed under the US IP Solutions unit, within the Government Regulatory Practice, which is overseen by Nawfel Elalami (the CGI Project Director for the SIROMS project).

4.2.3　　Subcontractor Information

4.2.3.1　Blue Streak Technologies, LLC

Blue Streak Technologies, LLC is a Baton Rouge, Louisiana based software consulting company specializing in design and implementation of Business Process Management (BPM) and Business Intelligence (BI) solutions. Founded in 2003, Blue Streak has over ten years of experience developing application solutions for Louisiana state agencies, including the Departments of Revenue, Education, Social Services and the Division of Administration. Blue Streak's customer service approach is simple: we partner with our customers to build more than applications; we build relationships. Our goal is to team with our clients to develop solutions with the organization in mind, allowing us to deliver a product that will truly add value to that organization.

Blue Streak specializes in implementing and using the OpenText's MBPM software suite, one of the leading pure-play BPM products, for the delivery of process driven applications. As an OpenText Alliance Partner, Blue Streak has direct access to MBPM technical support. This partnership allows us to offer the most competitive software pricing models, and grants us fast access to technical support resources. With our combined years of experience with the MBPM software suite, Blue Streak is a leader in state government BPM development. Our developers also have a strong knowledgebase of traditional programming skills and experience, allowing us to easily integrate the MBPM system into most legacy, third-party, or otherwise existing systems.

Managing Partners Kevin Manuel and Alan Reed together have over 40 years of IT consulting experience. Alan co-founded and managed R&D Networking in 1992, and as a result of several acquisitions, secured positions on the executive teams of various reputable business consulting firms. In addition, he currently holds ownership in Portico Learning Solutions, a Louisiana-based firm that provides e-Learning training programs to both government and private-sector clients. His time managing these organizations has allowed him to demonstrate both his commitment to achieving quality in partnership with the State of Louisiana, and his staying power in the IT industry through excellence in customer service.

Kevin Manuel joined R&D Networking's team in 1997 and has since led teams across the IT spectrum, including custom application development, database administration, network administration, web development, and project management. Prior to joining R&D, Kevin spent seven years in the US Armed Forces working primarily as a communications specialist and two years in the IT industry. As Managing Partner and Chief Technical Officer of Blue Streak, Kevin

has developed a reputation of utmost commitment to customer service through efficiency, productivity, and reliability. He has become a trusted advisor to many state agencies based upon his broad background and technical expertise.

In addition to its Managing Partners, Blue Streak has employed numerous developers, project managers, business analysts and business development team members, each of them full time employees with broad and complimentary skill sets. Blue Streak Technologies is a private partnership with annual revenues in excess of $2 million.

Blue Streak is registered to conduct business with the State of New Jersey under certificate number 1793547.

4.2.3.2 HORNE, LLP

For over 50 years, the dedicated team of professionals at HORNE has provided accounting and business advisory services to clients across a broad range of industries. From office locations in Texas, Mississippi, Tennessee, Alabama and Louisiana, HORNE team members deliver to clients across the U.S. HORNE serves public and private clients with disaster recovery management; financial planning; valuation services; fraud, forensic and litigation consulting; risk management; outsourcing and compliance; as well as the traditional services of tax, assurance, and business accounting and consulting.

HORNE partners with governments to help ensure financial compliance by implementing recovery programs, ensuring expenditure of grant funds in compliance with federal disaster recovery guidelines and documenting the expenditure of those funds. HORNE's disaster recovery practice group is anchored by a team of Certified Public Accountants (CPA), Certified Internal Auditors (CIA), Professional Project Managers (PMP), Certified Fraud Examiners (CFE) and other highly qualified professionals experienced with managing complex compliance requirements.

HORNE currently provides compliance services for more than $7.5 billion of federal disaster recovery awards. Their experience in Texas and Mississippi addressed the results of hurricanes Gustav, Ike, Katrina, and Rita, as well as an assortment of other storm and flood events. Because HORNE has the foundation of a CPA firm, we are able to couple traditional accounting knowledge with an extensive understanding of recovery programs, financial monitoring and federal grant compliance. HORNE's field-tested knowledge of recovery program guidelines enables us to translate federal regulations into actionable guidance, even in the midst of chaos.

Further detailed information about HORNE, our service areas and our team can be found at **www.horne-llp.com**.

4.2.3.3 GCR Inc.

Established in 1979, GCR Inc. (GCR) is an urban planning and technology firm headquartered in New Orleans with offices in Baton Rouge, and Covington, Louisiana, Los Angeles, CA and Washington D.C. With more than 140 employees, the firm has the capacity to provide a full range of services to our public and private sector clients, from consulting services to custom IT solutions. GCR specialize in a variety of industries, notably disaster recovery, housing, analytics, transportation, and program administration. GCR's capabilities were apparent in the hurricane Katrina and Sandy recovery efforts. Following the storms of 2005, GCR became immersed in

recovery initiatives in New Orleans and throughout Louisiana and the Gulf Coast. Local, state, and federal officials quickly looked to GCR to quantify the impact of the storm on the people and assets in the impact zone. GCR's core competencies in data management, geographic information systems (GIS), and community planning led to the firm's involvement in many major emergency response, disaster recovery, and rebuilding initiatives. GCR was recognized and engaged by FEMA, the Louisiana Housing Finance Agency, the Louisiana Recovery Authority, the City of New Orleans, Jefferson Parish and many corporate clients to develop recovery plans and solutions.

4.3 Resumes

The CGI Team recognizes that the success of this effort requires professionals who are familiar with the NJDCA environment and its data, seasoned in technology project management, experts in the relevant tools, and have expertise delivering CDBG-DR program to other states. The CGI Team has a well known track record of successful projects, technical skills, and functional knowledge. We have provided in **Appendix B** the resumes of our proposed staff.

4.4 Backup Staff

The CGI Team will draw on resources across our partner firms and the 72,000-strong membership of our company in the event that we are called upon to assist or replace an assigned team member. Backup staff resumes are included in **Appendix C**.

4.5 Contract Experience and References

Included in this section are project profiles for CGI and subcontractor clients, demonstrating that the CGI Team has the capability to provide the services required.

4.5.1 CGI References

4.5.1.1 Reference 1 – State of Louisiana Office of Community Development/Disaster Recovery Unit (OCD/DRU)

Name of Client	State of Louisiana Office of Community Development/Disaster Recovery Unit (OCD/DRU)				
Project/ Program Name	The Road Home Project		Year Contracted	2009	
Client Address	P.O. Box 94095				
Client City	Baton Rouge	State	LA	ZIP Code	70804-9095
Client Contact 1	Tom Burkes		Title	State of Louisiana OCD/DRU IT Director	
Client Contact 2	N/A		Title	N/A	
Contact Telephone	(225) 219-9600	Contact Fax	N/A		
Contact E-Mail	tom.burkes@la.gov				
Number of Years Contracted	4 (currently contracted)				
Implementation Description	CGI provided a full range of consulting services over the duration of the engagement, including release management, program/project planning/management, change management, application and system development/integration, system solution assessments, quality assurance/systems and integration testing, best practices, business				

intelligence reporting, help desk and implementation/training support.

- We accomplished a **complete transition of service providers** from March to June 2009. This was fully accepted by the State. To assist the state with more aggressive transition, the CGI team formally took over operations in mid-April, well before the contractual transition completion date.
- **Program/Project Management.** During the Transition Phase, CGI established Program Management and Oversight functions. This included staffing the Project Director, Operations Management Office and the Program Management Office. Plans and processes were put in place to manage the engagement including the Program Management Plan, Change Management Plan, Program Tracking and Communication Plan, Issues and Risk Management Plan, Quality Assurance Plan, Configuration Management Plan, Intergroup Coordination Plan, Requirement Management Plan and the Software Development Lifecycle.
- **System Development.** Acting on behalf of the OCD/DRU, CGI has created and executed multiple full system development lifecycle project initiatives. These include Compliance and Monitoring systems for both Homeowner and Small Rental; the Direct Loan Initiative for Small Rental; and the Applicant Tracking System for HMGP.
- **Task Order Issuance and Management.** CGI works with the State to prepare task orders. CGI focuses on the clear definition of each task order and the criteria that must be met for the successful sign-off of the task order deliverables. The Project Director assigns responsibility for completion of the deliverables to specific members. The Project Director monitors the completion status of each deliverable.
- **Change Control and Configuration Management.** CGI and the State developed the Change Request Management process that is described in the RPF.

The Configuration Management Plan, developed during Transition, identifies configuration items and defines Configuration Management processes and tools relative to establishing and controlling configuration item baselines. In addition, it identifies managed and controlled work products and defines Configuration Management responsibilities for managing and controlling them.

- **Service Desk and Incident Management.** CGI has staffed and managed a Service Desk for reporting, tracking and resolving incidents.
- **Quality Assurance, System and Integration Testing.** CGI has staffed and managed Quality Assurance, Systems and Integration Testing. System and Integration testing is an integral step for every project work stream. Test Plans, Test Tracking and Results Report as well as User Acceptance frameworks have been established and utilized for each system development initiative.
- **Oracle Database Management.** CGI has focused on the development of Oracle Database Management/Data Warehousing/Reporting to provide data look up and analysis to State and Program Management and staff.
- **SQL Database Management.** CGI has staffed and managed a team to support SQL applications such as HDS.
- **Data Warehouse Management/Reporting.** CGI has staffed and managed a Data Warehouse Team and a Reporting Team to provide ad hoc and scheduled reports to State and Program Management and staff.
- **Business Intelligence Reporting.** CGI has staffed and managed a Business Intelligence Reporting team.
- **IT Computer Operations Management.** The Infrastructure Team manages the computer operations housed at Venyu.
- **LAN Management.** The Infrastructure Team is responsible for LAN Management
- **Desktop Support.** The Level 2 Service Desk team is responsible for Desktop Support.
- **IT and Desktop Security.** The Security Team is responsible for IT and Desktop Security.
- **Disaster Recovery Planning and Testing.** The Infrastructure Team is responsible for

	Disaster Recovery Planning and Testing.
	▪ **Geospatial Information Services.** The Reporting Team is staffed with a Geospatial Specialist.
Describe Relevance to the states needs listed above	▪ The LA Road Home project is very similar to the SIROMS initiative in the following ways: ▪ The business challenge deals with disbursing aid to citizens impacted by a hurricane. ▪ CGI has used the same solution components being proposed for the SIROMS initiative which includes the Metastorm BPM solution, a Business Objects data warehouse, systems integration services, infrastructure services, help desk and other support services. ▪ The program areas specified in the New Jersey Action Plan to HUD are similar to the Louisiana Action Plan to HUD.

4.5.1.2 Reference 2 – Ohio Department of Job and Family Services (ODJFS)

Name of Client	Ohio Department of Job and Family Services (ODJFS)				
Project/ Program Name	Child Care Information Data System (CCIDS) Client Registry Information System (CRIS-E) Support Enforcement Tracking System (SETS) Workstation Upgrade Services Project			Child Care Information Data System (CCIDS) Client Registry Information System (CRIS-E) Support Enforcement Tracking System (SETS) Workstation Upgrade Services Project	Child Care Information Data System (CCIDS) Client Registry Information System (CRIS-E) Support Enforcement Tracking System (SETS) Workstation Upgrade Services Project
Client Address	4200 E. Fifth Avenue				
Client City	Columbus	Columbus	Columbus	Columbus	Columbus
Client Contact 1	Michelle Burk			Michelle Burk	Michelle Burk
Client Contact 2	N/A			N/A	N/A
Contact Telephone	(614) 387-8635		(614) 387-8635	(614) 387-8635	
Contact E-Mail	burkm@odjfs.state.oh.us			burkm@odjfs.state.oh.us	
Number of Years Contracted	11 (currently contracted)				
Implementation Description	CGI staff members have provided a full range of consulting services over the duration of the engagement, including release management, process re-engineering, program/project planning/management, change management, application and system development/integration, system solution assessments, quality assurance/systems and integration testing, best practices, business intelligence reporting, help desk and implementation/training support. ▪ **Program/Project Management.** CGI has provided Project Management leadership and guidance through every project phase utilizing CGI's Project Management Framework. ▪ **Systems Development.** Acting on behalf of the Bureau of Child Care and Development, CGI has created and executed multiple full system development lifecycle project initiatives to integrate data and provide automated tools for State resources. The Data Integration Team has led the systems development efforts for the Electronic Incident/Injury Report initiative. This effort spanned from requirements gathering, design of alternative solutions to meet the business and MIS requirements, analysis of alternative solutions, development of the selected web based application and data processing tool, system and unit testing, and implementation of the new application. ▪ **Task Order Issuance and Management.** CGI partnered with the State of Ohio and ODFJS to address the Senate Bill 170 Governor's Order project. CGI provided the				

oversight of the identification of over $36 million that had been erroneously listed as unclaimed funds and the distribution of over $15 million dollars to Ohio families under the Senate Bill 170 Governor's Executive Order project. CGI provided documentation and analysis of business requirements, design, testing, and implementation phases from initiation to completion for this project.

– The SB 170 Governor's Executive Order project involved the system design lifecycle for a critical statewide application (SETS). It included the management and creation of deliverables including requirements documentation, county training, formal presentations and project management methodologies.

- **Change Control and Configuration Management.** CGI developed and utilizes Change Control and Configuration Management during its System Development and maintenance processes.
- **Service Desk and Incident Management.** CGI created, managed and staffed help desk for SETS (Support Enforcement Tracking System) for ODJFS in the early 2000's for a minimum of 2 years. In addition, CGI is currently in the process of gathering requirements and developing an Office of Child and Family Help Desk that we will staff. We will provide a help desk framework and tool set that can be transitioned to the State staff.
- **Quality Assurance, Systems and Integration Testing.** System and Integration testing is an integral step for every project work stream. Test Plans, Test Tracking and Results Report as well as User Acceptance frameworks have been established and utilized for each system development initiative.
- **Oracle Database Management.** CGI manages the relational data base technology (Oracle and DB2)
- **SQL Database Management.** ODJFS has an SQL client server platform with an object-oriented front end. CGI performs the SQL Database Management.
- **Data Warehousing Management/Reporting.** For the last few years CGI has focused on the development the ODJFS Data Warehouse/Reporting vehicle using relational data base technology (Oracle and DB2) to provide data look up and analysis to state and county management and staff.
- **Business Intelligence Reporting.** CGI has managed and led the requirements, design, implementation, testing, and implementation processes to identify and implement solutions such as Business Intelligence Reporting, Child Care Benefits web application, Consolidated Provider View, System Generated IDs, and Help Desk Set up.
- **IT Computer Operations Management.** CGI led the effort to increase system monitoring using multiple tools by each team, which helped pinpoint the numerous cause of poor system performance. As a result of application, network, and infrastructure improvements by this team, 99.9% of all user response times were completed in 0-5 seconds at the end of the project. CGI manages the release and computer operations performance for all major system enhancement efforts for both county and state staff.
- **Desktop Support.** The PC Technology Upgrade initiative has upgraded nearly 14,000 PCs since project inception. Given the nature of the project PC Support and Help Desk/Incident Management tends to be the primary discipline in the effort.

CGI manages the CRIS-E, Child Care Data Information Data Systems (CCIDS) 3299 and CCIDS enterprise systems for ODJFS. All three systems include payment, eligibility determination and federal reporting and tracking components. The technical environments for the three systems include the following:

- IMS DB/DC
- Oracle 9i
- Novell
- MS Server 2002
- MS Access
- Telon

	▪ Cobol ▪ SQL*Plus ▪ Cognos ▪ Informatica ▪ Erwin ▪ DB2 UDB ▪ IIS ▪ ASP ▪ JavaScript ▪ TCP/IP ▪ SNA ▪ Ethernet ▪ VBA
Describe Relevance to the states needs listed above	The scope and focus of the IT services delivery model planned and implemented by CGI for ODJFS is similar to that required by NJDCA. From a scope of services standpoint, the CGI Team supports 15,000 users in the areas of applications, determination of program eligibility and issue of benefits – core functionality mirroring that of the SIROMS project. These services are provided either by means of contractual support or task order. From the standpoint of services focus, CGI Team's delivery model is quite close to that which is called for in the RPQ: Program/Project Management, System Development, Help Desk, Quality Assurance/Testing, Business Intelligence Reporting, Infrastructure Support, Applications Maintenance Support Services and Change Process Implementation. From a technology perspective, both ODJFS and the SIROMS project have Oracle based BI data structures and SQL server platforms with an object-oriented front end.

4.5.1.3   Reference 3 – New Jersey Department of Environmental Protection (NJDEP)

Name of Client	New Jersey Department of Environmental Protection (NJDEP) New Jersey Department of Community Affairs (NJDCA)			
Project/ Program Name	NJEMS – New Jersey Environmental Management System RIMS – Registration, Inspection Management System		NJEMS – New Jersey Environmental Management System RIMS – Registration, Inspection Management System	NJEMS – New Jersey Environmental Management System RIMS – Registration, Inspection Management System
Client Address	401 E. State St.			
Client City	Trenton	Trenton	Trenton	Trenton	Trenton
Client Contact 1	Pete Tenebruso			Pete Tenebruso	Pete Tenebruso
Client Contact 2	N/A			N/A	N/A
Contact Telephone	(609) 292-3211		(609) 292-3211	(609) 292-3211	
Contact E-Mail	peter.tenebruso@dep.state.nj.us			peter.tenebruso@dep.state.nj.us	
Number of Years Contracted	18 (currently contracted)				
Implementation Description	Elements of the NJDEP enterprise system include CGI's NJEMS (RIMS) solution, an online government services portal (RSP), ambient data repositories, enterprise data integration and exchange framework, and many other projects. Several of these projects included integration with other systems, such as NJDEP's public information portal, document management system, and statewide financial system. All our work at NJDEP has included CGI's rigorous Project Management methodology;				

	requirements analysis; software development, testing, configuration, and support; software training for client personnel; and documentation similar in scope and complexity to NJDCA RIMS and RSP systems.
	Specific examples of our relevant experience include:
	▪ **NJEMS (RIMS)** – CGI's NJEMS (RIMS) system was initially implemented for Air Quality Permitting. Since 1995, CGI has maintained and incrementally expanded this system to encompass the vast majority of permitting, compliance, and enforcement functions from across every division and program area within the agency, including air quality, water quality, drinking water, site remediation, solid/hazardous waste, well permitting and land use.
	▪ **Regulatory Services Portal (RSP)** – As NJDEP's strategic information system partner, CGI designed and developed and maintains NJDEP's enterprise eGovernment portal to enable online permitting and compliance transactions with the regulated community. To date, CGI has implemented over 65 individual permit types or compliance submittals on the portal including Air Quality permits, Solid Waste permits, Well permits, Land Use permits, e-payment, Discharge Monitoring Reports, Air Emissions Reports, and compliance self-reports. An additional 26 are in progress. CGI has recently deployed the next-generation architecture of RSP, which is rooted in a service-oriented architecture (SOA), to provide for reuse of components and enable rapid development and deployment of new services. This next-generation architecture is a first step in enabling NJDEP to realize its vision of expanding RSP to include over 200 online transaction types.
	▪ **Enterprise Ambient Data Repository** – CGI deployed and maintains our COMPASS data repository to house NJDEP's ambient monitoring data for multiple program areas, assembled from several source systems across the agency.
	▪ **System Integration Projects** – Through our maintenance arrangement, CGI has led the integration of NJDEP's mission-critical business systems across their enterprise architecture. We have listed a sampling of these projects below to demonstrate our capability for integrations related to the NJDCA project.
	– Financial System Integration – CGI integrated NJEMS (RIMS) with NJDEP's financial system to process all accounts receivable and payable.
	– Cost Accounting Data Warehouse – CGI created a data warehouse that integrated cost accounting and timesheet information from NJDEP's Timekeeping system (CGI's eCATS software) with programmatic activities and task information stored in NJEMS (RIMS). This solution enables NJDEP to perform analysis required for planning and forecasting, budgeting, and cost recovery.
	– NJEMS (RIMS), RSP, and Enterprise Content Management System Integration – This project involved the integration of many systems but has centered on linking together NJEMS (RIMS), the RSP, and NJDEP's enterprise content management system (HighView). CGI built reusable services to manage content creation and workflow integration across the two systems, utilizing a set of APIs that allow for continual re-use as content is fed to each system from various channels (e.g., scanners, web, NJEMS).
Describe Relevance to the states needs listed above	This engagement demonstrates our experience and track record with the State of New Jersey. CGI has been working with NJDEP for over 15 years providing application development, application maintenance, user support and regulatory compliance services to the State of New Jersey successfully for over a decade.

4.5.2   Blue Streak Technologies, LLC References

4.5.2.1   Reference 1 – State of Louisiana Office of Community Development/Disaster Recovery Unit (OCD/DRU)

Name of Client	State of Louisiana Office of Community Development/Disaster Recovery Unit (OCD/DRU)		
Project/ Program	The Road Home Project	The Road Home Project	The Road Home Project

Name				
Client Address	P.O. Box 94095			
Client City	Baton Rouge	Baton Rouge	Baton Rouge	Baton Rouge	Baton Rouge
Client Contact 1	Tom Burkes			Tom Burkes	Tom Burkes
Client Contact 2	N/A			N/A	N/A
Contact Telephone	(225) 219-9600		(225) 219-9600	(225) 219-9600	
Contact E-Mail	tom.burkes@la.gov			tom.burkes@la.gov	
Number of Years Contracted	6 (currently contracted)				
Implementation Description	Installed, configured and maintained the Metastorm BPM system. This system includes development, testing, and production environments for two separate systems – ATS and all other projects. Included in these systems are ten Microsoft Windows application and web servers with connections to several Microsoft SQL database clusters and to an Oracle instance. Includes 700+ internal users and unlimited number of public users. Currently delivering development support for numerous business processes.				
Describe Relevance to the states needs listed above	The Road Home program is designed to provide compensation to Louisiana homeowners affected by Hurricanes Katrina or Rita for the damage to their homes. The Road Home program is the largest single housing recovery program in U.S. history. The program's objective is to provide compensation to Louisiana homeowners affected by Hurricanes Katrina or Rita for the damage to their homes. The responsibilities of OCD/DRU expanded following hurricanes Ike and Gustav to included management of those recovery efforts in addition to the continuation of the efforts started under the Road Home program. Processes developed during this period are proposed as a way to deliver the solution for this response.				

4.5.2.2   Reference 2 –State of Louisiana Division of Administration

Name of Client	Division of Administration State of Louisiana				
Project/ Program Name	IT-10 Budget Application			IT-10 Budget Application	IT-10 Budget Application
Client Address	Claiborne Building, 1201 N. Third St., Suite 2-130				
Client City	Baton Rouge	Baton Rouge	Baton Rouge	Baton Rouge	Baton Rouge
Client Contact 1	Neil Underwood			Neil Underwood	Neil Underwood
Client Contact 2	N/A			N/A	N/A
Contact Telephone	(225) 342-7105		(225) 342-7105	(225) 342-7105	
Contact E-Mail	Neal.Underwood@la.gov			Neal.Underwood@la.gov	
Number of Years Contracted	5 (currently contracted for support)				
Implementation Description	The Louisiana Division of Administration's Office of Information Technology (OIT) is tasked with the review and approval of all IT Budget Requests (IT-10s) made within all Louisiana state agencies. When OIT decided to move away from an Oracle-based workflow solution, they chose the Metastorm BPM platform as their workflow standard, and selected Blue Streak Technologies as their BPM development partner. This statewide, internet-based system offers a user registration and approval process, a ten-step wizard-style process for initial request entry, and a workflow for review and approval of IT-10s at both the Agency and State levels. Users log in to the system via a custom login screen, and are directed into a custom dashboard. On the dashboard, users are presented with their working list of active				

	requests (requests awaiting action by the logged in user), and their organization request list (all requests, historical and current, for their organization). From this dashboard, higher-level admin users can also manage user registration requests and role assignments. When a user submits a request, it is routed to their organization's internal IT Director, Budget Analyst, and Undersecretary for approval. If approved at those levels, the request moves into a workflow of division-level approval steps, including OIT Analysts, OPB Analysts, and the State CIO. The request is dynamically routed based on type of request (budget/mid-year) and whether approved or disapproved at any level. There are some additional features of this system: email notifications, printable PDF-formatted display of IT-10 form, graphical audit trail, ability to add comments, and private correspondence between users.
Describe Relevance to the states needs listed above	The IT10 budget request workflow system is designed to provide all Louisiana state agencies with an on-line flexible solution to submit and/or manage IT requests 24/7. The system allows one access point for state IT budget requests, visibility to track the progress of submitted requests and review the history of current and past requests. This system was originally deployed in version 7.6 and has been upgraded to use version 9.2 of the OpenText MBPM platform.

4.5.2.3   Reference 3 – State of Louisiana, Department of Children and Family Services

Name of Client	State of Louisiana, Department of Children and Family Services, Office of Family Support, Fraud and Recovery Section				
Project/ Program Name	Fraud and Recovery Case Management Information System		Fraud and Recovery Case Management Information System	Fraud and Recovery Case Management Information System	
Client Address	627 North Fourth Street, 7th Floor				
Client City	Baton Rouge	Baton Rouge	Baton Rouge	Baton Rouge	Baton Rouge
Client Contact 1	Michael Eleam			Michael Eleam	Michael Eleam
Client Contact 2	N/A			N/A	N/A
Contact Telephone	(225) 342-5708		(225) 342-5708	(225) 342-5708	
Contact E-Mail	michael.eleam@la.gov			michael.eleam@la.gov	
Number of Years Contracted	10 (currently contracted for support)				
Implementation Description	Utilizing Metastorm's BPM development platform, Blue Streak modeled the Section's existing business process to automate collection of information about the case. In addition to the e-Work case management information system (CMIS), Blue Streak has implemented a Geographic Information System (GIS) application. This application uses ArcIMS, ArcGIS, and ArcSDE to map recipients, stores, and other pertinent information to assist Investigators in identifying signatures of fraud. The GIS application uses WebFOCUS to generate reports on data extracted from DCFS' data warehouse. The reports and information are made available to FRS management through a data dashboard putting the power of the GIS application at management's fingertips. Includes 70+ end users.				
Describe Relevance to the states needs listed above	A large part of this application is the integration of reports and dashboards derived from map selection data. Another key feature is the integration of GIS and the Metastorm-based Case Management Information System, which allows a GIS user to generate potential investigation cases from map filter results.				

4.5.3   HORNE, LLP Reference

4.5.3.1   Reference 1 - Mississippi Emergency Management Agency (MEMA)

Name of Client	Mississippi Emergency Management Agency (MEMA)				
Project/ Program Name	Public Assistance Program			Public Assistance Program	Public Assistance Program
Client Address	#1 MEMA Drive, P.O. Box 5644				
Client City	Pearl	Pearl	Pearl	Pearl	Pearl
Client Contact 1	Mr. Robert Latham			Mr. Robert Latham	Mr. Robert Latham
Client Contact 2	Mr. Larry Bowman			Mr. Larry Bowman	Mr. Larry Bowman
Contact Telephone	(601) 933-6362		(601) 933-6362	(601) 933-6362	
Contact E-Mail	rlatham@mema.gov			rlatham@mema.gov	
Number of Years Contracted	7				
Implementation Description	Financial oversight and document management services for $3.1 billion of Public Assistance funds including monitoring and reporting to meet compliance and financial reporting standards. Prepare reporting for the Mississippi Emergency Management Agency and FEMA in regards to Project Worksheet status reports, performance benchmarks reports and outstanding issues reports.				
Describe Relevance to the states needs listed above	Extensive experience with federal and state disaster recovery financial oversight program, including program process development, program management, pay request packages, weekly and monthly status reporting, document management, monitoring, and final inspection.				

4.5.3.2   Reference 2 - Mississippi Development Authority, Disaster Recovery Division

Name of Client	Mississippi Development Authority, Disaster Recovery Division				
Project/ Program Name	Project Management Office; Long Term Workforce Housing			Project Management Office; Long Term Workforce Housing	Project Management Office; Long Term Workforce Housing
Client Address	P.O. Box 849				
Client City	Jackson	Jackson	Jackson	Jackson	Jackson
Client Contact 1	Mr. Jon F. Mabry			Mr. Jon F. Mabry	Mr. Jon F. Mabry
Client Contact 2	Mr. Charles L. Bearman			Mr. Charles L. Bearman	Mr. Charles L. Bearman
Contact Telephone	(601) 359-3449		(601) 359-3449	(601) 359-3449	
Contact E-Mail	jmabry@mississippi.org			jmabry@mississippi.org	
Number of Years Contracted	5				
Implementation Description	Development of cost classification tables for 18 separate programs, document management, applicant closing automation of the appeals process as well as internal monitoring, reporting and budgeting. Coordinate and communicate policies and best practices across multiple state agencies, projects and municipal governments. Housing program implementation, financial monitoring and reporting. Preparing subrecipients for contract, reviewing policies and procedures an conducting training sessions on cash request processing, HUD policies and Fair Housing requirements.				

	Customize reporting tools to expand transparency and accountability by aging and track all project processes and events. Develop a Housing Applicant Income Verification process that determines applicant eligibility and monitored HUD income requirements to increase subrecipient compliance. Provide policy recommendations on program income, subrecipient financing, allowable expenses and other topics.
Describe Relevance to the states needs listed above	Extensive experience with the development of operational plans, strategic planning, program development, process development Fair Housing, affordable housing activities including homebuyer assistance, home repairs and new home construction, subrecipient contract management, financial oversight, request for cash processing, duplication of benefits compliance, income verification, program reporting and subrecipient close out.

4.6 Sample Plans

All Sample Plans requested have been included in **Appendix D.**

4.7 Financial Capabilities

All Financial Capabilities requested have been included in **Appendix E.**

4.7.1   CGI DUNS Number

CGI's DUNS number is

5. Appendix A

5.1 MacBride Principles Compliance Form

MACBRIDE PRINCIPLES FORM

BIDDER'S REQUIREMENT: TO PROVIDE A CERTIFICATION
IN COMPLIANCE WITH MACBRIDE PRINCIPLES
AND NORTHERN IRELAND ACT OF 1989
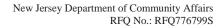
Pursuant to Public Law 1995, c. 134, a responsible bidder selected, after public bidding, by the Director of the Division of Purchase and Property, pursuant to N.J.S.A. 52:34-12, or the Director of the Division of Building and Construction, pursuant to N.J.S.A. 52:32-2, must complete the certification below by checking one of the two representations listed and signing where indicated. If a bidder who would otherwise be awarded a purchase, contract or agreement does not complete the certification, then the Directors may determine, in accordance with applicable law and rules, that it is in the best interest of the State to award the purchase, contract or agreement to another bidder who has completed the certification and has submitted a bid within five (5) percent of the most advantageous bid. If the Directors find contractors to be in violation of the principles which are the subject of this law, they shall take such action as may be appropriate and provided by law, rule or contract, including but not limited to, imposing sanctions, seeking compliance, recovering damages, declaring the party in default and seeking debarment or suspension of the party.

I certify, pursuant to N.J.S.A. 52:34-12.2 that the entity for which I am authorized to bid:

⦿   has no ongoing business activities in Northern Ireland and does not maintain a physical presence therein through the operation of offices, plants, factories, or similar facilities, either directly or indirectly, through intermediaries, subsidiaries or affiliated companies over which it maintains effective control; or

◯   will take lawful steps in good faith to conduct any business operations it has in Northern Ireland in accordance with the MacBride principles of nondiscrimination in employment as set forth in N.J.S.A. 52:18A-89.8 and in conformance with the United Kingdom's Fair Employment (Northern Ireland) Act of 1989, and permit independent monitoring of their compliance with those principles.

I certify that the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me are willfully false, I am subject to punishment.

** see attached

Signature: _Mary Crigler_   Date: _5-9-13_

Print Name: Mary Crigler   Title: Contracts Director

Firm Name: CGI Federal Inc

MacBride Principles Compliance Explanation for New Jersey

CGI Group Inc., which is the parent of CGI Federal Inc has no physical presence in Northern Ireland, directly or indirectly through any subsidiaries or affiliated companies over which the corporation maintains effective control. CGI Group Inc. performs remote telephony work in Canada under a contract with a client that operates in Northern Ireland. All of the work performed under the contract is performed in Canada, although the invoices for the work are sent to, and paid from, client offices in Northern Ireland. As CGI has no employees or contractors or subcontractors at work in Northern Ireland, there are no actions for CGI to take in support of the MacBride Principles. That said, CGI embraces the MacBride Principles and will, if circumstances change to require it, address them lawfully and in good faith.

5.2 Ownership Disclosure Form

SOURCE DISCLOSURE CERTIFICATION FORM

Contractor: CGI Federal Inc   Contract Number: _____

I hereby certify and say:

I have personal knowledge of the facts set forth herein and am authorized to make this Certification on behalf of the Contractor.

The Contractor submits this Certification in response to the referenced contract issued by the Division of Purchase and Property, Department of the Treasury, State of New Jersey (the "Division"), in accordance with the requirements of N.J.S.A. 52:34-13.2.

Instructions:
List every location where services will be performed by the Contractor and all Subcontractors.
If any of the services cannot be performed within the United States, the Contractor shall state, with specificity the reasons why the services cannot be so performed. Attach additional pages if necessary.

Contractor and/or Subcontractor	Description of Services	Performance Location[s] by Country	Reasons why services cannot be performed in US
CGI Federal Inc CGI Technologies and Solutions Inc.	Consulting Support Services	United States	

Any changes to the information set forth in this Certification during the term of any contract awarded under the referenced solicitation or extension thereof will be immediately reported by the Vendor to the Director, Division of Purchase and Property (the "Director").

The Director shall determine whether sufficient justification has been provided by the Contractor to form the basis of his certification that the services cannot be performed in the United States and whether to seek the approval of the Treasurer.

I understand that, after award of a contract to the Contractor, it is determined that the Contractor has shifted services declared above to be provided within the United States to sources outside the United States, prior to a written determination by the Director that extraordinary circumstances require the shift of services or that the failure to shift the services would result in economic hardship to the State of New Jersey, the Contractor shall be deemed in breach of contract, which contract will be subject to termination for cause pursuant to Section 3.5b.1 of the Standard Terms and Conditions.

I further understand that this Certification is submitted on behalf of the Contractor in order to induce the Division to accept a bid proposal, with knowledge that the Division is relying upon the truth of the statements contained herein.

I certify that, to the best of my knowledge and belief, the foregoing statements by me are true. I am aware that if any of the statements are willfully false, I am subject to punishment.

Contractor: CGI Federal Inc _____
[Name of Organization or Entity]

By: _Mary Crigler_____   Title: Contracts Director _____

Print Name: Mary Crigler _____   Date: 5-9-13 _____

5.4 Subcontractor Utilization Plan

REQUIRED SUBMISSION IF BIDDER INTENDS TO SUBCONTRACT

STATE OF NEW JERSEY DIVISION OF PURCHASE AND PROPERTY (DPP) **SUBCONTRACTOR UTILIZATION PLAN**	DPP Solicitation No.: RFQ776799S
	DPP Solicitation Title: SIROMS
Bidder's Name and Address: CGI Federal Inc 12601 Fair Lakes Circle Fairfax, VA 22033	Bidder's Telephone No.: 7032678233 Bidder's Contact Person: Nawfel Elalami

INSTRUCTIONS: List all businesses to be used as subcontractors. This form may be duplicated for extended lists.

SUBCONTRACTOR'S NAME ADDRESS, ZIP CODE TELEPHONE NUMBER AND VENDOR ID NUMBER	CHECK HERE IF CONTRACT IS NOT SMALL BUSINESS ☐			TYPE(S) OF GOODS OR SERVICES TO BE PROVIDED	ESTIMATED VALUE OF SUBCONTRACTS
	SMALL BUSINESS CATEGORY *				
	I	II	III		
Blue Streak Technologies, LLC 412 N. 4th Street, Suite 105, Baton Rouge, LA70802 Office: (225) 387-8700 Vendor id		X		Software Development	USD $800,000
Horne, LLP, 1020 Highland Colony Parkway, Ridgeland, MS 39157 Vendor id				Business Consulting	USD $5,000,000
GCR Inc. 2021 Lakeshore Drive, Suite 500 New Orleans, LA 70122				Software Development	USD $100,000

* For those Bidders listing Small Business Subcontractors: Attach copies of Division of Revenue – Small Business Enterprise Unit registration for each subcontractor listed. If bidder has not achieved established subcontracting set-aside goals, also attach documentation of good faith effort to do so in the relevant category in accordance with NJAC17:13-4 and the Notice to All Bidders.

I hereby certify that this Subcontractor Utilization Plan (Plan) is being submitted in good faith. I certify that each subcontractor has been notified that it has been listed on this Plan and that each subcontractor has consented, in writing, to its name being submitted for this contract. Additionally, I certify that I shall notify each subcontractor listed on the Plan, in writing, if the award is granted to my firm, and I shall make all documentation available to the Division of Purchase and Property upon request.

I further certify that all information contained in this Plan is true and correct and I acknowledge that the State will rely on the truth of the information in awarding the contract.

PRINCIPAL OF FIRM:

Mary Crigly	*Director Contracts*	5-10-13
(Signature)	(Title)	(Date)

PB-SA-3
Revised 10/11

6. Appendix B – Named Personnel Resumes

6.1 Venkat Iyer

EXPERIENCE SNAPSHOT

INDUSTRY

- Government
- Healthcare
- Insurance
- Manufacturing

SPECIALIZATION

- Legacy Environments
- Internet Technologies
- Systems Integration
- Software Selection
- IT Strategy
- Project Management
- Best Business Practices
- Managing Multiple Engagements
- Establishing and Managing Large Teams
- Large Scale Project Management

BACKGROUND

With more than twenty years of consulting and business management experience in information technology, Mr. Iyer has wide ranging experience in solution development, management and delivery of large scale engagements with various customers. During his tenure at CGI, Mr. Iyer's successes include customer creation and retention, engagement management, customer relationship management, project management, systems analysis and design, programming, testing and quality management.

CGI EXPERIENCE

CGI EMPLOYEE, 08/26/91 – PRESENT

PRACTICE LEADER, REGULATORY SOLUTIONS GROUP (RSG), 04/11 – PRESENT

DIRECTOR, RSG OPERATIONS, 08/08 – 04/11

Responsibilities:
CGI's Regulatory Solutions Group (RSG) helps State regulatory Agencies and large chemical manufacturers achieve their objectives with respect to regulatory compliance and environmental protection by offering specialized technology and business solutions that include software products, consulting services, and business process services. Mr. Iyer joined RSG in 2008 as the Director of Operations and expanded his leadership role in the group to RSG Practice Leader in 2011. In this Practice Lead role, Mr. Iyer oversees a 20 Million dollars per year portfolio of engagements and a team of over 140 geographically disperse staff members and his responsibilities as part of RSG include the following:

- Providing leadership, oversight and direction
- Driving business growth in the Environmental Commercial and Public Sector markets with new and existing clients
- Expanding the portfolio of capabilities in the environmental space to include business process services
- Providing management oversight over multiple engagements to ensure that projects are meeting their desired objectives
- Interacting with senior RSG client managers to proactively address project risks and issues as necessary
- Providing strong leadership and inputs for RSG's strategic initiatives

- Management of RSG technical infrastructure
- Financial management and responsibility for RSG operations

As part of his tenure with RSG, Mr. Iyer has worked closely with many RSG clients including New Jersey Department of Community Affairs, Maryland Department of Environment (MDE), Indiana Department of Environmental Management (IDEM), ExxonMobil, Momentive Inc., and 3M.

DIRECTOR, CONSULTING SERVICES, CGI FEDERAL, 01/03 – 08/08

Responsibilities:
As a Director in the Federal Government Group at CGI in the Greater Washington DC region, Mr. Iyer's major responsibilities and achievements include:

- Management and Oversight of the Department of Defense (DOD) AHLTA Implementation and Training Project. AHLTA is the Electronic Records Initiative for DOD's Military Health System. As CGI's project director for this project, Mr. Iyer oversaw all aspects of the project including client delivery, management of the CGI team of 45 consultants, management reporting and administrative functions. Mr. Iyer took over responsibility for in this project beginning in April 2004.
- Management of an Independent Validation and Verification (IV&V) project for the National Library of Medicine (NLM). CGI was responsible for providing IV&V services on a content management initiative launched by NLM. Mr. Iyer was responsible for management of the contract from May 2003 to May 2005.
- Account Manager for Fannie Mae. As account manager for Fannie Mae, Mr. Iyer was responsible for managing the CGI team of consultants and sub-contractors working on 5 Fannie Mae projects that were assigned to CGI. These projects covered the areas of single family housing, loan acquisitions support, financial systems upgrades and credit loss management applications.
- Capture and solutions lead on a large content management initiative for the Office of Federal Housing Enterprise Oversight (OFHEO), an independent agency within the department of Housing and Urban Development (HUD). After contract award, Mr. Iyer was responsible for project kick-off and start up activities that led to the transition of the project to its full-time project manager.
- Played the lead role in establishing partnerships between CGI and other major government contractors on large GWAC contracts including D/SIDDOMS III, VA-GITS, ENCORE and CIOSP II.

DIRECTOR, CONSULTING SERVICES, 06/99 – 10/2002

Responsibilities:
As Director in CGI's Healthcare and Government business unit in Cleveland, Ohio, Mr. Iyer's major responsibilities and achievements included:

- Delivery and management of IT projects in the business unit. Responsibilities included client management, oversight of day-to-day operations, staffing, financial management and reporting. Major clients included State of New York, Medical Mutual of Ohio, Whole

Health Management, Blue Cross Blue Shield of North East Pennsylvania, Progressive Insurance, and LaFarge.

▪ Capture and solution development on new initiatives. In this role Mr. Iyer was responsible for various tasks including bid/no bid reviews, profitability analysis, proposal management and solution development.

▪ Development of automated tool to conduct HIPAA analysis for healthcare clients. In this role Mr. Iyer managed a team responsible for conceptualization, analysis, design and development of an impact analysis toolset to analyze application source code for a healthcare organization to analyze the impact of HIPAA compliance from a transaction set perspective.

▪ Initiated the ISO-9001 compliance initiative for the Cleveland business unit.

ENGAGEMENT DIRECTOR, AMERICAN GREETINGS, 10/96 – 05/99

Responsibilities:

As Engagement Director, Mr. Iyer managed and delivered a multi-million dollar engagement to American Greetings. Initially American Greetings outsourced their total Year 2000 conversion effort to CGI. Additionally, the customer awarded 5 other IT projects to CGI as a result of CGI's impressive track record. CGI had a staff of over 80 consultants working on the engagement for a period of 2 years. All projects were delivered on time within budget and CGI exceeded customer expectations on this contract. Mr. Iyer's responsibilities on this engagement included:

▪ Solution Development
▪ Contract Negotiations
▪ Total Engagement Management
▪ Management of the entire CGI staff of over 80 consultants
▪ Quality Management
▪ Reporting to CGI and customer management

ENGAGEMENT MANAGER, FORD MOTOR COMPANY, 01/94 – 10/96

Responsibilities:

As Engagement Manager, Mr. Iyer was responsible for managing CGI's relationship at Ford Motor Company. Ford initially retained CGI to deliver a pilot project to demonstrate the offshore services delivery model. Upon successful delivery of the project, Ford awarded numerous projects to CGI which were all delivered on time, within budget and exceeded customer expectations. The projects delivered by CGI included Vehicle Loss and Damage System, Competitive Advantage System for Ford Trucks, Global Customer Database, NAFTA Parts Qualification System and Global Distribution System. CGI was awarded the Ford Systems Excellence Award for 4 of its projects. Mr. Iyer's responsibilities at Ford included:

▪ Managing all engagements at customer site
▪ Management of all CGI consultants
▪ Quality Management
▪ Reporting to CGI and Customer Management

PROJECT MANAGER, CENTRAL POWER AND LIGHT, 03/93 – 01/94

Responsibilities:
As Project Manager and facilitator, Mr. Iyer was responsible for the development of CPL's Fleet Management System. CPL is one of the leading providers of electric power in the State of Texas. CPL outsourced the development of its fleet management system to manage its fleet of over 2000 company owned vehicles to CGI. The main features of the system included a vehicles database, vehicles selection and purchase, vehicle assignment to personnel, preventative maintenance schedules and reporting. The system was delivered in 9 calendar months with a team size 12 Analysts/Developers. Mr. Iyer's responsibilities included:

- Project Management
- Systems Analysis and Design
- Quality Assurance
- Testing

PROJECT MANAGER, WACHOVIA BANK, 10/92 – 03/93

Responsibilities:
As Project Manager, Mr. Iyer was responsible for the re-engineering of the Student Loan Management Applications. The Bank wanted to migrate their loan systems from its current architecture to a new architecture using VSAM files. In addition, portions of the systems were written in Assembler which had to be migrated to COBOL. CGI was awarded the outsourcing contract for this effort. The effort was completed in 8 calendar months using a team of 42 developers. Mr. Iyer's responsibilities on the project included:

- Project Management
- Architecture Definition
- Program Specifications
- Management of CGI consultants
- Testing and Quality Assurance
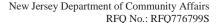
TECHNOLOGY: MVS, VSAM, COBOL, ASSEMBLER, JCL

TEAM LEADER, UNUM LIFE INSURANCE, 03/92 – 09/92

Responsibilities:
As a Team Leader, Mr. Iyer was responsible for the development of a security system for UNUM Life Insurance. UNUM wanted to develop an Access Control System that would capture user profiles and their access privileges to various core applications within the organization. CGI was selected to develop this system for UNUM. The development of the system was completed in 6 calendar months with a team of 5 developers. Mr. Iyer's responsibilities included:

- Requirements Definition
- System Design
- Programming
- Testing

- Team Management

TECHNOLOGY: MVS, VSAM, TELON, CICS, COBOL, JCL

CONSULTANT, LEO BURNETT, 08/91 – 02/92

Responsibilities:
As a Consultant, Mr. Iyer was responsible for identifying and correcting system defects in a PL/1, CICS environment. His responsibilities included:

- Correcting critical System Defects
- Improving Systems Performance
- Training IT personnel on testing and debugging techniques
- Setting up production job streams

TECHNOLOGY: MVS, CICS, PL/1, ADABAS, JCL

PRIOR EMPLOYMENT EXPERIENCE

Senior Analyst, Interface Software, 08/90 – 08/91

As a Senior Analyst, Mr. Iyer worked on various projects performing requirements definition, systems design, architecture design, programming, testing and performance tuning activities. Mr. Iyer also provided training to new recruits on various technologies that were used on projects.

TECHNOLOGY: MVS, DOS/VSE, CICS, COBOL, PL/1, DB2, SQL/DB, VSAM, JCL, ASSEMBLER

Business Analyst and Programmer, Blow Plast Limited, 05/87 – 07/90

As a Business Analyst and Programmer, Mr. Iyer worked on various projects for Blow Plast Limited, a leading luggage manufacturer. Applications developed included Branch Office Automation Applications, Financial Systems and Payroll Systems.

TECHNOLOGY: WANG VS 65, COBOL, DBASE III+, BASIC

EDUCATION

- B.Sc., Physics and Computer Programming, University of Bombay, 1985
- Diploma in Computer Programming, Systems Analysis and Application, State of Maharashtra, Board of Technical Education, 1987
- Diploma in Systems Management, University of Bombay, 1989
- Project Management Professional, 2006
- ITIL Foundations Certification, 2008

6.2 Keith Pigue

EXPERIENCE SNAPSHOT

INDUSTRY

- State & Local Government
- Telecommunications
- Cable
- Insurance

SPECIALIZATION

- IP Telephony
- Service Delivery Platforms
- SIP Application Development & Integration
- Billing & Rate
- Program Management
- Marketing & Sales

BACKGROUND

With more than 20 years in the Information Technology industry, Mr. Pigue has a proven and diverse record of successful client account management, project delivery, marketing & business development success, and practice leadership for CGI and its clients, in both the Public Sector and Commercial industries. Mr. Pigue has extensive experience in the planning, managing, and delivery of strategic business solutions.

CGI EXPERIENCE

CGI EMPLOYEE, 07/05/94 – PRESENT

PUBLIC SECTOR ACCOUNT MANAGER/IT DIRECTOR, LOUISIANA ROAD HOME, 03/09 – PRESENT

Responsibilities:
Mr. Pigue is the IT Project Director for CGI's on-going managed services engagement with the Louisiana Office of Community Development/Disaster Recovery Unit Road Home Engagement. He oversees a team of over 50 CGI and subcontractor staff responsible for application maintenance and support, infrastructure management, IT service desk, and 24x7 operations. He also has overall Account Management responsibility for all CGI's State & Local business in Alabama and Louisiana.

IP SOLUTIONS PRACTICE LEAD/ENGAGEMENT MANAGER, COMCAST, 09/06 – 03/09

Responsibilities:
Mr. Pigue was the U.S. practice lead for CGI's IPSolutions/IPCentricITy™ Practice. His team was responsible for developing and delivering CGI's convergent communications offerings in the IP Telephony - Unified Communications space with an emphasis on service delivery platform architecture, Session Initiated Protocol (SIP) application development & integration, and IMS/Next Generation Network design and deployment. He was also a senior member of the CGI Telecommunications Senior Leadership team charged with defining and executing industry-based strategy and operations.

From February 2007 until March 2009 he was also responsible for CGI's successful project at Comcast to design, implement, and support an advanced SIP-based applications infrastructure and set of retail applications for Comcast's cable customers, including caller-id for TV. CGI's delivery team spanned both the U.S. and Canada and included on-site project work at multiple Comcast facilities in greater Philadelphia.

MARKETING AND SALES SUPPORT, TAPESTRY® (CGI), 07/02 – 08/06

Responsibilities:

Mr. Pigue served as head of Tapestry Marketing & Sales Support. Tapestry is CGI's rating, billing, and order management solution for the convergent communications market. He and his team were responsible for supporting all marketing and sales efforts including client business development, pricing and proposal creation, marketing collateral and website management, and trade show planning and execution. He also served as member of the Tapestry senior management team responsible for overall product strategy and direction.

PROGRAM MANAGER, BELLSOUTH, 04/00 – 06/02

Responsibilities:
Mr. Pigue was the IT Prime Integration Office (PIO) Manager for the UNE 319 Integrated Billing Solution Program from March 2000 through June 2002. He chartered the Prime Integration Office in March 2000. This multi-year, $100M+ program, driven by FCC 319 regulatory compliance, included the deployment of AMS' Tapestry Billing Solution along with Oracle Accounts Receivable. The program successfully launched in the 4th quarter 2001 and completed deployment in the 3rd quarter 2002. Mr. Pigue directly managed a staff up to seven people responsible for IT program management functions including stakeholder management, financial reporting, integrated planning, status reporting, issue/risk management and overall coordination among four primary solution partners (AMS, Oracle, Accenture, & Fortune 100 Client). As PIO Manager, he worked closely with senior client and solution partner management throughout the entire program lifecycle.

PROGRAM MANAGER, NEXT GENERATION NETWORK, 10/99 – 03/00

Responsibilities:
Mr. Pigue served as the Program Office Manager (PMO) for the Next Generation Network Systems organization at U S WEST. The team was responsible for planning a variety of xDSL related programs to support data and video product rollouts and migration of existing network systems towards Next Generation Technologies. Mr. Pigue managed the PMO with a staff of 2-4 people responsible for integrated planning, issue/risk management, requirements management, and stakeholder management.

PROJECT MANAGER, BELLSOUTH, 04/99 – 09/99

Responsibilities:
Mr. Pigue was the Project Manager on the Print Manipulator Deployment Project in BellSouth Billing, Inc. from April 1999 until September 1999. The team supported a variety of bill design related projects centered on the deployment of new print manipulator technology for use by both BellSouth Telecommunications and affiliates for producing their printed bills. The team also worked heavily on redesigning the BellSouth Consumer and Small Business Bill to meet the needs of the BellSouth Solutions Project and remains involved in Consumer's continued bill redesign efforts.

REQUIREMENTS DEFINITION TEAM MANAGER, BELLSOUTH, 07/98 – 03/99

Responsibilities:
Mr. Pigue managed the joint 25+ person AMS, BBI, and Symphony Alliance BellSouth Industrial Billing System (BIBS) Requirements Definition Team from July 1998 until March 1999. The team was responsible for analyzing and defining the requirements for an entirely new industrial billing system initially targeted for Unbundled Network Element (UNE) billing with foundations laid for all industrial billing including Access, Resale, Payphone Service Providers, and Wireless. The team worked closely with Amdocs, the primary solution vendor, to define the requirements and the enhancements needed to meet those requirements. The team successfully produced a Conceptual System Design (CSD) which captured a very robust set of business requirements, window mockups, and interface specifications as well as a project schedule, cost, and technical architecture.

DEVELOPMENT TEAM MANAGER, BELLSOUTH, 01/98 – 06/98

Responsibilities:
Mr. Pigue managed the joint 25+ person AMS-Symphony Alliance Application Development Team for the New Bill Design Project from January 1998 until June 1998. He transitioned from the QUANTUM Business Requirements Team, where he led the effort to define the requirements and analyze the engineered solution, to the application team to oversee the design and development of the solution. This project was launched to implement a re-designed BellSouth bill for their consumer and small business markets. Due to BellSouth funding issues, the project was suspended during the design phase.

REQUIREMENTS TEAM MANAGER, BELLSOUTH, 08/96 – 12/97

Responsibilities:
Mr. Pigue was the Business Requirements Team Manager for the QUANTUM Project at BellSouth from August 1996 until December 1997. This team, comprised of approximately 20 AMS and BellSouth staff, had various functional responsibilities. Its primary responsibility was the planning and analysis of new billing initiatives. These efforts resulted in Project Charters and Conceptual System Designs (CSDs), which were used to identify, scope, price, and schedule new initiatives. In addition, his team was also responsible for ongoing requirements and change management for all Quantum applications. The Documentation & Training and Software Configuration Management functions were also part of his organization.

As part of the QUANTUM Business Requirements Team, Mr. Pigue has played a lead role in several planning initiatives. He was responsible for producing the CSD for the 97.2 release of the Product Packaging application. He also contributed to the 97.2 Customer Billing Relationships CSD. These applications are large, object-oriented systems which support BellSouth's marketing strategy. In early 1997 he led the effort to produce the Multiple Balances Project Charter. This effort concentrated on Treatment and Accounts Receivable processing across BellSouth products and affiliates. He also led the team responsible for analyzing and defining the business requirements for a redesigned BellSouth bill.

TEAM LEAD, BELLSOUTH, 07/94 – 07/96

Responsibilities:
Mr. Pigue managed the Bill Presentation team on BellSouth's Future Billing System Project from December 1994 through July 1996. The team consisted of 50+ software engineers and test analysts from AMS, BellSouth and third-party contractors. While under his management the team deployed the Future Billing System across the entire BellSouth territory. This included the implementation of a Spanish Bill, an 8.5 x 11 Bill, full duplexing capability, and significant enhancements to support U.S. Postal Reclassification.

Prior to assuming the Team Manager position, Mr. Pigue was the Team Leader for the Data Definition Team, one of the application teams in Bill Presentation. He held this position from September 1994 through November 1994.

Mr. Pigue joined AMS as a member of the BellSouth Bill Presentation Team. He represented FBS on the Spanish Bill Project Team. He worked very closely with the Consumer, Small Business, and Interconnect groups to define the business and systems requirements for the Spanish Bill which was successfully implemented in July 1995.

PRIOR EMPLOYMENT EXPERIENCE

IT Manager, Travelers Insurance Company, 07/86 – 06/92

Prior to joining AMS, Mr. Pigue spent six years at the Travelers Insurance Company. For the last three years he was an Information Technology Systems Manager in the Property-Casualty business area. In this role he managed a team of 5-10 software engineers responsible for implementing and supporting Management Information Systems. While at Travelers he was part of the ACCENT Management Development Program, an accelerated management development program which brought him experience in various technologies and business areas. He also served a six-month assignment as the Executive Assistant to the Chief Investment Officer.

EDUCATION

- M.S., Management, Massachusetts Institute of Technology, 1994
- B.Sc., Information and Computer Science, Georgia Institute of Technology, 1986

6.3 Carey Lambert

EXPERIENCE SNAPSHOT

INDUSTRY

- State Government
- Private Sector
- Finance
- Telecommunications

SPECIALIZATION

- HUD CDBG-DRDisaster Recovery
- Disaster Recovery Project Management
- Business Process Management
- Document Management and Review

BACKGROUND

Carey is a senior manager in disaster recovery services at HORNE LLP where he is responsible for projects related to US Department of Housing and Urban Development (HUD) Community Development Block Grant (CDBG) administration and process improvement.

Carey joined HORNE in 2013 with more than 25 years of experience in project management, information technology and business consulting.

HORNE EXPERIENCE

HORNE EMPLOYEE, 04/13 – PRESENT

SENIOR MANAGER, CDBG-DRDISASTER RECOVERY PROGRAMS, 04/13 – PRESENT

Responsibilities:
Mr. Lambert is a member of the disaster compliance division at HORNE, where he is a Senior Manager on CDBG-Disaster Recovery (DR) programs in Texas. Mr. Lambert is responsible for the Texas CDBG-DRHomeowner Opportunity and Homeowner Assistance Program for the City of Galveston Disaster Recovery Housing Program (Round 1 and Round 2), the Lower Rio Grande Valley Development Council Disaster Recovery Housing Program, the South East Texas Regional Planning Commission Hurricane Ike Housing Recovery Program, the Galveston County Housing Assistance Program, and the City of Houston Housing & Community Development Department Single Family Home Program.

As Senior Manager focused on Texas CDBG-DRDisaster Recovery programs, Mr. Lambert works directly with the Texas General Land Office and Sub Recipients to ensure all compliance and oversight activities related to more than $1 Billion in new construction, rehabilitation, and homebuyer assistance CDBG-DRdisaster recovery programs. These programs include project management activities associated with non-profit, for-profit, and municipal organizations. Compliance for these programs includes all applicable CDBG, Stafford Act, ADA, and fair housing regulations.

PRIOR EMPLOYMENT EXPERIENCE

Senior Manager, CohnReznik, 08/08 – 04/13

Mr. Lambert was responsible for multiple Louisiana agency engagements associated with the recovery from hurricanes Katrina, Rita, Gustav and Ike where total CDBG-DR allocations exceeded $14B. Working primarily with Louisiana's Office of Community Development, Disaster Recovery Unit (OCD/DRU), Mr. Lambert's team assisted with compliance monitoring

plans, grant administration performance reporting, IT requirements, contractor and program transitions, and process improvements.

Project Lead, Reznik Group, 09/06 – 10/08

Mr. Lambert worked as a project lead on the HUD funded CDBG-DRDisaster Recovery Homeowner's Assistance and Elevation Grant Programs providing program management and oversight for the distribution of $2.5 billion of federal disaster recovery funds. Mr. Lambert designed and implemented programs, processes, and systems to assure internal controls and effective reporting. He managed the development of automated software for processing applications, an electronic audit trail indicating all conclusions drawn from the data and all roles that personnel played during the verification process. He created processes and procedures to integrate data from hundreds of stakeholders to ensure non-duplication of benefits, continual quality assurance, investigation and internal audit functions. He also assured a complete electronic audit trail was maintained for every application submitted. He developed change management planning and business process engineering. He monitored the IT department to ensure it complied with HUD and state laws and regulations.

Project Lead, Reznik Group, 06/07 – 08/08

Mr. Lambert worked as a project lead on the first phase of the $235M HUD funded CDBG-DRDisaster Recovery Small Rental Assistance Program. The Small Rental Assistance Program, a compensation grant program, encouraged individuals and businesses to renovate or construct affordable rental properties along the Mississippi Gulf Coast. Property owners applied through the Mississippi Development Authority for up to $40,000 per application in forgivable loans for the repair or construction of rental properties. Mr. Lambert was responsible for process analysis and implementation strategies to increase efficiency and effectiveness of all monitoring programs in compliance with HUD and state laws and regulations. He designed workflow tools and processes for tracking, document management, and monitoring. He supervised multiple IT functional areas including operations, applications development, infrastructure support and the service desk. He managed the development of Portfolio Manager – the automated grants processing applications. He created processes and procedures for integrating data from hundreds of stakeholders to ensure non-duplication of benefits, continual quality assurance, investigation, and internal audit functions. He assisted the Project Manager to identify and procure IT services and products; evaluating the best products and services to meet the client's needs, and obtain the best value.

Director – Information Technology, JP Morgan Chase, 08/03 – 07/06

Mr. Lambert was responsible for managing IT staff, resources and activities needed to service $11B+ Student loan portfolio. Key roles included Project Management, Strategic Planning, Budgeting, Capacity Planning, Business Continuity Planning and IT Audit Representation. He implemented formal IT request processes and change control and risk management processes. Mr. Lambert established and maintained system availability SLAs and consistently managed IT expenses within budget. He represented IT in many audits including Sarbanes-Oxley and SAS70 Type II.

Director – Information Technology, MCI/WorldCom, 01/99 – 07/03

Mr. Lambert was responsible for planning, implementing, monitoring and administration of IT infrastructure. He managed operations of a 24 X 7 Data Center, Technical Support of Back Office, LAN, WAN, Desktops, IT Procurement and Service Desk.

EDUCATION

- B.A., Management Information Systems, Mississippi State University, 1981

6.4 Scott Keller

HORNE EXPERIENCE

HORNE EMPLOYEE, 08/07 – PRESENT

MANAGING PARTNER, HORNE (NSG), NATIONWIDE, 08/07 – PRESENT

Responsibilities:
Mr. Keller, a senior policy advisor with 20 years experience at all levels of government, founded National Strategies Group in 2007 and works with corporate and governmental clients to address complex legislative and regulatory challenges. Mr. Keller has capabilities and expertise in a wide variety of business sectors, but maintains a strong focus in the federal appropriations process, the programs of the US Department of Housing and Urban Development, the financial services sector, health care and public/private housing initiatives. Additionally, Mr. Keller serves on the board of First Alliance Lending, a large US based lending partner to institutions and homeowners, dedicated to creating and preserving home ownership.
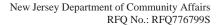
PRIOR EMPLOYMENT EXPERIENCE

Deputy Chief of Staff, United States Department of Housing and Urban Development, 12/03 – 08/07

While at the Department of Housing and Urban Development (HUD), Mr. Keller directed personnel, political and policy matters for over 9,000 employees in Washington, D.C. and across the country. He served as the senior political and policy advisor to the Secretary on all Departmental, Congressional, Cabinet and executive agency issues. Mr. Keller was responsible for overseeing and negotiating the agency's budget requests from FY2004 through FY2008 with both the Executive Office of the President and the Congress. Further, he was tasked by the Secretary to work with the President's senior staff to manage and coordinate the Department's programmatic and operational efforts to accomplish the President's goals and initiatives. He was instrumental in managing the Department's response during and after the 2004 gulf coast hurricanes as well as gulf coast recovery following Hurricane Katrina. Those efforts included the development of an allocation process to distribute almost $18B in Community Development Block Grant (CDBG) funds to Texas, Louisiana, Mississippi, Alabama and Florida, working with the Governors of those states to develop creative solutions for use in recovery, the redevelopment of public housing at the Housing Authority of New Orleans and the rebuilding of Charity Hospital and other public infrastructure programs. In 2006, President Bush nominated Mr. Keller for the position of Assistant Secretary for Congressional and Intergovernmental Relations.
Director of Governmental Affairs, Greenberg Traurig, 08/94 – 12/03

Mr. Keller spent 10 years at the Greenberg Traurig Law Firm in Tallahassee, Florida, as Director of Governmental Affairs. He represented a wide variety of interests, including the Habitat Companies and the Chicago Housing Authority, but specialized in public housing authority policy realignment, health policy advocacy, utility regulation, and property and casualty insurance regulation.

EDUCATION

- B.Sc., Finance and Economics, Florida State University, 1993

6.5 Jim Rance

EXPERIENCE SNAPSHOT

INDUSTRY

- Government

SPECIALIZATION

- Project Management
- Financial Planning
- Emergency Preparedness

TRAINING

- Navy Emergency Preparedness Liaison Officer (NEPLO) University, 2006
- National Incident Management System (NIMS) training ICS 100, 200, 700 & 800
- Defense Institute of Security Assistance Management (DISAM), Security Assistance Management -C, 1998
- U.S. Naval Aviation Training, Designated Navy Pilot / Qualified rotary wing and single-engine fixed wing aircraft, 1986

BACKGROUND

With more than eight years in the Information Technology industry and 28 years of management, Mr. Rance has a wide range of experience providing project management, service delivery and account management, as well as documenting, testing and implementing complex business technology solutions.

CGI EXPERIENCE

CGI EMPLOYEE, 03/16/09 – PRESENT

APPLICATIONS SERVICE DELIVERY MANAGER, LOUISIANA ROAD HOME, 03/09 – PRESENT

Responsibilities:
Mr. Rance is the Service Delivery Manager of the I.T. Applications team composed of 15 business analysts, test analysts, and programmers. This team supports the broader organization of 500 employees in the largest housing recovery project in the history of the United States. The team gathers requirements, develops software solutions, processes change requests, and provides QA/Testing, vendor management and daily operational support for custom built and 3rd party vendor solutions. Software used for the program includes custom development of Metastorm BPM, SharePoint, and JIRA issue tracker applications. Mr. Rance is also responsible for oversight of vendors contracted directly to the state, STR and Housing Development Software (HDS). The team successfully reduced middle-ware products and instituted structured Software Development Lifecycle processes for over 1000 Change Requests in three years.

PRIOR EMPLOYMENT EXPERIENCE

Manager of IT Applications, ICF International, 02/07 – 03/09

Mr. Rance's team implemented, configured, and supported software applications that accepted over a 140,000 applications for benefits, calculated over 70,000 awards and interfaced with closing agents to award 120,000 people over $8B grant money for the Louisiana Road Home program. His team implemented two scheduling software packages and migrated over 100,000 appointments from one to the other. In less than a month, they designed, managed development, and implemented a Web application which accepts applications for the Small Rental program.

Navy/Marine Corps Intranet (NMCI) Resource Manager, Navy Reserve, 04/05 – 02/07

While recalled to active duty, he served as the NMCI Resource Manager for the Navy Reserve. He and his team ordered and tracked delivery of all computing equipment for the Navy Reserve throughout the United States. He controlled a budget of $92M which served over 70,000 customers. Mr. Rance's team performed account management with the prime contractor to verify the costs of the program. Many sub-projects were involved with this program to include technical refresh of equipment, Blackberry procurement and delivery and initial outfitting of some remote sites. During this assignment, he earned the Project Management Professional (PMP) certificate.

Web Division Director & IT Project Manager, Navy Reserve, 04/05 – 02/07

While recalled to active duty, he served as the Director of the Navy Reserve Web Site (NRWS). The NRWS is the primary access point and content management tool for 70,000 Navy Reservists and is hosted and managed by Commander, Navy Reserve Forces Command (CNRFC) staff and contractors. Its primary purpose is to provide a common template- based system for all Navy Reserve commands and units that provide each site with a consistent, attractive and user friendly design. Mr. Rance conducted a bottom-up review of change management for the site and developed a training program for the field users and the helpdesk staff, which included a web site boot camp for administrative rights users. The NRWS was built in a customized version of Microsoft's Content Management Server (CMS) 2002.

Navy Emergency Planning Liaison Officer, State of Louisiana, 02/06 – 12/06

Mr. Rance served for one year as the Navy Emergency Preparedness Liaison Officer (NEPLO) to Louisiana, which involved frequent contact and planning with the Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP). He was the primary point of contact between the State and the U.S. Navy in matters pertaining to Defense Support of Civil Authorities (DSCA). He parlayed his dual role in I.T. management to affect the issuance of new computer equipment to all NEPLOs nationwide.

Financial Advisor, Merrill Lynch, 03/00 – 12/06

Mr. Rance worked as a financial advisor with Merrill Lynch where he earned the Certified Financial Planner (CFP®) certificate. He was responsible for marketing of service, conducting investment seminars and management of client assets. He was recalled to active duty to serve on the staff of Commander, Navy Reserve Forces Command in New Orleans, Louisiana as an I.T. Project Manager.

Country Program Manager, Navy International Programs Office, 11/97 – 12/99

As a Country Program Manager and Navy Officer, Mr. Rance opened, executed and closed over 110 Foreign Military Sales cases valued in excess of $1.8B. The delivered products were either manufactured or purchased from existing inventories to include ships, aircraft, missiles and communication systems. The level of detailed planning and financial estimating was extensive. He also established education and training cases, engineering services and assistance cases. Most of these cases required multiple steps to execute thoroughly whereas some required Congressional notification.

U.S. Naval Officer/Pilot, U.S. Navy, 05/85 – 12/99

His Naval service included over 13 years as a helicopter pilot in the Light Airborne Multi Purpose System (LAMPS) community. Mr. Rance led aviation detachments onboard Navy warships. He also led a team of 11 recruiters and administrative assistants, divided between two office locations, in canvassing and interviewing potential medical, nuclear, and general officer program candidates. In his last tour, he was assigned to the Navy International Programs Office (NIPO).

EDUCATION

- B.Sc., Mathematics with Computer Science Option, Tulane University, 1985
- Certified Financial Planner, 2004
- Project Management Professional, 2006

6.6 David DeCarlo

BACKGROUND

With more than 17 years of experience in information technology, project management and systems administration, Mr. DeCarlo has worked every aspect of IT infrastructure, from design, budgeting and procurement to implementation and administration. He is experienced in infrastructure management and operations for high profile, sensitive/critical data systems. He specializes in designing and building reliable and cost efficient IT systems for both private business and public entities.

CGI EXPERIENCE

CGI EMPLOYEE, 04/19/09 – PRESENT

DELIVERY MANAGER, LOUISIANA ROAD HOME, 04/09 – PRESENT

Responsibilities:
As Delivery Manager for the Louisiana Road Home Program IT Infrastructure, Mr. DeCarlo's responsibilities include:

- Oversight of the systems, network and data center services as well as management of the Service Desk functions.
- Serving as chief architect for the systems, servers and network; focusing on delivery of an efficient IT infrastructure.
- Project Manager for the 3rd party data center service provider with oversight of performance and invoice review.
- Senior manager for the nine person IT service desk with responsibility for assisting over 500 users.

Following the successful completion of an enterprise assessment, Mr. DeCarlo also

- Developed a continuous improvement plan using ITIL methodologies for the enterprise.
- Proposed and implemented a server refresh project, leveraging virtualization technologies to consolidate the environment.
- Redefined the Disaster Recovery Plan and led annual Disaster Recovery tests on the various systems used by the programs.
- Realized additional cost savings for the state by replacing leased storage with a purchased solution, achieving ROI in less than nine months. In total, reduced data center costs for the state by more than 50%.

Technical Environment: Windows, Exchange, SharePoint, SQL, Oracle, Linux, Solaris/UNIX, Cisco VOIP, VMware.

PRIOR EMPLOYMENT EXPERIENCE

Infrastructure Manager, Louisiana Road Home, ICF International, 11/06 – 04/09

- Management of network administration, information security, technical support, desktop support, and multi-tiered helpdesk staff totaling nearly 60 individuals at the peak of the program.
- Network architect/administrator for Microsoft Windows, RedHat Linux and Sun Solaris platforms as well as application servers including; MS Exchange, MS SQL Clusters, MS SharePoint, Oracle RDBMS, Oracle Application Server, JIRA, Apache/Tomcat and others.
- Subcontract manager for NTG and Trace security contracts.

Technical Environment: Microsoft Windows, Exchange, SharePoint, SQL, Oracle, Linux, Solaris/UNIX, Cisco, VMware

Manager, IEM Inc., 09/96 – 10/06

- Managed nine person IT staff.
- Responsible for management, architecture and administration of the entire IT infrastructure.
- Deployed solutions, systems and services to meet the ever changing requirements of a technology oriented consulting company.
- Managed all aspects for IT-related acquisitions, including forecasting, budgeting, product selection, vendor negotiations, procurement, and inventory functions.
- Network architect/administrator for Microsoft Windows, Sun Solaris and Cisco platforms as well as application servers including; MS Exchange, MS SQL, MS SharePoint, Oracle RDBMS, Apache/Tomcat and others.
- Appointed ISSO for the corporate Industrial Security program.

Technical Environment: Microsoft Windows, Exchange, SQL, Oracle, Linux, UNIX, Cisco.

EDUCATION

- B.Sc., Computer Science, Clemson University, 1995
- EMC VNX Foundations, EMC Education Services, 2011
- EMC VNX Block Storage Provisioning Using Unisphere, EMC Education Services, 2011

6.7 Nawfel Elalami

EXPERIENCE SNAPSHOT

INDUSTRY

- Financial Services
- Environmental State Agencies
- Regulatory Agencies

SPECIALIZATION

- IT Program/Project Management
- Risk Management
- Vendor Relations & Coordination
- Business/Project Strategy & Direction
- SOX Requirements
- Operations Management
- Business Process Improvements
- Resource Planning & Allocation
- Mentoring & Staff Development
- Implementation of COTS Products
- Customer Focus

BACKGROUND

Mr. Elalami is a highly skilled PMP certified IT Program Manager with excellent leadership abilities and relationship building skills. He possesses more than 10 years experience managing various sizes and types of Information Technology projects and matrix teams. He is an experienced IT Program Manager who has successfully led 50+ software development and infrastructure projects. He has a solid working knowledge of portfolio management, project life cycle, SDLC/PMLC, various programming languages and system architectures and has received numerous awards that recognized his outstanding technical and leadership achievements throughout his career.

CGI EXPERIENCE

CGI EMPLOYEE, 02/18/2008 – PRESENT

PROGRAM DIRECTOR, REGULATORY SOLUTIONS GROUP (RSG), 01/13 – PRESENT

Mr. Elalami serves as the Program Director for the public sector of Regulatory Solutions Group; a group focused on helping regulatory Agencies achieves their objectives with respect to regulatory compliance, environmental protection, public safety, and serving citizens. As Program Director, he is responsible for delivery management and quality oversight to CGI's state and local clients in the regulatory sector.

Responsibilities:
- Direct 14 million dollars per year portfolio of engagements between CGI and 10 state agencies, which cover multiple state wide projects and production support.
- Responsible for program and portfolio management activities within the Regulatory Solutions Group. Those include providing delivery assurance across all engagements, managing the staffing process, financial management and supporting our sales activities across the group.
- Manage a suite of three regulatory management software product families.
- Manage a distributed global team of 80 professionals that deliver large scale IT projects and provide production services to our state customers.
- Direct and maintain program management processes and disciplines in the areas of: program schedule and quality management; communications management; human resource

management; cost management; procurement management; risk / issue management; change management.

- Foster customer loyalty by ensuring that our customers fully utilize the value of our technical solutions and services.

DEPUTY PROGRAM DIRECTOR, REGULATORY SOLUTIONS GROUP (RSG), 08/11 – 01/13

Responsibilities:
- Helped direct 8 million dollars per year portfolio of engagements between CGI and 9 state agencies, which cover multiple state wide projects and production support.
- Responsible for program and portfolio management activities within the Regulatory Solutions Group. Those included providing delivery assurance across all engagements, managing the staffing process, financial management and supporting our sales activities across the group.
- Helped direct a distributed global team of 80 professionals that deliver large scale IT projects and provide production services to our state customers.
- Responsible and accountable for coordinating the management of multiple related projects directed toward strategic business and other organizational objectives.
- Built credibility, established rapport, and maintained communication with stakeholders at multiple levels within CGI's organization and the client's organization.
- Mentored staff in methodology and consulting excellence and encouraged best practices in project management and project planning.
- Directed and maintained program management processes and disciplines in the areas of: program schedule and quality management; communications management; human resource management; cost management; procurement management; risk / issue management; and change management.
- Fostered customer loyalty by ensuring that our customers fully utilize the value of our technical solutions and services.

ENGAGEMENT MANAGER, VARIOUS STATE OF NEW JERSEY AGENCIES, 02/08 – PRESENT

Responsibilities:
- Managed 5 million dollars per year CGI engagement with the New Jersey Department of Environmental Protection and the New Jersey Department of Community Affairs, which covers multiple Agency wide projects and production support.
- Directed a portfolio of system development and IT infrastructure projects throughout the project life cycle from initiation to maintenance.
- Led a project team of about 30 members (number fluctuated base on project needs) that managed large scale projects and provided production support services for more than 10 complex Agency wide applications and databases on multiple platforms.
- Directed the deployment of an eGovernment solution for multiple state agencies.
- Directed the deployment of environmental management system for the department of environmental protection.

- Facilitated the creation of a strategic road map for CGI's regulatory enforcement and compliance solutions and eGovernment product.
- Worked in partnership with multiple state agencies CIO's to develop an IT strategic road map to respond to their business needs.
- Led win-win successful negotiations for a multi year's contract extension with the state of New Jersey.

PRIOR EMPLOYMENT EXPERIENCE

Senior Project Manager, Freddie Mac, 03/05 – 02/08

- Managed the technology needs of various business units (Sales& Marketing, customer support, Customer Management, and Customer Education departments) across multiple divisions within Freddie Mac.
- Directed a portfolio of system development and IT infrastructure projects for multiple Business units.
- Led a team of 3 project managers, 2 business analysts, 8 programmer analysts plus matrix software engineers from different centers of excellence(number fluctuated base on project needs), which managed large scale projects and provided production support services for more than 40 complex enterprise applications and databases on multiple platforms.
- Directed 20+ projects with different sizes and types for various business divisions.
- Managed and established service level agreements with multiple Business Partners.
- Worked in partnership with various business units to create the 36-months IT strategic road map to respond to their business needs.
- Directed enhancement efforts and hotline fixes to numerous complex systems.
- Directed the deployment of a learning management system for the Customer Education business unit.
- Managed the deployment of call recording system (eTalk) for the customer support business unit.
- Directed the deployment of the Business Process Management (BPM) tool for the customer support business unit.
- Managed and maintain multiple business units' Computing Environments.
- Developed and maintained strong relationships with various internal and external business and IT partners.
- Managed the creation and deployment of technical training curriculums to the sales group in order to help them efficiently use all the systems and tools available to them.
- Developed various support models for different complex systems that involve multiple departments across the organization.
- Led multiple company-wide collaboration efforts to introduce cutting-edge mobile technologies (Blackberry infrastructure, Wireless LAN - WiFi) to Freddie Mac.
- Managed the Sarbanes-Oxley (SOX) compliancy of various production systems owned by multiple Business Partners.

Project Manager, Freddie Mac, 04/03 – 02/05

- Managed 10 projects with numerous sizes and types concurrently for various Business Partners.
- Managed matrix project team of 10 plus staff for various enterprise initiatives.
- Supported the financial re-statement effort through managing a project that developed and automated reports.
- Managed the deployment of Relavis- Customer Relationship Management (CRM) tool to multiple business units.
- Led the Blackberry enterprise solution deployment project within our Sales Lending Division.
- Managed the deployment of broadband technologies to Freddie Mac Sales Force.
- Managed the Virtual private Network (VPN) checkpoint upgrade to Cisco VPN project for the Sales Division.
- Managed the development of e-expense system for the Sales division.
- Managed the Virtual private Network (VPN) Replacement to Remote Access Network for the Sales Division.
- Managed the Windows 2000 upgrade/Laptop upgrade for all of the Sales force across the country.
- Led the creation of the sales mobile computing strategy for Freddie Mac Sales Force in collaboration with multiple business and IT partners.

Lead Programmer Analyst, Freddie Mac, 06/01 – 03/03

- Provided IT support to over 100 sales mobile users across the country.
- Led the redesign of the computing environment support model in collaboration with multiple partners through Service Level Agreements and the creation of a knowledge base system.
- Created, enhanced and provided resolution to technical issues for multiple complex applications for the Sales and contracting divisions.
- Acted as subject matter expert for multiple software development projects.
- Supported the sales and contracting applications and computing environments through monitoring, maintenance and updating of code.

Operation Manager, Aramark Corporation, 11/97 – 05/01

- Managed the day-to-day operations of 1200+ seats dining facility.
- Managed staff of 200+ employees.
- Worked in a team of four managers to communicate operational performance and manage day-to-day issues.
- Developed recruiting strategies to staff the daily operation of the dining facility.
- Managed a major project which streamlined the new hire paperwork process to expedite onboarding of new employees
- Managed a project which created a recruiting website and a relational database to manage marketing and scheduling.

EDUCATION

- B.Sc., Computer Science, James Madison University, 2001

- M.S., Project Management, Information Technology, George Washington University, 2006
- Project Management Professional, 2006

6.8 Julie Chung

BACKGROUND

With over 15 years of experience in Agile and traditional systems development and business process reengineering, Ms. Chung combines expertise in strategic business and operations analysis, scalable systems integration and replacement, customer-centricity, and Web technology with a strong background in project management, quality assurance, functional design, testing management, release and post-implementation experience.

Since joining CGI, Ms. Chung has been a process improvement agent on over a dozen Agile and full-lifecycle projects where she led customer visioning sessions, the as-is analysis of the business, and crafted the approach and vision for the to-be future operations.

CGI EXPERIENCE

CGI EMPLOYEE, 07/17/95 – PRESENT

PROJECT AND FUNCTIONAL LEAD, CIGNA 02/12 – 04/13

Responsibilities:
Ms. Chung is responsible for envisioning technical and business process solutions to assist the Senior Leadership team manage strategic corporate investments in Portfolio Projects and support business reporting on infrastructure projects, including the financials for a multi-million dollar Portfolio, and executive scorecards. Ms. Chung has accountability for successfully documenting and rolling out processes for the team to grow from a 3 person team to a 15 person team. She manages business requirements and collaborates with multiple stakeholder groups to gain adoption of the new technologies and processes. In addition, she is responsible for standing up the organization and transitioning the new processes developed to 3 newly hired FTE managers.

QUALITY ASSURANCE TEAM LEAD, MOODY'S, 12/09 – 01/12

Responsibilities:
As the QA team lead on the Pyramid Ratings and Banking Financial Metrics project, Ms. Chung led teams responsible for quality assurance of Security and Publications for the entire Ratings application both internally before publication and also after publication to outside vendors. She led the development of the testing strategy, execution and monitoring of monthly production rollouts of software fixes and enhancements. She was responsible for certifying that the software meets the business requirements, maintaining a custom testing dashboard report, day to day management of the team to meet an aggressive rollout schedule, defect management to ensure that critical software defects were prioritized for remediation, and escalation of issues and risks.

PROJECT TEST TEAM LEAD, CIGNA, 09/09 – 11/09

Responsibilities:

As a Project Test Lead for a key enterprise strategic initiative to streamline healthcare claims processing and operations, Ms. Chung managed daily system, integration, and release test phases. She was responsible for developing and rolling out a testing operations plan which included standards and templates for system, exception, integration, UAT, production readiness and release testing phases along with changes to the use of HP Quality Center and ReqPro for requirements tracing and defect management. Ms. Chung led day-to-day test efforts including identification of business test scenarios, requirements traceability, and reporting and resolution of issues and risks.

PROJECT MANAGER, CITY OF NEW YORK, 02/05 – 09/09

Responsibilities:

Ms. Chung managed a 17-person team on a project migrate the City's Claims Reimbursement system from a COBOL and Windows desktop GUI interface to the CGI Advantage and infoAdvantage (Business Objects) J2EE compliant platforms. She led the efforts of gathering the business requirements, reviewing COBOL code, and creating the JAVA application and 40+ extract/transform/load, conversion, and interface designs. She was responsible for the quality assurance of 50+ reports designs. Ms. Chung led the development of testing plans, and scripts, and code migrations into development, package, integration, systems, conversion, and prod path environments. The system is used to transform Accounting expenditure data from Advantage to provide support State and Federal grants reimbursements.

Ms. Chung led the testing team in the unit, system, integration, and assembly test phases to certify delivered code met business requirements. She worked side-by-side with testers daily to create traceable white box and black box test cases and scripts; run batch processes; document SQL statements used to verify that the detail displayed on the report was accurate based on the test bed; execute test scripts; and log, retest and close fixed defects. She reported to management and escalated testing issues and risks.

Previously, Ms. Chung led multiple teams implementing a large scale financial accounting and budgeting system for the City including a fit-gap analysis of the existing budget application from its Mainframe architecture to a J2EE/WebSphere one. She performed full lifecycle project management from business analysis, work estimates, project planning and execution, personnel management, issue escalation and resolution, development, testing, and deployment activities. She has extensive experience using ClearQuest, Clear Case, and SharePoint.

TEAM LEAD, STATE OF MISSOURI DEPARTMENT OF REVENUE, 09/03 – 01/05

Responsibilities:

Facing severe budget constraints, DOR was tasked with increasing revenues for the state. With an almost 20-year-old Computer Assisted Collections System (CACS) in place and operating at peak performance, DOR needed to invest in a more effective, powerful, and flexible IT solution

with long-term value. The Missouri Department of Revenue (DOR) awarded CGI a benefits-funded contract to upgrade its CACS to a web-enabled platform.

Within the first 90 days of the project start, Ms. Chung led the business process reengineering effort to examine the processes that DOR used to collect delinquent accounts receivable, and in partnership with DOR management recommended and implemented process improvements to jump start the measurable project benefits with over $3 million dollars collected by this effort. After the Early Win BPR activities were implemented, she co-led the CACS implementation team and managed the interfaces, conversion, reports, and correspondence tasks by guiding team members, managing team member and client expectations, and taking responsibility for the development, review, revision, and delivery of CACS design sessions and documents.

QUALITY ASSURANCE ANALYST, STATE OF VIRGINIA, 07/03 – 08/03

Responsibilities:

As part of the Virginia Tax Partnership Project, the Tax Amnesty program was an effort by the Commonwealth to collect an additional $48.5 million in revenue needed for the FY 2004 budget. Ms. Chung coordinated the highly collaborative readiness tests and communication effort that included six outside collection agencies (OCAs) across the country on contract with VATAX and CGI leadership, and five TAX operating units. Ms. Chung was responsible for quality assurance and communications with the OCAs. She ensured and validated that the OCAs were prepared and trained to answer and process the high volume of incoming calls.

TEAM LEAD, PENNSYLVANIA DEPARTMENT OF TRANSPORTATION, 02/03 – 07/03

Responsibilities:

The Pennsylvania Department of Transportation, PENNDOT partnered with CGI to conduct a study of their existing Driver License and Motor Vehicle systems and business processes in order to develop Business Process Reengineering and Technical Infrastructure Options for PENNDOT's Safety Administration. Ms. Chung led the business process reengineering and future system visioning efforts. Her responsibilities included the day-to-day management of project deliverables; coaching client and CGI staff on BPR tools and techniques; facilitating over 35 focus group sessions to examine opportunities for PENNDOT to improve its current business processes and systems support infrastructure; working with PENNDOT's leadership to develop a shared vision for its future business processes and system environment; and tailoring the Achieving Breakthrough Performance (ABP) Methodology to develop a clear, comprehensive roadmap for PENNDOT to achieve its future vision.

BUSINESS ANALYST, 32BJ BENEFIT FUNDS, 12/02 – 02/03

Responsibilities:

Ms. Chung analyzed, developed and implemented process improvements in the Health Center for the 32BJ Benefit Funds. She worked with the client to develop an integrated plan for Health Assessment changes and managed the development of organization policies, procedures, and

workflows for Health Center improvements in patient care. While managing a series of projects as a change agent, she developed performance measurement reports.

QUALITY ASSURANCE ANALYST, MANULIFE, 07/02 – 10/02

Responsibilities:

Ms. Chung developed test strategies, project plans, conditions, cases and scripts for quality assurance testing of this large enterprise-wide system development effort to support a processing for a new product distribution channel (integration and implementation of the systems and operations to sell and administer its new business with an external mutual fund company within six months). She managed the dry run of the production systems migration and conversion of all agent information that resided in the recordkeeping.

TEAM LEAD, LARGE MULTI-NATIONAL FINANCIAL SERVICES FIRM, 01/02 – 06/02

Responsibilities:

Ms. Chung led the client in planning, identifying, and evaluating commodity functions, developing a process to identify candidate outsourcing companies, and developing a high level plan to pilot an outsourcing arrangement. She worked closely with the client's geographically dispersed executive team to develop customized management tools that included analysis and documentation of potential outsourcing opportunities.

FUNCTIONAL LEAD, AXA INSURANCE, 08/00 – 10/01

Responsibilities:

Ms. Chung was the functional lead on multiple projects for AXA Financial ranging from business process reengineering and outside Integrated Voice vendor management to multiple project implementations. She managed a mixed client and consultant team to create requirements and build a set of custom, interactive financial calculators to support a business process redesign initiative to generate leads for financial planners. The project encapsulated extensive proprietary coaching messages and financial algorithms within the technology used to publish the information in a J2EE environment using Java servelets. Not only was the application delivered on time and within budget, but it also received high praise for its innovation and design from financial planner and user communities. The project required integration of content with internal and third party COTS applications, design, usability reviews, application testing, load testing, and transition/knowledge transfer of the web application to internal client resources.

Ms Chung led the assessment of broker/dealer licensing and appointment systems functions that included a thorough review of the regulatory requirements, processes in place for these functions, an identification of the operational gaps in the existing process, and a recommendation and design for a new application and operations processes. Her assessment presented a data model for the subsystem along with the implementation steps to rollout the changes.

FUNCTIONAL LEAD, AXA INSURANCE, 08/00 – 10/01

Responsibilities:

Working directly for the division SVP, Ms. Chung recommended external mutual funds and associated business changes that would enhance the investment choices for their retirement plan products while reducing call times and improving customer satisfaction. She examined and directed the system modifications, including customer service front-end, voice response system, and reports changes, to support an addition of over 200 External Funds to their existing investment options.

TESTING TEAM AND FUNCTIONAL LEAD, LARGE INVESTMENT TRUSTEE, 05/96 – 04/99

Responsibilities:

CGI was selected by a large investment trustee to perform a comprehensive review of its business processes and supporting systems to identify process and systems improvements. As testing team and functional lead for the customer service functions, to support over a million participants and over a billion in assets, Ms. Chung facilitated joint application design (JAD) sessions with stakeholders to understand the current business models for customer service, enrollments/indicative data, and participant statements. She developed a strategic business model for customer service to support the move from monthly to daily valuation.

TEAM LEAD, PUTNAM INVESTMENTS, 09/95 – 02/96

Responsibilities:

As team Lead, Ms. Chung helped reengineer the retirement takeover/conversion business by streamlining and implementing business process changes including a detailed Conversion Project Plan and Testing Methodology. She trained managers and line staff on the methodology and the use of associated management tools.

BUSINESS ANALYST, QUEST DIAGNOSTICS, 07/95 – 08/95
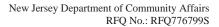
Responsibilities:

After analysis of the business problem of manual billing itemized testing fees on HCFA forms, Ms. Chung proposed several alternative solutions to help the client recover several hundred thousand dollars in account receivables that were uncollected due to the inaccurate bills, and implemented the custom application solution chosen by the client.

PRIOR EMPLOYMENT EXPERIENCE

Wells Fargo, Full-Time Internships, Summers during 06/91 – 08/94

Extensive experience in all aspects of frontline customer service functions, risk management and mitigation, credit analysis, and corporate credit approval processes. Full-time summer internship.

EDUCATION

- B.Sc., Economics with concentrations in Finance and Accounting, University of Pennsylvania, 1995
- M.S., eCommerce, Carnegie Mellon University, 2000

6.9 Raul Matos

BACKGROUND

Mr. Matos has over 10 yrs of experience managing the full software development lifecycle (SDLC) process and 10 years of business analyst experience. He has extensive experience as an Implementation Specialist with a proven ability to manage client expectations while working in fast-paced, demanding environments. Mr. Matos and the teams he as has led have executed over 400 deployments, and implemented software for 13 Affordable Housing Agencies. He has participated and lectured in Affordable Housing Seminars and has experience in working with and analyzing Department of Housing and Urban Development (HUD) data for data capturing.

CGI EXPERIENCE

CGI EMPLOYEE, 04/20/09 – PRESENT

APPLICATION TEAM LEAN, LOUISIANA ROAD HOME, 04/09 – PRESENT

Responsibilities:

Louisiana Road Home is a large-scale Department of Housing and Urban Development (HUD) funded Community Development Block Grant (CDBG) effort. As the Small Rental Program IT Application Team Lead, Mr. Matos has overseen the successful completion of more than 300 releases ranging in scale from small to large. For each release, he ensures that the project scope is clearly defined and that all changes to scope are documented and appropriately controlled. Mr. Matos has extensive project management experience in defining and planning tasks, deliverables, resources, and schedules for Small Rental Projects. He assigns tasks and tracks progress for the team, monitoring and coordinating the team's activities to drive successful results.

Mr. Matos regularly communicates with upper management and stakeholders by providing comprehensive weekly status reports, plan vs. actual reports, and risks/impacts/issues reports. He manages the end users' expectations by clearly communicating the project's scope and objectives. Mr. Matos manages Service Desk tickets and assigns and tracks work as needed. In addition, he is the primary liaison with key third-party software vendors. Often, he is required to drive and improve delivery schedules from the Vendor. Also, he ensures the streamlined operation of the IT Department in alignment with the business objectives of the organization.

PRIOR EMPLOYMENT EXPERIENCE

IT Project Manager, ICF International Inc., 11/07 – 04/09

Mr. Matos worked on the Road Home Program for the State of Louisiana. This unprecedented hurricane restoration project has an overall budget in excess of $7B. In a nine month period, this team configured, implemented, and supported a software application that accepted over 140,000 applications, calculated over 70,000 awards, and interfaced with closing agents to award 20,000 people over $1.4 billion in awards under the Louisiana Road Home program.

In this capacity, he was responsible for overseeing the team directly responsible for vendor management, modification, implementation, and support of all end user applications used in Small Rental programs.

Duties & responsibilities included:
- Managing strategic relationship with vendors and clients
- Directing the project's resources and ensuring that the project was completed on time, within budget, and meeting acceptable quality standards
- Developing and using Project Management Processes (Issue Management, Risk Management, and Project Planning
- Ensuring the overall success of the project

Project Manager/Business Analyst/Implementation Specialist, Housing and Software Development (HSD), 04/03 – 11/07

HDS is the fastest-growing software vendor in the Affordable Housing Industry. HDS provides computer software products, programming, marketing, and consulting services to the Housing Finance and Community Development Agency market. Mr. Matos managed strategic relationships with entities like the Housing Finance and Community Development Agency across the United States. He successfully conducted implementations for over 13 clients in a span of 3 years and organized and facilitated focus groups sessions.

Duties & responsibilities included:
- Responsible for all aspects of the development and implementation process
- Developing detailed work plans, projects' estimates, and status reports
- Maintaining the projects' scopes and objectives
- Ensuring adherence to quality standards and reviewing projects' deliverables
- Examining, assessing, and documenting methods and processes of the business flow
- Identifying and resolving issues between business requirements and technical constraints, which often involved other business analysts and the development team

Computer Specialist, Nova Southeastern University (NSU), 07/01 – 04/03

NSU is the largest independent institution of higher education in the Southeast. Mr. Matos was responsible for supporting and troubleshooting the Senior Systems application. This system allows the administrative staff and faculty to query and report on student information such as grades and report cards, attendance records, and class schedules. Mr. Matos performed routine maintenance including scheduling backups of the Oracle database. In addition, he planned and

coordinated an evaluation of the entire system during peak periods when user interaction was high.

Duties & responsibilities included:
- Managing users' accounts on the network and administering the resources on the networks
- Responsible for the support of 500 computers and 9 servers for three school locations
- Maintaining the University School website and the Internet filtering system
- Handling help desk calls and all hardware maintenance
- Delivering software training to faculty and new work-studies
- Installing client server applications and configuring 48 wireless laptops with remote installation
- Working with Ghost for deploying standard images to PCs, ensuring image configurations were current
- Completing a full migration for the Coral Springs University School from a mix mode environment to Windows NT 4.0.

Computer Technician, Nova Southeastern University, 09/99 – 07/01

Primary responsibilities included performing user and PC support to all of the administrative departments and its staff campus wide.

Duties & responsibilities included:
- Supporting and performing maintenance on 500+ computers
- Ordering software and computer parts from vendors
- Troubleshooting and solving multimedia and database issues
- Supporting and assisting the help desk when necessary

Customer Assistant, AutoNation, 06/99 – 09/99

Mr. Matos acted as a liaison between the customer and the product specialist. He assisted the customer by narrowing their choices when transferred to the product specialist, as well as following up on leads and referring leads to product specialists.

Duties & responsibilities included:
- Answering customer questions through online chats
- Taking customer service complaints
- Cold calls for car services
- Calling customers to follow up on purchases.

EDUCATION

- B.Sc., International Business & Marketing, Nova Southeastern University, 1999
- M.A., Business Administration, American Intercontinental University, 2002

6.10 Amy Smith

BACKGROUND

Ms. Smith joined Horne in 2008 and serves as a project manager overseeing the software development for US Department of Housing and Urban Development (HUD) funded Community Development Block Grant (CDBG) disaster recovery projects in Texas and Mississippi totaling over $740 million.

HORNE EXPERIENCE

HORNE EMPLOYEE, 07/08 – PRESENT

MANAGER, TEXAS GENERAL LAND OFFICE, DISASTER RECOVERY HOUSING PROGRAM, ROUND 2, 10/11 – PRESENT

Ms. Smith began serving as the information technology project manager for the Texas General Land Office CDBG-DR program in October 2011. She is responsible for the Texas CDBG-DR Homeowner Opportunity and Homeowner Assistance Program for the City of Galveston Disaster Recovery Housing Program (Round 1 and Round 2), the Lower Rio Grande Valley Development Council Disaster Recovery Housing Program, the South East Texas Regional Planning Commission Hurricane Ike Housing Recovery Program, the Galveston County Housing Assistance Program, and the City of Houston Housing & Community Development Department Single Family Home Program. Ms. Smith manages process definition and development for these programs and she is responsible for coordinating the development of all workflow programs. She is also responsible for project reporting and tracking and oversees software development. She is the liaison between program management and IT development.

MANAGER, MISSISSIPPI DEVELOPMENT AUTHORITY, SMALL RENTAL ASSISTANCE PROGRAM AND PROGRAM MANAGEMENT OFFICE, 07/08 – PRESENT

Responsibilities:
Under this CDBG-DR funded effort, Ms. Smith defined program processes and developed automated solutions to improve program efficiency for the Mississippi Development Authority's Disaster Recovery Division Small Rental Programs I and II and the Project Management Office. She developed customized project reports to expand transparency and provide program accountability. She also developed and enabled web-based tools for 24/7 access to project data, process, and reporting. Ms. Smith facilitated data warehousing of environmental and inspection status for scattered sites to facilitate timely reporting. She also worked closely with HORNE subcontractors by monitoring progress on program benchmarks.

MANAGER, MISSISSIPPI DEVELOPMENT AUTHORITY, LONG TERM WORKFORCE HOUSING PROGRAM, 07/08 – PRESENT

Responsibilities:

Ms. Smith also developed and documented processes for long term workforce housing subrecipient cash requests, procurement compliance, environmental clearance and applicant income verification while supporting the CDBG-DRfunded Mississippi Development Authority's Disaster Recovery Long Term Workforce Housing Program. She facilitated communication of process requirements to the IT development staff.

PRIOR EMPLOYMENT EXPERIENCE

Account Manager, Cisco Systems, 07/06 – 07/08

Ms. Smith was an account engineer with multi-million dollar channel distribution responsibilities for computer networking technologies. She defined customer business problems in a technical context to refine and engineer networking solutions. She was responsible for effective communication of technical solutions to project stakeholders for project selection and deployment.

Engineering Account Manager, Siemens, 01/00 – 07/06

Ms. Smith developed energy conservation project programs for State and local agencies. This included development of project scope, economic lifecycle, and project implementation schedule and management of engineering resources, contractors and financial resources. She performed analysis for evaluation of project scope options and led client scope presentations from project proposal through project implementation and support.
Environment Engineer, ERGON, 01/96 – 01/00

Ms. Smith was responsible for compliance with all aspects of environmental regulations for petroleum facilities in Mississippi, Alabama, Georgia, Tennessee and Arizona. She Implemented permit limits, compliance plans, monitoring requirements, and reporting for all State and Federal environmental regulations. Conducted internal environmental audits and authored environmental audit reports.

EDUCATION

B.Sc., Industrial Engineering, Mississippi State University, 1996

6.11 Joe Benigno

BACKGROUND

Mr. Benigno is a Project Manager with 4 years of CDBG-DR Disaster Recovery program experience and 20 years of large program development. He performs business analysis and system automation development for disaster recovery oversight projects to ensure compliance with housing and grant guidelines. He is responsible for definition and implementation of project management and business processes within specialty accounting.

His prior experience includes more than 20 years leading teams in the implementation of technologies for both government and commercial projects. These projects included large scale telecommunications and disaster recovery systems for Federal and defense organizations. He has also established and managed project management organizations for consumer products businesses.

HORNE EXPERIENCE

HORNE EMPLOYEE, 07/09 – PRESENT

SENIOR MANAGER, TEXAS GENERAL LAND OFFICE, DISASTER RECOVERY PROGRAM, HURRICANES IKE AND DOLLY ROUND 2, 10/11 – PRESENT

Responsibilities:
Mr. Benigno performed project planning and business process modeling for CDBG-funded systems development and team deployment associated with the City of Galveston, Lower Rio Grande Valley, Galveston County, City of Houston and Southeast Texas projects. He conducted ground up definition of outreach, eligibility, set-up, closeout, complaint and appeals processes. He coordinated systems and procedural interfaces between eligibility and construction project phases. Mr. Benigno contributed to the development of CDBG-DR best practices for housing and non-housing program implementation. He participated as a member of the Special Topics and Appeals Team to ensure project policy development and appeals are performed in a timely and consistent fashion. He worked directly with the client to establish Homeowner Opportunity Program guidelines. Mr. Benigno also provided project planning and procedure analysis for the City of Houston Round 1 Recovery Plan.

SENIOR MANAGER, MISSISSIPPI DEVELOPMENT AUTHORITY, NEIGHBORHOOD HOME PROGRAM, 02/11 – PRESENT

Responsibilities:
On this CDBG-DRfunded effort, Mr. Benigno performed operational management of the eligibility processing team, which included day-to-day oversight and policy guidance. He conducted detailed project planning to coordinate multiple development teams, ensuring client timelines were met. He defined processes for eligibility, scope and construction phases. Mr. Benigno established system requirements for the development of automation essential to meeting Department of Housing and Urban Development (HUD) regulations. He worked closely with the client to conduct multiple population studies to ensure eligible applicants received proper assistance and to establish reporting baselines.

SENIOR MANAGER, MISSISSIPPI DEVELOPMENT AUTHORITY, LONG TERM WORKFORCE HOUSING, 07/09 – PRESENT

Responsibilities:

For this CDBG-DRfunded effort, Mr. Benigno conducted process analysis of the Cash Request procedures and developed guidance for enhancements. He supported the transition of Tenant Income Verification processes used on the Small Rental Assistance Program into self certification procedures for Long Term Workforce Housing sub-recipients.

SENIOR MANAGER, MISSISSIPPI DEVELOPMENT AUTHORITY, SMALL RENTAL ASSISTANCE PROGRAM 07/09 – PRESENT

Responsibilities:

Mr. Benigno assessed program processes and established procedural changes for streamlining and quality assurance for this CDBG-DRfunded effort. He evaluated and documented best practices for application to concurrent and future projects. He coordinated client-driven requirement changes for implementation by IT development staff.

PRIOR EMPLOYMENT EXPERIENCE

Senior Project Manager, Triton Systems, 07/06 – 06/09

Mr. Benigno led cross-functional project teams in the development of automated teller equipment. Key projects included a $5M international joint development project to produce a next generation bank-grade cash dispensing mechanism. Additional projects include multiple ATM system and component developments.

Mr. Benigno established project management organization by instituting procedures, creating deliverables, adapting web-based project management tools and conducting personnel training. He enhanced new product development capabilities through the introduction of StageGate processes, along with improved product management documentation and training.

Self Employed, 08/05 – 07/06

Mr. Benigno partnered with a team of former directors and executives from Terayon Communications in an effort to acquire the Broadband CPE Product line business.
Director, Terayon Communications, 03/02 – 07/05

Mr. Benigno directed a team of product marketing managers, technical managers and international development partners responsible for a family of broadband products, including cable modem, VoIP, home gateway and wireless networking products. The Product Line accounted for $80M+ in annual world-wide sales to major cable providers. Team performance resulted in quarterly revenue growth of $11M to $20M, gross margin improvement of over 25%, operational expense reduction of 35%, and market share increase from 6th to 2nd, resulting in sustained business unit profitability.
Senior Product Line Manager, Com21 Incorporated, 07/00 – 02/02

Mr. Benigno managed a line of advanced cable modem and residential gateway products. Products included enhanced capabilities such as residential firewall, home networking, and VoIP.
Project Manager, Harris Corporation/CSD, 02/99 – 07/00

As Project Manager, Mr. Benigno performed remote site management of a $40M subcontract to develop a satellite ground station control network for the US Air Force. He managed a team of 15-20 engineers. He conducted performance assessments, employee development, salary planning, hiring/termination, and corporate policy enforcement.
Chief Systems Engineer, Harris Corporation/CSD, 04/96 – 07/00

As Chief Systems Engineer, Mr. Benigno provided chief technical guidance for the definition, design, and implementation of a network management subsystem for the Air Force Satellite Communications Network.
Lead Systems Engineer, Harris Corporation/CSD, 02/92 – 04/96

Mr. Benigno led a cross-functional team of engineers in the definition, design, and implementation of a US Navy shipboard communications system. System included networking, network management, and end user systems.
Senior Hardware Engineer, Harris Space Systems Corporation, 06/90 – 02/92

Mr. Benigno led a subsystem design team in the design and implementation of a real-time data acquisition subsystem for NASA. The subsystem replaced obsolete ground-based telemetry equipment for the Shuttle Launch Processing System.
Systems Engineer, Harris Corporation, 05/88 – 06/90

Mr. Benigno participated in the design and development of a transportable communications system for the Federal Emergency Management Agency (FEMA). System implementations included wireless and landline, secure computing and WAN/LAN technologies. He developed operator training system, including hardware and training curriculum. He conducted train the trainer sessions as part of the customer hand-off process.

EDUCATION

- B.Sc., Technology, Pepperdine University, 2000

- B.Sc., Electrical Engineering, MS State University, 1988
- B.Sc., Computer Engineering, MS State University, 1988

6.12 Kevin Manuel

EXPERIENCE SNAPSHOT

INDUSTRY

- State & Local Government
- Manufacturing
- Legal
- Finance
- Health Care
- Retail
- Telecommunications

SPECIALIZATION

- Application Development

BACKGROUND

Since 1987, Mr. Manuel has been working in the Information Technology field gaining over 25 years of skills and experience. He served 8 years in the US Coast Guard as a Radioman/Telecommunication Specialist. During that time he received commendations for his work in designing and developing a database for tracking maritime incidents, and assisting in the implementation of a cutting edge, building-wide network upgrade. Following an honorable discharge from the Coast Guard, Mr. Manuel was employed by various companies, acquiring skills and advancing from a laser printer repair technician to a Master Certified Novell Network Engineer. Eventually, he became the Director of Louisiana Operations at DynTek managing a team of 34 support staff of various skills. In 2003, Mr. Manuel founded Blue Streak Technologies, which has evolved into a professional services organization dedicated to the implementation OpenText (formerly Metastorm) MBPM solutions.

Blue Streak Technologies is a premier partner of OpenText. Mr. Manuel is well known within the OpenText organization for his experience and skills, and served as a partner advisor prior to the release of the current version of the MBPM product. Together with other Blue Streak staff, he was one of the first two developers in North America to achieve the original Metastorm Developer Certification. He also participated in the BETA testing of the OpenText MBPM Version 9 certification program and, again with other Blue Streak staff became one of the first two MBMP Version 9 certified developers.

BLUE STREAK TECHNOLOGIES EXPERIENCE

MANAGING PARTNER AND CHIEF TECHNOLOGY OFFICER, BLUE STREAK TECHNOLOGIES, 01/03 – PRESENT

Responsibilities:
Manage and oversee the technical aspects of all Blue Streak projects. Lead Blue Streak's technical direction and assist with sales efforts. Provide training and support for new staff. Assist with supporting day-to-day company operations. Provide direct technical support as an OpenText MBPM developer for numerous Blue Streak customers that range in industries including State and Local Government, Manufacturing, Legal, Finance, Health Care, Retail, and Telecommunications.

Example State and Local Government Projects:

SENIOR BPM TECHNICAL ADVISOR, DEVELOPER AND SME, THE ROAD HOME PROGRAM, 07/05 – PRESENT

Responsibilities:

Provide senior technical support, hands on programming, business analysis, and issue resolution to create an application using OpenText MBPM to allow for online submission and management of the processing of applications submitted by Louisiana rental property owners wishing to receive funding assistance through the Louisiana Road Home Program. Managed the development effort for the Hazard Mitigation Grant Program, which manages $700 million federal grant for 220,000+ Katrina/Rita applicants, the approval process, documentation, contractors, inspections, and secure electronic payments through Chase Bank. Provide ongoing technical support for the various BPM enabled projects.

TECHNICAL SME, LOUISIANA DEPARTMENT OF REVENUE, 07/05 – 06/06

Responsibilities:

Provided technical support, expertise, and guidance on a project to create a time keeping and legal case management systems using Metastorm BPM. Assist with business analysis and system design. Design and implement BPM system components including integrations with Microsoft Active Directory for single sign-on.

TECHNICAL SME, ST TAMMANY PARISH GOVERNMENT, 07/04 – 06/05

Responsibilities:

Led development team in creating a Geographic Information System (GIS) application to assist a local government in determining sales tax impacts of city land annexation. The application consists of a GIS interface and integration with Metastorm BPM processes for the review and approval of tax annexation change requests. Provided senior technical guidance and acted as business analyst.

TEAM DEVELOPER AND TECHNICAL SME, LOUISANA DEPARTMENT OF CHILDREN AND FAMILY SERVICES SERVICES, 07/02 – 06/07

Responsibilities:
Managed development team, provided programming support and project management for the creation of a case management system using OpenText MBPM that tracks fraudulent activity and report on statistics for the Food Stamp Program that distributes an average of $55 million to over 230,000 per month. Design and implement BPM system components including integrations with Microsoft Active Directory for single sign-on. Created integrations between IBI WebFocus Business Intelligence, ESRI GIS and OpenText MBPM to enable graphical displays and reports depicting suspect fraudulent activities that feed the creation of new investigation cases.

PRIOR EMPLOYMENT

DynTek (formerly R&D Networking, Cohesive Network Systems, and Exodus) Master Certified Novell Network Engineer and Technical Services Director for Louisiana, 10/98 – 01/03

Responsibilities:

- Manage staff of network support and application development technicians
- Provide senior level network design and support
- Assist with sales efforts as pre-sales engineer
- Conduct training

United Companies Financial Services, Novell Network Engineer, 02/97 – 10/98

Responsibilities:

- Provide network support for Novell network
- Troubleshoot and resolve help desk incidents
- Maintain system backups and patch levels

EMCO Technologies, Network Technician, 08/95 – 02/97

Responsibilities:

- Provide network support for Novell networks
- Build and repair PC desktop systems
- Service and repair laser printers

United State Coast Guard, Radioman Second Class, 07/87 – 08/95

Responsibilities:

- Handle incoming and outgoing radio and teletype communications
- Provide support for shipboard and office computer networks
- Service and repair shipboard copiers
- Use and protect Top Secret cryptographic material

EDUCATION

- Metastorm Certified BPM Developer (Metastorm BPM V5.1-7.x), 2004
- Metastorm Certified BPM Developer (Metastorm BPM V9.x, 2010
- Dale Carnegie Effective Communications and Human Relations Training
- Novell: Certified Novell Engineer 4
- Novell: Certified Novell Engineer 5
- Novell: Master Certified Novell Network Engineer with NT Integration
- Vinca: Vinca Certified Engineer

6.13 Richard Morin

EXPERIENCE SNAPSHOT

INDUSTRY

- Emergency Management
- DOD
- Missile Defense
- U.S. Navy
- Medicare/Medicaid

SPECIALIZATION

- CDBG-DRDisaster Recovery
- Project Management
- Implementation Management
- Change Management
- Business-to-Business solution analysis & definition
- Business-to-Consumer solution analysis & definition
- Process analysis & definition
- Requirements analysis & definition
- Mercury Test
- Training

BACKGROUND

Mr. Morin has 25 years of experience in the field of information system services. Most of this experience has been involved with the definition, design, development and implementation of new customized application software projects in response to client specific requirements in many different functional areas. He has a wide range of experience including project management, ITIL-based service delivery and account management, as well as documenting, testing and implementing complex business technology solutions.

Mr. Morin is highly skilled in gathering requirements on business rules and process flow charts. In particular, he has developed expertise in the requirements and processes related to supporting the funds management and auditing of US Department of Housing and Urban Development (HUD) funded Community Development Block Grant (CDBG) disaster recovery projects. He has also served as Curriculum Developer for multiple projects at large client organizations.

CGI EXPERIENCE

CGI EMPLOYEE, 05/19/09 – PRESENT

PROJECT MANAGER/TEAM LEAD, LOUISIANA ROAD HOME, 05/09 – PRESENT

Mr. Morin is the Project Manager/Team Lead for Disaster Recovery Unit (DRU) MetaStorm projects, a set of CDBG-DRfunded applications. He is primarily responsible for scope, design, implementation and client communications within his program areas. Mr. Morin authored detailed State level requirements for each of the Parish allocations on the following administrative processes: the Gustav Ike Online System (GIOS), GIRP proposal, Infrastructure Pre-application, Infrastructure application, Economic Development application, Housing Application and the Draw request/Amendment process. For the Audit Tracking Tool (A133), Mr. Morin authored requirements to support the submission of electronic tracking and monitoring of recipients and sub-recipients of Federal grants over $500K at the Parish level based on a fiscal year and by event.

Mr. Morin is serving as Project Manager/System Administrator for the SharePoint 2007 Enterprise Portal for all Road Home team rooms and site collection using DLAP Active Directory for access and security. Under his management, his team has recently

re-architected 8 database site collections supporting all Road Home Business units for the enterprise ePortal. He serves as Configuration Manager for CM process of version control for a wide range of Metastorm/OpenText applications within Visual Source safe for Development, QA, Production, and DR environments while adhering to Software Development Lifecycle Management best practices.

For the Tracking and Reporting System (TRS), Mr. Morin authored requirements for the Compliance and Monitoring of Parish projects by Event, Grantee/Entity, Review Type, and Program/Project. He assisted with the creation of checklists and the corrective action and technical assistance guidelines.

PRIOR EMPLOYMENT EXPERIENCE

Deputy Director/Product Manager/Senior Business Analyst, ICF International, 05/07 – 05/09

Mr. Morin served as the Deputy Director/Product Manager/Senior Business Analyst for the transition of the Louisiana Road Home project from ICF to Louisiana OCD and CGI. His team coordinated the data collection and construction of the primary I.T. deliverable from ICF to the State of Louisiana which was used as the primary artifact to craft the State's RFP for the next Road Home contract. After contract award, Mr. Morin spearheaded the stand-up of multiple program tools that supported the Road Home business function and applicant processing.

On the Louisiana Road Home project, Mr. Morin was responsible for the development of the Grant Review Checklist which monitored the review of all homeowner options and closeout. He authored the Road Home Thumbprint program which was used to validate a homeowner's identity using thumbprint matching at application against all closing documents. He created a Duplicate Audit Tool and Invoice Comparison Tool to validate duplicate invoices submitted to the State. Additionally, Mr. Morin compiled data metrics in support of the Hazard Mitigation Grant Program. He coordinated customer requirements needed for data feeds to support Elevation, Pilot Reconstruction and Individual Mitigation Measures.

For ICF corporate, Mr. Morin authored requirements for the Project Workforce Management Tool Functional Requirements. He authored corporate Contract Solutions Management System Functional Requirements, aligning time cards and bill rates to ICF Contract workflow. He wrote and distributed a Comprehensive Request for Proposal (RFP) for corporate contact bidding.

Senior Curriculum Developer, Aerotek, 11/06 – 02/07

As Senior Curriculum Developer for Ground-Based Missile Defense (GMD) Project, Mr. Morin conducted research, developed the instructional framework, and wrote the training curriculum for the Ground Nonconformance Tracking System (GNTS) and the Time, Failure, Reporting, Analysis, and Corrective Action System (TFRACAS). In addition, he was responsible for creating and thoroughly documenting Software Change Requests (SCR) and Software Problem Reports (SPR) associated with the databases. Throughout his responsibilities, Mr. Morin strictly adhered to the Project Management (PM) principles.

Senior Consultant, Lockheed Martin, 11/06 – 02/07, part-time, 20-hours per week

As a Sr. Consultant Mr. Morin conducted monthly analysis on a data warehouse consisting of 72 million records. He conducted monthly data quality plan and monthly metric analysis on

Business Object reports on OLAP cubes and full client Webi reports. Additionally, he performed tests on migrated Software Change Requests (SCR), and Software Problem Requests (SPR) in the production environment. Mr. Morin researched trouble ticket reports, developed options for resolving tickets, and communicated his recommendations to management. He was also responsible for writing and preparing responses to Requests for Proposals (RFP). In particular, he performed analysis of cost estimates, factoring in resources and estimated completion dates.

Senior Business Analyst/Team Lead, Lockheed Martin, 11/01 – 11/06

Relocated to Memphis Tennessee due to Hurricane Katina and stood up operation as Lockheed Martin COOP plan.

As a Sr. Business Analyst and Team Lead Mr. Morin provided technical support to analyze, design, develop, and implement document requirements for the Career Information Management System (CIMS) and the Navy Retention Monitoring System (NRMS). He gathered the customer requirements needed to develop and maintain data quality of all systems. Mr. Morin analyzed existing legacy systems against the functional requirements, data and application integration points, and developed a comprehensive consolidation plan. He analyzed data metrics monthly to ensure data quality, and provide feedback on requirements. Mr. Morin completed a comprehensive program analysis of existing legacy systems, which determined level of effort for re-development and re-design. He provided program and database enhancements, and maintenance and support of a dynamic and extremely large data environment.

Force Retention Officer, U.S. Navy, 08/98 – 01/01

Mr. Morin served as Force Retention Officer where he managed a diverse retention program for the Naval Reserve Force consisting of over 74,000 Selected Reservists. He implemented policies and programs dealing with attrition and retention. Mr. Morin authored and developed a comprehensive employee benefits guide to delineate the policies and guidance for employees and their families. He gave numerous briefs to the Armed Forces Ways and Means Committee, Assistant Secretary of Defense, Assistant Secretary of the Navy for Reserve Affairs, and the Executive Steering Committee. He was responsible for the development of a comprehensive survey to determine command climate throughout the Naval Reserve Force. Mr. Morin fostered an Attrition Survey with Navy Personnel Research and Strategic Technologies (NPRST) called AURGUS. He brought forward innovative ideas and initiatives resulting in a four percent decrease in attrition in the Naval Reserve Force. He retired in January 2001 after 23 years of faithful service to the Navy.

Department Head, Naval Reserve, 01/95 – 07/98

Senior Chief Petty Officer, U.S. Navy Retired, 12/77 – 01/01

EDUCATION

- U.S.A.F. Senior Non-Commissioned Officer Academy, 1999
- U.S. Navy Master Training Specialist, 1999
- Defense Equal Opportunity Management Institute (DEOMI), 1998
- Training class by New Horizons, 2000
- FUS/ARDARS Medicaid/Medicare Billing System, 2001

- PeopleSoft Skills on Demand, Customizing Web Tool, 2002
- Business Objects and Business Intelligence, 2006

6.14 Devinderjit Najar

EXPERIENCE SNAPSHOT

INDUSTRY

- Environmental Solutions
- Defense

SPECIALIZATION

- Database Administration
- SDLC

BACKGROUND

Mr. Najar is an experienced Senior Technologist with 28 years experience in all facets of software development life cycle. He has been a database administrator (DBA) for the past 22 years and involved in database design, conversions, and performance optimization in production systems. The performance improvements he has implemented include physical database layout tailored to hardware specification, changes to legacy database operational parameters to reflect current processing requirements, and database reorganizations.

CGI EXPERIENCE

CGI EMPLOYEE, 11/16/1987 – PRESENT

SENIOR TECHNOLOGIST, ENVIRONMENTAL SOLUTIONS GROUP (ESG), 06/04 – PRESENT

Responsibilities:

At the core of ESG's business is the design, development, enhancement, implementation, and maintenance of a suite of enterprise regulatory software applications for both commercial and public sector clients. Mr. Najar manages the technical infrastructure for these enterprise applications, and his technical expertise is leveraged throughout the software development lifecycle. He is involved in making technical architecture recommendations, is involved in database design, and is instrumental in trouble-shooting technical issues in the CGI environment and at clients' environments.

Mr. Najar is integrally involved in defining future infrastructure requirements for ESG. He has introduced virtualization technology into ESG's production environment which has reduced costs and improved ESG's ability to support maintenance activities for legacy products and respond rapidly to current and future work. His current focus is the introduction of SAN technology into the group and other improvements in the technology base that will continue to enable agile response to changing needs.

Mr. Najar is also the lead database administrator for ESG and as such his areas of responsibility include hardware/OS maintenance for several servers; Oracle and SQL Server database administration; database tuning/analysis via AWR/ADDM (11g) and SQL query tuning/analysis via EXPLAIN PLAN and TKPROF to support new product releases and product maintenance support for ESG's suite of environmental solution products.

SENIOR PRODUCTION ORACLE DBA, CGI INTERNAL SYSTEMS, 11/98 – 06/04

Responsibilities:

Mr. Najar was the DBA for CGI internal systems which included financial, procurement, HR, expense vouchering, and timekeeping functions. His responsibilities included: daily performance

monitoring, monitoring/correcting production process during financial closes, ensuring backup and recovery of databases, implementing new functionality, performing upgrades, etc.

SENIOR TECHNICAL ROLES, MULTIPLE DEPARTMENT OF DEFENSE CLIENTS, 11/87 – 11/98

Responsibilities:

- Introduced pen-computing (from Symbol Technologies) to US Navy Shipyards enabling first line (shop) supervisors to track time and attendance, and work progress at the job site. Collected data was synchronized at end-of-shift with corporate databases. The Shipyard environment offered unique challenges that had to be overcome in order to deliver data accessibility in a nuclear/non-nuclear heavy industrial setting.

- Directed the analysis of the DoD's Functional Area Model – Data (FAM-D) logical enterprise model for use by the Military Health Service Systems. Participated in the development of an optimized physical model for the purpose of Military Dentistry; development of logical views to provide backward traceability to the logical model. The resulting physical model was delivered as tailored to Oracle but later converted to Informix.

- Performed data conversion, performance monitoring, and database integration tasks for the U.S. Navy's Supervisor's Desk (SUPDESK) application. The conversion was from Informix to Oracle.

- Directed a team of programmer/analysts to define requirements, develop, and implement a Military Personnel Application for the Royal Saudi Air Defense Force (RSADF). The project introduced client-server technologies into the clients' environment by integrating data sharing between existing mainframe systems (OS/390, VSAM) and Oracle.

- Directed a team to analyze and automate the production of Procurement Forms (P-Forms) for the U.S. Army Budget Office (OCSA). These forms are key exhibits in the development of the Army's Procurement budget. The effort was part of a office automation effort in the ABO to reduce dependency on custom software and incorporate COTS packages to speed procurement support.

- Analyzed and documented management requirements for U.S. Army installations in the areas of Force Development, Acquisition, and Deployment. The analysis resulted in broad, long-range Army installation management policy recommendations to the Office of the Secretary of the Army.

PRIOR EMPLOYMENT EXPERIENCE
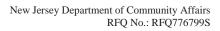
Programmer/Analyst, System Automation Corporation, 04/85 – 08/87

As a Programmer/Analyst (COBOL/Fortran), Mr. Najar maintained systems for US Army Recruiting Command. He participated in the design of an Internal Review and Audit Control system for the Social Security Administration and developed pattern recognition/matching software that served as a entre to the use of PCs in a mainframe shop.

United States Marine Corps, 06/78 – 06/82

- Infantry
- Honorably Discharged

EDUCATION

- B.Sc., Information Systems Management, University of Maryland Baltimore County, 1984

6.15 Eric Goldman

EXPERIENCE SNAPSHOT

INDUSTRY

- Government
- Manufacturing & Distribution
- Information Technology

SPECIALIZATION

- IT Infrastructure
- Enterprise Service Desk
- VMWare
- Documentum
- Metastorm System Administration

BACKGROUND

With more than 15 years of experience in information technology, project management and systems administration, Mr. Goldman has worked every aspect of IT infrastructure, from design, budgeting and procurement to implementation and administration as well as complex system development and integration projects. He is experienced in infrastructure management and operations for high profile, sensitive/critical data systems. He specializes in designing and building reliable and cost efficient IT systems for both private business and public entities.

CGI EXPERIENCE

CGI EMPLOYEE, 02/22/10 – PRESENT

TECHNICAL MANAGER, LOUISIANA ROAD HOME, 02/10 – PRESENT

Responsibilities:
Mr. Goldman serves as Technical Manager for the Louisiana Road Home Program IT Infrastructure. His responsibilities include: project management activities as well as systems administration. Major projects have included Infrastructure Hardware Refresh for core production systems including SQL Servers, VMWare ESX and Citrix Environments. He has directed and managed the hardware and software upgrade of the Development and QA environments and migrated the Road Home Physical Disaster Recovery (DR) environment to Venyu's Cloud Infrastructure (VMware vCloud Director). He was Project Manager and Systems Administrator for upgrading EMC's Documentum from version 5.3 to 6.5 and assisted the IT Manager in building project plans and making IT staff assignments.

Technical Environment: Windows, Exchange, SharePoint, SQL, Oracle, Linux, UNIX, Cisco VOIP, VMware

PRIOR EMPLOYMENT EXPERIENCE

Manager, IEM Inc., 10/07 – 01/10

- Managed all aspects of the IT infrastructure of a 300 person 8 office company.
- Led a team of IT professionals that included Systems Administrators, Security professionals and Service Desk technicians.
- Negotiated enterprise IT contracts for Microsoft Enterprise Agreement (savings of over $180K over three years) and on-line conferencing (savings of over $47K annually).
- Designated ISSM (Information Systems Security Manager) and COMSEC Custodian for all Government Contracts.

- Supervised, planned, and implemented two office build-outs that included network and telecom provisioning as well as office wiring.
- Directed the integration, installation and testing of multiple enterprise-wide COTS applications, including: Halogen eAppraisal, Cyber Recruiter, Deltek Accounting (Costpoint and Time and Expense) and TrackIT.
- Developed system-wide documentation of Enterprise Environment which was extensively used during Hurricane Gustav.

Technical Environment: Windows, Exchange, SharePoint, SQL, Linux, UNIX, Cisco, VMWare, Citrix

Sr. System Administrator, IEM Inc., 12/99 – 10/07

- Provided System Administration and LAN/WAN support for a network that consisted of 300 users, utilizing Windows and SUN Servers.
- Provided Project Management support for IT focused projects.
- Secured online hosting services for both internal and external projects.
- Appointed Project Manager for the Chemical Stockpile Emergency Preparedness Program (CSEPP) Portal. This was an online interactive portal for 8 Government sites with of over 1,000 active users.
- Provided technical specifications for software and hardware purchases for both internal and external projects.
- Maintained MS Exchange servers for local and remote offices

Technical Environment: Windows, Exchange, SharePoint, SQL, Linux, UNIX, Cisco, VMWare, Citrix

EDUCATION

- B.Sc., Microbiology, Louisiana Tech University, 1990
- B.Sc., Nuclear Medicine Technology, University of Arkansas for Medical Sciences, 1991
- M.S., Information Systems Decision Sciences, Louisiana State University, 2000
- Microsoft Certified Professional, 2000
- Microsoft Certified Solutions Associate, 2005
- Microsoft Certified Solutions Associate: Messaging, 2005
- Microsoft Certified Systems Engineer, 2005
- Project Management Professional, 2009

6.16 Ginny Breckridge

BACKGROUND

Ms. Breckenridge is a supervisor in specialty accounting for HORNE, LLP in Ridgeland, MS. She provides disaster relief compliance for CDBG-DRprojects and reviews applications prepared by eligibility counselors for submission to the appropriate council of government to ensure accuracy and compliance with federal, state, and project policy.

HORNE EXPERIENCE

HORNE EMPLOYEE, 06/06 – PRESENT

AREA MEDIAN INCOME AND DUPLICATION OF BENEFITS SUPERVISOR, TEXAS GENERAL LAND OFFICE, 10/12 – PRESENT

Responsibilities:
Ms. Breckenridge is the Area Median Income and Duplication of Benefits Supervisor of HORNE's disaster recovery housing programs. She is currently working with the housing programs in the City of Galveston, Texas, Galveston County, Texas, and the Lower Rio Grande Development Council, Weslaco, Texas. She is responsible for working with state and local units of government to develop and implement guidelines and policies to ensure compliance with all governmental regulations.

Ms. Breckenridge reviews applications and develops internal procedures associated with the eligibility determination of applicants for various State of Texas disaster recovery programs funded by the Department of Housing and Urban Development (HUD) Community Development Block Grant (CDBG) program. She works with responsible staff in the development of guidelines, policies and procedures as required to comply with State and Federal regulations.

Ms. Breckenridge is responsible for eligibility determination policies and procedures of the disaster recovery programs and trains all team members on Federal, State, and project eligibility requirements and subsequent changes to policies and procedures.

Ms. Breckenridge oversees a team of three while assisting program managers with the supervision of AMI production across the disaster recovery programs. She has been instrumental in the development of production reporting for each project. Also, she meets weekly with a representation from each program to ensure information is consistently being relayed to each team and to discuss questions and concerns that are team-specific as well as program wide.

SUPERVISOR, MISSISSIPPI EMERGENCY MANAGEMENT AGENCY, 06/09 – 10/12

Responsibilities:

Ms. Breckenridge was a supervisor providing disaster relief compliance for a public assistance program for the Mississippi Emergency Management Agency. She was involved in the development of a reimbursement request review process ensuring subgrantee compliance with

Public Assistance guidelines. She reviewed pay requests prepared by analysts for submission to the appropriate state agency to ensure accuracy and compliance with Federal and State policy. She provided proactive accounting assistance to both grantees and subgrantees. She was involved in real time expenditure and reimbursement tracking. While on Mississippi Public Assistance, Ms. Breckenridge supervised a team of six serving as a lead analyst. Her responsibilities included setting production expectations as well as addressing quality assurance issues.

SENIOR ASSOCIATE, HORNE LLP, 06/06 – 06/09

Responsibilities:

Ms. Breckenridge was a senior associate providing tax preparation services to individuals, estates, partnerships, and corporations. Her experience included multi-state and consolidated returns. While her main responsibility was return preparation, she was also involved in estate tax planning and the review of individual returns. She also co-authored a published article regarding the phasing out of gift taxes.

EDUCATION

- B.A., Accountancy, University of Mississippi, 2005
- M.A., Taxation, University of Mississippi, 2006

7. Appendix C - Back-up Resumes

7.1 Suneel Kanuri

EXPERIENCE SNAPSHOT

INDUSTRY

- State & Local Government
- Pharmaceutical
- Private Sector

SPECIALIZATION

- Application Development

BACKGROUND

Suneel has over 10 years of experience in .NET & SQL Server and 3 years of experience in Business Process Development and Management using OpenText's MBPM (formerly Metastorm BPM). His functions at The Road Home involve developing custom IT solutions for delivering outbound mail, as well to write the necessary software to organize the inbound mail for Cannon scanning stations at offsite locations in New Orleans, Hammond and so forth. He also developed & supported the mailing solutions for Louisiana Department of Administrative Law.

BLUE STREAK TECHNOLOGIES EXPERIENCE

TEAM DEVELOPER, STATE GOVERNMENT, 05/10 – PRESENT

Primary functions at The Road Home project involved developing custom IT solutions for delivering outbound mail in a timely fashion, as well to write the necessary software to organize the inbound mail for Cannon scanning stations at offsite locations in New Orleans, Hammond and so forth. This involved using a mix of technologies ranging from Metastorm for the front end, Jscript.NET for the scripting within Metastorm and C# for developing scanning software.

Responsibilities:

- Responsible for Business Process Analysis (BPA), Business Process Management & Designing (BPM), coding, testing and packaging
- Involved with Customer meetings to observe the existing functionality, the issues and scope out the project.
- Used Metastorm BPM Designer suite for Workflow Map development, MS SQL Server for database support and integrated it with .NET using JSCRIPT.NET, C# .NET.
- Developed custom software solutions to securely transfer files using FTPS (FTP over explicit SSL) using C# .NET from scanning stations.
- Developed MS Office based VBA solutions

PRIOR EMPLOYMENT EXPERIENCE

Business Process Management Consultant & Software Developer, CIBER Inc., 4/07 – 4/10

Responsibilities:
- Development and support of Metastorm BPM processes

Computer Programmer, GCR and Associates, 8/04 – 3/07

Responsibilities:
- Work on development projects using C# .NET
- Provide Microsoft SQL DBA functions

- Work on development project using Cold Fusion

Application Developer, Newtek Business Services, 12/03 – 7/04

Responsibilities:
- Development of application using PHP and C++ with MySQL database

EDUCATION

- Masters, Computer Science, 2004, Louisiana State University
- Bachelors, Computer Science & Engineering, 2001, University of Madras
- Metastorm BPM Certification, 2009

7.2 Kevin Berthelot

EXPERIENCE SNAPSHOT

INDUSTRY

- State & Local Government
- Pharmaceutical
- Private Sector

SPECIALIZATION

- Application Development

BACKGROUND

Kevin has over 7 years of experience in the Information Technology industry. He currently specializes in developing and supporting business process management solutions using OpenText's MBPM platform as well as support for legacy Metastorm BPM applications. Kevin has also been in sales and development of enterprise-wide imaging solutions for projects such as public records retention, confidential medical information, and microfiche to digital conversions.

BLUE STREAK TECHNOLOGIES EXPERIENCE

TEAM DEVELOPER, STATE GOVERNMENT, 07/10 – PRESENT

Responsibilities:
Designed and maintains current GIOS disaster funds business process. System includes procedures for applicant entry, applications for specific project, payment draw requests, and tracking and reporting. Manages any helpdesk related items as well as any continued development on all related systems.

TEAM DEVELOPER, PHARMACEUTICAL COMPANY, 07/09 – 07/10

Responsibilities:

Work with Metastorm Professional Services as a sub contractor both onsite and remotely developing an application for managing continuing education for a pharmaceutical company.

TECHNICAL LEAD AND LEAD METASTORM DEVELOPER, LOCAL GOVERNMENT, 07/08 – 09/08

Responsibilities:
Led application development on Parish Council member support request system. Metastorm-based workflow generates work assignments to resolve Council-requested services. System includes customizable task assignments, verification of task completions, and user definable reports. This application integrates with several Parish departments as necessary to generate tasks required for request completion.

TECHNICAL LEAD AND LEAD METASTORM DEVELOPER, LOCAL GOVERNMENT, 01/08 – 09/08

Responsibilities:
Led business analysis and application development efforts to create a Metastorm-based application to generate and route proposed contracts for all Parish services. This application is used by all departments within the Parish and is integrated with the Parish's financial records

system. Using the Metastorm data, system creates and attaches approved contracts and amendments, and generates custom reports with MS SQL Reporting Services.

TEAM DEVELOPER, LA DEPARTMENT OF REVENUE, 11/07 – 01/08

Responsibilities:

Developed a Metastorm-based system to manage policy services rulings. The system is used by policy analysts in the agency to manage a very large caseload of policy matters. Application manages the life cycle of these cases from assignment to matter resolution.

PRIOR EMPLOYMENT EXPERIENCE

Records Management Representative, C.F.Biggs Company Inc. 06/06 - 11/07

Responsibilities:
- Sales and integration of Document Management Systems utilizing digital micrographic and digital document imaging products from Canon USA and Digitech Systems, Inc.

EDUCATION

- B.Sc., Business Administration, Computer Information Systems, University of Louisiana at Monroe, 2006
- Metastorm BPM Certification, 2009
- Dale Carnegie Effective Communications and Human Relations Training

7.3 Jeremiah Simon

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EXPERIENCE SNAPSHOT

INDUSTRY

- State Government
- Private Sector

SPECIALIZATION

- Application Development

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BACKGROUND

Jeremiah has almost 10 years of experience as a developer. He currently specializes in developing and supporting business process management solutions using OpenText's MBPM platform along with database and server maintenance/management. He has developed a variety of systems in the fields of accounting, medical/prescription records, human resources, and GIS in both private and public sectors. He is currently the team lead for the Office of Community Services/Disaster Recovery Project.

BLUE STREAK EXPERIENCE

BLUE STREAK TECHNOLOGIES 05/05 – PRESENT

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SENIOR METASTORM ANALYST II/TEAM LEAD, LA OFFICE OF COMMUNITY SERVICES, 09/09 – PRESENT

Responsibilities:

Developed Gustav/Ike Recovery Program (currently GIOS). System receives Parish applications for grant assistance, tracks the approval process and distribution of funds. Lead developer for Hazard Mitigation Grant Program. System manages $700 million federal grant for 220,000+ Katrina/Rita applicants, the approval process, documentation, contractors, inspections, and secure electronic payments through Chase Bank.

METASTORM DEVELOPER, LA DEPARTMENT OF REVENUE, 01/08 – 08/09

Responsibilities:

Designed and developed automated IT service request process. Application development included database design and implementation, software installation, new forms development, report development, and customer satisfaction survey integration. Configure single sign-on functionality into Microsoft network environment. Designed and developed a Human Resources process that developed the paperwork for the hiring process for new employees.

GIS/WEBFOCUS DEVELOPER, STATE GOVERNMENT, 09/05 – 06/06

Responsibilities:
Developed and implemented disaster-specific GIS/Reporting/Business Intelligence Dashboard in preparedness for future disasters and emergencies. System focused on Disaster Food Stamp program data and provided mapping functions for Disaster Food Stamp transactions, clients, and providers.

TEAM DEVELOPER, STATE GOVERNMENT, 09/05 – 12/05

Responsibilities:

For a case management system reporting environment, created new web-based interface for report selection, including a "mini-wizard" to decrease the complexity of the reporting system for fraud investigators, supervisors, and management.

TEAM DEVELOPER, STATE GOVERNMENT, 06/05 – 07/05

Responsibilities:
Built webpage to allow public submission of suspected public assistance fraud. Information automatically feeds into Metastorm-based case management system.

METASTORM/GIS DEVELOPER, LA DEPARTMENT OF CHILDREN AND FAMILY SERVICES, 05/05 – 12/07

Responsibilities:
Developed case management system and fraud hotline response system. Worked on application development efforts to streamline case management business processes. Identify productivity enhancements through process and task automation. Integrate with back end databases, GIS system, and web reporting forms. Configure single sign-on functionality into Novell network environment. Work with customer and contractor staff to provide management with weekly project status information.

GIS/WEBFOCUS DEVELOPER, STATE GOVERNMENT, 05/05 – 06/07

Responsibilities:

Assisted in development of a GIS application for efficient identification of fraudulent activities. Performance maintenance and troubleshooting directly in GIS application (ArcGIS/ArcIMS). Modified and enhanced existing functionality of WebFOCUS reports. Improved Parish selection for Fraud Investigators by modifying back-end criteria selection in JAVA. Created documentation of complete system and all processes to comply with contractual requirements and facilitate historical record-keeping.

PRIOR EMPLOYMENT EXPERIENCE

Computer Technician/Consultant/Lead Developer, Self-Employed, 01/00 – 05/05

Responsibilities:

- Worked as needed to program, specify, purchase, configure and install computer systems for 10+ regular customers.
- Conducted many informal training sessions with home and business users.
- Worked on marketing software for the medical field.
- Created application that manages daily and monthly invoicing, billing (paper and electronic), and aids in tracking accounts payable for occupational, speech and physical therapists involved with children in the Early Steps program

Delivery Driver, Mattress Direct, 09/01 – 12/04

Responsibilities:

- Delivery driver for Baton Rouge, New Orleans and Lafayette areas and part-time computer support person as needed.
- Specified, purchased, configured and installed most of the initial computer systems.

Business Machines Specialist, Office Depot, 09/00 – 09/01

Responsibilities:

- Sold computer systems, software and other business machines
- Employee of the month, December 2000

EDUCATION

- B.Sc., Computer Science, Southeastern Louisiana University, 2004
- Metastorm Certified BPM Developer, 2008
- Dale Carnegie Effective Communications and Human Relations Training

7.4 Elliot Waguespack

BACKGROUND

EXPERIENCE SNAPSHOT

INDUSTRY

- State Government
- Legal
- Finance
- Telecom
- Oil Field
- Construction

SPECIALIZATION

- Application Development

Elliot has over 7 years of experience in the Information Technology industry. He currently specializes in designing, developing, and supporting business process management solutions using OpenText's MBPM platform. Elliot has achieved the OpenText MBPM V9 developer certification. He has also served as architect and lead developer of enterprise-wide software solutions build to manage oil field related resources.

BLUE STREAK TECHNOLOGIES EXPERIENCE

BLUE STREAK TECHNOLOGIES, 11/2010 – PRESENT

TECHNICAL LEAD AND TEAM METASTORM DEVELOPER, PRIVATE SECTOR, 09/12 – PRESENT

Responsibilities:
Lead development efforts to build integration layer between Order Entry Systems and Network Management Systems using Web Services. Built process-monitoring workflows to track orders and trigger events on other back-end systems. Assisted with the migration of Metastorm V7 procedures including data migration. Maintain and monitor production servers and databases.

TECHNICAL LEAD AND TEAM METASTORM DEVELOPER, STATE GOVERNMENT, 12/10 – PRESENT

Responsibilities:

Lead development efforts to convert Metastorm 7.6 applications to version 9. Converted, tested, and implemented several Metastorm processes using the Metastorm File Migration Assistant. Migrated V7 data to V9 using the Metastorm Repository Migration Assistant. Installed and configured all applicable Service Release Updates and Hotfixes in development and production environments. Migrated development and production environments to MS SQL Server 2008.

TECHNICAL LEAD AND TEAM METASTORM DEVELOPER, STATE GOVERNMENT, 10/11 – PRESENT

Responsibilities:

Renamed V7 roles and removed SWiFT client side functionality in preparation for V7/V9 Side-by-Side Operations. Installed Metastorm 9.1. Configured environment for Side-by-Side Operations. Deployed Windows Single Sign On. Installed and configured all applicable Service Release Updates and Hotfixes in development and production environments. Converted several mission critical Metastorm processes from V7 to V9 using the Metastorm File Migration Assistant. Migrated V7 data to V9 using the Metastorm Repository Migration Assistant.

TECHNICAL LEAD AND TEAM METASTORM DEVELOPER, PRIVATE SECTOR, 07/11 – PRESENT

Responsibilities:
Make changes to Metastorm 7.6 processes based on business user requests. Developed Metastorm application to streamline the New Client Conflicts Check process. Installed and configured a development environment. Changed the authentication type from Novell sign on to Windows Single Sign On.

TECHNICAL LEAD AND TEAM METASTORM DEVELOPER, PRIVATE SECTOR, 09/11 – 09/12

Responsibilities:
Lead development efforts to convert several Metastorm 7.6 applications to version 9, including testing and implementation. Seek opportunities for process improvement and make recommendations to business users. Configured V7/V9 Side-by-Side Operations. Deployed Windows Single Sign On. Installed and configured all applicable Service Release Updates and Hotfixes in development, quality assurance, and production environments. Wrote custom SSIS migration packages to move version 7 data to version 9.

TECHNICAL LEAD AND TEAM METASTORM DEVELOPER, STATE GOVERNMENT, 07/11 – 06/12

Responsibilities:
Make changes to Metastorm 7.6 processes based on business user requests. Installed Metastorm 9.1 with Novell sign on. Installed and configured all applicable Service Release Updates and Hotfixes in development and production environments. Converted several Metastorm processes from V7 to V9 using the Metastorm File Migration Assistant. Migrated V7 data to V9 using the Metastorm Repository Migration Assistant.

TEAM DEVELOPER, PRIVATE SECTOR, 05/11 – 09/11

Responsibilities:
Assisted users in planning major process improvements to several of their Human Resource applications. Developed, tested, and implemented enhancements to Metastorm 7.6 processes.

TECHNICAL TRAINER AND TEAM DEVELOPER, PRIVATE SECTOR, 05/11 – 07/11

Responsibilities:
Trained client development staff in Metastorm 7/9 conversion techniques. Converted a Metastorm process from V7 to V9 using the Metastorm File Migration Assistant to teach the in-house developers how to convert. Migrated V7 data to V9 using the Metastorm Repository Migration Assistant as a learning exercise for the staff developers.

TEAM DEVELOPER, STATE GOVERNMENT, 12/10

Responsibilities:
Installed and configured Metastorm BPM 7.6 production and development environments. Moved existing Metastorm 7 applications from Windows Server 2003 to Windows Server 2008. Setup Metastorm 9.0 development server.

PRIOR EMPLOYMENT EXPERIENCE

Programmer Analyst, Grand Isle Shipyard Inc., August 2008 – November 2010

Responsibilities:

- Designed, built, and maintained Microsoft .NET applications to manage oil field related resources.
- Worked closely with accounting to routinely move financial data from remote offices to headquarters. Supported the payroll process and was responsible for the integration between a custom-built resource management system and the Accounting System.
- Key Stakeholder in the design and implementation of Microsoft Dynamics GP.

PC Specialist, Nicholls State University May 2007 – August 2008

Responsibilities:

- Supported 1500 users in a Microsoft Windows/Novell environment.
- Maintained Antivirus, File, and Print servers.

EDUCATION

- B.Sc., Business Administration and Computer Information Systems, Nicholls State University, 2008
- Dale Carnegie Effective Communications and Human Relations Training
- OpenText MBPM V9 Certified Developer

7.5 Denae Matthews

BACKGROUND

Denae has over 6 years of experience in the Information Technology industry. She currently specializes in developing and supporting business process management solutions using OpenText's MBPM (formerly Metastorm) platform. Denae has also been lead developer of enterprise-wide software solutions for projects such as inventory systems, store accounting systems, and coin processing systems.

BLUE STREAK TECHNOLOGIES EXPERIENCE

BLUE STREAK TECHNOLOGIES, MAY 2011 – PRESENT
Responsibilities:

- Create cost-effective, scalable, and business-enhancing business process solutions using the OpenText MBPM suite of products.
- Work proficiently with the following languages/tools: OpenText MBPM V7-V9, C#, SQL, ASP.NET, JavaScript, JScript.NET, VBScript.NET, .NET web services, SQL Server, Visual Studio, and SharePoint.
- Understand business requirements and translate them into system requirements
- Define scopes of work and complete projects on time and within set budget
- Manage communication and relationships with the key stakeholders at all levels
- Perform unit testing and provide production support

TECHNICAL LEAD AND LEAD METASTORM DEVELOPER, PRIVATE SECTOR, 04/13 – PRESENT

Responsibilities:
Lead development efforts to build Billing System that interacts with Network Management Systems using Web Services. Built process-monitoring workflows to track billing components and trigger events on other back-end systems.

LEAD METASTORM DEVELOPER, STATE GOVERNMENT, 07/12 – 03/13

Responsibilities:
For the Case Management Information System, performed upgrade and converted existing processes from Metastorm BPM 7.6 to Metastorm BPM 9.2 and replaced existing BRD SWiFT client-side enhancements with comparable Metastorm BPM functionality.

LEAD METASTORM DEVELOPER, STATE GOVERNMENT, 07/12 – 11/12

Responsibilities:
Led development of customer requested enhancements and additions to public-facing website.

TEAM METASTORM DEVELOPER, STATE GOVERNMENT, 02/12 – 05/12

Responsibilities:
For the Service Request System, upgraded and converted automated IT service request processes from Metastorm BPM 7.6 to Metastorm BPM 9.1 and replaced existing BRD SWiFT client-side enhancements with comparable Metastorm BPM functionality.

TEAM METASTORM DEVELOPER, HEALTHCARE, 12/11 – 08/12

Responsibilities:
Led implementation of converting core business processes from Metastorm BPM 7.6 to Metastorm BPM 9.1 and creating a Metastorm BPM 9.1 global code library. Converted processes include Patient File process, IT Provisioning process, Legal Contract Routing process, Business Card Request process, Employee Reward process, Time Off Request process, and Clinical Trial Deviations process.

TEAM DEVELOPER, PRIVATE SECTOR, 11/11 – 10/12

Responsibilities:
Development of public-facing customer web portal to facilitate secure user login to Metastorm BPM 9.1 environment. Implemented third-party security features.

TEAM METASTORM DEVELOPER, CHILD AND FAMILY SERVICES USER SUPPORT SYSTEM, 06/11 – 07/12

Responsibilities:
Performed support and enhancements of Metastorm BPM 7.6 system for management of user data.

TEAM METASTORM DEVELOPER, LOCAL GOVERNMENT, 06/11 – 12/11

Responsibilities:
Led development of customer requested enhancements and support of Metastorm BPM 7.6 system for contract routing.

PRIOR EMPLOYMENT EXPERIENCE

Software Developer, Rouse's Supermarkets, 05/07 – 05/11
Responsibilities:
- Day to day maintenance of web based systems and optimizing code for the best user experience
- C#, ASP.NET, JavaScript, SQL, HTML, CSS, SQL Server, Visual Studio
- Lead developer on projects such as Inventory System, Store Accounting System, and Coin System
- Proactively analyze results, current systems and processes and seek better alternatives or improvements where necessary
- Prepared department Secure Application Development Lifecycle Policy in accordance to PCI compliance guidelines

- Web Application Security such as preventing XSS and SQL Injection

EDUCATION

- B.Sc., Computer Information Systems, Nicholls State University, 2008
- Metastorm Developer BPM 7.6 Foundation Training course, June 2011
- Metastorm Developer BPM 9.x Foundation Training course, July 2011
- Dale Carnegie Effective Communications and Human Relations Training

7.6 Cory Matessino

BACKGROUND

Mr. Matessino has nearly a decade of experience in development and implementation of Business Process Management solutions, with special expertise in the OpenText MBPM (formerly Metastorm) suite of BPM products. He began his career in the health care industry, implementing HIPAA compliance procedures and solutions for a wide range of hospitals and medical facilities. He joined Blue Streak Technologies in 2004 as a BPM solutions developer, and when necessary has fulfilled the role of Project Manager, Business Analyst, and Technical Lead. He is now the Senior BPM Developer at Blue Streak, specializing in solution implementation across a wide range of industries, including Government, Finance, and Legal.

Mr. Matessino served as a partner advisor prior to the release of the current version of the MBPM product. Together with other Blue Streak staff, he was among the first two developers in America to achieve the original Metastorm Developer Certification. He also participated in the BETA testing of the OpenText MBPM Version 9 certification program and, again with other Blue Streak staff became one of the first two MBPM Version 9 certified developers.

BLUE STREAK TECHNOLOGIES EXPERIENCE

SENIOR BPM DEVELOPMENT CONSULTANT, MARCH 2004 – PRESENT

Responsibilities:
- Design, develop, and implement BPM solutions for clients across a wide range of industries.
- Work with clients to refine solution requirements and optimize business process design.
- Provide leadership and oversight to development team.
- Perform project management functions as required.

TEAM DEVELOPER, PRIVATE SECTOR, 04/13 – PRESENT

Responsibilities:
Set up V7/V9 side-by-side operations for large national law firm to begin migration to Metastorm V9. This environment includes a load-balanced split deployment V7 system, to be integrated via side-by-side with the new V9 interface.

TECHNICAL LEAD, LA DEPARTMENT OF REVENUE, 10/07 – 12/07, 07/10 - PRESENT

Responsibilities:
Lead development and maintenance of Metastorm-based system for management of policy rulings data.

TECHNICAL LEAD, LA DEPARTMENT OF REVENUE, 10/07 – 12/07, 07/10 – PRESENT

Responsibilities:
Led development and maintenance of Metastorm-based system for onboarding new and recurring annual employees into the agency. System includes kiosk-based access for employee completion of applications, and production of finalized electronic application documents, routed through approval workflow.

TECHNICAL LEAD AND LEAD METASTORM DEVELOPER, LA DEPARTMENT OF REVENUE, 05/07 – 12/07, 07/10 - PRESENT

Responsibilities:
Design, develop, and maintain Metastorm-based system for management of legal case data. Configure SWiFT third-party client enhancements.

TECHNICAL LEAD AND LEAD METASTORM DEVELOPER, LA DEPARTMENT OF REVENUE, 07/05 – 06/08, 07/10 – PRESENT

Responsibilities:
Design, develop, and maintain multi-tiered automated IT service request process. Application development included database design and implementation, software installation, new forms development, report development, and customer satisfaction survey integration. Configure single sign-on functionality into Microsoft network environment. Configure SWiFT third-party client enhancements. Upgrade Metastorm software as available, and perform necessary data migrations. Convert processes from Metastorm V7.6 to new V9 format.

TEAM DEVELOPER/TECHNICAL LEAD, PRIVATE SECTOR, 04/10 – PRESENT

Responsibilities:
Assisted development of and currently maintain pricing approval system for large manufacturer of commercial and residential tools and hardware.

TECHNICAL LEAD, PRIVATE SECTOR, 02/09 – PRESENT

Responsibilities:
Led development and currently maintain multi-national organization's Metastorm-based purchase requisition system. Features include multi-currency support, master purchasing product catalog, and integration with organization's asset-tracking software.

TECHNICAL LEAD, PRIVATE SECTOR, 09/08 – PRESENT

Responsibilities:
Led development and currently maintain Human Resources onboarding and offboarding system. The workflows are designed to accept hire, transfer, and termination requests, and distribute and assign tasks to fulfill those requests. Currently this is system is being converted from Metastorm V7 to V9.

TECHNICAL LEAD, PRIVATE SECTOR, 03/08 – PRESENT

Responsibilities:
Completed development and currently maintain large-scale Metastorm-based system for client order processing management. This Metastorm system is integrated with SalesForce.com, and features a project/task architecture that includes more than 20 workflows.

TECHNICAL LEAD, PRIVATE SECTOR, 03/07 – PRESENT

Responsibilities:
Develop and maintain Metastorm case management application for private background-checking firm. System includes public web-accessed V9 front-end order entry system integrated with V7-based multi-level case management system. Integrations of these systems include data synchronization, scheduled report and invoice generation, and functioning disaster recovery backup environment.

TEAM DEVELOPER/TECHNICAL LEAD, PRIVATE SECTOR, 06/10 – 02/12

Responsibilities:
Assisted development of promotional product pricing approval process for large manufacturer of commercial and residential tools and hardware. System features both manual input and automated intake from SAP.

TECHNICAL LEAD, LA OFFICE OF INFORMATION TECHNOLOGY, 05/10 – 08/11

Responsibilities:
Led development of Metastorm-based project management system, including home-grown project document/template repository, and project management dashboards and status reports. System was converted from Metastorm V7 to V9.

TEAM DEVELOPER, PRIVATE SECTOR, 07/10 – 09/11

Responsibilities:
Assisted in development and maintenance of New Matter Intake process for medium-large law firm.

TEAM DEVELOPER, PRIVATE SECTOR, 07/10 – 09/11

Responsibilities:
Assisted in development and maintenance of Check Request process for medium-large law firm.

TECHNICAL LEAD, PRIVATE SECTOR, 08/10 – 03/11

Responsibilities:
Led development of shipping/freight pricing approval process for large manufacturer of commercial and residential tools and hardware.

TEAM DEVELOPER, LA DEPARTMENT OF EDUCATION, 05/08 – 08/08

Responsibilities:
Assisted development of purchase order request system.

TECHNICAL LEAD, LA OFFICE OF INFORMATION TECHNOLOGY, 11/07 – 06/09

Responsibilities:
Led development of state-wide Metastorm-based IT project budget submission and approval process. System includes public web front end for budget submission and approval status review.

TECHNICAL LEAD AND LEAD METASTORM DEVELOPER, LA DEPARTMENT OF CHILD AND FAMILY SERVICES, 07/05 – 06/07

Responsibilities:
Developed and maintained end-user support request system. System generates work assignments to resolve end-user software issues. Includes task assignment reports and monthly time and cost data reports.

TEAM DEVELOPER, LOCAL GOVERNMENT, 03/05 – 05/05

Responsibilities:
Developed transportation management application for a local school system. The Metastorm application interfaced with an AS400 back end.

TEAM DEVELOPER, HOME HEALTH, 11/04 – 03/05

Responsibilities:
Developed Metastorm workflow to integrate document management solution with accounts payable systems for large home health firm.

TEAM DEVELOPER, LOCAL GOVERNMENT, 07/04 – 06/05

Responsibilities:
Developed Metastorm application to assist a local government to determine sales tax impacts of city land annexation.

TECHNICAL LEAD, LEAD METASTORM DEVELOPER, AND PROJECT MANAGER, LA DEPARTMENT OF CHILD AND FAMILY SERVICES, 03/04 – 06/09

Responsibilities:
Developed and maintained case management system and fraud hotline response system. Lead application development efforts to streamline case management business processes. Integrate with back end databases, GIS system, and web reporting forms. Configure single sign-on functionality into Novell network environment. Configure SWiFT third-party client enhancements. Work with customer and contractor staff to provide management with weekly project status information. Prepare biweekly status reports and attend biweekly status update meetings. Facilitate joint application development sessions. Compile and submit billing/invoicing data for approval.

PRIOR EMPLOYMENT EXPERIENCE

Training Consultant, Healthcare Education Strategies, 08/02-02/04

Responsibilities:

- Conduct HIPAA Privacy and Security Compliance training sessions

EDUCATION

- Metastorm Certified BPM Developer (Metastorm BPM V9.x), 2010
- Metastorm Certified BPM Developer (Metastorm BPM V5.1-7.x), 2004
- MBA, University of Southern Mississippi, 2002
- B.Sc., Business Administration, Management Information Systems, University of Southern Mississippi, 2001
- Dale Carnegie Effective Communications and Human Relations Training

7.7 Andy Gower

BACKGROUND

Andrew Gower joined CGI September of 2006 and has more than seven years in the Information Technology industry with a wide range of experience. He has acted as a web developer, business intelligence and reporting solutions developer, business analyst, and database developer with CGI.

CGI EXPERIENCE

CGI EMPLOYEE, 09/01/06 – PRESENT

DEVELOPER, LOUISIANA ROAD HOME, 04/09 – PRESENT

Responsibilities:
As a consultant for the Road Home Program, Mr. Gower has been instrumental in design and implementation of a variety of assignments. He works daily with clients from all projects under the Road Home umbrella and leverages his extensive experience and knowledge of all the programs to consultant and influence decision making and design. As a developer/architect for the Business Intelligence and Reporting team, Mr. Gower works integrating and analyzing data from more than 15 disparate systems and combines them into a single efficient reporting database environment. Also, he is responsible for more than 30 GUI based interactive web reporting environments in which he has greatly simplified reporting for the client and other members of his team. As an extract, translate and load (ETL) developer, Andrew has both improved the efficiency of existing jobs and created more than 40 additional jobs. He has also converted other types of batch processes, some taking as much as 6 hours, into jobs running in under 20 minutes. He creates efficient freehand queries, views, functions, and packages in MS SQL Server and Oracle. As a programmer/tester, he has written Java code used in the successful data conversion and transition of a high profile project with stringent timeframes.

Technical Environment: Oracle, MS SQL Server 2000 and 2005, Business Objects (Data Integrator/Services, Designer, Web Intelligence, Desktop Intelligence, Crystal Reports), MS Server 2003, MS Office 2003 and 2007, Java, Eclipse

PROGRAMMER ANALYST, FLORIDA DEPARTMENT OF CHILDREN AND FAMILIES, 03/07 – 04/09

Responsibilities:

As a programmer analyst for the Florida Safe Families Network (FSFN) application, Mr. Gower has filled roles across the functional and technical spectrum. As a developer, he has used Java in both application and batch coding. Mr. Gower has extensive experience developing efficient ETL processes, complex SQL, and stored procedures. As a designer, he helped in the design of a star schema business intelligence database used in the development of a high efficiency reporting

datamart with sub-second response time. During the course of incorporating JAWS, a third party software used by the visually impaired, with the FSFN application, Mr. Gower performed analysis of data usage practices, created JAWS scripts (using the product specific scripting language), and trained users in its proper use.

Technical Environment: DB2, Java, Bea Weblogic, MySQL, HTML, JSP, Business Objects (Data Integrator and Performance Manger, Designer, Web Intelligence, Desktop Intelligence, Crystal Reports), Apache ANT Scripting, Subversion revision control, FileZilla FTP client, Cygwin, JAWS Scripting, Apache Struts, Eclipse, Windows 2003, Linux, JAWS

JAVA DEVELOPER, NEW JERSEY DEPARTMENT OF CHILDREN AND FAMILIES, 09/06 – 03/07

Responsibilities:

Mr. Gower acted as a Java developer during his tenure on the New Jersey Spirit project. He developed both new application code as well as corrected existing base line code to meet system requirements; and throughout his time on the project, was given assignments with increasing responsibility.

Technical Environment: Oracle, Java, IBM Websphere, HTML, JSP, Apache Struts, Eclipse.

EDUCATION

▪ B.Sc., Computer Science with emphasis in Mathematics, University of Wisconsin-Madison, 2005

7.8 Neil Forbes

EXPERIENCE SNAPSHOT

INDUSTRY

- State Government
- Federal Government
- Private Sector

SPECIALIZATION

- CDBG-DR–DR Planning
- CDBG-DRPolicy and Procedure Development
- Program Management
- CDBG-DR–DR Business Process Modeling
- CDBG-DR–DR Technical Assistance
- Financial and Strategic Planning/Budgeting
- Regulatory and Programmatic Analysis
- Financial

BACKGROUND

Neil Forbes is a partner in disaster recovery services at HORNE LLP. He oversees disaster recovery projects related to US Department of Housing and Urban Development (HUD) Community Development Block Grant (CDBG) funds. Mr. Forbes' responsibilities include program management, financial and regulatory compliance with grant regulations and all applicable state and federal laws including The Stafford Act, Fair Housing regulations, and income eligibility requirements. His experience includes coordinating with state and federal agencies, non-profit and for-profit sub-recipients, and individual applicants receiving federal disaster aid.

HORNE EXPERIENCE

HORNE EMPLOYEE, 09/08 – PRESENT

DIRECTOR, CDBG-DRDISASTER RECOVERY PROGRAMS, 02/09 – PRESENT

Responsibilities:
Mr. Forbes is a Partner in the disaster compliance division at HORNE, where he is the director of CDBG-DRDisaster Recovery programs in Texas and on the Mississippi Gulf Coast for Horne.
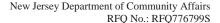
As director of the Mississippi and Texas CDBG-DRDisaster Recovery programs, Mr. Forbes works directly with the Mississippi Development Authority, The Texas General Land Office and Sub Recipients to coordinate all compliance and oversight activities related to more than $1 Billion in new construction, rehabilitation, and homebuyer assistance CDBG-DRdisaster recovery programs. These programs include coordinating activities with non-profit, for-profit, and municipal organizations. Compliance for these programs includes all applicable CDBG, Stafford Act, ADA, and fair housing regulations.

PROGRAM DIRECTOR, MISSISSIPPI DEVELOPMENT AUTHORITY LONG TERM WORKFORCE HOUSING (LTWH) PROGRAM, 02/09 – 12/10

Responsibilities:
Mr. Forbes was responsible for oversight and implementation of the LTWH Program, which is a $350 million dollars CDBG-DR program designed to provide affordable housing to low to moderate income families displaced due to Hurricane Katrina on the Mississippi Gulf Coast. The LTWH Program consists of over 50 subrecipients and subgrantees that provide single family rehabilitation, single family new construction, multi-family

rehabilitation, multi-family new construction, down payment assistance, community outreach, and mortgage assistance for applicants that could not meet traditional lending criteria.

PRODUCTION MANAGER, SMALL RENTAL ASSISTANCE PROGRAM, ROUND 1, 09/08 – 02/09

Responsibilities:
Mr. Forbes worked as the production manager on the first phase of the $235M HUD funded CDBG-DRDisaster Recovery Small Rental Assistance Program. The Small Rental Assistance Program, a compensation grant program, encouraged individuals and businesses to renovate or construct affordable rental properties along the Mississippi Gulf Coast. Property owners applied through the Mississippi Development Authority for up to $40,000 per application in forgivable loans for the repair or construction of rental properties.

PRIOR EMPLOYMENT EXPERIENCE

Campaign Manager, Wayne Parker for Congress, 06/08 – 09/08

Mr. Forbes managed two campaign offices with emphasis on grassroots development and implementation. He worked with phone, direct mail, media, and polling vendors to coordinate activities. He was responsible for the fundraising for a potential million dollar campaign and managed a staff of eight.

Campaign Manager, David Landrum for Congress, 01/08 – 04/08

Mr. Forbes managed two campaign offices with emphasis on grassroots development and implementation. He worked with phone, direct mail, media, and polling vendors to coordinate activities. He was responsible for the fundraising for a million dollar campaign and managed a staff of ten.

Campaign Manager, Phil Bryant for Lieutenant Governor, 12/06 – 12/07

Mr. Forbes managed five campaign offices with emphasis on grassroots development and implementation. He worked with phone, direct mail, media, and polling vendors to coordinate activities. He was responsible for the potential fundraising for a four million dollar campaign and managed a staff of fifteen.

Regional Political Director, Republican State Leadership Committee, 01/05 – 11/06

Mr. Forbes was responsible for political activity in twelve states for a National 527 political organization specifically dedicated to gaining and maintaining Republican majorities, state legislatures, attorney generals, and lieutenant governors. He wrote, coordinated and taught legislative and statewide training seminars focusing on incumbent retention, campaign development, GOTV implementation, and issue development. He traveled and worked directly with campaigns as a consultant to ensure proper campaign mechanics and implementation. States included Maine, Vermont, Indiana, Michigan, Minnesota, Wisconsin, Montana, Oklahoma, Kansas, Alabama, Delaware, New York and West Virginia.

Deputy Political Director/RLGA Executive Director, Republican State Leadership Committee, 01/04 – 12/04

As Deputy Political Director, Mr. Forbes worked with the Political Director to implement political activity for a National 527 political organization. He was responsible for retrieving, organizing, and analyzing vote history for selected states to target legislative and statewide races. He was deployed as a consultant on general and special elections to ensure effective use of resources.

As RLGA Executive Director he worked with the incumbent lieutenant governor to establish an active association dedicated to retaining and electing Republican lieutenant governors across the country. He also organized quarterly meetings between lieutenant governors, donors, and prospective donors. He organized fundraising for the association and targeted campaigns.

Campaign Manager, Scott Newton for Attorney General, 01/04 – 12/03

Mr. Forbes was responsible for overseeing all earned and paid media. He was responsible for developing, implementing and overseeing all fundraising. He worked with paid vendors, media consultants, and polling consultants. He managed message development and opposition research.

Campaign Manager, Mike Cox for Attorney General, 05/02 – 11/02

Mr. Forbes hired and managed eight full-time employees and numerous interns. He worked with pollsters, media consultants, and vendors to perform duties for the campaign. He was responsible for all earned and paid media and message delivery.

Political Director, Forbes for Congress, 06/01 to 04/02

Mr. Forbes was responsible for all fundraising, volunteers, and special interests activities to prepare for congressional re-election of Randy Forbes. He was responsible for building and maintaining all databases and was the sight developer for a new office.

Campaign Manager, John Cosgrove for Delegate, 08/01 – 11/01

Mr. Forbes was responsible for all volunteer and special interest activities. He worked with mail vendors in order to deliver the campaign message via mail. He also worked with statewide campaigns in order to maximize turnout and message delivery.

Grassroots Coordinator, Forbes for Congress, 01/04 – 06/01

Mr. Forbes was responsible for all volunteer activities including rallies, sign placement, literature drops, and various events. He implemented a 4 day volunteer program which reached 56,000 households in order to promote the congressional candidate.

Deputy Sheriff, Chesapeake Sheriff's Office, 09/94 – 10/97

Mr. Forbes was initially assigned to jail security, then became a Senior Deputy over seven other deputies on evening shift. Once assigned to evening shift he used the National Criminal Information System, the Virginia Criminal Information Network, and the Automated Fingerprint Identification System in order to identify incoming inmates and verify if they had outstanding

warrants. He attended FBI fingerprint school in order to identify and testify on identification of inmates.

E-4 Infantry Specialist, Virginia Army National Guard, 1994 – 1999

In Hopewell, VA, Mr. Forbes was assigned to Light Infantry Unit and eventually became squad leader in charge of three other soldiers. He trained at Fort Polk, LA in order to prepare for guerrilla warfare. He was also a marksman instructor in charge of training new soldiers on M-16 marksmanship.

Airborne Infantryman, U. S. Army, Camp Casey, 1990 – 1993

Mr. Forbes attended basic training and airborne school at Fort Benning, GA. While in Korea in the 2nd Infantry Division, he was assigned to the mechanized infantry unit and attended Sniper School and Combat Lifesaver Medic School.

While assigned to Fort Bragg, NC and the 82nd Airborne Division he was assigned to the Light Infantry Anti-tank Unit capable of airborne operations with the HUMMWV. He was also assigned as truck leader in charge of a driver and gunner.

EDUCATION

- B.A., English Literature, Virginia Wesleyan College, 2000

7.9 Natasha Acoff

EXPERIENCE SNAPSHOT

INDUSTRY

- Disaster Recovery
- Child Welfare
- Education
- Sports Entertainment
- Graphic Design

SPECIALIZATION

- Requirements Gathering
- JAD Sessions
- Training
- System Testing
- User Acceptance Testing
- Onsite Support
- Project Management
- Object Oriented Programming

BACKGROUND

Ms. Acoff has six years of experience in the field of Information Technology. Her key performance has been related to the software development life cycle and design of client specific requirements as well as graphics development. In response to client requests, she has also engaged in implementation, documentation and design of specific functional application software in different areas.

CGI EXPERIENCE

CGI EMPLOYEE, 01/07/07 – PRESENT

BUSINESS ANALYST, LOUISIANA ROAD HOME, 10/09 – PRESENT

Responsibilities:
The State of Louisiana has implemented The Road Home program, designed to provide compensation to Louisiana residents affected by various hurricanes. Ms. Acoff joined the Road Home team in October 2009 as a Functional Analyst on the Quality Assurance team. Her tasks included creating testing documentation for multiple change requests which supply a test plan, test metrics and test scripts for review and approval. She maintained the QA Plan, Quality Center, defect database used to capture defects and requirements from System Test, User Acceptance Testing and Production. She led testing efforts with stakeholders as well as consolidated monthly testing metrics.

In June 2010, Ms. Acoff joined the Hazard Mitigation Grant Program (HMGP) project as a testing analyst in an effort to assist the team with conversion related tasks prior to implementation of the Metastorm packaged Applicant Tracking System (ATS). She provided on-site support to the program during implementation as well as worked as a business analyst during subsequent phases on the program's initial deployment.

In October 2010, Ms. Acoff began as the Lead Business Analyst of HMGP, establishing business processes for the ATS application, working with the program to gather requirements, providing general design documentation and help desk support via AdventNet Service Center. Additionally, Ms. Acoff works with the developers to provide specifications for development, creates technical specifications for reporting, performs system testing of the required functionality, produces user guides and training/demonstrations of functionality to users and program management and conducts user acceptance testing.

As the Lead Business Analyst, Ms. Acoff has been successful in establishing business processes for ATS, providing support for internal audits, assisting in training and user documentation for the program as well as maintaining a project schedule of development.

BUSINESS ANALYST, FLORIDA SAFE FAMILIES NETWORK, 01/07 – 09/09
The Department of Children and Families implemented the Florida Safe Families Network (FSFN), a State Automated Child Welfare Information System. Ms. Acoff became a member of the Functional Team prior to Release 1.

Responsibilities:
Ms. Acoff's activities included assisting with massive QA tasks, leading contractors with creating system test scripts, engaging with state agencies during preparatory sessions for software readiness, providing implementation on-site support to state agencies, training documentation, and facilitation of design sessions and change management activities. In addition, she performed tasks in the following areas:

HELP DESK: Ms. Acoff provided support to the Department of Children and Families from March 2009 – September 2009. Using Service Center, she supported users with her extensive application knowledge in resolving issues. Ms. Acoff was responsible for reviewing issues related to current Release 1 and Release 2A functionality, as well as multiple Release 2B functionalities. While assisting users, Ms. Acoff provided workarounds and solutions as well as ensured all appropriate issues are documented for the vendor for repair and additional documentation.

TRAINING: Ms. Acoff worked in various training areas throughout the project. She assisted with data input for statewide training and mass production of information to be presented to clients. Ms. Acoff facilitated training sessions to various agencies. She also recorded voice over trainings, using the Adobe Acrobat Connect Pro, which is made available to the clients for Release 2B implementation.

CHANGE MANAGEMENT: Ms. Acoff worked as a part of the Change Management team with responsibility of examining, evaluating and documenting current business processes, prospective business processes and identifying gap analysis for state agencies. Ms. Acoff was also responsible for coordinating meetings and travel to Community Based Care locations with Site Contacts. Ms. Acoff met multiple stakeholders to review their current business practices and maintained an excellent rapport with client personnel.

IMPLEMENTATION: Ms. Acoff served on the Implementation team for Release 1 to develop seed data for training environments. Prior to Implementation, Ms. Acoff facilitated contractor staff with test script execution. She was also responsible for traveling to state agencies to determine site readiness. Ms. Acoff participated in Onsite support with a state agency to provide guidance and training to users during Release 1 implementation of the Florida Safe Families Network.

PROVIDER TEAM LEAD: Ms. Acoff worked on the provider team since Release 2A. She served as the provider lead for multiple topics. She facilitated and led design sessions to determine system designs based on requirement specifications. Ms. Acoff also created screen mockups for developers and made updates to topic paper designs. On the provider team, she also

created test scripts, tested application software and developed design documentation for deliverables.

FUNCTIONAL TEAM: As a member of the project's functional team, Ms. Acoff performed testing of the applications software using Test Scripts and User Acceptance Testing. Prior to Release 1, she maintained the systems Knowledge Web that provided useful links and tips to Release 1 Web-based Training modules (WBTs). She also maintained the system's RoboHelp application that served as the mechanism for Help files for users within FSFN. Ms. Acoff participated in multiple stakeholder conference calls to attain extensive knowledge of client issues and concerns.

PRIOR EMPLOYMENT EXPERIENCE

Billing Specialist, Leon County Schools, 02/99 – 01/07 (approximately 20-30 hours per week until January 2002 when the position became full time)

Ms. Acoff served as an Administrative Assistant and Billing Specialist, maintaining public student files, inputting Medicaid billing codes associated with Occupational, Physical and Speech Therapy services rendered to students, producing labels and mail outs in support of countywide therapists and nurses and submission of transactions to the state for reimbursement. Ms. Acoff also created spreadsheets and documentation for billing procedures to assist other school districts and post personnel.

EDUCATION

- Associate of Arts, General Studies, Tallahassee Community College, 2003
- Associate of Science, Computer Programming, Tallahassee Community College, 2004
- B.Sc., Information Technology, Florida State University, 2006

7.10 Mike Lee

BACKGROUND

With more than 20 years in the Information Technology industry, Mr. Lee has a wide range of experience providing project and account management, as well as developing, documenting, coding, testing and implementing business technology solutions. He has acquired an in-depth knowledge of database and software architectural solution by architectural best practices. Such as addressing application, security, data and technology in the context of supporting processes across all business segments.

CGI EXPERIENCE

CGI EMPLOYEE, 07/14/96 – PRESENT

DBA, THE ROAD HOME PROGRAM, 03/10 – PRESENT

ROLE: DBA ORACLE/SQL SERVER, JAVA DEVELOPER, DATA WAREHOUSE DEVELOPER

Responsibilities:
Mr. Lee provides leadership direction and accountability for strategic application architecture plans, system design, and implementation. Mr. Lee has been able to:

- Reduce risk on large implementations by proactively reviewing Proof of Concepts, Implementation plans and Product Applicability.
- Collaborate with partners/team member to improve their delivery capability.
- Architect multiple platforms from object oriented 2-tier client Server to N tier software development, middleware (web services / SOA), messaging, and object relational database.
- Work closely with other concept owners, application programmers, and the infrastructure team to ensure all of our data-driven applications are running optimally.
- Provide an analytical processing of data from the data warehouse for forecasting, planning, and what-if analysis such as trends and patterns.
- Help improve and maintain Road Home's heterogeneous and homogenous distributed database environments.
- Help support transparent gateway agent to interface with the specified non-Oracle database system using easySoft (Oracle client in a MS-SQL world).

Road Home consists of numerous Oracle databases containing approximately 1.5 terra bytes of data and 98 MS-SQL databases containing 950GB of data.

Technical Environment: Oracle 11g, MS SQL Server 2008, J2EE 1.6

ETL TESTER, TRACTOR SUPPLY, 12/09 – 2/10

Responsibilities:
Mr. Lee's responsibilities primarily included testing ETL processes for an enterprise wide POS Retail system collaborating / mitigating with an ERP (SAP).

Technical Environment: J2EE 1.4, IBM Websphere 6.x, Oracle 10g, and SAP Data Intergrator

DBA, OLDE FINANCIAL SERVICES, 07/08 – 11/09

Responsibilities:
Mr. Lee was the primary DBA with end-to-end responsibilities for major databases. His responsibilities include:

- Oracle Application DBA
- Database Modeling and Design (Logical/Physical)

Technical Environment: J2EE 1.4, IBM Websphere 6.x, Oracle 10g, Struts / Spring and Hibernate open source framework for a J2EE web based application

ORACLE APPLICATION DBA AND JAVA DEVELOPER, NOKIA, 05/01 – 04/08

Responsibilities:
- Oracle Application DBA – Creating the user experience accomplished through writing the functional requirements, information structure & flow, defining the objects, creating linkages to existing information structures, and the leveraging of the meta-data available.
- Database Modeling and design (Logical/Physical)
- Creating security roles, triggers, indexes, triggers, packages(functions/procedures),   users, jobs, views(snapshots/dynamic), xdk api (XML)
- Java Developer – Providing UML artifacts, design and construct OO objects and services using Struts MVC framework and web services APIs.

Technical Environment: J2EE 1.4 , BEA Weblogic 8.1.x & Oracle 9i (packages, procedure & function), BEA Weblogic 6.1 Transaction Server , Netscape iPlanet, Web Server Struts Framework J2EE web based app, UML/Rational Rose, XML (DOM,SAX); Sybase PowerBuilder & DBMS

LEAD DEVELOPER, RELIANT ENERGY, 01/01 – 04/01

Responsibilities:
- PowerBuilder Developer. Implemented a out-of-box solution from Sun-Guard System. Transition the energy application to handle Oracle PL/SQL from Sybase TSQL

MULTIPLE ROLES, TEXAS TECH UNIVERSITY, 07/99 – 12/00

Responsibilities:
- Team Lead, Application DBA, and Senior Developer: Coordinated design issues, development timelines, testing procedures, and customer expectations for course development, instructor assignment, grade reporting, instructor pay, accounting, student

enrollment, registration, textbook and course materials purchasing, and lesson submission and grading

Technical Environment: SilverStream 3.x Designer & Server, Java 1.1, MSL SQL 7, UML

TEAM LEAD, STATE AND LOCAL GOVERNMENT PROJECTS, 08/98 – 06/99

Responsibilities:
- Client/server applications to handle marriage, liquor, and driver license for township/city/county and state level.

Technical Environment: Sybase PowerBuilder, IBMDB2 & Sybase SQL Anywhere

TEAM LEAD/DEVELOPER, DELOITTE & TOUCHE, 08/96 – 07/98

Responsibilities:
- The Global Advantage application was to provide an enterprise business solution for a full range of complex administrative activities to serve companies for expatriate employees.

Technical Environment: UML Rational Rose 98, Sybase PowerBuilder 6.5, Sybase EA Server (Jaguar), Oracle 7

PRIOR EMPLOYMENT EXPERIENCE

New Data Strategies Consultant, Delhi Gas (Koke Industry), 07/95 – 07/96

Technical Environment: Sybase PowerBuilder, Sybase System 10 & MSSQL, IBM DB2

Programmer Analyst, Grey Hound Bus Lines, 06/93 – 06/95

Technical Environment: Sybase PowerBuilder, Sybase 4.9 & System 10, Sun Solaris Unix

EDUCATION

- B.A., Information Systems, Baylor University, 1993

7.11 Peter Stubbs

EXPERIENCE SNAPSHOT

INDUSTRY

- Environmental Solutions
- State and Local Government

SPECIALIZATION

- Environmental Subject Matter Expertise
- Project Management
- Program Management (PMO)
- Business Intelligence and Data Warehousing
- Requirements and Design Management
- Use Case Methodology
- Process Analysis and Design
- Business Case/Cost-Benefit Analysis

BACKGROUND

Peter Stubbs is an experienced Director, currently serving as a Delivery Lead for the State and Local Environmental Solutions Group (ESG). He began working at CGI in June, 2000 as a Business Analyst. Mr. Stubbs' current role is to oversee all delivery operations for 10 clients and an overall team size of approximately 55 resources. Mr. Stubbs is a skilled Project and Program Manager and with a wide range of experience providing program, project, service delivery and business development support. His area of specialization is environmental solutions. Mr. Stubbs is also experienced in business intelligence (BI) and data warehousing, having successfully planned and led several large initiatives. In particular, Mr. Stubbs managed a number of successful planning and analysis, business process analysis and requirements efforts for BI projects at various telecommunications companies and within the Commonwealth of VA. Prior to coming to CGI, Mr. Stubbs earned an MBA from Georgetown University, where he successfully completed several strategic and financial consulting projects with international telecommunications and software providers.

CGI EXPERIENCE

CGI EMPLOYEE, 06/05/00 – PRESENT

SECTOR LEAD, ENVIRONMENTAL SOLUTIONS GROUP, 10/07 – PRESENT

Responsibilities:
Mr. Stubbs serves as the Sector Lead for the Environmental Solutions Group (State and Local sector). As such he is responsible for delivery management and quality oversight to CGI's state and local clients in the environmental sector. Mr. Stubbs oversees the work of approximately 55 resources and is responsible for human resource functions for the group. Mr. Stubbs also manages 3 different product families, where he is responsible for product direction and strategy. In addition to these duties, Mr. Stubbs is responsible for financial reporting for the group. In addition to his Sector Lead responsibilities, Mr. Stubbs also participates in and manages direct delivery projects where his expertise can add value.

As part of his Sector Lead responsibilities, Mr. Stubbs' has provided oversight for 3CROMERR analysis and implementation efforts. Mr. Stubbs is also currently leading CGI's efforts to support the CROMERR Working Group, sponsored by Montana Department of Environmental Quality.

PROJECT MANAGER, MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY, 01/10 – 06/11

Responsibilities:
Mr. Stubbs served as the Project Manager for CGI's support of Mississippi Department of Environmental Quality (MDEQ) data management systems. As such, Mr. Stubbs served as the primary contact with the client and managed a team to support further implementation of CGI's TEMPO and RSP products, and establishment of data flows to the Federal EPA. Mr. Stubbs has also facilitated a CROMERR analysis and implementation for MDEQ, leading to the establishment of an enterprise approach for CROMERR compliance.

PROJECT MANAGER, TEXAS COMMISSION OF ENVIRONMENTAL QUALITY, 10/09 – 05/10

Responsibilities:
Mr. Stubbs led the effort to renew the Texas Commission on Environmental Quality's (TCEQ) Information Strategic Plan. This plan, which will govern TCEQ investment in information technology for the next ten years, was accepted by the Commissioners. During the renewal of the team Mr. Stubbs and his team conducted facilitated information gathering sessions with 25 different groups representing all programs in the Agency. In addition, Mr. Stubbs and his team synthesized input from other key stakeholders, including members of the legislature and the regulated community. The accepted plan is designed to transform use of information technology at TCEQ in a manner that enables information to be leveraged as a strategic asset.

PROJECT MANAGER, LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY, 11/08 – 06/09

Responsibilities:
Mr. Stubbs served as the Project Manager for the TEMPO Implementation and enhancement efforts at Louisiana Department of Environmental Quality. As such, Mr. Stubbs managed a team to provide software enhancements and bug fixes. Mr. Stubbs' team also provided business process and technical analysis for how TEMPO can be adopted to meet the needs of additional business processes. Mr. Stubbs' duties included establishing the timeline and detailed schedule of activities for all work efforts, and managing those efforts to completion. He was the primary point of contact for the client.

PROJECT MANAGER, MARYLAND DEPARTMENT OF ENVIRONMENT, 05/06 – 03/08

Responsibilities:
Mr. Stubbs served as the Project Manager for the TEMPO implementation at Maryland Department of the Environment. TEMPO, an enterprise software solution for environmental agencies is being implemented across 5 years. As PM, Mr. Stubbs was the key client contact across all facets of the $6.4M effort. Mr. Stubbs negotiated and executed all necessary task orders, and established work plans for the functional and technical teams. Mr. Stubbs also directly managed the CGI team in completion of all tasks.

PROJECT MANAGER, INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT, 09/07 – 02/08

Responsibilities:
Mr. Stubbs served as the project manager for the implementations of TEMPO and RSP at Indiana Department of Environmental Management (IDEM). As such Mr. Stubbs oversaw the completion of the software fit activities where his team provided a detailed analysis of IDEM business processes and how TEMPO and RSP can support both existing and newly envisioned activities. Ultimately the team delivered an analysis that showed all necessary software modifications and their associated costs for the 4 year implementation.

PROJECT MANAGER, COMMONWEALTH OF VIRGINIA, 02/05 – 04/06

Responsibilities:
Mr. Stubbs served as the Project Manager for the Business Intelligence project as part of the Virginia Enterprise Architecture Program (VEAP). VEAP is a multi-year program established to transform the business processes and related technological infrastructure across the Commonwealth of Virginia. Mr. Stubbs joined the team during capture management activities and crafted a vision for use of enterprise wide BI as a means to enhance decision making at the highest levels of the state. Mr. Stubbs' work was an integral part of the successful proposal, leading to Mr. Stubbs appointment as Project Manager for the BI efforts. While full implementation of the BI project has now been delayed, Mr. Stubbs successfully established a vision and plans for implementation.

PROJECT MANAGER, VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY, 10/05 – 02/06

Responsibilities:
Mr. Stubbs led sales cycle activities and served as the Project Manager for a Business Intelligence Strategy Assessment at the Virginia Department of Environmental Quality (DEQ). This project involved establishing a vision for how DEQ can improve its operational procedures through more effective use of information. This effort included gathering both functional and technical requirements for a data warehouse for the organization. As Project Manager, Mr. Stubbs led the CGI team through all activities, and served as the primary point of contact with the client. Mr. Stubbs also negotiated software contracts with multiple vendors on behalf of DEQ. At the conclusion of the project, Mr. Stubbs and his team provided a BI Strategy document, including functional and technical requirements as well as a Roadmap highlighting viable implementation details.

BUSINESS DEVELOPER, CGI – INTERNAL, 03/05 – 10/05

Responsibilities:
Concurrently with other duties, Mr. Stubbs worked on an internal initiative with the Director of the Business Intelligence Service Line to develop and document the group's methodology, processes and other collateral. Mr. Stubbs role included leading the definition of discrete offerings, and the creation of detailed information about the service line's offerings and capabilities.

PROJECT MANAGER, BELLSOUTH, 10/03 – 01/05

Responsibilities:
Mr. Stubbs served as the Project Manager at BellSouth Long Distance to analyze the need for an enterprise data warehouse. In this role, Mr. Stubbs led a team of 7 analysts and developers through the planning, analysis and requirements for the warehouse. The initial effort involved building consensus with various levels of the client organization on the need for the warehouse, including the Chief Information Officer. Key deliverables included a Conceptual Vision for the warehouse, an Enterprise Data Model and detailed Requirements for the initial phase of the effort. At the conclusion of the planning and analysis phase, Mr. Stubbs continued to lead a team responsible for on-going source data analysis, tactical reporting solutions, and development of detailed report design for the post data warehouse landscape. In this phase of the project, Mr. Stubbs was integral to the success of the warehouse development team by leveraging his team's knowledge of the source data, existing business processes and technical requirements towards the effort. Mr. Stubbs also served as the primary issue and risk manager and as the key client contact to all levels of the organization. Finally Mr. Stubbs planned and executed the deployment of the warehouse, including UAT, development of end-user job aids and training. At the conclusion of this effort, the warehouse was successfully deployed.

SENIOR BUSINESS ANALYST, BELLSOUTH, 06/03 – 10/03

Responsibilities:
Mr. Stubbs served as a Senior Business Analyst to assess the processes and data flows of the Long Distance organization of an RBOC. Project SCUBA was charged with analyzing the data and environment, and providing BSLD tactical and strategic recommendations for improvement. The project resulted in a series of recommendations that were implemented, costing approximately $8 million in IT related improvements. Mr. Stubbs went on to lead the data warehouse efforts that were recommended during this assessment (as detailed above).

PROJECT MANAGER, VERIZON, 01/03 – 06/03

Responsibilities:
Mr. Stubbs was the Project Manager for a team that analyzed the need for and collected requirements for a Customer Hierarchy Management Tool in the business services group at Verizon. In this role, Mr. Stubbs personally facilitated a large requirements gathering and JAD session. He then managed the team through the creation of a requirements document, a Roadmap showing phased delivery and a more detailed Systems Requirement Specification (SRS) for the initial phase.

SENIOR BUSINESS ANALYST, VERIZON, 09/02 – 01/03

Responsibilities:
Mr. Stubbs served as a Senior Business Analyst during the planning phase for a data warehouse at Verizon. Specifically, Mr. Stubbs interviewed key organizational personnel to contribute to a data warehouse Roadmap, and requirements document for the warehouse. Mr. Stubbs also co-facilitated various JAD session during this effort.

PRODUCT MANAGER, CGI – INTERNAL, 06/02 – 08/02

Responsibilities:
Mr. Stubbs served as a Product Manager to develop a business plan and launch a new product suite designed for the Media, Entertainment and Broadband market sector. A core component of this strategy involved development of an end-to-end Enterprise Content Management (ECM) solution, utilizing a combination of partner technologies and internally developed products. Mr. Stubbs' responsibilities included partner management, creation of a "Go-To-Market" strategy and related marketing collateral for the offering and project management of the internal development team. In addition, Mr. Stubbs selected and managed a delivery staff of twelve through an ECM immersion-training program.

BUSINESS ANALYST, VERIZON, 11/01 – 05/02

Responsibilities:
Mr. Stubbs designed program management processes for effective governance of a multi-faceted information systems improvement project at a Verizon. Mr. Stubbs also designed training materials based on these processes and oversaw their initial implementation. Mr. Stubbs also served as the initial Issue and Risk Manager for the program.

LEAD BUSINESS ANALYST, QUEST COMMUNICATIONS, 08/01 – 10/01

Responsibilities:
Working in conjunction with an organization design specialist at Quest, Mr. Stubbs redesigned the corporate software development processes. The goal of the effort was to accelerate cycle times by moving from a standard multi-phase waterfall methodology to one that leverages agile components, enabling rapid and iterative development. After acceptance of the new process, Mr. Stubbs supported the implementation across the department, numbering several hundred resources. The new process enabled measureable improvement in software development cycle time.

LEAD BUSINESS ANALYST, QUEST COMMUNICATIONS, 04/01 – 08/01

Responsibilities:
Mr. Stubbs served as a Lead Business Analyst in the Metrics Organization of the E-Commerce PMO for Quest Communications. In this role, Mr. Stubbs provided analysis for a variety of weekly and monthly Executive Reports, including the IT Balanced Scorecard that was prepared for the CIO and a variety of reporting Dashboards. Mr. Stubbs also developed a comprehensive communications plan for the IT Organization. Finally, Mr. Stubbs conducted an organizational assessment for the Director of the PMO. This project resulted in a set of recommendations for organizational improvement.

BUSINESS ANALYST, UUNET, 10/00 – 03/01

Responsibilities:
Mr. Stubbs worked as a Business Analyst on a requirements definition phase of an e-commerce project for a UUNET, a subsidiary of MCI. Specifically, employing Use Case Methodology, Mr. Stubbs defined requirements for the proposed e-billing engine as well as a proposed capacity

utilization measurement tool. Deliverables for this project included business scenarios, use cases and process maps. In addition, Mr. Stubbs assumed PMO responsibilities, working to establish program management processes and procedures for the next phase of the effort.

DEPUTY ENGAGEMENT MANAGER, VERIZON, 06/00 – 10/00

Responsibilities:
Mr. Stubbs functioned as Deputy Engagement Manager for a data assurance project with the Marketing Systems for Long Distance (MSLD) for Verizon. In this role, Mr. Stubbs' primary responsibility was to manage client expectations and facilitate client-facing communications. Mr. Stubbs also implemented several initiatives to streamline internal processes and improve communication.

PRIOR EMPLOYMENT EXPERIENCE

Lead Analyst, Lost Wax E-Commerce, 10/99 – 03/00

EDUCATION

- B.Sc., Political Science, Guilford College, 1989
- MBA, Operations and Marketing, Georgetown University, 2000

7.12 Beth Long

BACKGROUND

With more than 25 years of management experience in the Information Technology, Quality Assurance, Healthcare and Non Profit industries, Ms Long has a wide range of experience. She has provided project management, quality assurance/control services and service delivery to state, federal, non-profit and retail financial customers. Ms Long has experience developing, documenting, modifying, testing and implementing project quality assurance and testing plans. She has been responsible for securing and administering state and federal healthcare funding contracts including the responsibility for compliance with regulations of federal and state funding sources.

CGI EXPERIENCE

CGI EMPLOYEE, 08/08/05 – PRESENT

PMO, STATE OF LOUISIANA, OFFICE OF COMMUNITY DEVELOPMENT, DISASTER RECOVERY UNIT, 12/12 – PRESENT

Responsibilities:
PMO responsibilities include: Change Management Process, weekly and monthly Program Status Reports, Core Service Provider metrics reports, invoice preparation for multiple service lines, and performing program vendor invoice reviews.

TEST MANAGER, STATE OF FLORIDA, DEPARTMENT OF CHILDREN AND FAMILIES, 07/12 – 11/12

Responsibilities:
- Responsible for planning and supervision of the System Testing related activities for the State of Florida Safe Families Network (FSFN) Hotline Transformation project.
- Supported the successful development and management of software validation activities and resources to provide integration, system, and regression testing and assist with user acceptance testing.
- Developed test strategy, plan, ensured requirement coverage and provides daily test team progress and results.

TEST LEAD, STATE OF LOUISIANA, DEPARTMENT OF CHILDREN AND FAMILY SERVICES, 04/11 – 07/12

Responsibilities:
- Responsible for providing planning and supervision for the System Testing related activities for the CAFÉ (Common Application Front End) applications supporting the successful

development and management of software verification and validation plans, activities and resources for integration, system, and regression testing.

- Responsible for assisting the State with their user acceptance testing for Release 1.
- Developed the testing strategy, System Test Plan, and ensured requirement coverage for the Customer and Worker Portal applications in Rational Quality Manager.
- Developed a statistical model to provide System Test progress and results; led multiple training classes for DCFS staff related to various Rational products including RQM, CQ and RequisitePro including the creation of user guides for each; provided ongoing support related to the Rational products.
- Represented the prime contractor in various client meetings and one-on-one sessions with the client.

TEST ANALYST, AT&T SMALL BUSINESS SOLUTIONS, 01/11 – 04/11

Responsibilities:
- Responsible for testing coordination, planning, and execution of AT&T Small Business applications.

DEPUTY PROJECT MANAGER, USAA COLLECTIONS, 09/10 – 12/10

Responsibilities:
- Responsible for providing direction relative to CGI best practices in program management, processes and procedures and related documentation to the Project Manager.
- Responsible for coordination of all project deliverables, including weekly financials and transportation, and daily test team activities for approximately 30 positions.
- Provided accurate and timely ad hoc reporting to both the client and CGI management on a daily basis.
- Provide PMO support during daily executive meetings with the client.

TEST LEAD, LOUISIANA OFFICE OF COMMUNITY DEVELOPMENT, DISASTER RECOVERY UNIT, 04/10 – 08/10

Responsibilities:
- Proactively partnered with the client to accurately capture requirements, confirm designs and efficiently conduct testing activities in an abbreviated timeframe.
- Responsible for the test management of the customized Metastorm application to support HMGP.
- Utilized Mercury Quality Center for defect management and reporting.
- Provided management dashboards at multiple daily intervals.
- Served as the primary liaison between the DBAs, developers and test staff.
- Provided coordination of deployments to multiple test environments and production.

CONSULTANT, QUALITY ASSURANCE OFFICE, DEPARTMENT OF SOCIAL SERVICES, INFORMATION SERVICES, STATE OF LOUISIANA, 08/05 – 04/10

Responsibilities:

- Responsible for completion and submission of all quality assurance contract deliverables.
- Responsible for supporting the client in the development and implementation of a defined Quality Assurance process and System Development Lifecycle (SDLC) for utilization on the State's mainframe and web systems.
- Responsible for developing and enhancing the QAO development and execution methodology.
- Responsible for leading all releases associated with the SDLC build out and developing these solutions through the utilization of CMMI, Industry Standards and Best Practices to formulate well thought out solutions that supported the defined Success Criteria of the QAO.
- Responsible for leading the training and staff support efforts associated with the implementation of the SDLC methodology.
- Due to testing expertise and experience, she was assigned to four testing efforts, the largest being a development effort related to disaster declaration to assist in the development and testing of a web system to streamline the application process for emergency food stamp eligibility.

PRIOR EMPLOYMENT EXPERIENCE

Deputy Project Manager, Quality Assurance Manager, Office of the Attorney General, State of Texas, Northrop Grumman, 08/00 – 08/05

- Interacted with the State of Texas client to control and manage communications regarding Quality Assurance, deliverables, priorities and customer satisfaction.
- Responsible for all areas of management for staff performing Quality Assurance and Call Center functions and acted as the Project Manager in his absence.
- Initiated, recommended, and provided solutions to ensure adequate controls throughout all areas of performance within the life cycle of the TX ENHR CFM project to include identifying and acquiring the software.
- Responsible for the development of the definition, creation, implementation and compliance monitoring of the Call Center and Quality Assurance activities and related reporting.
- Assisted in the analysis, development and testing of custom software applications.
- Responsible for creating presentations, written documents and ad hoc reports for clients and senior management.

Manager, Financial Operations/Program Control, Army Research Institute, State of Alabama Child Support, Texas Teachers Retirement System, Texas Education Association, Northrop Grumman, 09/95 – 07/00

- Responsible for providing financial analysis and budget performance reporting for multiple Federal and State contracts ranging in value from $500,000 to $15,000,000.

- Analyzed project expenditure trends, report variances and identified potential issues that may have a negative revenue impact, preparing, documenting and communicating financial forecasts and results to senior management reacting quickly with accurate financial details.
- Utilized SAP to prepare financial proposals for State and Federal government contracts.
- Responsible for providing area managers with direction regarding cost issues, compensation, personnel management issues, progressive discipline, legal and ethical issues, and all other corporate policies and procedures.

Vice President Marketing, Director of Wintergreen Healthcare Facility, Goodwill Industries, 02/92 – 09/94

Senior Sales Representative, NTS Securities, 05/91 – 02/92

Vice President, Hilliard, Lyons, Inc., 05/85 – 02/91

Stockbroker, Stifel, Nicolaus & Co., 05/81 – 05/85

EDUCATION

- Psychology, University of Louisville, 1979 – 1980

7.13 Gayland Shotton

BACKGROUND

Mr. Shotton has over 20 years experience in the fields of computer hardware, data communications, data modeling, database administration, and application/database performance tuning. His duties have ranged from network design, terminal and computer hardware repair, RDBMS database design and administration, and application/database performance tuning and testing. Mr. Shotton has had major roles in the design and installation of local and wide area networks, data conversion, database design and administration, data modeling tasks, and configuring performance test environments. Mr. Shotton has had duties of Team Leader for data communication, microcomputer, database design and administration, and data modeling teams.

CGI EXPERIENCE

CGI EMPLOYEE, 12/01/87 – PRESENT

TEAM LEAD, LOUISIANA ROAD HOME, 02/09 – PRESENT

Responsibilities:
Mr. Shotton serves as the Team Lead for the Data Warehouse team. Mr. Shotton manages a group of Oracle and MicroSoft SQL DBAs. The team is responsible for the development and production support of the databases for the Road Home project. This role includes being part of the management team that manages the OCD/DRU IT operations. The Data Warehouse team is responsible for 6 production Oracle 11.2 servers, and over 180 MicroSoft SQL databases using SQL 2008 and SQL 2005.

ORACLE DBA, COMCAST, 12/07 – 01/09

Responsibilities:
Mr. Shotton served as the Oracle DBA for the Development and Production Support teams. This role included being part of the Installation team that deploys the Caller ID application to new Comcast sites. Mr. Shotton was also responsible for performance testing and implementing a new strategy for call logging within the Oracle database. This application is located in 12 sites across the US with all sites connected to one Oracle database residing on an Oracle cluster using Oracle 10.2 RAC software.

SENIOR DBA, AT&T, 05/07 – 11/07

Responsibilities:

Phase 1 of this project was the port of the AT&T ECBR system from a Sybase database to an Oracle database. Mr. Shotton served as a Senior DBA responsible for porting the actual database

objects. This included the design, coding, and unit testing. Mr. Shotton was also responsible for proving support to the rest of the Development team for database issues, as well as providing guidance and expertise in the use of the Oracle DBMS product. At the conclusion of the code and unit test of phase I, Mr. Shotton started the design and coding of phase II of the project which integrated the South East CBR mainframe input feeds into the ECBR application.

DATABASE/OPS TEAM LEAD, BELLSOUTH, 05/04 – 05/07

Responsibilities:
This project was a development of a new functionality of the CBR application. Mr. Shotton served as the Database/OPS Team Lead. In addition to his Team Lead responsibilities, Mr. Shotton served as the Senior DBA on the CBR project, responsible for producing the database and operational process flow detailed designs. This role also included providing DBA support for the Development and Testing team databases. Mr. Shotton was a valued member of the Project Leadership team. In this role he participated in weekly meetings to track project status and to manage project issues and risks.

DATABASE TURNING CONSULTANT, BELLSOUTH, 03/04 – 05/04

Responsibilities:
As a Database Tuning Consultant, Mr. Shotton was responsible for analyzing the Oracle database layout for storing call records in the data warehouse and making recommendations for improving database performance for nightly processing of these records. The recommendations included changes in the portioning scheme for storing the data and process flow for processing the records.

INFRASTRUCTURE SUPPORT TEAM MEMBER, BELLSOUTH, 03/02 – 01/04

Responsibilities:
As an Infrastructure Support Team member, Mr. Shotton was responsible for production support issues pertaining to application performance and functionality and database performance and functionality. In the roll of Lead DBA, duties included development and testing environment support, as well as the UNE 319 production environment. During this engagement, Mr. Shotton played a lead role in upgrading the Tapestry application from version 3.2 to 5.1. Mr. Shotton consulted on creating change requests for the Tapestry solution that pertained to performance.

TEAM MEMBER, TAPESTRY PRODUCT GROUP, 02/00 – 03/02

Responsibilities:
As a member of the Tapestry Performance team, Mr. Shotton was responsible for environment design and setup for the Tapestry performance environment. This included the hardware and software environments, installation, and configuration. Mr. Shotton was also responsible for conducting and completing performance testing for the 3.0, 3.1, and 3.2 versions of Tapestry. Mr. Shotton also played a major role in the planning and coordination of the Tapestry performance testing done at Sun Laboratories in May of 2001.

SUPPORT TEAM MEMBER, ARCOR TAPESTRY ENGAGEMENT, 06/99 – 02/00

Responsibilities:
As a member of an Installation and Production Support team, Mr. Shotton played a lead role in installing and supporting the batch (Rating and Billing) components of the Tapestry system for The ARCOR-Tapestry project. This included the database and application installation and hardware environment setup. After installation, Mr. Shotton played a lead role in production support for these applications including training client personnel for production support.

DBA TEAM LEAD, ARCOR TAPESTRY ENGAGEMENT, 07/97 – 06/99

Responsibilities:
As the DBA Team Lead, Mr. Shotton had the responsibilities for design of the database for the Tapestry application. These duties included overseeing a team of four people that reviewed the application detailed designs and object models and then created an Oracle database to store the persistent data. In addition, several standards and procedures documents were produced in the areas of change management, naming and DDL coding standards, and database backup and recovery.

DBA TEAM MEMBER, AIRTOUCH SUPPORT ENGAGEMENT, 05/97 – 07/97

Responsibilities:
As a member of the DBA team for the Airtouch client, Mr. Shotton was responsible for routine maintenance and support of the Startouch and SAMS Sybase databases. During this time, Mr. Shotton was responsible for implementing a performance redesign of the production Startouch database located in the Los Angeles office.

DBA, AIRTEL SUPPORT ENGAGEMENT, 03/97 – 05/97

Responsibilities:
As a Sybase DBA, Mr. Shotton had the responsibilities of designing a database to handle the raw call information for the AirTel client in Spain. Mr. Shotton was part of a team that was designing this feature as an enhancement to the Spectrum 2000 platform.

TECHNICAL SUPPORT TEAM LEAD, PNI/PHASE2 ENGAGEMENT, 05/96 – 03/97

Responsibilities:
As the Technical Support Team Lead for the PNI/PHASE2 project, Mr. Shotton had the responsibilities for overseeing the tasks of Unix and VAX system administration, Lotus Notes support, software migration, and Sybase database administration. As well as the duties of team leader, Mr. Shotton performed the daily technical duties of a DBA.

DATABASE ADMINISTRATION TEAM LEAD, PHH REAL ESTATE ENGAGEMENT, 11/94 – 05/96

Responsibilities:

As the Database Administration Team Lead, Mr. Shotton had the responsibility of installing and maintaining the Sybase databases for the development and system test environments within the PHH project. Mr. Shotton performed many of the daily technical duties involved in this task. These databases were installed on a combination of Unix and Windows NT operating systems. In addition, Mr. Shotton performed the operating system administration of these systems.

Mr. Shotton played a major role in working with the client to ensure the client network and user environment would handle the new business system. These duties included working with the client to measure and monitor local and wide area network traffic to ensure there was adequate bandwidth to handle the new system. Mr. Shotton also played a role in making recommendations for improvements in desktop PC's, network environment, and servers.

DATA COMMUNICATION SPECIALIST, ROYAL MANAGEMENT PROJECT, 12/87 – 11/94

Responsibilities:
As a Data Communication Specialist Mr. Shotton had the task of designing an intranet network that would connect MMS, RMP to the Department of Interiors intranet network. This included connections to all the RMP sites, as well as all state offices and Indian tribe sites that the RMP serviced. This design incorporated a Frame Relay network providing multiple services using TCP/IP and IPX protocols. One of the tasks involved was to investigate and evaluate wide area network management tools. This design was used as the main provider of services for the Minerals Management Service.

PRIOR EMPLOYMENT EXPERIENCE

Hardware Specialist, International Business Services, 10/84 – 12/87

As Hardware Specialist, Mr. Shotton was responsible for installing, troubleshooting, and repairing data terminals and personal computers. Also, Mr. Shotton was responsible for developing, installing, and maintaining communication networks for DEC VAX mini-computers. Tasks included anticipating user requirements and reconfiguring the networks to meet these needs within budget constraints.

Mr. Shotton also assembled a Hardware Reference Manual containing all computer, computer peripherals, and other related hardware equipment used by the operations and production control staff. The manual contained all pertinent information needed to care for and operate the equipment. Mr. Shotton was also responsible for all hardware training of the staff.

Senior Field Engineer, Burroughs Corporation, 07/76 – 10/84

As Senior Field Engineer, Mr. Shotton was responsible for managing a territory from a resident point. The duties included pre-site planning and pre-site inspections of new client computer sites, as well as the installation and maintenance of the computer equipment.

EDUCATION

▪ Associate of Science, Electronics Technology, Kansas Technical Institute, 1975

8. Appendix D – Sample Plans

8.1 Appendix D.1 - Sample Backup Plan

Please see Volume I – SIROMS Technical Proposal - Appendix D 1 - Sample Backup Plan.pdf.

8.2 Appendix D.2 - Sample Contingency Plan

Please see Volume I – SIROMS Technical Proposal - Appendix D 2 - Sample Contingency Plan.pdf.

8.3 Appendix D.3 - Sample Disaster Recovery Plan

Please see Volume I – SIROMS Technical Proposal - Appendix D 3 - Sample Disaster Recovery Plan.pdf.

8.4 Appendix D.4 - Sample Performance Management Plan

Please see Volume I – SIROMS Technical Proposal - Appendix D 4 - Sample Performance Management Plan.pdf.

8.5 Appendix D.5 - Sample Record Retention Plan

Please see Volume I – SIROMS Technical Proposal - Appendix D 5 - Sample Record Retention Plan.pdf.

8.6 Appendix D.6 - Sample Security Plan

Please see Volume I – SIROMS Technical Proposal - Appendix D 6 - Sample Security Plan.pdf.

8.7 Appendix D.7 - Sample Software Upgrade Plan

Please see Volume I – SIROMS Technical Proposal - Appendix D 7 - Sample Software Upgrade Plan.pdf.

8.8 Appendix D.8 - Sample System Support Plan Help Desk

Please see Volume I – SIROMS Technical Proposal - Appendix D 8 - Sample System Support Plan Help Desk.pdf

8.9 Appendix D.9 - Sample Training Plan

Please see Volume I – SIROMS Technical Proposal - Appendix D 9 - Sample Training Plan.pdf

Back-up Requirements Form

Service Recipient	████████ / ████████
Service Provider	CGI Phoenix Data Center TSM Engineering, TSM Administration
Purpose	████████████████████

Server IP	████████	**Gateway**		**VLAN**	
BKP Server IP		**BKP Gateway**		**BKP VLAN**	
Server ID	████████	**Server Name**	████	**Environment**	Production
Server Location	████████	**Start Date**	████	**Criticality**	Critical

Backup procedures will be incorporated into system and facility run books as maintained by the respective systems administrator, from Tier 1 Hosting Services. As per NIST standards, the CGI PDC policy indicates the backup processes be reviewed and updated regularly, as part of PDC's change management process, to provide that new information is documented and contingency measures are revised if required. Revision Log:

Version	Description	Issue Date	Author	Remedy Change #	Reviewer	Date Reviewed
1.0	Initial draft of Backup Requirements	8/7/08	A. Atcherson	N/A		

Reference Information:

Notes for the Sections: Analyze the application data (not OS or application software) for this server/application with respect to the following Recovery Guidelines:
1. Current version always recoverable. You can assume that the current version of files, notes documents and databases will always be recoverable from backups, no matter how long ago the backup was taken.
2. Specify recovery requirements for prior versions. What is your business requirement for recovery of prior version(s) of data? I.e., how long must you be able to retrieve an old version of a file after it has been replaced? You can explain further in the "Notes" sections below.

Storage, Backup & Recovery Criteria:

Operating System:	Unix
Type of files	Flat Files
Hours available for backup?	Daily backup hours: Mon thru Sat, 12:01 AM to 6 AM EST[1] Monthly Archives: Sunday 12:01 AM to 6 AM Sunday EST
Application processes to be stopped before backup and restarted afterwards?	N/A
How should TSM handle open files?	Skip, No special handling required – backups from database to flat files that are recognized and picked up by TSM are handled by RMAN. RMAN is managed by the DBA Team
Steps user must take to initiate backup:	Annual backups are requested via Remedy Ticket by CGI Federal FAS4T Service Delivery Manager
Steps user must take to initiate restore:	Open Remedy Ticket
GB's of data:	150 gig
GB's of data in 12 months:	200 gig
GB's of data in 24 months:	300 gig
DR requirement for offsite copy?	Yes
Encryption: [2]	No

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[1] System should remain available during backups.

[2] Data considered Reclamation Restricted or sensitive should be stored in an encrypted format, preventing disclosure in the event of theft. The encryption method should be machine independent (e.g., encryption keys

Back-up Requirements Form

Backup Pool: CGI Federal Backup Pool

Frequency of Backups: The frequency of backups and offsite retention requirements are as follows:
- **Daily Incremental Backup –** Incremental backups run Monday through Friday evenings. Copies of daily tapes are sent offsite and retained for 14 days.
- **Weekly Full Archives** – Not performed. (weekly backups are addressed leveraging TSM architecture)
- **Monthly Full Archives –** Month end Archives are performed on the first Sunday after the 4th calendar day of each month, to capture prior month close. Month end tapes are retained for 12 months.
- **Annual Archive** –The CGI Federal GSA Service Delivery Manager will be responsible for opening a remedy ticket to request the backup. In order to produce the backup set, a full Annual Archive set, the full server will be backed up. All specified excludes will be ignored thereby creating a full application image backup set of each production server, to facilitate the recovery of data, application and server environments necessary to restore/view annual archive data and run reports against the data as necessary. Attached to the Remedy ticket will be:
  - The current version of the server build books and run books
  - The version of the GSA DR Plan documents current as of the backup
  - Software data keys necessary to perform full restore of equipment, assuming different hardware
  - Table of necessary permissions to provide account team and support team access to servers/application. Since the premise of an Annual Archive restore is an audit, Active Directory will not be included with the backup set. Permissions will be added as needed by the restore team.
  - The current version of the application (Momentum) build books current as of the backup
  - TSM application backup client code on CD, version used to produce backup
  - If necessary, list of all encryption keys for the environment
  - Production of the offsite tape copy for Annual Archive will be produced using the TSM tape to tape feature using TSM Rapid Recovery[3]. The Tape to Tape copy will be processed with low system priority so as to not impair the daily offsite backup schedule. Running in low priority mode, completion of the Tape to Tape copy may occur over the course of two weeks time.
  - The SunGard hardware recovery schedule will need to be maintained for all equipment configurations necessary to support the restore, in the event production hardware configurations change. For example, if a server is migrated from Wintel to UNIX, both configurations must be maintained on the recovery schedule.
  - Year end processing backups are retained for 7 years.

Other:
- None

Archival Storage – Archival storage locations must be at facility that complies with standards developed by the National Archives and Records Administration (NARA).

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not unique to the machine that created the data). When a portion of the data stored on a medium must be encrypted, it is recommended that the entire server backup set be encrypted.

[3] Rapid Recovery creates a virtual full backup (or client archive) from data already stored at the IBM Tivoli Storage Manager server. In execution the Annual Archive data copy is sent to another tape set which creates a full backup tape from existing tapes without actually accessing the server. Besides a full copy of information from a given point in time, the archive tapes also contain all necessary inventory information to perform a restore without interacting with the TSM database. The TSM client also can read the instant archive media directly, which means that in case of a disaster, or in remote areas without sufficient bandwidth to transmit a full restore over a network, the instant archive media can be removed from the TSM server and mounted directly to the client machine. This enables a rapid full restore without any interaction with the TSM server or the network.

Back-up Requirements Form

- A trained, trusted, Reclamation Employee or bonded, trusted couriers must perform transportation of storage media to and from the archival storage location.
- The offsite facility must be sufficiently separated from the hosting facility such that it is not likely to be affected by the same natural or man-made disasters as the hosting facility. The storage location must be environmentally protected to preserve data media, and access controlled.
- The current distance requirement is specified to be at least 25 miles from the production facility.
- Storage media will be erased, cleaned and certified as safe before being reused for short-term storage.
- Long-term storage data, in excess of 90 days, including monthly backups, must be written on media designated secure for long-term storage. Used magnetic media will not be used for long-term storage. Write-once CD-ROM can be used for long-term storage.
- Archival storage and reclamation procedures will be incorporated into system DR Plans and facility COOP documents. A copy of the Facility COOP and application DR Plans will be stored at the archival storage location.

Backup Specifications:

File System	Directories	Business Requirement	Encryption[4] Y/N
Includes:	Include /audit/.../* /opt/.../* /opt/tivoli/* /var/* /etc/oratab/.../* /etc/oralnst.loc /u01/app/oracle/* /b01/backups/* /b01/exports/* /b01/pipes /b01/archives/* /logarch/* /home/* /ccr/* /ccrarchive/* /igt/* /igtarchive/* /ca/* /sc/*	Daily Incremental – 14 day retention	N
Excludes:	Exclude /var/log /var/adm /tmp	Exclude these directories only	
Floating mount point			N
Database files	exclude: /d01 /d02 /d03		N

Notes:
The backup strategy implemented for GSA performs a complete backup of all directories of the CCR server. The entire server is to be backed up with the exclusion list limited to the file systems designated as /d01, /d02, /d03,

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[4] When a portion of the data stored on a medium must be encrypted, it is recommended that the entire server backup set be encrypted.

Back-up Requirements Form

On Monday only the data and new archived redo logs that have changed since Sunday will be backed up. Likewise, on Tuesday only the data and new archived redo logs that changed that day will be backed up. Wednesday follows the same strategy. On Thursday a cumulative backup will be made of all data and archived redo logs added since Saturday. Consequently, to completely recover a database on a Sunday, an administrator would first apply the full backup from Saturday, then the cumulative backup from Thursday, and finally the incremental backups from Friday.

Recovery of Data – Necessary steps will be taken to verify all data on the media can be restored.

- Systems considered non-critical and typically not used over weekends and holidays will be recoverable from the prior working day.
- Recovery procedures will be incorporated into system DR Plans and the associated staffing requirements and recovery objectives will be maintained within the facility COOP documents.
- Recovery procedures will be tested annually.

Comments:
The CGI Federal GSA Service Delivery Manager approves all changes to the TSM schedule after production go-live.
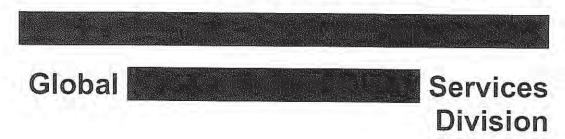
CGI Federal GSA Service Delivery Manager

	Name	Office Telephone	Home/Pager/Cell
Team Leader	████	████	
Alternate Leader	████	████	
Escalation:	████	████	████

DR Coordinator

	Name	Office Telephone	Home/Pager/Cell
Primary	████	████	████
Alternate 1	████	████	████
Alternate 2	████	████	

Business Continuity Plan

Global ▮▮▮▮▮▮▮▮▮▮ Services
Division

NOTICE
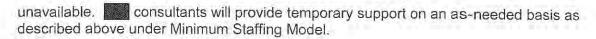
This Reference Manual assumes that Affiliates of ██████████████ will, before implementing any changes in their existing operations or structure,

(1) obtain all local Governmental approvals that are required,

(2) observe all appropriate corporate formalities, including the execution of service agreements, powers of attorney or other documents, the election of new officers and directors, and the adoption of new corporate resolutions,

(3) comply with any obligations they may have under the Standard Research Agreement to Works Councils or other labor organizations, and

(4) comply with any obligations they may have to joint venture partners or other third parties under contracts, licenses or other documents (including obtaining any waivers or consents that may be required under those documents to disclose information or take other contemplated action).

Nothing in this manual is intended to override ██████████████████████ ██████████████ corporate separateness or the corporate separateness of other local entities. Working relationships discussed in this manual do not necessarily represent a reporting connection, but may reflect a functional guidance, stewardship, or service relationship. The terms *corporation, company, affiliate,* ██████████████████, *our, we* and *its,* as used in this manual, sometimes refer not only to ██████████████████████ or to one of its divisions, but collectively to all companies affiliated with ██████████████ or to any one or more of them. The shorter terms are used merely for convenience and simplicity

Scenarios Addressed by this Document

- ☑ Any scenario in which the ▮▮▮ site is fully or partially inaccessible to ▮▮▮▮▮▮ personnel resulting in activation of the ▮▮▮▮▮▮ Business Continuity Plan
- ☑ Scenarios considered in ▮▮▮▮▮▮ Business Continuity Plan (Pandemic Addendum & Appendices) including:
  - D.1 Pandemic Flu
  - D.2 Severe Ice Storm
  - D.3 Terrorist Attack
  - D.4 IT Systems Outage (impact to ▮▮▮ operations may be limited)

Consequence Assessment

The overall consequence of the ▮▮▮ site becoming fully or partially inaccessible to ▮▮▮ ▮▮▮ personnel or ▮▮▮ personnel availability being impacted by a pandemic or other event [see ▮▮▮▮▮ Business Continuity Plan (Pandemic Addendum & Appendices) document] is considered **LOW** because ▮▮▮▮▮ critical work processes can continue without ▮▮▮ personnel.

While critical work processes can continue without ▮▮▮▮▮ personnel, those work processes are more efficient when ▮▮▮ personnel are available. For this reason the ▮▮▮ ▮▮▮▮▮ BCP is maintained to ensure resources will be available on a best efforts basis.

Overview

In the event the ▮▮▮ site becomes fully or partially inaccessible to ▮▮▮▮▮▮ personnel or ▮▮▮ personnel availability is impacted by a pandemic or other event, available personnel and resources outside ▮▮▮ will continue to perform high priority ▮▮▮ Systems Operations and ▮▮▮▮▮ roles via off-site access to the ▮▮ network.

When the ▮▮▮ Business Continuity Plan is activated the contact chain used will be as follows:

1. ▮▮▮ Recovery Team via the ▮▮▮ Manager informs ▮▮▮ Division Manager of decision to activate the ▮▮▮ Business Continuity Plan, typically due to a ▮▮▮ site access issue or critical personnel availability issue of greater than two (2) consecutive work days.
2. ▮▮▮ Division Manager informs ▮▮▮▮▮▮▮ and ▮▮▮ System Operations Section Heads (e.g., ▮▮▮▮ Section Head) of the decision to implement the ▮▮▮ Business Continuity Plan.
3. ▮▮▮ Section Heads contact all critical operations personnel to inform them of the decision to implement the ▮▮▮ Business Continuity Plan.

Majority of ▮▮▮ personnel involved in critical operations have ▮▮▮▮▮▮ laptops which can be brought home as required to address BCP needs. In the event ▮▮▮▮▮ email or the ▮▮▮ Outlook servers are not functional, ▮▮▮ will use in order any and all of the following communications channels based on availability.

Communication Method	Channel
Voice	Home Phone Cell Phone ■ 24x7 Audio Conference Bridge(s)*
Email	■ Email Personal Email
Collaboration	■ VPN to Office Communicator VPN to WebEx

*renewal required (semi-annually)

Consistent with the ▉▉▉▉ BCP, ▉▉▉ Section Heads are to cascade information to staff and staff should maintain contact with their Section Heads to provide health/work status updates and to receive work direction. Additionally, ▉▉▉ Section Heads will contact personnel who have not checked-in within 48 hours of site inaccessibility. This proactive, bottom-up approach is a further safeguard to ensure critical operations continue in the event the ▉▉▉ site is inaccessible.

Regardless of ▉▉▉ Business Continuity Plan activation trigger, the following staffing models will be utilized to ensure that ▉▉▉ is functional and that critical ▉▉▉▉▉▉▉▉▉▉ ▉▉▉▉▉ in response to business demand. If after 5 days, the ▉▉▉▉▉ network is still not accessible via VPN, when given direction by ▉▉▉ management, available ▉▉▉ personnel will travel to the nearest or most opportune ▉▉▉▉ site(s) with network connectivity available to ensure ▉▉▉ continues to function.

Minimum Staffing Model Assumptions
The ▉▉▉ minimum staffing model is based on the following assumptions regarding services required during the activation of the BCP:
- ☑ Minimum staffing will enable the continued operation of ▉▉▉ systems and ▉▉▉ which if not done would significantly disrupt ▉▉▉▉▉▉▉▉▉▉▉▉▉ operations.
- ☑ Transaction oriented processing of ERP sales feeds will continue.
- ☑ Break/fix will be provided for ▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉ ▉▉▉▉▉▉▉▉▉▉ Modules.
- ☑ ▉▉▉▉▉▉▉▉▉ updates are low priority and would be continued based on availability of personnel and tools
- ☑ ▉▉▉▉▉▉▉▉ modifications are low priority with exception of required break/fix issues, and would be continued based on availability of personnel and tools.

Minimum Staffing Model
For the purposes of this Business Continuity Plan the "▉▉▉ Minimum Staffing Model" is defined as a dynamically variable, minimum membership subset of ▉▉▉ Personnel that still contains the skill mix required to effectively execute the BCP.

The System Operations minimum staffing model is one person (primary, secondary or tertiary) for each ▉▉▉ Module. Upon Business Continuity Plan activation and on a daily basis following activation the availability of critical resources will be assessed to determine who will function as primary, secondary and tertiary support for each Module. This determination is made by the ▉▉▉ System Operations Section Head, designated stand-in or acting System Operations custodian.

In the event ████-based System Operations personnel are not available as in a pandemic scenario, the ███████████████ Applications Lead will act as the System Operations custodian. ███ (vendor) ████ support personnel in ████ will stand-in to provide continued system operations. ████████████████████████████████████ support personnel already have █████████████ laptops and access to Development and Acceptance environments to provide troubleshooting and consulting services. The acting System Operations custodian will temporarily elevate the access level of ███ support personnel to be equivalent to that of ████████ analysts. The acting System Operations custodian will be the liaison between ███ and other ████ organizations to keep █████ operational.

The ██████████████ minimum staffing model is four (4) ██████████ to cover critical ████ demand for all business units and one coordinator, typically Section Head or designee. Critical ██████ needs will follow ████████████ BCP critical operations definition, "work, if not done would significantly disrupt ██████████████████████ operations". It is anticipated critical ██████ demand will be significantly less than routine demand.

If resources are available beyond minimum staffing model, additional business needs will be fulfilled. To better ensure BCP preparedness in absence of advanced warnings, a minimum of two (2) ████████ from ██████████ and the Section Head will routinely bring their laptop homes. The assignment of the 2 ████████ will be on a rotating annual basis. Upon Business Continuity Plan activation and on a daily basis following activation the business unit coverage will be assessed to determine who supports which business units. This determination is made by the ██████████████ Section Head or designee.

In the event all ████-based ████████████████ personnel are not available, the remotely located ███████████, including contractors will fulfill the demand (4) and identify potential need to increase authoring access to balance of ████ personnel located internationally ██████.

In the event additional resources beyond ████████████████████████ personnel are required, a communication plan will be developed to solicit support from the ███████████ ███████████ with primary focus on key regional contacts. Key Contacts within ████████████████ outside █████ are not located in ██.

Pandemic - Preparation Phase

During a Pandemic Preparation Phase █████ will take the following actions:
- ☑ All ██████ Personnel will be asked to review this BCP document and provide updates of contact and other information to the █████ Section Heads
- ☑ █████ Section Heads will update this document if required
- ☑ An updated copy of this document will be distributed to all █████ Personnel and third parties with a BCP role
- ☑ █████ Section Heads will meet to discuss additional actions that may be warranted under the circumstances and such actions will be assigned to █████ personnel and others as required.
- ☑ All █████ Personnel will review Email Emergency Preparedness steps as described in the then current █████ documentation. The following link or a search of █████ Intranet may be used:

██

████████████

Pandemic - Hot Standby Phase

During a Pandemic Hot Standby Phase ▓▓ will take the following actions:

- ☑ All ▓▓ Personnel, impacted third parties and Business Unit contacts will be informed that Hot Standby has been declared.
- ☑ ▓▓ Section Heads will review the BCP with ▓▓ personnel, and impacted third parties.
- ☑ ▓▓ Section Heads will meet to discuss additional actions that may be warranted beyond the ▓▓ ▓▓ BCP under the circumstances and such actions will be assigned to ▓▓ personnel and others as required.
  - Additional actions could include (but not limited to) all personnel taking laptops home, confirming conference call numbers, contact BU regarding their needs if in same impacted zone ▓▓▓▓▓▓▓▓▓▓, identification of potential off-site locations

Pandemic - Critical Phase

During a Pandemic Critical Phase ▓▓ will take the following actions:

- ☑ All ▓▓ Personnel, impacted third parties and Business Unit contacts will be informed that Critical Phase has been declared.
- ☑ ▓▓ Section Heads will review the BCP with ▓▓ personnel and impacted third parties, including work at home needs, travel restrictions and other direction provided via BCP communications.
- ☑ ▓▓ Section Heads will meet to discuss additional actions that may be warranted beyond the ▓▓ ▓▓ BCP under the circumstances and such actions will be assigned to ▓▓ personnel and others as required.
  - Additional actions could include (but not limited to) personnel working from home, methods to increase system access to rest of ▓▓, potential need to increase system access for core authors

Internal Interdependencies

▓▓ System Operations is dependent only on ▓▓. Reliance on ▓▓ is two-fold:

(1) Infrastructure: ▓▓ server operations in ▓▓ (primary) and ▓▓ (DR site). The ▓▓ infrastructure is part of the ▓▓ Dallas Data Center Disaster Recovery Plan. In the event of a disaster at the ▓▓ Data Center, ▓▓ will restore the ▓▓ infrastructure at the ▓▓ Data Center. The ▓▓ infrastructure is duplicated via the "▓▓ Acceptance Environment" for this specific purpose. ▓▓ participates in periodic ▓▓-led Disaster Recovery Tests to ensure and confirm readiness.

(2) Networks: VPN operations and Audio conference.

▓▓ is dependent upon ▓▓ System Operations, server availability and ▓▓. In event all core authors and ▓▓ are unavailable, ▓▓ will be dependent on other ▓▓ resources used in ▓▓.

External Interdependencies

External interdependencies are:

- ☑ phone line availability
- ☑ personal internet email availability (i.e., Internet Service Provider home internet access)

In addition to the above, ▓▓ System Operations will be dependent on ▓▓ (vendor) consultants in the event both Primary and Secondary Systems Operations personnel are

unavailable. ▉ consultants will provide temporary support on an as-needed basis as described above under Minimum Staffing Model.

Critical Software Applications
- ▉
- VPN for off ▉ site access to the ▉ network

Business Continuity Readiness
This ▉ Business Continuity Plan makes no assumption concerning advance warning or preparation for activation. All participants must be fully prepared for activation at any time with no advance notice or special preparation.

In Pandemic terms, ▉ is in a perpetual state of Hot Standby readiness. In the event advance notice is available, the time will be used to relocate critical or additional resources to secure locations that provide ▉ network connectivity such as personal residences, hotel rooms or an alternate ▉ site.

Business Continuity Plan Verification
An annual Desktop Verification Exercise will be conducted to confirm the effectiveness of this ▉ Business Continuity Plan. The Desktop Verification will confirm readiness including:

- ▉ personnel evergreen readiness
    + BCP current copy kept off-site, including ▉ contact list
    + Laptop taken off-site every day
    + VPN used off-site at least once every 90 days
    + LAN share backup drive mapping in place and access working

- Support system readiness
    + Back up data file readiness: ▉ LAN Share Backup is current
    + 24x7 telecon number is working

- BCP Walkthrough to confirm assumptions and preparation steps remain accurate and adequate

Results of the annual Desktop Verification Exercise will be reviewed with ▉ management in a timely manner. Corrective actions required, if any are identified, will be documented in the management communication.

An off-site BCP drill will be conducted every three years to confirm the effectiveness of the ▉ Business Continuity Plan. This drill will include ▉ and the third party software provider. The drill will confirm continuity plan readiness including the following components:

- ▉ personnel evergreen readiness
    + BCP current copy kept off-site, including ▉ contact list
    + Laptop taken off-site every day
    + VPN used off-site at least once every 90 days
    + LAN share backup drive mapping in place and access working

- Support system readiness
    + Back up data file readiness: ▉ LAN Share Backup is current
    + 24x7 telecon number is working

- BCP Walkthrough to confirm assumptions and preparation steps remain accurate and adequate

The first off-site drill was conducted in 2011 with subsequent drills to occur every third year.

Data Files

Data files which will be required in the event access to the ▮▮▮ site is restricted for more than 30 days exist within the ▮▮▮ LAN folders listed below. ▮▮▮ and ▮▮▮ have developed a process whereby these folders are replicated periodically on servers at the ▮▮▮ site.

In ▮▮▮

Group	LAN Folders
System Operations	▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮
	▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮
	▮▮▮▮▮▮▮▮▮▮
	▮▮▮▮▮▮▮▮▮▮▮▮
▮▮▮	▮▮▮▮▮▮▮▮▮▮▮▮▮
	▮▮▮▮▮▮▮▮▮▮▮
▮▮	▮▮▮▮▮▮▮▮▮▮

In Fairfax

Group	LAN Folders
▮▮▮	▮▮▮▮▮▮▮▮▮▮▮▮
	▮▮▮▮▮▮▮▮▮▮
	▮▮▮▮▮▮▮▮▮▮
	▮▮▮▮▮▮▮▮▮▮
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	▮▮▮▮▮▮▮▮▮▮▮
▮▮	▮▮▮▮▮▮▮▮

If access to the ▮▮▮ file share is unavailable, the ▮▮▮ file share folders above can be mapped directly to access the same information. ▮▮▮ users should map the ▮▮▮ shared folders in advance. The current mapping process is as follows using the Windows Explorer 'Map Network Drive' window:

1. Drop down the Drive: prompt to select the drive letter to be used
2. Type the path in the Folder: prompt box. For example,
   ▮▮▮▮▮▮▮▮▮

Email Emergency Preparedness

Current ▮▮▮ guidelines on email emergency preparedness for ▮▮▮ Notebook users do not require any action during pre-disaster preparations.

▮▮▮▮▮

Business Continuity Documents Checklist

▆▆▆▆ designated resources must keep current copies of the following documents readily available off-site at all times in the event the ▆▆▆ BCP is activated.

1. ▆▆▆▆ Business Continuity Plan (this document).
2. ▆▆▆▆ Extract of ▆▆▆ Emergency Phone Chain List.
3. EMAIL & MESSAGING EMERGENCY PREPAREDNESS FOR ▆▆▆ USERS (▆▆ document): ▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆

▆▆▆▆ BCP Activation Action Sequence

Assumption
1. ▆▆▆ site activates the ▆▆▆ Business Continuity Plan.
2. ▆▆▆▆ Section Heads establish contact with all personnel.
3. Personnel confirm that ▆▆▆ is fully operational.
4. Daily status telecons begin at predetermined times:

Subgroup	Telecon Times (all times are US Eastern)
▆▆▆▆▆▆▆▆▆▆▆▆▆▆	9 AM (and 3 PM if required)
▆▆▆▆▆▆▆▆	10 AM (and 4 PM if required)
▆▆▆▆	11 AM
▆▆▆▆	12 Noon (and 5 PM if required)
▆▆▆▆▆	1 PM
▆▆	2 PM

5. ▆▆▆ users are informed of ▆▆▆ site issue and instructed appropriately, if needed.
6. Appropriate communications to Business Unit representatives informing them of the BCP activation and degree of continued authoring support.
7. Determination of business critical ▆▆▆ needs will follow ▆▆▆ ▆▆▆ BCP critical operations definition, A critical operation is defined as "work, if not done would significantly disrupt ▆▆▆▆▆▆▆▆▆▆▆▆ operations". This equates to the following criteria for ▆▆▆▆▆▆;
   - Update or creation of ▆▆▆ is directly preventing commerce of ▆▆
   - Modification of existing ▆▆▆ is required due to significant increase in ▆▆▆▆▆▆▆▆
   - Requests which do not meet threshold for criticality will be logged and actioned as time permits while Business Continuity Plan is activated ▆▆▆▆▆▆▆▆▆▆▆
8. Restore email access if required.

████ **Resources:** see ████ Extract of ████ Emergency Phone Chain List for contact information

████Role	Primary	Secondary	Criticality Notes
███████████			
██████	████████████	██████████	(1)
██████	███████████████		(1)
██████	███████████████		(1)
██████	████████████████		(1)
██████	████████████████		(1)
██████	████████████████		(2)
████			(3)
█████████████			
██████	████████	█████████	(1)
████	████████	█████████	(1)
████████████	████████	█████████	(1)
██████	████████	█████████	(1)
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████	████████	█████████	(2)
██████████████	████████	█████████	(2)
████████	████████	█████████	(3)

* Assigned on 12 month rotating basis

Criticality Notes
(1) Required after 5 days   (2) May be required after 30 days   (3) Desired after 180 days (NOT required during BCP event)
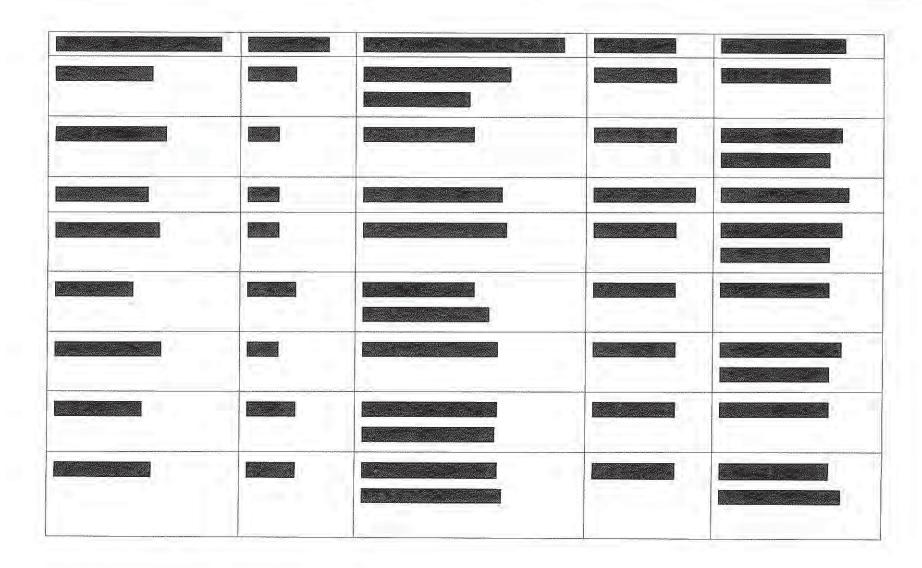
Other Notes

██

███
███
███
███

██████████████

▮▮▮ Systems Operations ▮▮▮ Contact Information
Current as of: January, 2012　　Next Update: January 2013

Last Name, First Name, MI	Organization	Non-▮▮▮ Email Address	Office Phone	Emergency Contact
▮▮▮	▮▮▮	▮▮▮ ▮▮▮	▮▮▮	▮▮▮ ▮▮▮
▮▮▮	▮▮	▮▮▮	▮▮▮	▮▮▮ ▮▮▮
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Other Important Contact Information

GROUP	████████ Email Address	Office Phone	Emergency Contact
████████	████████████	████████	████████████
████████████████	████████ ████		
████████████	████████████ ████████████ ████████		████████████ ████████████ ████████
████████████	████████████		
████████	████████ ████	████ ████████	████████ ████████ ████████████
████████	████████████		████ ████████
████████	████████████		████ ████████

████████

IT Disaster Recovery Plan

Version 5.2

REVISION HISTORY

Version	Date	Author	Description
Version 1.0	2009-06-10	David DeCarlo / Dave Johnson / Hisham Cheikali	Initial Version
Version 2.0	2009-06-26	David DeCarlo / Dave Johnson / Hisham Cheikali	Completed based on meeting with
Version 3.0	2009-06-30	Dave Johnson	Incorporated feedback from
Version 4.0	2009-07-07	Dave Johnson	Verbiage and date revision
Version 4.1	2010-01-31	Mike Wilson	Updating of contacts and addition of eGrants related verbiage
Version 5.1	2010-04-26	Mike Wilson	Revised Recovery Priorities chart and 5.0 merge.
Version 5.2	2011-01-30	Dave DeCarlo	Updates to reflect changes to the environment
Version5.3	2012-08	Dave DeCarlo	Updates for 2012

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1 OVERVIEW

1.1 GOALS

This document details the resources, actions, tasks and locations of data required to manage the business recovery process of the ███████ IT systems in the event of a business interruption due to a catastrophe. This includes the organizational structure, roles, responsibilities, and key recovery activities of the Disaster Recovery Plan (DRP).

The goals of this DRP are to:

Minimize the impact and duration of a serious disruption;

Commence timely response to a disaster;

Facilitate effective coordination of recovery tasks;

Provide procedures and a listing of resources needed to recover critical business functions;

Identify those vendors or business partners requiring notification of a disaster due to their necessary involvement with recovery;

Ensure that ███████ IT systems are up within the specified Recovery Time Objective (RTO).

Document the storage, safeguarding and retrieval procedures for vital records; and

Identify areas of the business where a communications strategy will be needed to keep stakeholders and customers informed of recovery progress and to safeguard the reputation and legal liability of our organization.

1.2 SCOPE

The DRP Plans highlight the CGI and VENYU provided services in support of the ████ █████████████████ / █████████████ (████ / ████ solution at:

The VENYU Data Center located on ████████████████████████████; that houses the ███████ Program JIRA, HDS Systems, The Data Warehouse Storage Area Network, Network Operations Center,(NOC);

Present Failover site located at ███████████████████████████;

The following are out of scope for this DRP:

Routine Maintenance - Scheduled downtime or cutover periods are not encompassed by this plan;
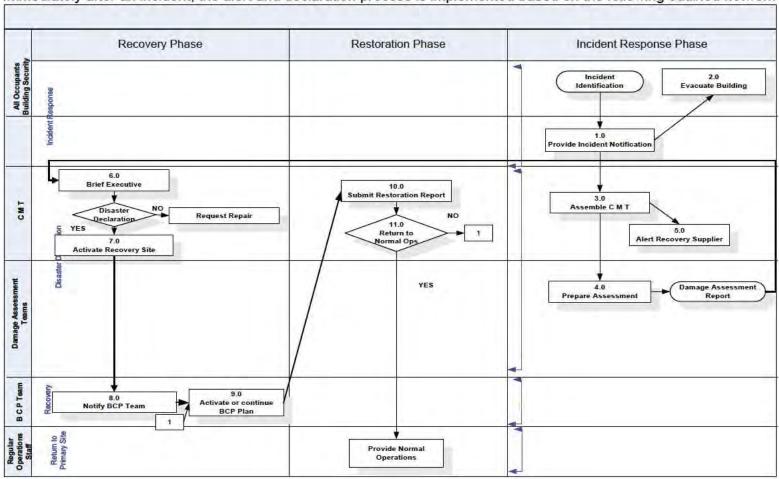
Business Resumption – The return to normal service would involve a separate planning activity between CGI and ▮▮▮ / ▮▮▮ at the time of the disaster;

Business Resumption – The staff required to deliver the ▮▮▮▮▮ IT systems failover services;

Business Resumption – Activation of the Continuity Of Operations Plan (COOP) / Continuity Of Governance Plan (COG); and

1.3 PLANNING ASSUMPTIONS

The DRP has been developed for implementation in the event of a disaster that renders the hardware, software and network components for the systems hosted at VENYU Production Data Center located on ▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮ inoperable. The systems technical administrative support is conducted remotely from the ▮▮▮▮▮▮▮ ▮▮▮▮▮▮▮▮▮▮▮ by CGI and locally by VENYU staff. If the production environment in the current VENYU Data Center hosting ▮▮▮▮▮ IT systems is deemed inoperable for longer than the permitted recovery time objective and a disaster is not declared, the event will then be considered a Service Desk incident or outage but may still be subject to the procedures outlined in the plan.

The planning assumptions adopted in creation of this plan are as follows:

Execution of the IT Disaster Recovery Plan (ITDRP) will start within the first 48 hours of any incident occurring that can potentially impair the normal operations of the ▮▮▮▮▮ IT systems and technical services;

Some staff members may be unavailable at the time of the disaster, but during the recovery, key personnel and various disaster recovery teams will be available to assist in recovery;

▮▮▮ / ▮▮▮ will have their own Business Continuity Management / COOP / COG framework (of which this plan is part of) and will work with subcontractors and staff to mitigate the effects of a disaster under their guardianship;

Taken into consideration that the ▮▮▮▮▮▮ Program is deemed a non-essential service to the state of ▮▮▮▮▮▮ there will be a temporary suspension of Service Level Agreements in the event a state declares a crisis; system recovery time is identified by the CMT;

If the VENYU Data Center located on ▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮ housing the O CD/▮▮▮ IT Services Infrastructure and Systems is rendered unusable, those systems will failover to ▮▮▮▮▮▮▮

The ▮▮▮▮▮▮ IT systems will be hosted from the specified DR site until the primary data Center is restored. Once the facility is restored, the ▮▮▮▮▮▮ IT Disaster Recovery Plan is designed to recover from this scenario or any incident less severe than this;

No additional software licenses will be required;
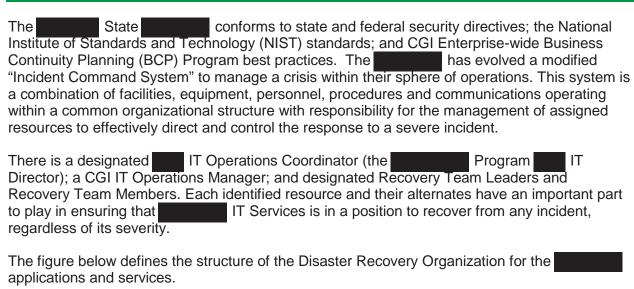
External organizations such as clients, suppliers and other stakeholders will be available and accessible during the business recovery period;

At least one form of telephone communication is available (e.g. cellular, land-line or pager);

Off-site storage locations for critical back-up files and information are intact and accessible; and

National disasters and Acts of War (or coup d'état) are beyond the scope of this plan.

2   INCIDENT COMMAND FLOW

Immediately after an incident, the alert and declaration process is implemented based on the following outlined network diagram:

3   ROLES AND RESPONSIBILTIES

The ███████ State ████████ conforms to state and federal security directives; the National Institute of Standards and Technology (NIST) standards; and CGI Enterprise-wide Business Continuity Planning (BCP) Program best practices. The ████████ has evolved a modified "Incident Command System" to manage a crisis within their sphere of operations. This system is a combination of facilities, equipment, personnel, procedures and communications operating within a common organizational structure with responsibility for the management of assigned resources to effectively direct and control the response to a severe incident.

There is a designated ███ IT Operations Coordinator (the ████████ Program ███ IT Director); a CGI IT Operations Manager; and designated Recovery Team Leaders and Recovery Team Members. Each identified resource and their alternates have an important part to play in ensuring that ████████ IT Services is in a position to recover from any incident, regardless of its severity.

The figure below defines the structure of the Disaster Recovery Organization for the ████████ applications and services.

Figure 3-1 – [REDACTED] **Disaster Recovery Organization**

Every staff member of the [REDACTED] recovery organization is expected to:

Carry out their assigned task in a professional manner, without hesitation or excuse in an emergency or crisis situation and with due regard for their safety and security; and

Be thoroughly familiar with the contents of this document in general and, in particular, with their respective roles, responsibilities and plans.

3.1 ██ IT OPERATIONS COORDINATOR

The ██ ██ IT Operations Coordinator provides feedback on damage assessments to the ██ IT Operations Crisis Management Team (CMT), and will provide the CMT and Program stakeholders (Clients, Staff, State Members, etc.) with timely situation reports on the recovery progress. The ██ IT Operations Coordinator has the authority to invoke and activate elements of the DRP without having to have a disaster officially declared. Once invoked, the ██ IT Operations Coordinator oversees and coordinates the recovery effort. The IT Operations Coordinator assumes the responsibility of provisioning all IT Equipment necessary to deliver business services.

The role of the ██ ██ IT Operations Coordinator is assigned to ████████, ██ Director of IT. Should the ██ IT Operations Coordinator be unavailable, the alternate would be ██████ ██████.

3.2 ██████ PROGRAM CRISIS MANAGEMENT TEAM

The ██ IT Operations Coordinator commands the local Command Center. The ██ IT Operations Manager employs a four phased process to manage the incident:

    Assess

    React

    Manage

    Recover

The IT CGI Operations Manager reports to the ██ IT Operations Coordinator the status of system application recovery, assessment of the impact and estimated time for overall system recovery. Should the CGI IT Operations Manager be unavailable, the designated alternate would be the Infrastructure Recovery Team Lead

3.3 ██████ PROGRAM CRISIS MANAGEMENT TEAM

This group is comprised of the Executive Team Members who are responsible for directing the development and execution of the business continuity plan, as well as responsible for declaring a disaster, providing direction and communications during the recovery process. Within ██ ██████████ is the designated CMT Chair and ██████████ is his alternate. Should the IT Director of the ██ be unavailable, an alternate member of the ██ by the name of ██████ has been designated to take on the role of ██ IT Operations Coordinator. The CMT is comprised of the following:

Name	Role	Alternate	Contact Information	EMAIL address

Name	Role	Alternate	Contact Information	EMAIL address
███████	Crisis Management Team Chair	████████	███████	████████████
███████	BCP/COOP Coordinator	TBD		███████████
███████	██ IT Operations Coordinator	████████	███████	████████████
██████	Communications Function	█████	██████	██████████ ███████████
███████	Administrative Coordinator	███████	██████	██████████ ██████████

3.4   EXTENDED CRISIS MANAGEMENT TEAM

The extended crisis management team is comprised of individuals from the recovery teams that are requested to attend the CMT gatherings as subject matter experts to provide recovery advice.

3.5   RECOVERY TEAMS

Recovery Teams report to the CGI IT Operations Manager (███████████). Team members come from the various work groups and are subject matter experts within their respective areas of responsibility. These pre-selected individuals are trained to perform their individual responsibilities in case of a crisis and are familiar with the contents of this DRP. Over and above the execution of their DR plan, the recovery teams are charged with the responsibility of creating, periodically testing and updating (maintenance) of their respective plans. In times of crisis, the recovery teams report to and receive direction from the CGI IT Operations Manager.

All teams are lead by a Disaster Recovery Team Lead with a designated alternate. The primary responsibility of the Team Leader is to provide leadership of the disaster recovery team and coordinate support for the recovery effort. Responsibilities include:

> Contact their recovery team(s) members;
>
> Communicate the needs and priorities;
>
> Follow up on the recovery activities and manage the situation(s);
>
> Serve the CMT as an important decision-making resource; and
>
> Communicate with the CGI IT Operations Manager the status of recovery efforts.

> Roles and responsibilities are detailed in
> **Appendix A – Recovery Team Lead Responsibilities**.

4 DISASTER MANAGEMENT

4.1 THE FIRST 48 HOURS

The ██ IT Operations Coordinator is responsible for initiating the following actions that will ensure that ████████ can recover ████████ IT systems and services under their responsibility.

Initiate the Alert Notification Process

> Identify and define type, scope, impact and location of incident (potential or real).

> Alert Disaster Recovery Team Leaders and Teams together and prepare to further assess situation.

Initiate the Security Process

> While the safety of all staff is paramount, assure that all state assets and information is safeguarded.

Initiate the Assessment Process

> Define the problem; focusing on impact / potential impact if situation is prolonged.

> Assess the impact of situation, determining the possible length of outage.

Initiate the Recommendation Process

> Confer with and provide to senior management a clear picture of the situation, as well as recommendations and options for resolution.

Execute the Management Decision

> Based upon the recovery strategy of the Crisis Management Team:

> > o Activate the DRP (all plans or parts thereof);
> >
> > o Stand down; or
> >
> > o Stand by – Continue to monitor situation and reassess options to determine if necessary to activate or can stand down.

Review and Use are detailed in

Appendix B – ████████ IT Operations Coordinator Response Checklist

---

4.2 NOTIFICATION AND ESCALATION

The contacts listed in this plan are IT and State ████████ personnel or other third party personnel who play a critical role in IT systems recovery operations. This list is **_confidential and has restricted distribution_**. It is intended to be used in the event of a disaster to

implement the recovery plan. Notification must be carried out using an escalation process, which means contacting the first person on the list first. If this person does not answer or is not available, the second person on the list is called. It is of the utmost importance to keep this list up-to-date. Any name change to this list must be communicated immediately to the Recovery Team Leader.

> Prior to initiating contact, review
> **Appendix D – Notification Instructions**.

A triggering incident, typically a combination of mundane incidents, can combine to cause a disruption of services. This incident or incidents may be discovered or reported by any source and will be escalated internally to ▮▮▮▮ management. Depending on the initial assessment by the manager of that affected service, (determining cause, extent of the damage, and a time estimate to restore the service); it will be quickly escalated through the ▮▮▮▮ Program management chain to the ▮▮ IT Operations Coordinator (▮▮ IT Director of ▮▮▮▮ IT Services, ▮▮▮▮

▮▮ IT Operations Coordinator will be contacted at the tactical level by the CGI IT Operations Manager; The CGI IT Operations Manager at the tactical level will be contacted by the IT Recovery Team Leads; and the CMT will be contacted at the executive/strategic level by the ▮▮ IT Operations Coordinator.

> Key contact information is found in
> **Appendix C – Key Points of Contact**

The CGI IT Operations Manager (▮▮▮▮) assumes local control of the IT crisis, and will direct recovery efforts under the authority of the ▮▮ IT Operations Coordinator (▮▮▮▮ the CGI IT Operations Manager will order the necessary disaster recovery teams to assemble at the ▮▮▮▮ Facility or at another facility if the ▮▮▮▮ Facility is unusable.

> Review **Appendix D – Notification Instructions**
> Complete **APPENDIX E Notification Memorandum** prior to initiating any calls.

Using the team member contact list; the team leader, alternate or assigned individual will convey the following information when contacting the team personnel.

  Brief description of the problem;

  Location of the Command Center;

  Phone number of the Command Center;

  Immediate actions to be taken;

  Whether or not the facility can be entered;

  Location and time the team will meet;

Remind all team members to carry photo identification with them at all times and be prepared to show it to security or local authorities; and

Instruct everyone notified not to make any statements to the media.

During notifications of an alert or declared disaster, this procedure will be used to alert all personnel.

4.3   DAMAGE ASSESSMENT

Damage assessment is the process of assessing damage, following a disaster, to computer hardware, vital records, office facilities, etc. and determining what can be salvaged or restored and what must be replaced.

Recovery Teams will be tasked by the CGI IT Operations Manager to take part in assessing the damage and report back the findings to the local Command Center. The purpose of this activity is to give the ███ IT Operations Coordinator and the State CMT the information that is needed to determine which measures must be taken.

Damage reporting provides the valuable information for an emergency response and assists in the mobilization of resources required to assist in the response and recovery phase of an emergency. It is incumbent upon the damage assessment teams to provide this factual information, in a timely manner that will allow the CMT to consider options and render appropriate direction for recovery efforts.

Based on the results of the damage assessment (survey), a report will be prepared for the CMT by conducting a systematic analysis (based upon actual observation and inspection) of the nature and extent of the damage and making proposals for remedying the damage.

An overview of the damage at the VENYU Data Center;

An assessment of the time required to clean, repair or replace the damaged equipment (restoration time); and

Any supporting material documenting or depicting the extent of the disaster, including photographs or film.

> Damage Assessment forms and the State Situation Report are found in
> **APPENDIX F – DAMAGE and SITUATION REPORTS TEMPLATE**

4.4   RECOMMENDATION PROCESS

Problem assessment is an iterative and evaluative process of decision making that will determine the nature of the issue to be addressed and a severity assessment will be made at the outset of a crisis. Factors to be considered include the size of the problem, its potential for escalation, and the possible impact of the situation.

The following criteria for assisting in determining the correct recommendation are as described in Table 3-1. One compares the impact of the event against the table to determine the appropriate level of damage.

Table 3-1 - Problem Assessment Criteria

Level 1	Level 2	Level 3	Level 4
Emergency incident that s resolved with negligible impact to business	Minor business interruptions • No casualties • Minimal damage • Limited impact to clients • No community impact • Fact that there is/was a problem limited to local media coverage only	Moderate business interruptions • Several injuries or death • Moderate damage • Some impact to clients • Moderate community impact • Fact that there is/was a problem. known by National media	Major business interruptions • Major impact in all areas

Based on damage assessments and personal observations, ▮▮▮ IT Operations Coordinator can report findings and make recommendations back to the CMT. The level of impact will drive both local and state response.

The CMT through the ▮▮▮ IT Operations Coordinator will confer with their affected clients and through approved communiqués present the recommendations of how the Program ▮▮▮▮ intends to proceed with the recovery and provide them with recovery activity updates until the situation is stabilized.

5   RECOVERY MANAGEMENT

5.1   RECOVERY PLAN FORMAT

This plan is structured in a modular format to provide general recovery guidelines and checklists for all staff involved in the recovery effort and individual Recovery Team Plans designed by each respective recovery team to recover their area of responsibility.

Recovery plans contain the following pertinent information:

Team Responsibilities. This section identifies scope of the recovery plans and the recovery teams assigned in the event of a disaster. The team leader is responsible to identify changes in assigned personnel and make changes to their section as required.

Disaster Recovery Team Alert List. This section provides contact information for all personnel assigned to the team.

Dependencies. This section describes the dependencies on other services (and teams) that must be in place in order to assure successful recovery.

Recovery Procedures to be Followed. This section identifies the strategies for recovery of critical functions. This section also details the sequence and steps that must be initiated and completed, as well as where the reference documents are located, in order to accomplish their recovery.

Notification. This section ensures that the ▮▮▮ IT Operations Coordinator (▮▮▮▮▮▮ Program ▮▮▮ IT Director, ▮▮▮▮▮▮▮▮ is informed of the conclusion of the recovery work and that the Coordinator is able to inform the ▮▮▮▮▮▮ Program CMT and Clients that they are now able to use their systems in recovery mode.

Key Vendors. This section identifies the contact information for critical vendors. The team leader will review this list to determine that the list is complete and accurate.

5.2   RECOVERY COMPONENTS

Once the Recovery Team leader receives a notice to initiate a call out to his or her recovery team, the stopwatch starts for the first 48 hour window of recovery activities. Team leaders will ensure that each team member has the most up to date copy of their respective recovery plan.

Team Leaders will initiate their Recovery Plan distribution procedure. This procedure is part of the overall recovery plan and is one of the very first recovery activities. Individual plans are found in the Appendices. These are to be considered the "master plans" and may be duplicated for distribution to Recovery Team members. As plans are reviewed and/or tested, any resulting amendments will be promulgated and the Appendices updated with the most current version.

APPENDIX A – RECOVERY TEAM LEAD RESPONSIBILITIES

When notified by the ■■■■ IT Operations Coordinator that an incident has occurred and that damage assessment is required, or the Disaster Recovery Plan (DRP) has been activated, the primary responsibilities of the team will be to use their resources to support the ■■■■■■ ITapplications and services recovery effort and to activate recovery procedures.

TEAM LEADER RESPONSIBILITIES / CHECKLIST

The Primary responsibility of the Team Leader is to provide *leadership* of the disaster recovery team and coordinate support for the recovery effort. Responsibilities include:

Contact their recovery teams members;

Assess the impact to their services provided and the priorities;

Communicate the needs and priorities;

Follow up on the recovery activities and manage the situations; and

Provide an important decision-making resource.

Recovery Team Leaders are to read the entire section before performing any assignments and check-off actions in the following list as they are performed.

Situation Occurred / Potential:	
Notification Process:	
	Note, scope, impact and location of incident (potential or real)
	Fill in Appendix B, review Notification and Escalation (section 3.2), initiate Recovery Team call tree, and record results on plan checklist
	Go directly to assembly location
	Notify the CGI IT Operations Manager and wait for further instructions
	Continue to escalate the notifications and make additional contacts, as required
Security and Evacuation, if required:	
	Follow standard building evacuation procedures
	Go directly to assembly location, and ensure that sufficient copies of recovery plan is

	Situation Occurred / Potential:	
	available	
	Notify management and wait for further instructions	
	Conduct a head count to account for all staff and provide appropriate direction	
	Assessment and Recommendation Process:	
	Participate in Resumption meetings with the ▮▮▮ IT Operations Coordinator	
	Assess the impact of situation in area of responsibility	
	Determine the possible length of outage	
	Provide the ▮▮▮ IT Operations Coordinator with options and recommendations for resolution, prioritization of effort, etc.	
	Recovery Process:	
	When ordered, distribute and execute plans or parts there of	
	Direct the Disaster Recovery efforts of your team	
	Coordinate with the Command Center regarding all administrative issues	
	Management Decision:	
	Invoke plans or parts there of – proceed to activation	
	Stand down	
	Stand by – Continue to monitor situation and reassess options to determine if necessary to activate or can stand down	

TEAM LEADER RECOVERY STEPS

The following recovery actions are to be used as a guide. During a disaster, circumstances may dictate that some or all of the steps documented may have to be altered. The team leader is to use his/her judgment while managing the recovery operation.

Task List:	
	Review tasks to be performed and assign personnel
	When ordered to do so, designated personnel will contact vendors and advise them about the situation and the recovery requirements. Specific vendor information is located at the end of each recovery plan.
	Distribute copies of any forms that will be needed during the recovery operation.
	Personnel may be assigned to provide recovery support needed by other teams, as needed
	Identify the category in which personnel will be alerted. Consider: ➢ Personnel that may be needed to give aid to other teams; ➢ Personnel that will be needed at the work area to resume normal business functions; and ➢ Personnel who will stay home and remain on standby (they will be needed when the initial group needs rest).

REPORTS

When requested, the Team Leader will prepare detailed Damage Assessment (see Appendix F – Damage Assessment Report) and follow up Situation Reports at a frequency of every 60 minutes after the recovery task commences; then as directed by the CGI IT Operations Manager up to, or on completion of an activity.

APPENDIX B – ████████ PROGRAM CGI IT OPERATIONS MANAGER'S RESPONSE CHECKLIST - THE FIRST 12 HOURS

Situation Occurred / Potential:	
Alert Notification Process:	
	Identify and define type, scope, impact and location of incident (potential or real)
	Notify Disaster Recovery Team Leaders teams to further assess situation
	Notify others in organization that need to know assessment is under way
	Advise others who may be indirectly affected, for information only
	Continue to escalate the notifications and make additional contacts, as required
Security and Evacuation, if required:	
	Follow standard building evacuation procedures
	Go directly to assembly location
	Notify management and wait for further instructions
	Conduct a head count to account for all staff and provide appropriate direction
	Arrange for the securing of the facility and all ██████ Program assets
Assessment Process:	
	Define the problem, focus on impact / potential impact if situation is prolonged
	Assess the impact of situation to your business, customers, suppliers, other business groups
	Determine the possible length of outage
	Gather and validate information about situation as it evolves
Recommendation Process:	
	Provide to senior management a clear picture of the situation
	Provide to senior management options and recommendations for resolution, prioritization of effort, etc.

Situation Occurred / Potential:	
Management Decision:	
	Invoke plans or parts thereof – proceed to activation
	Stand down
	Stand by – Continue to monitor situation and reassess options to determine if necessary to activate or stand down

APPENDIX C – KEY POINTS OF CONTACT

██ / ██ CONTACTS

The CGI Service Coordinator for the ████████ Program and the CGI Client Service Director has in their possession the complete list including home phone numbers.

███ Key Contact List

Name	Role	OFFICE	CELL	EMAIL address
███████	CGI IT Operations Manager / ██ IT Director	████	████	████
██████	██ Facilities Manager	████	████	████

CGI IT Operations Key Contact List

Name	Role	OFFICE	CELL	EMAIL address
Keith Pigue	CGI ██ ██ Program Engagement Lead	(225) 330-0950	████	Keith.Pigue@cgi.com
David Perkins	CGI IT Operations Manager	(225) 330-0935	████	David.Perkins@cgi.com

██ IT OPERATIONS PERMANENT CONFERENCE BRIDGE

To be used for conference communications only in an emergency.

Conference ID	TBD #
Toll-Free Dial-In Number	1-866-378-2305
Information	205-403-8426
Conference Leader PIN	Reside with David DeCarlo, David Perkins

APPENDIX D – NOTIFICATION INSTRUCTIONS

By using the following instructions, you will avoid unnecessarily alarming family members of a member who was working at the affected site at the time of the disaster.

All callers record status of everyone they call, noting the time the call was placed and whether the person was contacted.

A reasonable number of attempts will be made if the phone was busy or there was no answer.

> **If contact is made with an answering machine - Make no statement regarding the situation. Provide the phone coordinates and time of the conference call.**

1. Initiate a mobile phone call to all team members
   Record the information in the status column "Response" found at the beginning of your recovery plan

2. If there is no phone response, place phone call to residential number and say, "May I speak with (individual)?"

   If available, provide the information you called to convey.
   Remind the person to make no public statements about the situation

   Remind the person not to call co-workers (unless instructed to) and to advise their family not to call other employees

Record the information in the status column "Response" found at the beginning of your recovery plan.

If not available, try for alternate contact information. Ask, "Where may I reach (individual)?"
   If the individual was working at the affected site, indicate that you will reach the individual there. DO NOT discuss the disaster with the person answering the phone.

   If at any location other than the affected site, get the phone number. Call the other location and provide the information you wanted to convey.

3. Immediately notify the ▮▮ IT Operations Coordinator of the results.
   Record the information in the status column "Response" found at the beginning of your recovery plan.

   If no answer - Record the information in the status column "Response" found at the beginning of the recovery plan.

APPENDIX E – NOTIFICATION MEMORANDUM

When notified by the ▮▮ IT Operations Coordinator that the DRP has been activated, the team leader or alternate may record the following information that will be passed along to Disaster Recovery Team personnel:

❑ Brief description of the problem:

_____

_____

❑ Location of the Command Center:

_____

_____

❑ Phone number to contact the Command Center:

_____

❑ Any immediate support requested by the ▮▮ IT Operations Coordinator:

_____

_____

❑ Whether or not the facility can be entered: Yes ( )   No ( )

❑ If the facility cannot be entered, the location that the team will use for a work area or meeting place:
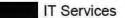
APPENDIX F – DAMAGE AND SITUATION REPORT FORMATS
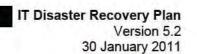
DAMAGE ASSESSMENT (SALVAGE AND RESTORATION) PROCEDURES CHECKLIST

Task List:	
	Obtain an inventory list of the computer equipment and other office supplies
	Obtain support from the manufacturers and insurers, if necessary
	Obtain authorization to access the disaster site, if necessary
	Assess the area in question attentively. Pay particular attention to the infrastructure, including the walls, floor, ceiling, water lines, ventilation, electrical supply, etc.
	Note all major damage
	Assess all damage caused to the products on the computer equipment inventory list, such as the CPU, servers, workstations, tape units, disks, cassettes and computer supplies
	Photograph the damage
	Draw up a list of the damage and assess the time required to restore the equipment
	Prepare Damage reports. When requested, individual reports will be prepared to cover the following areas: Main Computer Room; Equipment Damage (IT and non-IT assets); Electrical Supply; Air Conditioning/HVAC; Data and Telecommunications; Network Operations Center (NOC); Security Operations Center (SOC); and Any other area of interest or damage not specified above.
	Submit the damage report to the ▮ IT Operations Coordinator

DAMAGE ASSESSMENT REPORT

Damage Assessment Report for: _____

AS OF (DATE AND TIME) _____

Level of impact:	Level 1		Level 2		Level 3		Level 4	
Extent of damage:	**Negligible**		**Minor**		**Medium**		**Major**	
Time anticipated for recovery:								
Damage description :								
COMPLETED BY :								

██ SITUATION REPORT

All disaster recovery teams are required to send a progress report of the recovery activities to the ██ CGI IT Operations Manager at a frequency of 60 minutes after the recovery task commences then as directed by the ██ CGI IT Operations Manager up to, or on completion of an activity.

Name: _____   **Team Name:** _____

Title: _____   **Date and Time:** _____

Topic and Location:

_____

Summary/Problems/Recommendations/Assigning/Solving/Responsibilities:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Completed by:

_____

APPENDIX G – THE DISASTER RECOVERY TEAM

TEAM RESPONSIBILITIES

The Disaster Recovery Team is responsible for the provision and continued upkeep of the █████████ IT systems being housed at the VENYU Data Center. The State of ████████ is responsible for providing the actual real-estate, procurement, the allocation of space within the ███████████ facility as per Program stated requirements, security, environment (HVAC, power, fire suppression), Data and Telecommunications connectivity and procurement services.

The ███████████ facility must have space for the Main Computer Room (MCR), Network Operations Center (NOC), and Security Operations Center (SOC). Space in each area is allocated as per Program Systems requirements. In the worst possible case, the state will arrange for an alternate remotely located facility. In the event of a less serious situation, the Team will arrange for stabilization and repair of the physical environment.

The Disaster Recovery Team is also responsible for the restoration of Shared Operations infrastructure including any Service Desk Tools and Asset Management.

REIGER FACILITY AND RECOVERY TEAM ALERT LIST

Team Leaders have in their possession the complete list including home phone numbers. Team leaders are responsible for keeping their lists up to date.

Area of Expertise	Name	Alternate
CGI IT Operations Manager	███████████	Keith Pigue 205 919 2918 keith.pigue@cgi.com
Infrastructure	███████████	███████████
Database	███████████	███████████
Information Security	███████████	███████████
Applications	███████████	███████████
Reporting	███████████	
Service Desk / Technical Services	███████████	███████████
Venyu Data Center	███████████	███████████
Facilities / Procurement	███████████	███████████

Note: The following are the individuals VENYU contacts in the event incidents occur at VENYU Production Site:

VENYU Production Data Center Administrator Contact List			
Name	**Office**	**Cell**	**(EMAIL address)**
███████████	██████████	█████████	████████████████
██████████	██████████	█████████	█████████████████
██████████	██████████	█████████	████████████████
█████████	██████████	█████████	████████████████
█████████	██████████	█████████	█████████████████

Escalation Contacts (08/30/2012)			
Issue	**Group**	**Lead**	**Manager**
Core Infrastructure			
Network Infrastructure	Infrastructure	████████████	██████████
Active Directory	Infrastructure	███████████	█████████
Telephony	Infrastructure	███████████	██████████
Internet/Client VPN	Infrastructure	███████████	█████████
P2P VPN Connectivity	Infrastructure	███████████	█████████
System Databases			
eGrants Database	Database	██████████	████████████
Data Warehouse	Database	█████████	████████████
Reporting DB	Database	██████████	████████████
SQL Servers	Database	████████████	████████████
Tier 1 Applications			
AdventNet/Helpdesk	Infrastrucutre	███████████	███████████
Blackberry	Infrastructure	██████████	████████████
Documentum	Infrastructure	██████████	███████████
eGrants	Application Support	██████████	█████████
eGrants LLT	Application Support	█████████	█████████
Email / Webmail	Infrastructure	██████████	████████████
ePortal	Application Support	█████████	█████████
File Services	Infrastructure	██████████	███████████

GMS	Application Support	▮	▮
HMGP-ATS	Application Support	▮	▮
JIRA/Issue Tracker	Application Support	▮	▮
Metastorm	Application Support	▮	▮
www.road2la.org	Reporting	▮	▮
Supporting Services			
AMF	Application Support	▮	▮
Appointment Plus	Application Support	▮	▮
Blue Coat / Web Filtering	Information Security	▮	▮
Business Objects	Reporting	▮	▮
Citrix Services	Infrastructure	▮	▮
CRT	Application Support	▮	▮
eLoader	Application Support	▮	▮
File Transfer/Upload site	Infrastructure	▮	▮
GIS/Arc Info	Reporting	▮	▮
Mercury/Quality Center	Application Support	▮	▮
OOT	Application Support	▮	▮
ProofPoint	Information Security	▮	▮
Symantec	Information Security	▮	▮
Webtop	Infrastructure	▮	▮
WorlTrac	Application Support	▮	▮
Worltrac Sync	Application Support	▮	▮

DEPENDENCIES

Secure facility with adequate space, HVAC, power, data and telecommunications to the site

Trained staff available to implement the plan

Functional Hardware and Operating systems with most recent configurations

50MB datacenter connectivity, 10MB Internet DR connectivity;

Cisco ASA 5510 Firewall/VPN connectivity; and

Must have "as built" diagrams in order to restore physical layout to what it was prior to event (only valid if facilities are restored or repaired in present site).

Appendix H – ██████ Program APPLICATIONS AND SERVICE RECOVERY teamS

TEAM RESPONSIBILITIES

The OECM applications and Service Recovery Teams are composed of four teams:

Infrastructure and shared services

Database Support & Reporting

Information Security

Application support

The Program Support Teams are divided along specific areas of expertise, but work as an integrated team administering the present production infrastructure located at the VENYU Level 4 Data Center; and restoring the ██████ Program applications and servers' solution infrastructure at the Reiger Road designated failover site as required.

██████ PROGRAM TEAM ALERT LIST

IT DR Team Leaders have in their possession the complete list, including home phone numbers and mobile phone numbers, of their recovery team.

Team leaders are responsible for keeping their lists up to date.

RECOVERY PROCEDURES – REIGER ROAD

These activities can be conducted at either the VENYU Data Center or at the designated Reiger Road failover restore site

ACTIVITY	RESPONSIBLE	REFERENCE	VERIFIED
Assess Damage Detailed report to ██ IT Operations Coordinator, extent of damage, impacted services, level of effort, salvage and restoration (and every one hour thereof)	CGI IT Operations Manager	Appendix F Damage Assessment Guide and Reports Disaster Recovery Plan	Submit a damage assessment Report, and the ██ Situation Report to the ██ IT Operations Coordinator
Invoke failover to alternate location Based on the damage incurred, failover to Reiger for applications presently available	██ IT Operations Coordinator		In consultation with the CMT

ACTIVITY	RESPONSIBLE	REFERENCE	VERIFIED
Component Restoration Re-Establish Backup Infrastructure	Infrastructure Recovery Team Lead	Backup Servers Tape Library, Near line Storage Configuration, restore image Build Book, data restore	Submit a Progress / Situation Report to the CGI IT Operations Manager
Re-Establish Network Infrastructure Firewalls (Public, Private) – Build Book and config. restoration Distribution Switches – config. res VPN Concentrators (Public) – config. restore	IT Security Recovery Team Infrastructure Recovery Team	Build and configuration books, Firewall rules, network diagram, IP addressing plan	Submit a Progress / Situation Report to the CGI IT Operations Manager
Re-Establish (IT Service Desk, SOC, NOC	Infrastructure Recovery Team Lead NOC Team SOC Team Service Desk, NOC and SOC Teams	Build and configuration books, Application Management build book	Submit a Progress / Situation Report to the CGI IT Operations Manager
Rebuild Account Infrastructure Domain Controllers, DHCP servers, DNS and NTP	IT Security Recovery Team Infrastructure Recovery Team Lead	Build books and vital data	Submit a Progress / Situation Report to the CGI IT Operations Manager
Restore Activation of DR data sources. Initiate the restore processes from the remote Venyu vault(s)	Applications Recovery Team Lead Infrastructure Recovery Team Lead Database Recovery Team Lead	-Windows servers Build Books -Application Build Books -Third Party S/W: (Oracle) -Operating systems	Submit a Progress / Situation Report to the CGI IT Operations Manager
Restore Network Security Anti-virus, IDS	IT Security Recovery Team Lead Infrastructure Recovery Team Lead	Build books, latest signature files, restore image files	Submit a Progress / Situation Report to the CGI IT Operations Manager
Re-establish Private and External Interfaces Private LAN Internet	Infrastructure Recovery Team Lead IT Network, and Telecommunications Recovery Teams	Physical connectivity	Submit a Progress / Situation Report to the CGI IT Operations Manager

ACTIVITY	RESPONSIBLE	REFERENCE	VERIFIED
Restore Ancillary ▮▮▮▮▮ Program System Apps System Monitoring agents System Backup agents	Infrastructure Recovery Team Lead	Build books, config docs build docs	Submit a Progress / Situation Report to the CGI IT Operations Manager

INFRASTRUCTURE AND APPLICATION RECOVERY PRIORITY

System/Svc	Notes	Dependencies	HAP	SRP	HMGP	▮	Priority	Recovery Time	Comments
Network Infrastructure	Connectivity, hardware in place at Reiger.	Electrical Power, Structure safe/undamaged	x	x	x	x	0	0	
Active Directory	Domain Controllers online and replicating.	Network Infrastructure	x	x	x		0	0	Active Directory servers in place.
Telephony	Cisco Call Manager backup Subscriber at Reiger, Limited PRI service configured. UCC out of scope.	Network Infrastructure, Active PRIs, Porting numbers by DeltaCom	x	x	x		1	Outbound = 0 Inbound=5 days	Inbound recovery is dependent on CenturyTel moving DID number from Venyu PRIs to Reiger PRIs
Internet/Client VPN	Connectivity to outside services and sites	Network Infrastructure, Service from provider, ASA	x	x	x	x	1	1 day	Backup Internet link requires manual activation.
P2P VPN Connectivity	P2P connectivity between facilities.	Network Infrastructure, Internet	x	x	x		1	1 day	Tied to above Internet
eGrants Database	Database server in place with replication	Network Infrastructure	x		x		1	1 day	Oracle upgrade includes DR replication
Data Warehouse	Oracle Server for other business functions	Network Infrastructure	x	x	x		1	1 day	Oracle upgrade includes DR replication
SQL Server(s)	SQL Server 2005 / 2008 database services	Network Infrastructure, Active Directory	x	x	x	x	1	1 day	Manual intervention required to online.

System/Svc	Notes	Dependencies	HAP	SRP	HMGP	▪	Priority	Recovery Time	Comments
AdventNet	IT/Facilities Service Desk	Network Infrastructure, SQL Server	x	x	x		2	2 days	
Blackberry	Mobile devices in place, BES requires Exchange.	Network Infrastructure, Active Directory, Exchange	x	x			2	5 days	Exchange is a dependency
Documentum	eGrants attachment repository	Network Infrastructure, SQL Server	x		x		2	2 days	Database and files replicated, onlining untested
eGrants Application	Application server online,	Network Infrastructure, eGrants Database, Documentum	x		x		2	2 days	2 days for application alone; Documentum is a dependancy
eGrants LLT	LLT edition of eGrants. Separate application server, eGrants database.	Network Infrastructure, eGrants Database, Documentum				x	2	2 days	2 days for application alone; Documentum is a dependancy
Email / Webmail	Exchange difficult to recover quickly. Recommend alternate email; cgi.com, la.gov, etc.	Network Infrastructure, Active Directory	x	x	x		2	5 days	Current configuration requires recovery from Datavault. Upgrade to Exchange 2010 will improve RTO.
ePortal	SharePoint	Network Infrastructure, SQL Server	x	x	x	x	2	3 days	Database 1 day, onlining time consuming.

System/Svc	Notes	Dependencies	HAP	SRP	HMGP		Priority	Recovery Time	Comments
File Services	File shares, U drives	Network Infrastructure, Active Directory	x	x	x		3	1 day / 5 days	Depending on file system, some immediate, others will have to be restored
HDS	Thick Client Install with a dependency on SQL Server	Network Infrastructure, SQL Server		x			2	2 days	Database 1 day, client install on demand, Citrix Online in DR.
HMGP ATS	Metastorm application. DR servers provisioned.	Network Infrastructure, SQL Server			x		2	2 days	
JIRA/Issue Tracker	Issue Tracker - application server in place.	Network Infrastructure, Active Directory, eGrants Database	x	x			2	2 days	Oracle upgrade improves RT.
Metastorm Apps	Metastorm Application server - server in place	Network Infrastructure, SQL Server	x	x		x	2	3 days	Database 1 day, Application 1 day Ext linkages 1 day
SR Blue Streak	Applicant Ranking and scoring application	Network Infrastructure, SQL Server		x			2	3 days	
GIRP (Metastorm)	Gustav Ike Recovery Proposal (used for proposals and Infrastructure applications/Pre-apps.	Network Infrastructure, SQL Server, Internet				x	2	3 days	

System/Svc	Notes	Dependencies	HAP	SRP	HMGP	▉	Priority	Recovery Time	Comments
HAP C&M	Metastorm application to manage the Homeowner compliance and monitoring workflow.	Network Infrastructure, SQL Server	x				2	3 days	
Grant Recapture	Metastorm application to manage workflow of the ▉ Grant Recapture process	Network Infrastructure, SQL Server				x	2	3 days	
DRX	Metastorm application to manage the ▉ Finance check receipt and deposits process	Network Infrastructure, SQL Server				x	2	3 days	
SR C&M	Metastorm application to manage the SRPP compliance and monitoring workflow.	Network Infrastructure, SQL Server		x			2	3 days	
www.road2la.org	Road2la web site, VM exists in DR.	Network Infrastructure, Internet	x	x	x		2	2 days	External DS change required to online
Appointment Plus	Outreach appointments. Hosted site.	Internet		x			4	N/A	Externally hosted site.
Business Objects	Business Objects Server, multiple database requirements	Network Infrastructure, SQL Server, DWH, eGrants DB	x	x	x		3	TBD	Reporting database a unforeseen requirement
Citrix	Citrix Servers, HDS, others	Network Infrastructure, SQL Server	x	x	x		3	3 days	Citrix host online in DR environment

System/Svc	Notes	Dependencies	HAP	SRP	HMGP	▮	Priority	Recovery Time	Comments
CRT	Change Request Tool (.Net Application residing on Sharepoint)	Network Infrastructure, SQL Server, Internet	x	x	x		4	4 days	Database 2 days, onlining untested.
File Transfer	Server available, data restore required	Network Infrastructure, Internet	x	x		x	4	4 days	For restore, replication would improve
GIS	ArcGIS Data Server (Maps), large data component	Network Infrastructure, Active Directory	x	x			4	TBD	Data restore required
Grant Review Checklist	Grant Review Checklist (.Net Application on Share Point)	Network Infrastructure, SQL Server, Internet, Reporting DB	x				6	TBD	Reporting DB a requirement, untested
Grant Review JIRA	Separate instance of JIRA	Network Infrastructure, Active Directory, eGrants Database	x				6	3 days	Oracle upgrade improves RT.
OOT	Owner Occupant Tool, DR server exists	Network Infrastructure, SQL Server		x			4	5 days	Database 2 days, onlining untested.
Webtop	Webtop application is web based but the DB is server based in RH.	Documentum	x				6	4 days	
WorlTrac	Service provided by Worley, no DR infrastructure exists.	Network Infrastructure, Active Directory	x	x			4	4 days	Worley's commitment

System/Svc	Notes	Dependencies	HAP	SRP	HMGP	▇▇	Priority	Recovery Time	Comments
Worltrac Sync	Data migration link between HDP 3 and WorlTrac	Internet, Worltrac		x			4	N/A	Client application
Environ ERIMS	Environmental Monitoring, DR Infrastructure in place	Network Infrastructure,				x	TBD	TBD	
Grant Management Services	GMS site, hosted for GCR.	Network Infrastructure, SQL Server, Internet				x	TBD	TBD	
Infrastructure Dashboard	GMS site, hosted for GCR.	Network Infrastructure, SQL Server, Internet				x	TBD	TBD	

The following describes the ▮▮▮▮▮▮ IT systems Disaster Recovery environment and recovery activities for the core infrastructure and applications. The core infrastructure requires minimal effort to become fully operational. The activities required to recover the various applications will be outlined in this section. Detailed instruction for recovery of the individual applications resides with the respective team members.

Core Infrastructure

The core infrastructure consists of the network gear, servers, storage and connectivity. The physical hardware is installed and configured to operate inside the DR environment. Basic functionality of the environment is operational, supporting the daily activities of the workforce.

NETWORK INFRASTRUCTURE: The network at the Reiger office consists of a redundant pair of core switches and multiple access switches distributed between the two wiring closets. Power to the network gear is UPS protected and backup power is available via the .75 MW generator wired into the facility. The network is operational and self sufficient. No immediate action is required to continue operations.

ACTIVE DIRECTORY: A Windows Server domain controller is setup as an Active Directory Global Catalogue for the DR site. The server is online and replicating with the production domain controllers. Replication of the Active Directory is set to the standard one hour cycle. Additionally, the Reiger office has two production domain controllers on premise. The systems would be operational without intervention, but there are some tuning steps required to complete recovery. These actions include updating A/D to accurately reflect the network topology and reassigning ownership responsibilities to the remaining servers.

Step	Time	Description
1	30 Min	Updating A/D to accurately reflect the network topology
2	30 Min	Reassigning ownership responsibilities to the remaining servers

TELEPHONY: Primary telephony services reside at the Venyu data center. The Reiger office does contain one backup subscriber server and 2 PRI circuits to support limited telephony services in a recovery situation. Additional services such as the call center functionality and voicemail are not presently in the immediate recovery plan, although these capabilities can be restored over time. Inbound calling does require action to resume operations in the Reiger facility. The provider of voice services, CenturyTel will need to make a change to their call routing, send the assigned DID numbers from Venyu to the PRI's at the Reiger facility.

Step	Time	Description
1	TBD	Contact CenturyTel for reassignment of Inbound calling
2	TBD	Re-establish call center functionality
3	TBD	Re-establish Unity voicemail

INTERNET/CLIENT VPN: For normal operations, all Internet and VPN connectivity is supplied through Venyu's infrastructure. In the event Venyu is unavailable, a backup circuit, provided

through OTM, has been installed at the Reiger facility.   This circuit terminates at the state ISB, into a ▮▮▮▮▮▮▮ ASA device. This device route Internet traffic, support P2P VPN and client VPN connections. Manual steps are required to engage this backup connection.

Step	Time	Description
1	2 hours	Update routing rules for alternate path
2	3 hours	Enable client VPN connectivity and distribute profile

P2P VPN CONNECTIVITY: Satellite offices are connected to Venyu over Point to Point (P2P) VPN connections. Under normal conditions, connectivity is terminated to network hardware located in the Venyu data center. In the event Venyu is unavailable, these VPN connections wound need to be reconfigured to terminate at the state ISB, into the ▮▮▮▮▮▮▮ ASA device.

Step	Time	Description
1	4 hours	Reconfigure P2P VPN connections

Databases

Databases are the backend to practically all of the applications deployed in the environment. To that end, recovery of the databases is a prerequisite to recovery of the applications. In this environment, the database platforms include Oracle and Microsoft SQL server. Replication of the data is managed through periodic log shipping.

eGRANTS DATABASE: The eGrants database is an Oracle 11g database running on the Solaris 10 platform. Oracle's Data Guard solution is used to replicate data from the production environment to the equivalent server in DR. Minimal action is required to bring the DR instance of the database online.

Step	Time	Description
1	30 Min	Stop the Data Guard processes
2	30 Min	Change the database from restricted mode to open.
3	1 hour	Perform some verification and consistency checks

DATA WAREHOUSE: The data warehouse is an Oracle 11g database running on the Solaris 10 platform. Oracle's Data Guard solution is used to replicate data from the production environment to the equivalent server in DR. Minimal action is required to bring the DR instance of the database online.

Step	Time	Description
1	30 Min	Stop the Data Guard processes
2	30 Min	Change the database from restricted mode to open.
3	1 hour	Perform some verification and consistency checks

REPORTING DATABASE: The Reporting database is an Oracle 11g database running on the Solaris 10 platform. A full cold backup is performed on the reporting database nightly. Backup files are copied to the reporting disaster recovery server nightly. A full restore is performed on the DR reporting database to have a current reporting database available by 10 am. Actions to

bring the database server depend on the time of day of the disaster. Below are all steps listed to restore and refresh the reporting database.

Step	Time	Description
1	5 hours	Recover backup files from Data Vault.
2	4 hours	Restore reporting database.
3	5 hours	Refresh reporting database from Data Warehouse and eGrants databases. This includes connection setup to production database.
4	1 hour	Perform some verification and consistency checks.

SQL SERVERS: The MS SQL Server databases use the native log shipping function to replicate data from the production environment to the equivalent servers in DR. Minimal action is required to bring the DR instance of the database online.

Step	Time	Description
1	30 Min	Verify the log shipping imports are complete.
2	30 Min	Change the database from restricted mode to open.
3	2 hours	Perform some verification and consistency checks

Applications

Each of the applications will have actions required to complete the recovery. In most cases the core infrastructure and databases described previously will need to complete recovery before the applications can be recovered. Prepositioned resources in the Disaster Recovery environment ease and speed the recovery times of the applications.

ADVENTNET/Service Desk: The Service Desk application has a SQL server database dependency. A dedicated VM server in the DR environment is online with the current application instance installed. Once the service desk database is online, connecting the application server and starting the application are the primary steps to recovery.

Step	Time	Description
1	30 Min	Connect application to database
2	1 hour	Start application, operational checkout.

DOCUMENTUM: The Documentum environment has multiple SQL server databases as a dependency. A dedicated physical server in the DR environment is online with the current application instance installed. File system data is replicated from the production environment to the DR server on a regular basis. Once the Documentum databases for Homeowner and LLT are online, connecting the application server and starting Documentum services are the primary steps to recovery.

Step	Time	Description

| 1 | 30 Min | Connect application to database |
| 2 | 1 hour | Start Documentum, operational checkout. |

eGRANTS: eGrants application has an Oracle database dependency. A dedicated VM server in the DR environment is online with the current application instance installed. Once the service eGrants Oracle database is online, connecting the application server and starting the application are the primary steps to recovery.   Connectivity to Documentum will require additional verification.

Step	Time	Description
1	30 Min	Connect application to database
2	1 hour	Start eGrants application servers, operational checkout.
3	1 hour	Verification of Documentum connectivity

eGRANTS LLT: eGrants LLT application has an Oracle database dependency. A dedicated VM server in the DR environment is online with the current application instance installed. Once the service eGrants & eGrants LLT Oracle database are online, connecting the application server and starting the application are the primary steps to recovery.   Connectivity to Documentum will require additional verification.

Step	Time	Description
1	30 Min	Connect application to database
2	1 hour	Start eGrants LLT application servers, operational checkout.
3	1 hour	Verification of Documentum connectivity

EMAIL/WEBMAIL: Presently ▇▇▇▇▇▇▇ email is a rebuild and restore from backup process. Once the conversion to Exchange 2010 is complete, a 2nd server will be deployed in DR and setup for replication.

Step	Time	Description
1	8 hours	Build and configure Exchange server
2	4 days	Restore mailbox from remote backups

ePORTAL: The SharePoint application has multiple SQL server databases as a dependency. . A dedicated VM server in the DR environment is online with the current application instance installed. Once the ePortal configuration and content databases is online, connecting the application server and starting the application are the primary steps to recovery.

Step	Time	Description
1	2 hours	Connect application to configuration and content databases
2	1 hour	Start SharePoint, operational checkout.

HDS: The HDS environment has a SQL server database and Citrix dependency. A dedicated physical server in the DR environment is online with Citrix and the current application instance

installed. Once the HDS database is online, connecting the application and starting testing Citrix services are the primary steps to recovery.

Step	Time	Description
1	30 Min	Connect HDS application to database
2	1 hour	Validate published icons and test.

HMGP ATS: The HMGP ATS Metastorm application has a SQL server database dependency. A dedicated VM server in the DR environment is online with the current application engine installed. File system data will require restore from offsite backups to the DR server. Once the Metastorm database is online, connecting the application server and starting the application are the primary steps to recovery.

Step	Time	Description
1	30 Min	Connect Metastorm engine to database
2	1 hour	Start application, operational checkout.
3	2 days	Restore file system data from offsite backups

JIRA/ISSUE TRACKER: The JIRA application has an Oracle databases as a dependency. A dedicated physical server in the DR environment is online with the current application instance installed. File system data is replicated from the production environment to the DR server on a regular basis. Once the JIRA database is online, connecting the application server and starting JIRA are the primary steps to recovery.

Step	Time	Description
1	30 Min	Connect application to database
2	1 hour	Start JIRA, operational checkout.

METASTORM APPS: The ▮▮▮▮▮▮▮ Metastorm application has a SQL server database dependency. A dedicated VM server in the DR environment is online with the current application engine installed. File system data will require restore from offsite backups to the DR server. Once the Metastorm database is online, connecting the application server and starting the application are the primary steps to recovery.

Step	Time	Description
1	30 Min	Connect application to database
2	1 hour	Start application, operational checkout.
3	2 days	Restore file system data from offsite backups

WWW.ROAD2LA.ORG: The Web server hosts multiple sites, including: ▮▮▮▮▮▮▮ & HMGP's primary web sites. A dedicated VM server in the DR environment is online with the

current application instance installed. Verifying content and starting the application are the primary steps to recovery.

Step	Time	Description
1	30 Min	Verify content is current on the web server.
2	1 hour	Start web server, operational checkout.

RECOVERY SYSTEM TEST PROCEDURES

Supporting document attached to ITDR Plan

NOTIFICATIONS

When the recovery activities have been completed, the Team leader ensures that the ▮▮ IT Operations Coordinator is informed of the conclusion of the recovery work and that JIRA, HDS systems and Data Warehouse are now able to use their systems in recovery mode. The ▮▮ IT Operations Coordinator will inform the ▮▮▮▮ Program CMT and the Clients that they are able to use their systems in recovery mode.

ACTIVITY	RESPONSIBLE	REFERENCE	VERIFIED
A) When the recovery work is completed, Clients of the ▮▮▮ Program may use their systems in recovery mode	▮▮ IT Operations Coordinator		

KEY VENDORS

Covered by ▮▮ Procurement Recovery Team

APPENDIX I – BRIEF BIA CONDUCTED

Attached to the ITDR Plan as a supporting document.

APPENDIX J – REIGER DISASTER RECOVERY SITE SPECIFICATIONS

This section outlines the specifications on DR equipment residing within the Reiger Road facility. The software installed on the equipment, the DR network architecture and the backup schedule.

PHYSICAL BOSSIER-SHREVEPORT DATA CENTER SITE SPECIFICATIONS

DATACENTER PHYSICAL SECURITY:

- Built to anti-terror force protection codes
- full-time onsite armed security, monitoring & video surveillance
- biometric and card access
- man-trap access to data center floor

ENVIRONMENTAL PROTECTION:

- Truly redundant power and air handling systems
- Fully redundant power with UPS circuits to each rack.

CONNECTIVITY AND NETWORK INFRASTRUCTURE

- Multi-homed across geographically-diverse Tier-1 internet providers
- fully-redundant enterprise-class firewall and network infrastructure
- full-time staffed network operations centers.

PHYSICAL VENYU TIER 4 PRODUCTION SITE IN

DATACENTER PHYSICAL SECURITY:
- Full-time 24/7, 365 onsite security and monitoring.
- Video surveillance cameras throughout the facility (inside and out).
- On-site security guards on duty at all times.
- Biometric scanners and access card required for entry to all datacenter areas.
- Bullet-resistant walls and glass.
- Man-Trap areas at all entrances to all datacenter areas.

ENVIRONMENTAL PROTECTION:
- Non-water based FM-200 fire suppression system.
- Triple redundant and zoned air handling systems.
- Five air handlers that can deliver 750 tons of cooling.
- Triple-redundant, One-Megawatt diesel generators – resulting in increased protection against potential power outages.

- Three 250-Ton chillers.
- Fully-redundant power circuits to each rack. Redundant UPS battery backup to each redundant power circuit – resulting in increased uptime.

CONNECTIVITY AND NETWORK INFRASTRUCTURE
- Connection to multiple Tier-1 Internet providers including DS-3, OC-3 and OC-48
- Multi-homed across multiple geographically diverse Tier-1 Internet providers – resulting in increased uptime.
- Fully redundant enterprise-class Cisco firewalls.
- Fully-redundant Cisco meshed network infrastructure, allowing for no single point of failure.
- Staffed network operations center 24/7, 365.
- Managed VPN capabilities.
- System monitoring and notification.
- We currently have an emergency response fuel contract in place with a 4 hour response time.
- The ▮▮▮▮▮▮▮ Datacenter resides on a priority power grid with 2 major hospitals and the State EOC (emergency operations center).

Currently have 7 Tier-1 Internet Providers, provisioned over 5 separate, diverse fiber providers. These are protected ring networks.

CURRENT SYSTEM BACKUP JOBS

Included is the backup retention schedule for all servers. The listing is part of the monthly review and report conducted on all system backups and published to the Portal.

Changes through: **02/01/2011**

Computer	Job	Daily	Weekly (Friday)	Monthly (Last Day of Month)	Yearly (June 30)	Applicant Data
DASHBD-WEB	RH-DASHDB-WEB-DATA	14 Days	6 weeks	None	None	No
EGRANT5	RH-EGRANT5	14 Days	6 weeks	None	None	No
EGRANT6	RH-EGRANT6	14 Days	6 weeks	None	None	No
EGRANT-LLT	RH-EGRANT-LLT	14 Days	6 weeks	None	None	No
ENVSQL	ENVSQL-SQL	14 Days	6 weeks	None	None	No
ENVWEB	ENVWeb-DATA	14 Days	6 weeks	None	None	No
GMSWeb	RHP-GMSWEB-DATA	14 Days	6 weeks	None	None	No
localhost	RH-WWW3O	14 Days	6 weeks	None	None	No
RDHOMEUCC	RH-RDHOMEUCC-OS	14 Days	6 weeks	None	None	No
RDHOMEUNITY01	RH-UNITY-EXDB	14 Days	6 weeks	None	None	No
RDHOMEUNITY01	RH-UNITY-OS	14 Days	6 weeks	None	None	No
RH-ARCGIS	RH-ARCGISO	14 Days	6 weeks	None	None	No
RH-BOEDI-PROD	RH-BOEDI-PROD-Data	14 Days	6 weeks	None	None	No
RH-BOEDI-TEST	RH-BEDIT	14 Days	6 weeks	None	None	No
RH-BOE-PROD	RH-BOEP	14 Days	6 weeks	None	None	No
RH-BOE-PROD-	RH-BOE-PROD-OS	14 Days	6 weeks	None	None	No
RH-BOE-TEST	RH-BOETS	14 Days	6 weeks	None	None	No
RH-BSAPP	RH-BSAPP	14 Days	6 weeks	None	None	No
RH-BSRENTAL-PRO	RH-BSRENT-PROD	14 Days	6 weeks	None	None	No
RH-BSRENTAL-QA	RH-BSRENTQA	14 Days	6 weeks	None	None	No

RH-BSWEB	RH-BSWEBO	14 Days	6 weeks	None	None	No
RH-CA	RH-CA-OS	14 Days	6 weeks	None	None	No
RH-CITRIX1	ICF-RH-CITRIX1-DATA	14 Days	6 weeks	None	None	No
RH-CITRIX4	RH-CITRIX4-OS	14 Days	6 weeks	None	None	No
RH-CITRIX5	RH-CITRIX5-OS	14 Days	6 weeks	None	None	No
RH-DC3	RH-DC3-OS	14 Days	6 weeks	None	None	No
rh-dw-dev	RH-DW-DEV-OS	14 Days	6 weeks	None	None	No
rh-dw-grid0	RH-DW-GRID0-OS	14 Days	6 weeks	None	None	No
RH-GIS	RH-GIS	14 Days	6 weeks	None	None	No
RH-HDPWK	RH-HDPWKO	14 Days	6 weeks	None	None	No
RH-IDAPP	RH-IDPP	14 Days	6 weeks	None	None	Yes
RH-IIS1	RH-IIS1	14 Days	6 weeks	None	None	No
RH-IIS2	RH-IIS2	14 Days	6 weeks	None	None	No
RH-MERC	RH-MERCOS	14 Days	6 weeks	None	None	No
RH-MSAPPS	RH-MSAPPS	14 Days	6 weeks	None	None	No
rh-ora-db2	RH-ORADB2-OS	14 Days	6 weeks	None	None	No
RHP-BCLOGS	RHP-BCLOGS-DATA	14 Days	6 weeks	None	None	No
RHP-BES	RHP-BES-DATA	14 Days	6 weeks	None	None	No
RHP-BFIP	RHP-BFIP-DATA	14 Days	6 weeks	None	None	No
rhp-bkup	RHP-JIRA-SMB	14 Days	6 weeks	None	None	No
rhp-bkup	RHP-ORADB1-NFS	14 Days	6 weeks	None	None	Yes
rhp-bkup	RHP-ORADB2-NFS	14 Days	6 weeks	None	None	Yes
rhp-bkup	RHP-ORADB3-NFS	14 Days	6 weeks	None	None	Yes
RHP-BOE	RHP-BOE-DATA	14 Days	6 weeks	None	None	No
RHP-BOEDI	RHP-BOEDI-DATA	14 Days	6 weeks	None	None	No
RHP-CITRIX1	RHP-CITRIX1-DATA	14	6	None	None	No

		Days	weeks			
RHP-CITRIX2	RHP-CITRIX2-DATA	14 Days	6 weeks	None	None	No
RHP-CITRIX3	RHP-CITRIX3-DATA	14 Days	6 weeks	None	None	No
RHP-CITRIX4	RHP-CITRIX4-DATA	14 Days	6 weeks	None	None	No
RHP-CLEARVIEW	RHP-CLEARVIEW-DATA	14 Days	6 weeks	None	None	No
RHP-CSGATE	RHP-CSGATE-DATA	14 Days	6 weeks	None	None	No
RHP-DBA	RHP-DBA-C	14 Days	6 weeks	None	None	No
RHP-DC1	RHP-DC1-DATA	14 Days	6 weeks	None	None	No
RHP-DC2	RHP-DC2-DATA	14 Days	6 weeks	None	None	No
RHP-EFIELDS	RHP-EFIELDS-DATA	14 Days	6 weeks	None	None	No
RHP-EXCH	RHP-EXCH_DB_A-D	14 Days	6 weeks	None	None	No
RHP-EXCH	RHP-EXCH_DB_E-K	14 Days	6 weeks	None	None	No
RHP-EXCH	RHP-EXCH_DB_L-R	14 Days	6 weeks	None	None	No
RHP-EXCH	RHP-EXCH_DB_PUBLIC	14 Days	6 weeks	None	None	No
RHP-EXCH	RHP-EXCH_DB_S-Z	14 Days	6 weeks	None	None	No
RHP-EXCH	RHP-EXCH-SYS	14 Days	6 weeks	None	None	No
RHP-EXCH1	RHP-EXCH1-A-B	14 Days	6 weeks	6 Months	Infinite	No
RHP-EXCH1	RHP-EXCH1-C-D	14 Days	6 weeks	6 Months	Infinite	No
RHP-EXCH1	RHP-EXCH1-DB-A-D	14 Days	6 weeks	None	None	No
RHP-EXCH1	RHP-EXCH1-DB-E-K	14 Days	6 weeks	None	None	No
RHP-EXCH1	RHP-EXCH1-DB-L-R	14 Days	6 weeks	None	None	No
RHP-EXCH1	RHP-EXCH1-DB-Public	14 Days	6 weeks	None	None	No
RHP-EXCH1	RHP-EXCH1-DB-S-Z	14 Days	6 weeks	None	None	No
RHP-EXCH1	RHP-EXCH1-DB-TMPL-RES	14 Days	6 weeks	None	None	No
RHP-EXCH1	RHP-EXCH1-E-G	14 Days	6 weeks	6 Months	Infinite	No
RHP-EXCH1	RHP-EXCH1-H-K	14 Days	6 weeks	6 Months	Infinite	No

RHP-EXCH1	RHP-EXCH1-L-O	14 Days	6 weeks	6 Months	Infinite	No
RHP-EXCH1	RHP-EXCH1-OS	14 Days	6 weeks	6 Months	Infinite	No
RHP-EXCH1	RHP-EXCH1-P-R	14 Days	6 weeks	6 Months	Infinite	No
RHP-EXCH1	RHP-EXCH1-Public	14 Days	6 weeks	6 Months	Infinite	No
RHP-EXCH1	RHP-EXCH1-S	14 Days	6 weeks	6 Months	Infinite	No
RHP-EXCH1	RHP-EXCH1-T-Z	14 Days	6 weeks	6 Months	Infinite	No
RHP-FAX	RH-RHP-FAX-DATA	14 Days	6 weeks	None	None	No
RHP-FILE	RHP-FILE_C	14 Days	6 weeks	None	None	No
RHP-FILE	RHP-FILE_G-1	14 Days	6 weeks	6 Months	Indefinite	Yes
RHP-FILE	RHP-FILE_G-2	14 Days	6 weeks	6 Months	Indefinite	Yes
RHP-FILE	RHP-FILE_G-3	14 Days	6 weeks	6 Months	Indefinite	Yes
RHP-FILE	RHP-FILE-HOMEEVALPHOTOS1	14 Days	6 weeks	None	None	Yes
RHP-FILE	RHP-FILE-WORLTRACPICS-1	14 Days	6 weeks	None	None	Yes
RHP-FILE	RHP-FILE-WORLTRACPICS-2	14 Days	6 weeks	None	None	Yes
RHP-FILE	RHP-FILE-WORLTRACPICS-3	14 Days	6 weeks	None	None	Yes
RHP-FILE	RHP-FILE-WORLTRACPICS-4	14 Days	6 weeks	None	None	Yes
RHP-GIS	RHP-GIS	14 Days	6 weeks	None	None	No
RHP-GONZALES	RHP-GONZALEZ-DATA	14 Days	6 weeks	None	None	No
RHP-HELPDESK	RH-RHP-HELPDESK-DATA	14 Days	6 weeks	None	None	No
RHP-IPMON	RHP-IPMON-DATA	14 Days	6 weeks	None	None	No
RHP-MSTORM1	RHP-MSTORM1-DATA	14 Days	6 weeks	None	None	No
RHP-MSTORM2	RHP-MSTORM2-DATA	14 Days	6 weeks	None	None	No
RHP-MSTORMWEB	RHP-MSTORMWEB-DATA	14 Days	6 weeks	None	None	No
RHP-OWA	RHP-OWA-OS	14 Days	6 weeks	None	None	No
RHP-OWA1	RHP-OWA-SYS	14 Days	6 weeks	None	None	No
RHP-REIGER1	RHP-REIGER1	14	6	None	None	No

		Days	weeks			
RHP-REIGER2	RHP-REIGER2	14 Days	6 weeks	None	None	No
RHP-SPAPP1	RHP-SPAPP1-C-D	14 Days	6 weeks	None	None	No
RHP-SPAPP2	RHP-SPAPP2-C-D	14 Days	6 weeks	None	None	No
RHP-SPAPP-TEST	RHP-SPAPP-TEST-DATA	14 Days	6 weeks	None	None	No
RHP-SPDEV	RHP-SPDEV-DATA	14 Days	6 weeks	None	None	No
RHP-SPWEB1	RHP-SPWEB1-OS	14 Days	6 weeks	None	None	No
RHP-SPWEB2	RH-RHP-SPWEB2-OS	14 Days	6 weeks	None	None	No
RHP-SPWEB3	RHP-SPWEB3-OS	14 Days	6 weeks	None	None	No
RHP-SPWEB-TEST	RHP-SPWEB-TEST-DATA	14 Days	6 weeks	None	None	No
RHP-SQL0	RHP-SQL0-DATA	14 Days	6 weeks	None	None	No
RHP-SQL05-TEST	RHP-SQL5-TEST-DATA	14 Days	6 weeks	None	None	No
RHP-SQL05-TEST	RHP-SQL5-TEST-DATABASES	14 Days	6 weeks	None	None	No
RHP-SQL05-TEST	RHP-SQL5-TEST-MASTER	14 Days	6 weeks	None	None	No
RHP-SQL1	RHP-SQL1-DATA	14 Days	6 weeks	None	None	No
RHP-SQL1	RHP-SQL1-DB	14 Days	6 weeks	None	None	No
RHP-SQL2	RHP-SQL2-DATA	14 Days	6 weeks	None	None	No
RHP-SQL2	RHP-SQL2-DB	14 Days	6 weeks	None	None	No
RHP-SQL3	RHP-SQL3-DATA	14 Days	6 weeks	None	None	No
RHP-SYMANTEC	RH-RHP-SHAREPOINT-OS	14 Days	6 weeks	None	None	No
RHP-USERS	RHP-USERS	14 Days	6 weeks	None	None	No
RHP-WEBAPP	RHP-WEBAPP-DATA	14 Days	6 weeks	None	None	No
RHQA-BOE	RHQA-BOE	14 Days	6 weeks	None	None	No
RHQA-BOEDI	RHQA-BOEDI	14 Days	6 weeks	None	None	No
RH-RAGATE	RH-RGTE	14 Days	6 weeks	None	None	No
RH-SFTP	RH-SFTPOS	14 Days	6 weeks	None	None	No

RH-SQL2005	RH-SQL2005-DB	14 Days	6 weeks	6 Months	Indefinite	Yes
RH-SQL2005	RH-SQL2005-DELTAS	14 Days	6 weeks	None	None	No
RH-SQL2005	RH-SQL2005-MASTER	14 Days	6 weeks	6 Months	Indefinite	Yes
RH-SQL2005-1	RH-SQL2005-1-OS	14 Days	6 weeks	None	None	No
RH-SQL2005-2	RH-SQL2005-2-OS	14 Days	6 weeks	None	None	No
RH-SWINDS	RH-SWINDSO	14 Days	6 weeks	None	None	No
RH-WEBAPP	RH-WEBAPP	14 Days	6 weeks	None	None	No
SRV-CAC	RH-SRV-CAC	14 Days	6 weeks	None	None	No
SRV-JEF	RH-SRV-JEF	14 Days	6 weeks	None	None	No
HMGP SERVERS:						
RHP-ITSAPP1	▇ RHP-ITSAPP1	14 Days	6 weeks	None	None	No
RHP-ITSAPP2	▇ RHP-ITSAPP2	14 Days	6 weeks	None	None	No
RHP-ITSWEB1	▇ RHP-ITSWEB1-OS	14 Days	6 weeks	None	None	No
RHP-ITSWEB2	▇ RHP-ITSWEB2-OS	14 Days	6 weeks	None	None	No
RHQA-METASTORM	RHQA-METASTORM-DATA	14 Days	6 weeks	None	None	No

APPENDIX K – ACRONYMS AND GLOSSARY OF BUSINESS CONTINUITY TERMS
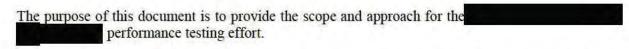
Term or Acronym	Description
Activation	The implementation of business continuity capabilities, procedures, activities, and plans in response to an emergency or disaster declaration; the execution of the recovery plan. Similar terms: Declaration, Invocation
Alert	Notification that a potential disaster situation exists or has occurred; direction for recipient to stand by for possible activation of disaster recovery plan.
Business Continuity Management (BCM)	A holistic management process that identifies potential impacts that threaten an Organization and provides a framework for building resilience with the capability for an effective response that safeguards the interests of its key stakeholders, reputation, brand and value creating activities. The management of recovery or continuity in the event of a disaster. Also the management of the overall program through training, rehearsals, and reviews, to ensure the plan stays current and up to date.
Business Continuity Planning (BCP)	The process of developing advance arrangements and procedures that enable an organization to respond to an event in such a manner that critical business functions continue with planned levels of interruption or essential change. SIMILAR TERMS: Contingency Planning, Disaster Recovery Planning, Business Resumption Planning, Continuity Planning
Business Continuity Program	An on-going program to ensure business continuity and recovery requirements are addressed, resources are allocated, and processes and procedures are completed and rehearsed. Most effective with management sponsorship and through regular rehearsals.
Business Impact Analysis (BIA)	The business Impact Analysis is a process designed to identify critical business functions and workflow, determine the qualitative and quantitative impacts of a disruption, and to prioritize and establish recovery time objectives. SIMILAR TERMS: Business Exposure Assessment, Risk Analysis
IT Operations Coordinator	Commands the local EOC reporting up to senior management on the recovery progress. Has the authority to invoke the local recovery plan.
Business Recovery Team	Designated individuals responsible for developing, execution, rehearsals, and maintenance of the business continuity plan, including the processes and procedures. SIMILAR TERMS: disaster recovery team, business recovery team, recovery team. Associated term: crisis response team.
Cold Site	An alternate facility that already has in place the environmental infrastructure required to recover critical business functions or information systems, but does not have any pre-installed computer hardware, telecommunications equipment, communication lines, etc. These must be provisioned at time of disaster. Related Terms: Alternate Site, Hot Site, Interim Site, Internal Hot Site, Recovery Site, And Warm Site

Term or Acronym	Description
Command Center	A physical or virtual facility located outside of the affected area used to gather, assess, and disseminate information and to make decisions to effect recovery. Associated term: Emergency Operations Center.
Crisis	A critical event, which, if not handled in an appropriate manner, may dramatically impact an organization's profitability, reputation, or ability to operate.
Crisis Management	The overall coordination of an organization's response to a crisis, in an effective, timely manner, with the goal of avoiding or minimizing damage to the organization's profitability, reputation, or ability to operate.
Crisis Management Team (CMT)	A crisis management team will consist of key executives as well as key role players (i.e. media representative, legal counsel, facilities manager, disaster recovery coordinator, etc.) and the appropriate business owners of critical organization functions.
Damage Assessment	The process of assessing damage, following a disaster, to computer hardware, vital records, office facilities, etc. and determining what can be salvaged or restored and what must be replaced.
Declaration	A formal announcement by pre-authorized personnel that a disaster or severe outage is predicted or has occurred and that triggers pre-arranged mitigating actions (e.g. a move to an alternate site.)
Disaster	A sudden, unplanned calamitous event causing great damage or loss as defined or determined by a risk assessment and BIA; 1) Any event that creates an inability on an organizations part to provide critical business functions for some predetermined period of time. 2) In the business environment, any event that creates an inability on an organization's part to provide the critical business functions for some predetermined period of time. 3) The period when company management decides to divert from normal production responses and exercises its disaster recovery plan. Typically signifies the beginning of a move from a primary to an alternate location. SIMILAR TERMS: Business Interruption; Outage; Catastrophe
Disaster Recovery	Activities and programs designed to return the entity to an acceptable condition. The ability to respond to an interruption in services by implementing a disaster recovery plan to restore an organization's critical business functions.
Disaster Recovery Plan (DRP)	The management approved document that defines the resources, actions, tasks and data required to manage the recovery effort. Usually refers to the technology recovery effort. This is a component of the BCM Program. See: BCM Plan
Disaster Recovery Teams (Business Recovery Teams)	A structured group of teams ready to take control of the recovery operations if a disaster should occur.
Emergency Operations Center (EOC)	A site from which response teams/officials exercise direction and control in an emergency or disaster. Associated term: Command Center.
Exercise	A people focused activity designed to execute business continuity plans and evaluate the individual and/or organization performance against approved standards or objectives. Exercises can be announced or unannounced, and are performed for the purpose of training and conditioning team members, and validating the business continuity plan. Exercise results identify plan gaps and limitations and are used to improve and revise the Business Continuity Plans. Types of exercises include: Table Top Exercise, Simulation Exercise, Operational Exercise, Mock Disaster, Desktop Exercise, and Full Rehearsal.

Term or Acronym	Description
High Availability	Systems or applications requiring a very high level of reliability and availability. High availability systems typically operate 24x7 and usually require built-in redundancy to minimize the risk of downtime due to hardware and/or telecommunication failures.
Incident Command System (ICS)	Combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure with responsibility for management of assigned resources to effectively direct and control the response to an incident. Intended to expand, as situation requires larger resources, without requiring new, reorganized command structure.
Incident Response	The response of an organization to a disaster or other significant event that may significantly impact the organization, its people, or its ability to function productively. An incident response may include evacuation of a facility, initiating a disaster recovery plan, performing damage assessment, and any other measures necessary to bring an organization to a more stable status.
Network Operation Center (NOC)	A place from which administrators supervise, monitor and maintain a telecommunications network.
Plan Maintenance Procedures	Maintenance procedures outline the process for the review and update of business continuity plans.
Response	The reaction to an incident or emergency to assess the damage or impact and to ascertain the level of containment and control activity required. In addition to addressing matters of life safety and evacuation, Response also addresses the policies, procedures and actions to be followed in the event of an emergency. . SIMILAR TERMS: Emergency Response, Disaster Response, Immediate Response, and Damage Assessment
Risk Assessment / Analysis	Process of identifying the risks to an organization, assessing the critical functions necessary for an organization to continue business operations, defining the controls in place to reduce organization exposure and evaluating the cost for such controls. Risk analysis often involves an evaluation of the probabilities of a particular event.
Risk Mitigation	Implementation of measures to deter specific threats to the continuity of business operations, and/or respond to any occurrence of such threats in a timely and appropriate manner.
Salvage and Restoration	The act of performing a coordinated assessment to determine the appropriate actions to be performed on impacted assets. The assessment can be coordinated with Insurance adjusters, facilities personnel, or other involved parties. Appropriate actions may include: disposal, replacement, reclamation, refurbishment, recovery or receiving compensation for unrecoverable organizational assets.
Security Operations Center	A place from which administrators supervise, monitor and maintain network and system security.

Introduction

The purpose of this document is to provide the scope and approach for the ███████████████ ███████ performance testing effort.

The effort involves identifying and removing performance defects in the architecture. AMS is establishing a dedicated performance-testing environment in Fairfax to simulate workloads similar to the production volumes expected in ██████████████████████████ however, actual workloads used in this testing may be limited by the capacity of the performance-testing environment.

Scope

The focus of performance testing is to monitor the system on-line and batch response times under simulated workload conditions and compare the results against the EJB Port performance testing results. Performance monitoring tools will be to collect and document performance metrics. It is important to document all of the testing performed; issues that were encountered and fixes that were made.

Broadly, the purposes of performance testing are:

- To verify the proper interaction between various technical infrastructure components, to validate the technical architecture components.

- To identify and ensure performance defects relating to the architecture are addressed prior to the deployment of the software.

- To identify and tune the factors affecting the scalability of the application.

- To ensure satisfactory transaction response times for on-line application components under average and peak workloads.

- To ensure satisfactory transaction response times for batch application components under average and peak workloads.

- To provide input to the platform capacity planning task.

This effort will be focused on the following areas:

Architecture Validation
This is to verify the proper integration of all the technical infrastructure components and establish the reliability of the entire system.

Application tuning
While designing the various components of the system, the performance aspect of those components was carefully examined to arrive at an optimal design. During performance testing the implementation of these designs will be re-examined to identify any inefficiencies in the code.

Scalability testing

Scalability Testing will verify the scalability of the application to the expected peak volumes for on-line and batch.

Gathering metrics for Estimation

A set of metrics will be identified and collected for estimating the deployment hardware configuration.

Performance Testing Key Assumptions

The Performance-testing effort is dependent upon the following assumptions:
- Use of Microsoft 2000 operating system for all tiers of the architecture.
- A subset of the ███████████████████████████ transactions, identified as key business processes in the service level target agreement (SLTA), will be used for testing.
- Batch transaction volumes and on-line arrival rates simulated during this testing will be determined by the capacity of the performance-testing environment.
- Collection of performance metrics will be limited to the items that are adequate to achieve the goals of this effort.
- Database will be bulked up to a level that is adequate to identify SQL inefficiencies and optimize the ████████████████████ data model.

Performance Testing Approach

The performance testing effort will consist of the following major tasks. An overview of each of these tasks is outlined below:

Planning

The planning process involves establishing a high-level project plan and then further refining it to a detailed task plan for some of the key tasks identified in the high-level plan. Identification of all the key tasks and responsibilities are captured in the high-level performance-testing project plan (see Appendix B for the high-level performance-testing project plan).

Preparation

This is a key step that will define and set the stage for the whole performance testing effort. It involves establishing goals, defining the experiments to be conducted to achieve the goals, procuring all the hardware and software components including preparing the ADVANTAGE Revenue software (with instrumentation), and setting up the test environment.

Establishing goals
This involves defining what will be performance tested and why. This involves
- o Identifying the business processes/scenarios to be tested for both on-line and batch (a sample set of on-line scenarios is provided in Appendix A)
- o Establishing the batch volumes and on-line transaction arrival rates
- o Deciding the scalability and reliability requirements

The Performance Goals are defined in the Performance Testing Goals document. The Performance Testing Goals document is being reviewed and approved in conjunction with this Performance Testing Scope and Approach document.

Defining the experiments
This describes the actual steps to be followed while executing the performance test. For example, this will identify experiments to be conducted with different hardware configurations to ascertain the scalability of the application.

Hardware and Software Components

The hardware components include database server, application servers, web servers and a client simulation workstation.

The software components include a performance-testing tool (Silk Performer from Segue) that could simulate the on-line transactions, JAVA code monitoring and tuning tool (Numega), network-monitoring tool (Sniffer), and the ████████████ baseline software instrumented to measure performance.

Instrumentation has been added to the ████████████ baseline software that may be used at anytime in the future. Performance testing will be using the ████████████ baseline software with this instrumentation included.

Setting up the test environment

This involves bulking up the database to contain test data for the performance test scenarios along with preloaded data to serve as background noise, and preparing the performance test scripts for the test scenarios.

A proper methodology is required to bulk up the database to contain test data, as many application tables are populated with related data to represent real-life scenarios. Based on earlier performance testing efforts of the ████████████ application a 'link-number' concept has been evolved that will be employed in this effort as well. A separate document will provide the description of this concept.

The purpose of creating the background noise (bulking up the database beyond just creating the test data) is to identify any SQL inefficiencies in the application code and to tune the data model for optimal database performance.

Preparing performance test scripts mostly pertains to performance testing the on-line transactions. Firstly, data interaction between the client (web browser) and the server (IBM's Websphere) is recorded while executing all the on-line test scenarios to be performance tested. Secondly, the recorded data is converted into a simulation script (using the simulation language provided by the performance testing tool vis-à-vis Silk Performer) to simulate multiple concurrent users.

Execution and Tuning

This involves carrying out all the experiments identified during the preparation step and collecting all the performance metrics that will be needed for later analysis.

Identification of performance bottlenecks and tuning will be an integral part of this step so the experiments will be repeated until optimal response time is achieved. This step will also provide key information needed for system scalability analysis.

Application software will be instrumented to collect response time metrics. This instrumentation is required to split the total response time into the following components:
Business logic execution time
Presentation logic execution time
Database wait time
Network latency, if any

Documenting the performance results

Results of all the experiments, including all the performance metrics, will be documented such that it could be used for further capacity analysis for establishing the deployment hardware configuration.
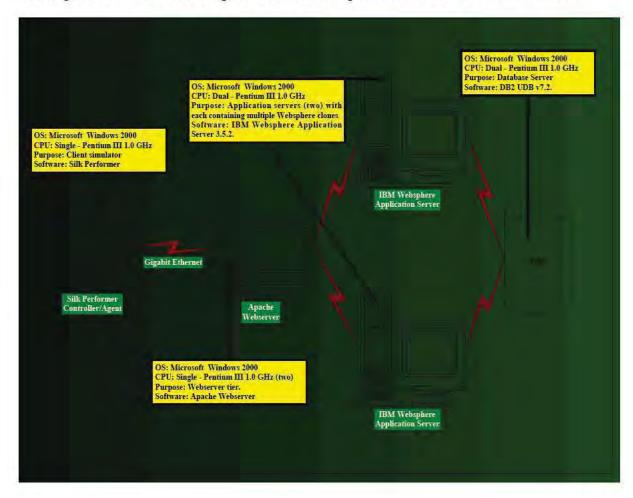
Operations planning

An operations plan will be developed to identify the production operational characteristics of the system. This operations plan will identify the time windows for the main components of the operational system, including the on-line window, the returns processing window, and the batch cycle window. This operations plan will cover both regular and peak processing times. In addition, batch testing will be carried out with a set of key batch jobs to be used in establishing an appropriate batch window.

Proposed performance testing environment

On-line Testing Environment

The diagram below shows the setup that will be used to performance test the on-line scenarios.

OS: Microsoft Windows 2000
CPU: Dual - Pentium III 1.0 GHz
Purpose: Database Server
Software: DB2 UDB v7.2.

OS: Microsoft Windows 2000
CPU: Dual - Pentium III 1.0 GHz
Purpose: Application servers (two) with each containing multiple Websphere clones
Software: IBM Websphere Application Server 3.5.2.

OS: Microsoft Windows 2000
CPU: Single - Pentium III 1.0 GHz
Purpose: Client simulator
Software: Silk Performer

IBM Websphere Application Server

Gigabit Ethernet

Silk Performer Controller/Agent

Apache Webserver

OS: Microsoft Windows 2000
CPU: Single - Pentium III 1.0 GHz (two)
Purpose: Webserver tier.
Software: Apache Webserver

IBM Websphere Application Server

Client Simulation

As shown in the diagram above the controller/agent provided by Silk Performer will be used to simulate multiple concurrent users. It will send http requests to the server and receive http responses back from the server while also measuring the round-trip time. There will be no web browser involved while simulating multiple users. All the tiers will be using Microsoft Windows 2000 operating system. This set up will use its own private network.

Simulation of a particular online scenario involves three basic steps.
1. Set up of data for the online scenario.
2. Recording of the online scenario.
3. Play back of the scenario.

For example, to simulate a taxpayer search scenario, the setup step would be to 'Register a taxpayer'.

Batch testing environment

The hardware environment is similar to the online test environment, however, this only includes a server machine and a database machine. Instrumentation of the application code will be completed to measure batch response times.

Hardware Specification

Type	Description
Database Servers	IBM xSeries Dual CPU 1 GHz Pentium III 1GB Memory
Application Servers	Two IBM xSeries Dual CPU 1 GHz Pentium III Up to 3GB Memory
Web Server	Two IBM xSeries 330 Single CPU 1 GHz Pentium III 512 MB Memory. (NOTE: The second web server will be used for testing the effect of a second server.)
Workstation for client simulation	IBM xSeries 330 Single CPU 1 GHz Pentium III 512MB Memory (NOTE: This workstation will be used for the simulation of many users using the simulation tool, as a result it needs to be 512M which is larger than the DOR standard client.)
Network	100Mb/Gigabit Ethernet

Appendix A – Sample test scenarios

Customer Search

After a customer has been saved within ████████████ the user has the ability to locate the customer's profile by performing a search. By selecting <u>Search -> Customer Search from the global navigation bar,</u> a user can search for a customer by external ID, name, domestic address (business customers only), international address, or name and address. The user simply clicks on the appropriate radio button, enters the required criteria and clicks on the 'Search' button. The search will return a list of all customers that meet the designated search criteria. If only one customer matches the criteria, that profile will open immediately, bypassing the list page.
<u>Perform a customer search by FEIN and SSN</u>:

- Log onto the system.
- You should be taken to the homepage.
- Select 'Search → Customer Search' from the global menu options.
- The customer search window should display.
- Click on the 'Identification Number' radio button and enter FEIN = 110000030.
- Click on the Search button
- The customer profile window for Sarah Smith should display.
- From this profile window, select 'Search → Customer Search' from the global menu options.
- The customer search window should display.
- Click on the 'Identification Number' radio button and enter SSN = 330000031
- Click on the Search button.
- The customer profile window for Sarah Smith should display.

Customer Profile

When a customer is registered in ████████████ a *customer profile*—a consolidated view of information about that customer—is created. The profile contains information about the customer (for example, name and primary address) and the different taxes for which the customer is responsible, organized in the form of tax accounts. Information is organized and displayed in the form of five tabs: Address, Tax Accounts, Interactions, Contact and Segment. Supplemental information can also be entered about the customer (such as relationships and additional addresses) through the use of the local menu options.

As a customer's business changes, corresponding changes may be needed in the customer's profile. For example, if the customer becomes liable for a different kind of tax, a new tax account should be added. If the customer changes its primary address or the address where particular business activities are performed, address changes must be made. Additionally, if a customer has a name change or has a new SSN/FEIN this information may be directly updated from the profile window.
<u>View customer profile, enter new information and perform an update</u>:

- Log onto the system.
- You should be taken to the homepage.
- Select 'Search → Customer Search' from the global menu options.
- The customer search window should display.

- Click on the 'Identification Number' radio button and enter FEIN = 110000030.
- Click on the Search button
- The customer profile window for Sarah Smith should display.
- The customer demographic information should be displayed at the top of the page.
- Click on the Address Tab. The customers primary address information is displayed.
- Click on the Tax Accounts Tab. A list of this customer's existing tax accounts is displayed.
- Click on the Interactions Tab. Message displays 'Interactions not implemented'.
- Click on the Contact Tab. The customer's contact information is displayed.
- Click on the Segment Tab. The segmentation information is displayed.
- Click on the 'Last Name' field in the customer's demographic information and change the last name from 'Smith' to 'Jones'.
- Enter a Suffix of 'Second'
- Click on the Contact Tab and enter the following information:
  - Contact Name = Henry Jones
  - Phone = (555) 555-5555
  - Fax = (555) 555-5555
  - Attention = Bob Jones
  - E-mail Address = Bob@Jones.com
- Click on the Submit button.
- Last name should be updated to 'Jones' and Contact information should be saved.
- From this profile window, select 'Search → Customer Search' from the global menu options.
- The customer search window should display.
- Click on the 'Identification Number' radio button and enter SSN = 330000031
- Click on the Search button.
- The customer profile window for Sarah Smith should display.
- Click on the Address Tab and update the address to the following:
  - Street: 100 Fairlakes Dr
  - City: Abilene (selected from the dropdown)
  - State: Kansas (default)
  - County: Defaults to Dickinson
  - Zip: 777775555
- In the demographic information, enter a Suffix of 'Third'.
- Click on Submit.
- Customer primary address should be updated to the new address.

Tax Account Detail

The Tax Account detail page allows the user to both view and edit specific information associated with a particular tax account. The top of the page displays general information related to the customer and more specific information related to that particular account. The bottom of the page is divided into six distinctive tabs:

- Periods tab – Displays information about the tax account periods. For example, Balance, Filing Status, and Billing Status.
- Totals tab – Displays totals for each tax account period. For example, Balance, Total Liabilities, Total resources, and Tax Reported.

- Mailing Address tab – Displays mailing address information. Functionality is available to differentiate between domestic and international addresses.
- Tax Type – Displays information specific to the tax type, such as Filing Frequency, Norm Amount.
- Contact tab - Displays information for the tax account contact.
- Status Dates tab - Status and Dates for a related tax account. Displays date such as Beginning Effective Date, Beginning Recorded Date, Inactivation Effective Date, Inactivation Recorded Date

<u>View tax account detail window, enter new information and perform an update:</u>

- Log onto the system.
- You should be taken to the homepage.
- Select 'Search → Customer Search' from the global menu options.
- The customer search window should display.
- Click on the 'Identification Number' radio button and enter FEIN = 110000003.
- Click on the Search button
- The customer profile window for Sarah Smith should display.
- Click on the Tax Accounts Tab
- Click on the hyperlinked account number of 004-110000003F-01
- The customer's Seller's Permit tax account should display.
- General Information, Tax Account Information and the Indicators section should be displayed at the top of the page.
- Click on the Periods Tab. The tax account period of M3 March 1999 should be displayed and hyperlinked.
- Click on the Totals Tab. The tax account period 1999 should be displayed and hyperlinked.
- Click on the Mailing Address Tab. The tax account mailing address should be displayed.
- Click on the Tax Type Tab. Tax account dates, registration status, filing frequency, norm amount, ACSS entity ID, legacy number and tax account check box indicators should be displayed.
- Click on the Contact Tab. The tax account contact information should be displayed.
- Click on the Status Dates Tab. The tax account status and related date information should be displayed.
- Click on the Close button. This action should take you back to the customer's profile window.
- From that customer's profile window, select 'Search → Customer Search' from the global menu options.
- The customer search window should display.
- Click on the 'Identification Number' radio button and enter FEIN = 110000037.
- Click on the Search button
- The customer profile window for Sarah Smith should display.
- Click on the Tax Accounts Tab
- Click on the hyperlinked account number of 004-110000037F-01
- The customer's Seller's Permit tax account should display.
- Click on the Tax Type Tab and update the following:
  - ACSS Entity ID = 1007
- Click on the Status Dates Tab and update the following:
  - Beginning Effective Date = 01/10/1998
  - ACSS Entity ID = 1007

- Click on Submit.
- All new information added to the Tax Type and Status Dates Tabs should be updated and saved.
- Click on Close. This action should return you to the customer's profile page.
- On the Tax Accounts Tab, click on the hyperlinked account number of 004-110000037F-01
- The customer's Seller's Permit tax account should display.
- Click on the Tax Type and Status Dates Tabs. New information entered above should be displayed.
- Click on Close. This action should return you to the customer's profile page.
- From the customer's profile window select 'Search → Customer Search' from the global menu options.
- The customer search window should display.
- Click on the 'Identification Number' radio button and enter FEIN = 110000034.
- Click on the Search button
- The customer profile window for Sarah Smith should display.
- Click on the Tax Accounts Tab
- Click on the hyperlinked account number of 004-110000034F-01
- The customer's Seller's Permit tax account should display.
- Click on the Contact Tab and enter the following information:
  - Contact Name = Henry Simpson
  - Phone = (555) 555-5555
  - Fax = (555) 555-5555
  - Attention = Dorothy Michaels
  - E-mail Address = Dorothy@Michaels.com
- Click on the Submit button.
- The tax account contact information should be saved.
- Click on the 'logoff' link at the top of the page.
- Log onto the system.
- You should be taken to the homepage.
- Select 'Search → Customer Search' from the global menu options.
- Click on the 'Identification Number' radio button and enter FEIN = 110000034.
- Click on the Search button
- The customer profile window for Sarah Smith should display.
- Click on the Tax Accounts Tab
- Click on the hyperlinked account number of 004-110000034F-01
- The customer's Seller's Permit tax account should display.
- Click on the Contact Tab. The newly entered contact information entered above should be displayed.

Tax Account Period

The tax account period is a specific span of time in which the customer is eligible to report tax liability. It is always associated to a tax account and is used primarily to capture and track all entries and financial activities that occur during that time frame. As a customer files required tax returns, payments, and so forth, ███████████ tracks these activities and their financial effect by creating entries. The entries are viewable and accessible from the periods tab. The totals tab displays hyperlinked entry categories that are divided into liabilities and resources. Clicking on one of these hyperlinks opens a breakout list page that displays all current tax account period entries that fall

within the selected category. The tax account period relationship to the tax account has to be created before any financial entries can be recorded for the customer.

The financial entries posted to a period will come through two major sources: the front end and the back end. The front end relates to those entries initiated by the customer or sent on behalf of the customer; whereas, the back end relates to those entries entered by a user or performed by ▮▮▮▮▮▮▮▮▮ based upon the tax account period state. For example, when a customer files a tax return or payment, the source is the front end, but when a user enters a manual penalty for a fraudulent customer or a deficient period is assessed automatic penalties and interest, the source is considered back end. Some of the entries, such as an original return, have accounting impact. Other entries, such as a return posted as Informational, have no accounting impact. No entries can be deleted, so there is always a complete audit trail of period entry activity.

View tax account period detail window:

- Log onto the system.
- You should be taken to the homepage.
- Select 'Search → Customer Search' from the global menu options.
- The customer search window should display.
- Click on the 'Identification Number' radio button and enter FEIN = 110000003.
- Click on the Search button
- The customer profile window for Sarah Smith should display.
- Click on the Tax Accounts Tab
- Click on the hyperlinked account number of 004-110000003F-01
- The customer's Seller's Permit tax account should display.
- Click on the Periods Tab. The tax account period of M3 March 1999 should be displayed and hyperlinked. Click on the M3 March 1999 period hyperlink.
- The M3 March 1999 Tax Account Period detail window should display.
- General Information, Tax Account Period Information and the Indicators section should be displayed at the top of the page.
- Click on the Entries Tab. The entry types of Original Return, Return Adjustment - Automatic, Payment – Normal Payment and details about each are displayed. The entries should be displayed as hyperlinks.
- Click on the Totals Tab. The hyperlinked entry categories of Tax, Penalties, Interest, Costs and Fees and Underpay Reclass are displayed under the Liabilities column. The hyperlinked entry categories of Payments, Credit Fwd/Fwd Applied, Offsets, Refunds and Overpay Reclass are displayed under the Resources column.
- Click on the 'Close' button. This action should return you to the customer's tax account page.

Payment Detail

The Payment detail page is displayed when a user chooses to view specific information related to a payment entry that is posted to a tax account period. Payment entries are created to represent the part of a remittance that is applied to a specific tax account period. The sum of all payment entries associated with a remittance must equal but not exceed the total remittance amount. In addition to displaying general information related to the associated tax account and period, the following information is shown relating to the payment itself: Amount, Status, Received Date, Source, DLN, Processed Date. The bottom of the page displays a grid listing all entries to which the payment has been applied.

View payment detail window:

- Log onto the system.
- You should be taken to the homepage.
- Select 'Search → Customer Search' from the global menu options.
- The customer search window should display.
- Click on the 'Identification Number' radio button and enter FEIN = 110000003.
- Click on the Search button
- The customer profile window for Sarah Smith should display.
- Click on the Tax Accounts Tab
- Click on the hyperlinked account number of 004-110000003F-01
- The customer's Seller's Permit tax account should display.
- Click on the Periods Tab. The tax account period of M3 March 1999 should be displayed and hyperlinked. Click on the M3 March 1999 period hyperlink.
- The M3 March 1999 Tax Account Period detail window should display.
- Click on the Entries Tab.
- Click on the hyperlinked Payment entry. The Payment detail window should be displayed.
- General Information and Tax Account Period Information should be displayed at the top of the page.
- The Payment Information box should display Amount, Status, Received Date, Source, DLN and Processed Date.
- The grid at the bottom of the page should display the entry to which the payment is being applied, the applied amount and the processed date of the applied to entry.

Performance Test Schedule and Key Dates

The following table outlines the high-level ITS Implementation schedule for the activities that are related to the Performance Test activities.

	2001							2002									
	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O
Setup and Preparation												X					
Execution												X	X				
Documentation													X				

CGI

IT Services
Records Retention Strategy

Revised: April 22, 2010

CGI

Program Planning

Quality Assurance Plan   IT Services

Organization Template Revision History
Revision History

Date	Version Number	Description	Author
04/22/10	1.0	Initial Version	Sarah Watson
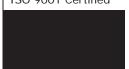
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Introduction

CGI has established this Record Management and Retention Policy ("Policy"). The Policy sets standards and rules for Record management, retention and destruction with a view to:

1. ensuring that documents are preserved and retained as required by law and/or sound business practices,
2. maintaining adequate control over documents that may be required by CGI to establish its position in a legal or business dispute,
3. ensuring that documents are disposed of in a timely and appropriate manner in accordance with this Policy.

Detailed instructions for implementing the requirements of this Policy are contained within the Records Management and Retention Procedures Manual (the "Manual"), which is included as Appendix A of the present Policy.

The _____ IT Services engagement will follow this policy for it's Records Management and Retention.

Definitions

Transitory Records

These are documents or electronic files that, while useful in daily operations, are not required to be retained for business or legal reasons. These may include:

- Convenience, courtesy, or information only copies of a Record (e.g., cc or bcc).
- Casual correspondence and documents such as those created to schedule meetings.
- Preliminary drafts once superseded by the final or executed document.

Active Records

These are Records that are related to current or in-process activities. These Records are typically referred to on a regular basis to respond to internal and external business requirements.

Inactive Records

These are Records that are related to closed, completed, or concluded activities that must be retained in order to fulfill legal, operational, or other retention requirements.

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Records Creation

For this engagement, the Project Director will be responsible for identifying which documents or electronic files are defined as a "Record" and for ensuring that the Record is retained and safeguarded in accordance with the CGI Policy.

Records Retention

Each Record is to be retained for the period of time specified in the Record retention schedules located in Appendix B of the CGI Policy. The rules and standards for Records retention are the following:

- All Records are maintained for the period required by their applicable laws, regulations and contractual requirements.

- All Records evidencing CGI's ongoing business operations or that do or could substantively affect the obligations of CGI will be retained for a period of time that will ensure their availability when needed, as specified in the Record Retention Schedules contained in Appendix B of the CGI Policy

- All Records, including all Transitory Records, no longer required to be retained by law, regulation and contractual requirements or for any other business purpose will be destroyed in a timely and appropriate manner, in accordance with the Policy.

Records Storage
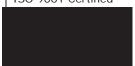
⬛⬛⬛ Records will be stored in Ensemble II that ensure their protection, reliability, integrity and retrieval within reasonable time frames.

⬛⬛⬛ Records

The following table indicates the documents that ⬛⬛⬛ IT Services will be retained in Ensemble II. The highlighted documents will be uploaded on a monthly basis by the CGI PMO.

Verification Item	Typical Provided Evidence
Client request for proposal or consulting services was received, needs were analyzed and applicable communications with the client were handled	▪ Letter or email from the client ▪ Request for Proposal (RFP) ▪ Approval granted per the Operations Management Framework (OMF) ▪ Win Probability Matrix ▪ Project Proposal Analysis Summary ▪ Bid/No Bid Decision Letter
Proposal was prepared	▪ Proposal ▪ Assumptions Identified ▪ Updated Project Proposal Analysis Summary

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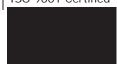
Verification Item	Typical Provided Evidence
Proposal was approved per OMF	▪ Proposal approval (signatures or email) per OMF requirements ▪ Proposal sign-off sheet ▪ Proposal letter or email
Client's request for proposal was analyzed and a decision made to pursue or not with the opportunity qualification activities	▪ Evidence of RFP, ESR Step A presentation material, minutes, participants and approvals to continue complying with BEMF requirements
The submission of the proposal to the client - and supporting documentation when applicable - was approved per CGI BEMF/OMF	▪ Evidence of ESR Step C presentation material, minutes, participants and approvals to submit complying with BEMF/OMF requirements
Required supplier/subcontractor contract was prepared and filed per BU requirements	▪ Signed (by subcontract/supplier) subcontractor contract / SOW / MOU / LOU, using the Corporate template ▪ Signatures and/or email approvals from CGI per the OMF and BEMF (where applicable) ▪ Stored in the BU repository
ALL contracts (client and suppliers/subcontractors) are approved per CGI OMF and filed per BU requirements	▪ Signed client contract(s) / SOW ▪ Signatures and/or emails granting approval per the OMF and BEMF (where applicable) ▪ Stored in the appropriate repository
Client contract was prepared and filed to appropriate repository	▪ Signed contract is stored BU repository ▪ Approval/signature per OMF ▪ SOW, MOU, LOU
Third parties teaming agreements were drafted and signed	▪ Evidence of teaming agreements signed by all parties
Third party contracts management data (including the actual contracts with suppliers, sub-contractors, licenses, etc.) were maintained and filed to an adequate documents repository	▪ Evidence a third party contract list, renewal and deactivation tracking, contracts filed based on a documented process
Invoices were prepared as per contractual requirements and granted approval before sending to client	▪ Evidence of prepared invoices per the planned schedule ▪ Email approvals from the project manager
Invoicing information is transmitted to CGI finance services	▪ Evidence of efforts/ deliverables/ milestones / change requests information sent to finance services for client invoicing
Invoicing related data was collected as per the applicable process(es) requirements for the invoicing cycles	▪ Evidence of a documented invoicing data collection process (fixed items, variable items, changes, etc.) and its application
Invoices were prepared as per contractual requirements	▪ CGI management approved invoices
An Engagement Description Form was prepared, per the Engagement Description Guide and sent to the appropriate repository	▪ Engagement Description Form

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Verification Item	Typical Provided Evidence
The Engagement Description Form was reviewed and updated if needed, if previously provided (End of Contract)	▪ Evidence of an updated version of the Engagement Description form
Opportunity Overview (if applicable per the OMF; including) change orders	▪ Review and approved per Deal Review Matrix ▪ Proposal and financial evaluation checklist ▪ Budget Capture Worksheet ▪ Assumptions and risks ▪ Evidence of revised documents if services/financial parameters have changed between proposal and contract phase
CSAP	▪ Latest completed CSAP and client signature/approval ▪ CSAPs should exist for all client-facing engagements including projects, consulting/staff augmentation providing at least 6 months of service
Status Reports	▪ Internal AND external status reports communicating quality, risks, issues within project team, to client and CGI management ▪ Health Check/EAS Reports, if applicable ▪ Status reports ▪ Cost tracking ▪ Evidence of transmitted status reports
Delivery Assurance procedures were applied and implemented	▪ Completed start-up checklist ▪ Materials referenced and used in Delivery Reviews ▪ Delivery Dashboard ▪ Health Check Report ▪ Delivery Review Meeting Minutes ▪ Evidence of risks resolved
Adequate Project Plan was prepared	▪ Completed project management plan including documented processes for Project Tracking, Communication Management, Procurement Management, Managing Change Requests, Tracking Outstanding Issues, Quality Assurance, Validating and Approving Deliverables and Risk Management ▪ Evidence that project management plan and separate documents were approved by client - email or signature

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Quality Assurance Plan

IT Services

Verification Item	Typical Provided Evidence
Quality assurance was performed on Project Management Plan	▪ Deliverable Compliance Checklist ▪ Evidence of Project Management Plan review (e.g. tracked comments, redlined AND change history) ▪ If process documents are separated, evidence of reviews need to be produced for each (e.g. separate Quality Management Plan, Risk Management Plan, etc.)
Project Plan was approved by client	▪ Evidence of signed Request for Review and Approval or equivalent
Project Work Plan was maintained	▪ Project Work Plan and evidence of regular updates ▪ Includes all major phases (requirements, design, development, testing, implementation, training, support), tasks and deliverables ▪ Includes assigned resources and status tracking
Risks were identified, tracked and managed	▪ Evidence of regular risks update, addition and closing - Health Check Reports, status reports
Change Requests were managed	▪ Defined requirements and defined requirement changes (Change Request List and/or Contract Modifications) ▪ Requirements Traceability Matrix (RTM) ▪ Evidence of form usage, status tracking, client approvals ▪ Updated Project Work Plan ▪ Request management tool
Outstanding Issues were identified, tracked and managed	▪ Evidence of a managed Issues within a log or status reports, adding and closing of issues, tracking of issue status and actions
Quality of deliverables was verified	▪ Deliverable Compliance Checklist ▪ Evidence of reviews (e.g. tracked comments, redlined AND change history) ▪ Evidence of reviews for all contractual deliverables (process plans, requirement, design, development, testing, implementation and training documents)
Deliverables status was tracked	▪ Managed deliverables/configuration items list ▪ Status reports ▪ Tracking accurately managed in project work plan
Deliverables were approved by client	▪ Review for review and approval ▪ Approval granted via email or sign-off ▪ User acceptance process (user acceptance testing)

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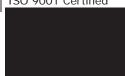
Verification Item	Typical Provided Evidence
Preservation of product / service	▪ Service Level Agreements ▪ Warranties ▪ Maintenance via defined configuration management processes and procedures
Measurement and analysis	▪ Project metrics (e.g. defects, schedule, cost)
Due Diligence process was executed, detailed information gathered and provided to the Contract negotiation and Transition Teams	▪ Evidence of a Due Diligence File filed or archived per BU requirements, documents, e-mails, spreadsheets, updated assumptions, recommendations, meetings
Due Diligence findings and report information were reviewed during contract negotiation activities	▪ Evidence of key findings, legal considerations, Due Diligence recommendations, Contract Negotiation SSR meeting minutes - with evidence that the overall solution and all required streams were reviewed - and participants complying with BEMF/OMF requirements
Once a decision to continue with opportunity qualification activities was made, pursuit resources were confirmed, a response strategy and team were established, and applicable communications with the client were coordinated	▪ Evidence of communications or information sessions with the client, ESR Step B presentation material, minutes, participants and approvals to continue complying with BEMF requirements, Bid/No Bid decision letter - if requested in the RFP ▪ BEMF/Outsourcing Executive Step Review (ESR) Report template was used
One or more Transition Plans were prepared and approved as part of Transition Projects	▪ Evidence of documented/ approved transition project plans, as per contractual obligations, Project Plans can cover the following transition activities: implement new organization, integrate human resources, implement client relationship processes, implement services delivery processes, implement project management processes and methodologies, implement application maintenance approach, transfer infrastructure, transfer software tools and licenses and transfer third party contracts.
One or more Transition Work Plans were prepared and tracked as part of the Transition Projects	▪ Evidence of regularly updated schedule, activities list, work plan, e-mails, efforts tracking
An Operational Framework or equivalent was prepared and approved as part of the Transition Projects	▪ Evidence of relationship and services delivery management processes documented and approved by client ▪ Using the CPMF Operational Framework template and contractual obligations capture the following: document distribution / change process, org chart, roles and responsibilities, contractual/service levels change management

Program Planning
Quality Assurance Plan

IT Services
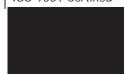
Verification Item	Typical Provided Evidence
	process, contracted services delivery management processes, relationship management, communications/escalation processes
The contract was updated to reflect changes to delivered services / service levels / price, etc.	▪ Contract updates and addenda approved (signed by client) as per the OMF
Delivered services change requests were approved by the client and managed through to their fulfillment	▪ Delivered services change requests ▪ Client approval of change requests
Service levels agreements (SLAs) were documented and communicated to delivery and management teams	▪ Documented service levels ▪ Service levels related communications, e-mails ▪ Service levels related data loaded in incidents/ problems/ changes management systems
The Service levels management report(s) was prepared and distributed to the engagement manager as per the OMF	▪ Report preparation ▪ Emails to members per the OMF
Communications were managed as per the operational framework requirements (Evidence of changes/ distribution of the operational framework document, escalation process application, meeting minutes, e-mails)	▪ Evidence the Operational Framework updates were communicated internally and externally ▪ Evidence of implementing (or the means to implement) the escalation process ▪ Meeting minutes ▪ Status Reports ▪ Emails ▪ Other evidence of communication per the Operational Framework
The Capacity plan was maintained in compliance to the contractual requirements	▪ Plan updates related to changes in human resources and infrastructure, presentation/ communication to client, e-mails
The Capacity Management Report(s) was regularly prepared as per contractual requirements	▪ Evidence of the preparation and distribution of the report to the engagement manager
The Availability Management Report(s) was regularly prepared, as per the operational framework requirements	▪ Evidence of the preparation an distribution of the report to the management manager
The Disaster Recovery plan was prepared and maintained, as per contractual requirements	▪ Evidence of the update of the plan related to changes in delivery services and infrastructure
The Disaster Recovery Management Report(s) was prepared, as per contractual requirements	▪ Evidence of the report preparation and distribution to the engagement manager related to disaster recovery plan tests or application
The Pricing/ Cost Model was maintained	▪ Evidence of the evolution of the model related to changes to the delivered services

Program Planning

Quality Assurance Plan | IT Services

Verification Item	Typical Provided Evidence
The engagement management information was collected and distributed to CGI management as per the responsible business unit and corporate reporting requirements	▪ Health Check reports ▪ Delivery Review materials
The Change Management Report was prepared as per the operational framework requirements	▪ Change Management Report ▪ Evidence of distribution of the report to management
The Assets Management Report was prepared as per the operational framework requirements	▪ Asset Management Report ▪ Evidence of distribution of the report to management
The Incidents Management Report was prepared as per the operational framework requirements	▪ Incidents Management Report ▪ Evidence of distribution of the report to management
The Security Management Report was prepared as per the operational framework requirements	▪ Security Management Report ▪ Evidence of distribution of the report to management
Applications or their additions/ changes were done using the methodology or approach describe in the operational framework	▪ Evidence of document preparation and implementation of the operational application per the steps described in the Operational Framework ▪ Project delivery checklist or evidence of a quality review of applications to verify compliance with the Operational Framework
The Change Management Report was prepared as per the operational framework requirements	▪ Evidence of the regular preparation end distribution of the report to the engagement manager
Data on managed assets were maintained as per contractual requirements	▪ Evidence of an asset management process linked to inventory changes, assets list, regular update to the asset list
Accuracy of assets management data was verified as per the operational framework requirements	▪ Evidence of asset data analysis, cross-references based on various information sources, etc.
The Assets Management Report was prepared as per the operational framework requirements	▪ Evidence of the regular preparation end distribution of the report to the engagement manager
Applications Change Requests were documented to facilitate their processing	▪ Evidence of a document or a database/ request management tool record
Applications Change Requests were verified/ estimates prepared and approved by the client	▪ Evidence of a CGI review or approval, approval by client, signed forms, electronic approvals, e-mails
Applications Change Requests were done, verified, tracked and their implementation done as per the OMF requirements	▪ Evidence of verification/ approval by CGI ▪ Acceptance testing if prescribed ▪ Change requests status report, transfer of the requests to the change management process, communications, e-mails

Program Planning

Quality Assurance Plan   IT Services
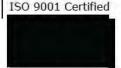
Verification Item	Typical Provided Evidence
Release Packages were prepared, verified and assembled before being authorized for distribution and implementation in the production environment	▪ Evidence of verification and testing of releases as per the OMF requirements
End users, support personnel and management were informed about the release packages related training, distribution and implementation plans	▪ Evidence of communications to the implicated groups, e-mails, internal memos to end-users, release packages documentation, as per the OMF
Release Packages were approved by the client and implemented in the production environment	▪ Evidence of release packages client approval as per the OMF
Hardware installations were approved and tracked by the responsible authorities	▪ Evidence of hardware installation requests and their approval by the responsible authorities as per the OMF ▪ Information transfers to change management and configuration (assets) management processes
Software installations and distribution were approved and tracked by the responsible authorities	▪ Evidence of software installation/distribution requests and their approval by the responsible authorities as per the OMF ▪ Information transfers to change management and configuration (third party contracts) management processes
Incidents were documented to facilitate their processing	▪ Evidence of a document or a database/ incident management tool record
Incidents were investigated and their resolution documented as per the operational framework requirements	▪ Evidence of a documented solution in a document or a database/ incident management tool record
Incident corrections (or recoveries from incidents) were processed as per the operational framework requirements	▪ Evidence of temporary or permanent solutions implemented, change requests preparation, emergency incident corrections, etc.
Incident closing feedback was delivered to the client	▪ Evidence of communication to client representatives, computerized or manually delivered, e-mails
The Incidents Management Report was prepared as per the operational framework requirements	▪ Evidence of the regular preparation end distribution of the report to the engagement manager
Equipments were monitored and their performance measured in compliance with the SLAs	▪ Evidence of the application of performance measurement mechanisms, information transfers to the availability management process

CGI

Program Planning
Quality Assurance Plan | IT Services

Verification Item	Typical Provided Evidence
Adequate support to hardware breakdowns was applied to comply with the SLAs and the operational framework requirements	• Evidence of sufficient hardware parts inventory levels to comply with the service levels agreements • Service levels agreement related to hardware maintenance contracts, documented and applied escalation process, hardware incidents knowledge base
Hardware installation requests were analyzed for their impact on the overall infrastructure performance in compliance to related SLAs	• Evidence of conducted impact analysis communicated to responsible authorities, information transfers to the change management process as per the OMF
Applications and software were monitored and their performance measured in compliance to the SLAs	• Evidence of the application of performance measure mechanisms, information transfers to the availability management process
Software related change requests were analyzed for their impact on the overall service performance and availability in compliance to related SLAs	• Evidence of conducted impact analysis communicated to responsible authorities, information transfers to the change management process as per the OMF
Networks were monitored and their performance measured in compliance with the SLAs	• Evidence of the application of performance measurement mechanisms • Information transfers to the availability management process
Adequate support to network breakdowns was applied to comply with the SLAs and the OMF	• Evidence of SLA related to network maintenance contracts, documented and applied escalation process, network incidents knowledge base
Network related change requests were analyzed for their impact on the overall service performance and availability in compliance to related SLAs	• Evidence of conducted impact analysis communicated to responsible authorities • Information transfers to the change management process as per the OMF
The Security Management Report was prepared as per the operational framework requirements	• Evidence of regular report preparation and distribution to the engagement manager
Discharge approval was received	• Evidence of official discharge document signed by client and CGI

State of ▮▮▮▮▮▮▮

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Information Technical Services Program

Security Plan

June 4, 2009

REVISION HISTORY

Version	Date	Author	Description
Version 1.0	2009-06-04	David Johnson /Jim Hewitt	Initial Deliverable

TABLE OF CONTENTS

1. Executive Summary

The State of ███████ ██████████████████████████ (████ requires the ████ / ████████████ Information Technical Services Program (██████ ITSP) to have a documented security plan. ████ has instructed its constituent organizations to commit the time, funding and resources to maintain a current, executable security plan. The purposes of the ██████ ████████ IT Services Security Plan are:

- To provide an overview of the security requirements of the program's systems;
- Describe the controls in place or planned for meeting those requirements;
- Make recommendations on work that has yet to be done and where to focus efforts for improvement;
- Communicate with Program and IT staff on the Program's security posture, as a basis for granting or denying user access.

2. Current State of ██████████ ITSP Information Security

The major success factor in implementing ████████ IT Services Security is **governance**. The authority for making and enforcing information security decisions for the Program rests with the State of ██████ and it is up to the State to exercise that authority. As the IT service provider for the program, CGI will implement the State's decisions and directives to protect the program's assets. This plan describes how CGI is implementing those decisions so far, and how it will do so in the future.

The focus of this plan is the protection of Personally Identifiable Information (PII). PII is defined in the NIST *Guide to Protecting the Confidentiality of Personally Identifiable Information* as:

> *Information which can be used to distinguish or trace an individual's identity, such as their name, social security number, biometric records, etc. alone, or when combined with other personal or identifying information which is linked or linkable to a specific individual, such as date and place of birth, mother's maiden name, etc.*

The ████████ IT Services environment presents significant security challenges, mainly related to its major organizational transition. The IT organization has invested heavily in security processes and technologies to address these challenges and has been successful in doing so. The Program has benefited from a consistent, thorough approach to security management, building of awareness and implementation of in technologies. This plan provides recommendations for extending this approach to address the risks presented by the transition.

Overall, the current environment has an effective combination of security technologies and non-technical controls. The comprehensive security strategy and mix of safeguards are a good match between the Program's business requirements and the IT security risks it faces. The environment has a wide variety of technical and non-technical controls, and employs a layered approach to defense. This creates resiliency without over-reliance on any single technology.

2.1. Plan Overview

The objective of the ▮▮▮▮▮▮ IT Services Security Plan is to outline the management approach for applying security measures that meet the expectations of the Program management, and the State of ▮▮▮▮▮▮ The plan encompasses the applications used by the program, its network and server environment, and the physical facility that houses it. Successful execution of the plan will create a sound operating environment and will allow the Program to operate securely.

This document will be reviewed periodically according to the project schedule and updated as needed. Lessons learned from continuing security management activities will be considered throughout the life of the Program and used to improve the standards for applying and managing security.

This security plan is divided into the following sections:

Scope and System Inventory – The systems and applications covered by the plan

System Environment and Conditions Impacting Security – Characteristics of the environment and the Program that create security challenges

Security Controls – In-place and planned countermeasures

- o **Administrative Controls** – Management and operational security measures
- o **Physical Controls** – Measures for protecting the program's physical environment
- o **Technical Controls –** Logical security measures

Noted Risks – Highlighted risks to be addressed as the plan is implemented

Plan Milestones – Major tasks for addressing the program's risks

2.2. Scope of the IT Security Plan

The scope of this plan is the systems listed in the ▮▮▮▮▮ *Review Inventory*:

System/Svc	OS Name	Type	OS Version	Notes
eGrants, J RA, ADS	Linux	Physical	2 6	Linux Database Server
eGrants, J RA, ADS	Linux	Physical	2 6	Linux Database Server
Data Warehouse	Linux	Physical	2 6	Business Objects Server Database
Data Warehouse	Linux	Physical	2 6	Business Objects Server Database
Email	Windows	Physical	2003	Domain Controller, Exchange2003
File Server	Windows	Physical	2003	Main File Share/TS Licensing Server
ADS, RAS, Microsoft Apps	Windows	Physical	2003	SQL 2005 Server
Sharepoint, BlueStreak, SQL	Windows	Physical	2003	SQL 2000 Server
Sharepoint, BlueStreak, SQL	Windows	Physical	2003	SQL 2000 Server
ADS, RAS, Microsoft Apps	Windows	Physical	2003	SQL 2005 Server
eGrants	Linux	Virtual	2 6	EGRANTS Back End Database
J RA	Linux	Virtual	2 6	Issue Tracker Web Front End
Active Directory	Windows	Physical	2003	Domain Controller
eGrants	Windows	Physical	2003	EGRANTS Front End Server
Blackberry	Windows	Virtual	2003	BlackBerry Server
J RA	Solaris	Physical	10	Issue Tracker Application Server
www.road2la.org	Windows	Virtual	2003	Road2la
Sharepoint	Windows	Virtual	2003	Microsoft SharePoint Administration
Sharepoint	Windows	Virtual	2003	SharePoint Server
Email / Webmail	Windows	Virtual	2003	Exchange OWA Front End Server
Data Warehouse	Windows	Physical	2003	Oracle Server for eGrants and FTP Server for letters
Blue Streak	Windows	Physical	2003	BlueStreak Application server.
ADS, RAS, Microsoft Apps	Windows	Physical	2003	SharePoint/ComponentArt.Web Server
Blue Streak	Windows	Physical	2003	BlueStreak Application server.
Blue Streak	Linux	Virtual	2 6	Blue Streak web front end
Data Warehouse, Reporting	Windows	Virtual	2003	Oracle Server unknown applications.
Cirtix, HDS	Windows		2003	Citrix Secure Client Gateway
Antivirus	Windows		2003	McAfee AntiVirus Server

It includes the network components, and policies and procedures that support these applications and physical security for the Customer Assistance Center (CAC) at ██████████████████ ████████.

It does not include security at the Venyu service provider, or at the Program's business partners.

2.3. Authority and Stakeholders

As stated above, security for the Program's IT environment involves stakeholders from both the program, the State of ████████ CGI, and other contractors. The various stakeholders and security points of contact are outlined below.

2.3.1. Stakeholders

The following organizations have been designated responsible for the systems and applications used by the ████████ Program.

████ – **Office of Community Development** – An agency of the State of ████████
████ – **Disaster Recovery Unit** – An office under ████ operator of the ████ / ████ Information Technical Services Program
CGI – The primary IT service provider for the Program, reporting to ████
HGI (Hammerman & Gainer, Inc.) – a contractor working on the Program for the State of ████
ACS – A contractor working on the Program for the State of ████
HDS – An ████ / ████ program focused on small rental properties, using the application of the same name

2.3.2. Information Security Contacts

Title	Name	Organization
Director of Information Security	David Johnson	CGI
Information Security Office – Access Management	Craig Morris Scott Landry	CGI
Active Directory Domain Administrator	Jim Rance	CGI
Data Warehouse	Jim Rance	CGI
eGrants	Kevin Marino Kelly Jorden	CGI
HDS	Raul Matos	CGI
BlueStreak	Jamie Corley	CGI
Business Objects	Chris McCarthy Orterio Villa	CGI
SharePoint Applications	Rick Morin	CGI
Director of ████	████████	State of ████
Program Manager (System Owner)	████████	State of ████

2.3.3.   Laws & Regulations that Apply to ▌▌▌▌▌ IT Services Systems

- Office of Management and Budget (OMB) Memorandums:
  - M-03-22: Implementing the privacy provisions of the E-Government Act of 2002
  - M-06-15: Required policy review for all agencies
  - M-06-16: NIST checklist for protection of remote information
  - M-06-19: Updated guidance on the reporting of security PII incidents
- NIST publications:
  - NIST Special Publication 800-18, Guide for Developing Security Plans for Information Technology Systems, dated February 2006
  - NIST Special Publication 800-37, Guide for the Security Certification and Accreditation of Federal Information Systems dated May 2004
  - NIST Special Publication 800-53, Recommended Security Controls for Federal Information Systems, December 2007
- ▌▌▌▌▌ IT Services internal policies:
  - Acceptable Use Policy dated April 20, 2009 (Summary)
  - Computer Security Incident Response & Reporting Policy
  - Access Management Policy dated May 2009 (Summary)
  - Sanctions for Privacy Violations Policy dated May 2009 (Summary)
  - Wireless Acceptable Use Policy reviewed May 2009 (Summary)
  - Termination Policy dated May 2009 (Summary)
  - Backup Policy dated May 2009 (Summary)
  - Disaster Recovery Policy dated May 2009 (Summary)
  - Risk Management Policy reviewed 5-31-09 (Summary)
  - Security Awareness Training and Reminders Policy dated May 2009
  - Security Risk Management Procedure dated April 2009
  - Computer Incident Response Team Procedures reviewed May 2009
  - Log-In Monitoring Policy dated May 2009 (Summary)
  - Password Policy dated May 2009 (Summary)
  - Attachment to Password Policy – Techniques for Creating Secure Passwords
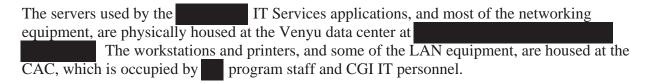
2.4.   System Environment and Conditions Impacting Security

Physical re-location – The Program's users have moved to new facilities in the last two months, and will move again in the next two weeks. The data center has not moved, but the staff who support it have relocated. New physical facilities were being added during the creation of this report, so the physical environment is changing rapidly.

Change of contracting organizations – CGI has taken the place of Inner City Foundation (ICF) as the primary IT contractor. CGI has rebadged the staff that supported this environment. The transition has been successful, but its work is on-going, and creates extra pressure on the security of the environment.

The servers used by the ███████ IT Services applications, and most of the networking equipment, are physically housed at the Venyu data center at ██████████████████ ████████ The workstations and printers, and some of the LAN equipment, are housed at the CAC, which is occupied by ██ program staff and CGI IT personnel.

Physical access is managed by CAC staff, whom CGI has no direct control and little transparency. While the building is closed to the general public, most areas of the building are not segregated on an as-needed basis. The Venyu data center has effective physical security.

2.4.1. Sensitivity of Information

Program information is not classified or categorized, beyond "PII" and "non-PII". The Program has no current policy that requires such classification. Other application information, such as financial records, would be harmful to Program clients and to the program if it were exposed. This security plan does not attempt to include protections against such risks as financial fraud by colluding internal staff.

2.4.2. Definitions of Security Risk Categories and Severities

Risks to information fall into three categories:

Confidentiality - The system contains information that requires protection from unauthorized disclosure.
Integrity - The system contains information that must be protected from unauthorized or unintentional modification, tampering or corruption.
Availability - The system provides services that must be available on a timely basis to meet mission requirements.

Risks are prioritized according to their levels of harm and impact, and their likelihood. These definitions are from the ████████ IT Services Program *Security Risk Management Procedures* document, reviewed May 31, 2009.

The adverse impact of a security event can be described in terms of loss or degradation of any, or a combination of any, of the following three security goals: integrity, availability, and confidentiality. *Integrity* is lost if unauthorized changes are made to the data or IT system by either intentional or accidental acts. If the loss of system or data integrity is not corrected, continued use of the contaminated system or corrupted data could result in inaccuracy, fraud, or erroneous decisions. Loss of *availability* occurs if an IT system is unavailable to its end users and impedes the organization's ability to fulfill its required function. Loss of system and/or data *confidentiality* is the unauthorized, unanticipated, or unintentional access or disclosure of information.

Definitions of Event Impact	
Critical	Warrants urgent action
Serious	Exercise of the vulnerability (1) may result in the very costly loss of major tangible assets or resources; (2) may significantly violate, harm, or impede an organization's function, reputation, or interest; or (3) may result in human death or serious injury.
Significant	Exercise of the vulnerability (1) may result in the costly loss of tangible assets or resources; (2) may violate, harm, or impede an organization's function, reputation, or interest; or (3) May result in human injury.
Minor	Exercise of the vulnerability (1) may result in the loss of some tangible assets or resources or (2) may noticeably affect an organization's function, reputation, or interest.

For the purposes of this plan, the major Program applications have been assigned the following values for each category of protection. Any system containing PII is assumed to have high confidentiality and integrity requirements, because of the legal liability to the Program if the data were disclosed or tampered with. Availability requirements are taken to be low-to-medium, because loss of the systems would not have an impact on public safety.

Definitions of Event Likelihood	
Likelihood Level	**Likelihood Definition**
Very High	Zero Day Event
High	The threat-source is highly motivated and sufficiently capable, and controls to prevent the vulnerability from being exercised are ineffective.
Moderate	The threat-source is motivated and capable, but controls are in place that may impede successful exercise of the vulnerability.
Low	The threat-source lacks motivation or capability, or controls are in place to prevent, or at least significantly impede, the vulnerability from being exercised.

2.4.3.   Inventory of Systems that Store or Process PII

Protection Requirements of ███ IT Services Program PII-Handling Applications			
	Confidentiality	*Integrity*	*Availability*
eGrants	High	High	Moderate
JIRA	High	High	Low
HDS	High	High	Low
ACS	High	High	Low
Business Objects	High	High	Low
BlueStreak	High	High	Low
Documentum	High	High	Low
SharePoint Applications	High	High	Low
Data Warehouse	High	High	Moderate

3. System Security Measures

This section contains a description of the security measures that protect the confidentiality, integrity, and availability of Program information.   Some of these control measures are already in place; some are planned, as described below. These control categories are derived from NIST Special Publication 800-53, *Recommended Security Controls for Federal Information Systems,* December 2007.

For each control measure identified below, specify whether the control is "**In-Place**," "**Planned**," "**In-Place and Planned**," or "**Not Applicable**." Not Applicable describes a type of control measure that is not needed, cost-effective, or appropriate for this system. A control that may be appropriate but not cost-effective should be highlighted as management may disagree during its review.

3.1. Management Controls

3.1.1. Security Assessment

Planned: To implement and fulfill the requirements that will allow the ▮▮▮▮▮▮▮ IT Services systems and networks to operate securely involves security control implementation and subsequent security testing of each component. The CGI Director of Information Security will collaborate with Program staff and all contractors and service providers to assist in the security assessment of the system. The Director will prepare the system for the security testing and work to resolve or mitigate Plan of Actions and Milestones findings resulting from the security testing. Security assessment occurs every three years at a minimum or whenever major changes take place to the system environment. The assessment effort is based on NIST sp800-53 and the complete set of Program security policies. This control area also feeds into the monitoring control portion the security plan.

3.1.2. Planning

In-Place: This control involves establishing a planning approach that involves creating a system security plan and maintaining it. The Director of Information Security owns the planning effort. This document is a central artifact of the planning effort, once approved and signed off by the Program managers. A primary responsibility of planning will be to ensure documentation is maintained according to the stated guidelines and updated as needed. Key Planning documents will be updated as part of the security implementation.   Planning control area documents are considered living documents and must be maintained to reflect the current operating environment of the systems, networks and applications.

3.1.3. Risk Assessment

An abbreviated risk assessment was conducted during the creation of this plan. The results are included in the listings of current and planned controls, recommendations and remaining risks in this document. A fuller risk assessment is planned after the completion of transition activities. The expected completion date is September 31, 2009.

The following applications were reviewed in order to design the risk assessment process:
- eGrants
- HDS - Home Owners Assistance Program
- HGS - Small Rental
- JIRA – Issue tracking
- SharePoint
- Database administrators
- BlueStreak
- Business Objects
- Service Delivery
- Access Management

Interviews: The security team conducted interviews with the staff responsible for applications, networks, databases, security systems.

Transaction walkthroughs: Security team walked through a sampling of transactions for each application, to understand the data flow and control points. The team also walked through some basic administration functions, such as how users are added and removed from systems.

Documentation Review: The security team reviewed the Program's security policies, system documentation, access management artifacts, software documentation, and procedure documents.

Site visit: The security team visited the CAC and Venyu sites and reviewed physical access and environmental controls.

System Characterization

The systems used by the Program are:
- Applications
- Databases
- Operating systems
- Networks

Physical locations
- The Venyu site at ▮▮▮▮▮▮▮▮▮▮▮ houses the servers and most of the network equipment.
- The CAC site at ▮▮▮▮▮▮▮▮▮ houses the user workstations, a few servers, and some switches.
- Some program work is done at some external sites by program business partners (loan closing companies, title companies).

Data used by the Program's systems:
  Applicant information
  Property information
  Case information
  Financial information
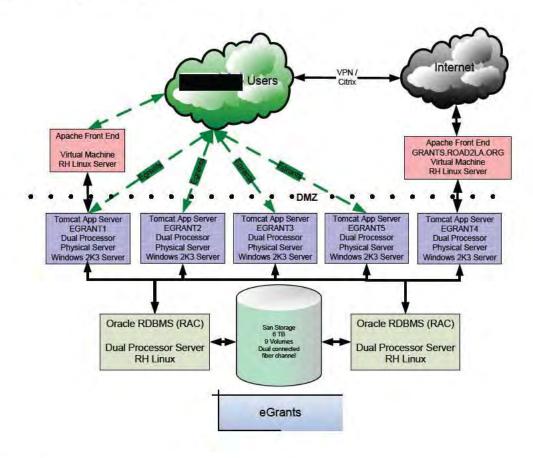
Users

████████ IT Services system users are the program staff located at the CAC, and some business partner users at external loan companies and title companies.

Application Flow

This diagram shows the general structure of the eGrants application, with the components that are in the scope of this plan:

Vulnerabilities

This preliminary risk assessment identified the following vulnerabilities:

- **Personnel**
  - All applications are vulnerable to unauthorized use by internal staff.
  - The Program users many business partners and sub-contractors, the people in the workforce report to many different managing authorities. As a result, authorization for enforcement of security policies is unclear.
  - The level of security training of State staff is unknown.
  - State staff and State management tend to demand increasing levels of privileges, in excess of business needs

- Sites that connect through Citrix are not under the control of the Information Security Office
- Move to new physical site creates adds potential for accidents and malfeasance
- Lack of documentation
- Applications have not been analyzed for vulnerabilities

Threat Sources
- Internal staff
- Computer criminals
- Adjunct staff, such as business partner staff
- Environmental threats, such as natural disasters

Control Analysis

Other System Evaluation Approaches
Periodic internal system reviews are conducted by the Security staff to identify possible areas of concern. The reviews are documented and the findings are forwarded to the appropriate personnel for action. Follow-up reviews are conducted to verify actions taken.

Review of Security Controls
The CGI Information Security Office is developing an ongoing audit and review program by which systems and applications will be assessed for security compliance and vulnerabilities. The expected completion date for this program is September 1, 2009.

Independent Security Review
An independent security review is planned for October 1, 2009, to be conducted by the State of ██████ or its designee. The results of the review, with any identified weaknesses in the areas of technical controls, security program documentation, risk assessment, security planning, and system configuration, will be reviewed with management. Actions will be taken to address all the areas of concern.

3.1.4.　　Workforce Controls

Access to Program applications requires that the user complete the following:
- A pre-employment criminal background check
- Security awareness training
- Authorization from the user's Program area manager
- Authorization from the CGI Director of Information Security

3.1.5. Systems and Services Acquisition

Control	Status	Description
Security oversight of systems and services acquisitions	In-Place	Acquisitions controls oversee system and services acquisitions, so that changes to system hardware and software do not present any exploitable vulnerabilities that will jeopardize the confidentiality, integrity or availability of the system's information. The Director of Information Security works with Program managers to ensure system documentation remains up to date and applicable. The Director also reviews acquisitions, changes to system software, interfaces, and the system configuration for security. New system or services acquisitions are reviewed for security with the Information Security Office.

3.2. ███████ IT Services Security Policies

The security policies associated with the Program are listed below. These policies form the basis of the security decisions made by the Program and IT management. Each policy is introduced by a Notice of Authority, stating that the policy is empowered by the authority of the State of ███████ explicitly _not_ by CGI:

> As the primary IT services contractor for Office of Community Development/Disaster Recovery Unit ("███████ CGI is authorized by ███████ to specify, communicate and monitor the WIRELESS ACCEPTABLE USE POLICY and the INFORMATION TECHNOLOGY ACCEPTABLE USE POLICY (collectively, "Policies"), based on policy requirements provided by ███████ Enforcement of the Policies is the responsibility of ███████ through the assistance of CGI. All ███████ contractors are required to provide that all staff members are educated on the Policies, and are responsible for providing that employees and subcontractors comply with the Policies.

Each policy includes a signature block to record user agreement. These policies are summarized in large-print wall posters on display in the CAC building.

1. *Acceptable Use Policy,* summarized in Appendices
2. *Appendix A: Acceptable Use Policy* . This policy enumerates the appropriate user behavior in order to protect the confidentiality, integrity and availability of information stored on or transmitted over the ███████ IT Services computer networks and telephony systems, and to make certain Local, State and Federal Regulations are being followed.

3. *Access Management Policy,* dated April 2009, summarized in Appendix C: Access Management Policy (Summary). This policy formalizes and documents the process for authorizing appropriate access to Program information systems containing PII.

4. *Sanctions for Privacy Violations Policy*, dated May 2009, summarized in Appendix D: Sanctions for Privacy Violations Policy, . This policy presents the sanctions (penalties) that the ███████ IT Services Program will apply for violations of the Information Technology Acceptable Use policies. Program personnel can be subject to disciplinary action up to and including termination.

5. *Wireless Acceptable Use Policy,* dated May 2009, summarized in Appendix E: Wireless Acceptable Use Policy (Summary). This policy defines the standards, procedures and restrictions for the procurement and use of wireless devices to access for the ███████ IT Services Program. The policy provides for the use of program resources in a secure and cost-effective manner while protecting these resources and data from unauthorized use.

6. *Termination Policy*, dated May 2009, summarized in Appendix F: Termination Policy (Summary). This policy defines each manager's responsibilities for disabling access to workstation and server access, data access, network access, email accounts, application user accounts, when an employee is terminated.

7. *Data Backup Policy,* dated May 2009, summarized in Appendix G: Backup Policy (Summary). This policy documents the Program's guidelines for backing up, securely storing and testing backups for information systems and electronic media systems that contain PII.

8. *Disaster Recovery Policy,* dated May 2009, summarized in Appendix H: Disaster Recovery Policy . This policy defines the Program's commitment to creating a disaster recovery regimen for restoring its systems if they are impacted by a disaster.

9. *Risk Management Policy,* reviewed May 31, 2009, summarized in Appendix I: Risk Management Policy . The Risk Management Policy communicates appropriate behavior in order to ensure the Confidentiality, Integrity and Availability of information stored on or transmitted over the ███████ IT Services computer networks or telephony systems, and to make certain Local, State and Federal Regulations are being followed.

10. *Security Awareness Training and Reminders Policy*, dated May 2009, reproduced in Appendix J: Awareness Training & Reminders Policy (Summary) . The Security Awareness Policy specifies how the Program's guidelines for appropriate user behavior will be communicated. The Program has developed, implemented and regularly reviews the formal, documented program for regularly providing appropriate security training and awareness to workforce members.

11. *Log-in Monitoring Policy*, dated May 2009, summarized in Appendix M: Log-In Monitoring Policy (Summary). It lists the specific steps required for a secure log-in (e.g. no information displayed before authentication, display of banner text, limit to number of unsuccessful login attempts), logging of log-in attempts, detection of discrepancies, and user training on how to log in.

12. *Password Policy,* dated May 2009, summarized in Appendix N: Password Policy (Summary). It lists the constraints and complexity requirements that are enforced on Program passwords.

13. *Attachment to Password Policy – Techniques for Creating Secure Passwords*, reproduced in Appendix O: Techniques for Creating Secure Passwords. It lists instructions for users on how to create passwords that are unique, secure and easy to remember.

3.3. ▮▮▮▮▮ *IT Services Security Procedures*

The ▮▮▮▮▮ IT Services security procedure upon which all the others are based is the *Security Risk Management Procedure*, dated April 2009. It is embedded at and quoted extensively here.

Most security-related procedures use the Program's Access Management Form (AMF). The AMF is used for changes to user access, user account creation and termination, network connections and hardware. The AMF prompts the user to enter required information based on the user's stated needs. It includes a section for the business justification of the requested change. Its basic workflow follows the pattern below. Variations of this procedure are used for a wide variety of IT tasks. For the most part, the process is consistent and well-documented. It appears to satisfy the business areas without overburdening the information security and technical areas.

When a business manager makes a request for application access through the AMF, the screen form displays the following text:

> The AMF System is strictly monitored. Once this form is submitted, Information Security will record and review all actions taken, including items selected, data completed and author. By submitting this form you agree to these terms and are subject to interrogation by an Information Security Officer.

The form has a checkbox labeled, 'I approve the information in this form,' and a free text box for justification of the requested access.

Access Management Form Workflow
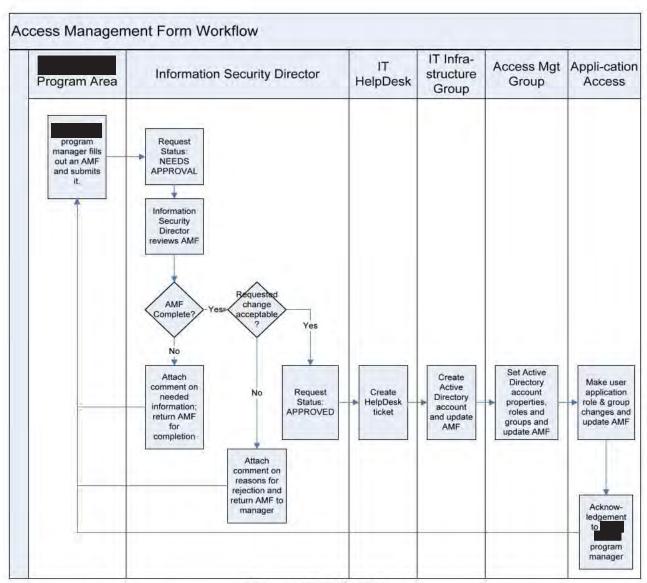
Figure 1 AMF Workflow

Procedure: Entry of New Employee
- Determine employee's access requirements
- Grant needed access
- Periodically review access

Procedure: Change of Employee Responsibilities
- Change user group, add new privileges
- Revoke old privileges

Procedure: Employee Termination
- Planned termination
- Expedited termination

Separation of Duties

Separation of duties is the division of tasks or privileges, such as the granting of access to a system, across two or more independent parties. With separation of duties in place, no individual can completely control an entire process. Separation of duties provides protection against mistakes, and against fraud.

Control	Status	Description
Separation of Duties	In-Place	Access to ███████ IT Services Program systems is governed by separation of duties in numerous areas. Primarily, almost all application access is managed by both Active Directory and application-level controls. Active Directory itself is handled by three separate IT groups. The Information Security Director approves user account setup, IT Infrastructure staff create the user accounts, and Access Management staff assign user groups, roles and privileges. Application access is done by dedicated staff for each application. . The implementation of separation of duties demonstrates the program's commitment to security, since these tasks can be done more simply by single staff members.

Assignment of Security Responsibility

Specific staff must have security tasks explicitly included in their day's work.

Control	Status	Description
Assignment of Security Responsibility	In-Place	The following staff support David Johnson Security Director and have been assigned responsibility in writing for the security of the subject systems: eGrants: Kevin Marino Kelly Jordan JIRA: Jim Rance HDS: Raul Matos Documentum: Jim Rance Business Objects: Chris McCarthy Orterio Villa BlueStreak: Jamie Corley SharePoint applications: Rick Morin Data Warehouse: Jim Rance Database: Gaylord Shotton

| | Planned | Each business unit/contractor has an application access management AMF coordinator, The AMF coordinator is the primary contact for the program areas when they have a new hire that needs access, a change in access, or a staffer has been terminated. He/She is in the process of analyzing and consolidating the user roles, profiles and groups. Because of the transition, there are many overlapping, redundant, excessive or under-documented user profiles.

The AMF coordinators and Information Security expect to have a complete set of consolidated roles and profiles by user profile 10/15/2009. |
| | Planned | Responsibility for security in acquisitions of hardware and software – responsibility for including security requirements in each purchase. |

Development / Implementation Controls for Systems and Applications

Program application development and implementation controls are intended to ascertain that adequate protection is built into the systems and applications during development and to ensure continued operation at an acceptable level of risk during the installation, implementation, maintenance, and operation stages.

Applications interviewed in connection with the development of this plan are well-versed in the security requirements of their applications.

Control	*Status*	*Description*
Application security testing	Planned	Program applications are written in Java and Microsoft .NET. Both have systemic vulnerabilities, and vulnerabilities caused by coding errors. Testing for application-level security is time-consuming, and was not part of the creation of this plan. One application (eGrants) has an easily visible security bug – it is susceptible to URL tampering
Security specifications for systems and applications	Planned	During the design, installation, configuration, and implementation of Program applications, security requirements identified by the Director of Information Security are taken into consideration.

Acquisition specifications	In-Place	For commercial, off-the-shelf applications, security requirements are identified and included in the acquisition specifications. Formal technical, administrative, physical, and personnel security requirements were included in specifications for the acquisition or operation of information technology installations, equipment, software, and related services. IT products are evaluated by CGI prior to request for procurement. During the evaluation, the technologies are tested for vulnerabilities and reviewed for compliance with security requirements. For example, CGI requires that applications support the use of Active Directory.
Acquisition process	Planned	The following acquisition-related tasks would improve the ▮▮▮▮▮▮ IT Services security posture: - Development of security requirements with associated evaluation and test procedures before the procurement action. - Inclusion of security requirements and test procedures in solicitation documents. Inclusion of provisions for updating security requirements as new threats and vulnerabilities are identified and as new technologies are implemented.
Design review	In-Place	CGI staff have reviewed the security designs and run tests on each Program application. Review and tests consisted of a compliance verification of the system configuration with established guidelines identified in the appropriate Security Compliance Checklist (Attachment 4). In addition, Information Security is developing an Audit and Review program that will include scheduled periodic system and application reviews and testing. Expected completion date is Aug. 31, 2009.
Configuration management	In-Place	CGI has developed a Configuration Management process that includes reviewing, testing and tracking modifications made to systems and applications. See 3.4.2 for details.

3.4. Operational Controls

Operational controls are the procedures and mechanisms used by CGI staff to protect production systems and applications. Operational controls affect the application and system environments.

The CAC facility has only rudimentary physical controls, managed by the State of ███████ The entrances are secured and attended by live guards. There are no publicly accessible areas of the facility.

3.4.1.   Awareness and Training

Control	Status	Description
Training policies	In-Place	Security awareness and training requirements are specified in the ██████ IT Services Program Security Awareness Training Policy.
Security Awareness Training	In-Place	The Program's security awareness training is a requirement for every member of the workforce when beginning work for the program. The Director of Information Security delivers the training in person. Topics include password management, use of email and specific policies such as restrictions on USB drives. The Information Security Director supplements the training with written materials and email bulletins on topics like phishing, protection from malicious software, incident reporting and discussion of program business outside the office.
Additional user documentation	In-Place	The ██████ *IT Services Program Account Information* one-page document is given to each user. It lists: - Login instructions - Password restrictions / complexity requirements, and recommendations on selecting a secure password - Email and application access instructions - ██████ IT Services Program helpdesk contact information
Periodic re-training in security awareness	In-Place	Security awareness training would repeated, for example once a year.
Login warning banner	Planned	The planned login warning banner message will promote user awareness.

3.4.2. Configuration Management

The Program's configuration management process allows system administrators and stakeholders to track changes to system configurations. The process establishes a system baseline configuration in order to effectively track deviations.

The Information Security, Services and Infrastructure groups work together to establish and maintain a system baseline and track changes to the system configuration. A critical component of configuration management is the analysis of the security impacts of any proposed system configuration changes. This analysis prevents the introduction of risks or vulnerabilities to the system as a result of a configuration change.

The following hardware and system software maintenance controls are used to monitor the installation and updates to hardware, operating system software, and other system software. These controls are used to ensure that only authorized software is allowed on the system.

Control	Status	Description
Configuration management program	In-Place	The CGI Infrastructure group has developed a Configuration Management program that includes version control, testing, impact analysis, change identification and documentation of modifications made to systems and applications.
On-line configuration management system	In-Place	An on-line configuration management form has been developed by the Access Management group and is close to approval and implementation.

3.4.3. Contingency Planning

CGI has an extensive contingency planning and disaster recovery planning effort in progress. It is documented separately and is largely out of scope for this Security Plan.

3.4.4. Incident Response

Control	Status	Description
Incident / event response procedure	In-Place	CGI has implemented an event response procedure with assigned staff and documented procedures. Members are assigned from each team (infrastructure, network, applications, and program areas) to respond to security incidents. Roles are assigned and a communications plan is in place. The Computer Incident Response Team Procedure is reproduced in Appendix B: Computer Security Incident Response & Reporting Policy.
Incident post-analysis	In-place	Incident post-analysis is performed regularly, with staff from each team participating.
Incident response including external parties	Planned	Incident response assignments for external entities, such as service providers (Venyu) and downstream customers (HGI, SBA and First American). Communications plans and escalation procedures including these parties.
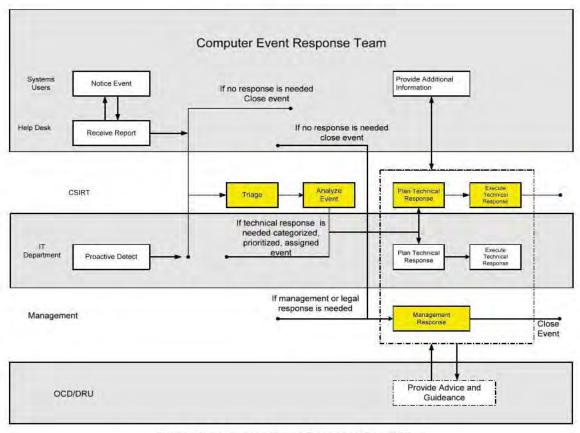
Figure 2 Computer Event Response Team Flow

3.4.5.   Maintenance

The maintenance controls put in place by CGI monitor the installation of operating system and application software, and their updates, so that the software is secure, updated, and functions as expected. This allows a historical record to be maintained of system and application changes. The CGI Director of Security coordinates with the IT Infrastructure system administrators to maintain a compliant approach to performing system maintenance. Consideration of security implications as a result of maintenance will be performed in coordination with the program areas. A primary focus of maintenance activities is analysis of the tools used to perform maintenance and maintenance being performed proactively so as not to introduce vulnerabilities due to negligence.

Several of the tools requested and planned for implementation by the Information Security Office have functions that are useful for maintenance.

Control	Status	Description
Routine maintenance services	In-Place	The Program has made provisions so that maintenance and repair work can be done without increasing security risks: - Restrictions and controls on staff who perform maintenance and repair activities. - Special procedures for emergency repairs and maintenance. - Management of hardware and software warranties and upgrades. - Controls on remote maintenance services
Preventive maintenance	In-Place	The Program has established an effective preventive maintenance program to eliminate or reduce most of the need for unscheduled corrective maintenance.
OS patching schedule	In-Place	Windows patches are scheduled for the 20th of each month. Patching is done in a test environment first then deployed to production.
System development lifecycle	In-Place	In-house developed applications used by the Program follow an established software development life cycle procedure during the development and operational stages. During these stages, all application and configuration changes are documented.
Application patch management	In-Place	Applications have scheduled downtimes for patching. Patches are installed in the test environment first, and then deployed to productions.
Removal of PII from test data	Planned	Most application testing is performed against live production data, though in read-only mode. A future test structure could include the generation of fictional test data, to address risks to confidentiality.

3.4.6. Media Protection

These controls protect physical access to printed and electronic media.

Control	Status	Description
Controls on removable media	In-Place	Prohibition of USB-mountable storage devices for all workstations and laptops that are connected to the Program's network
Shredding for hardcopy information	In-Place	Bins for the Program's shredding services are next to all high-capacity printers.
Sanitization of retired media	In-Place	The Program has policies and procedures in place for Sanitization of electronic media when it is reused or discarded. These are carried out by the Services Delivery group.
Additional controls on printed output	Planned	Despite these controls, the risk from printed output is still a concern at the CAC facility. The new facility may implement controls over the movement of paper documents with sensitive information.
Handling of removable backup media	Not applicable	The Program does not use removable media for backups, so they have no requirement for labeling or handling procedures for backups tapes, for example.

3.4.7. Physical and Environmental Protection

Physical security controls at the CAC facility:

Control	Status	Description
Badging and sign-in sheet at CAC entrance	In-Place	Badging and sign-in are handled by Program staff
Separately secured Document File Area for sensitive document handling, with a warning posted against entry by unauthorized personnel.	In-Place	Note: An attempt to enter this area without authorization resulted in the visitor being immediately challenged.
Keypad locks	In-Place	Keypad locks for some rooms, such as network operations
Assigned responsibility for physical security	Planned	The CAC facility does not have clear lines of authority for management of physical access.
Documented procedures for physical security	Planned	There appears to be a process for staff, contractors and visitors to sign in and sign out of the building. It is not clear how they are authorized. The level of training of the CAC physical security staff is unknown.
Separated workspaces limited by badge access	Planned	In the CAC facility, there is no way to limit access to different work areas by badge, except for the data center. Most areas of the building cannot be restricted, except by rudimentary keypad access and personal vigilance.
Restrictions on mobile computing devices	In-Place	The *Wireless Acceptable Use Policy* calls for users to maintain physical control of their laptops and Blackberries, and to physically lock them up when they cannot.

3.4.8. Personnel Security

Control	Status	Description
Evaluation of job positions by sensitivity level	In-Place	All security-related positions have been evaluated for sensitivity level. It was determined by ICF that all positions require a pre-employment criminal background check, management justification and approval by the Director of Information Security.
		Because almost all Program staff have access to sensitive information, positions are not individually reviewed for sensitivity level. A post-transition security task could include a review of positions that have elevated security requirements.

Additional workforce checks	Planned	- Background checks - Job descriptions - Oversight by workforce managers of staff's work - Periodic review of accumulated access rights

3.4.9. Audit and Variance Detection

Control	*Status*	*Description*
Intrusion detection and intrusion prevention systems	In-Place	CGI staff are well versed in these technologies. They have configured and tuned them to meet the Program's requirements, and they devote a significant portion of the workday to reviewing logs and alerts. Access Management staff discover and patterns of inappropriate user behavior or malicious activity, and escalate them to management.
Independent review	Planned	An independent security review is planned for 10/1/2009, to be conducted by the State of ███ or their designee. The results of the review, with any identified weaknesses in the areas of technical controls, security program documentation, risk assessment, security planning, and system configuration, will be reviewed with management. Actions will be taken to address all the areas of concern.
Current documentation	In-Place	The following is a list of documentation used by CGI in the service of the Program: – Vendor-supplied documentation of hardware and software – Application requirements – Operating procedures – Emergency procedures – User rules/procedures – User manuals – Contingency, backup and disaster recovery procedures – Configuration management form
In-progress documentation	Planned	Expected completion date is November 30, 2009 – Application program documentation and specifications – Test procedures and results – Memorandums of understanding with interfacing systems – Risk assessment procedures

3.5. Technical Controls

This section identifies the hardware and software controls that provide automated protection from unauthorized access or misuse, detect security violations, and support security requirements for systems, applications and data.

Active Directory (AD) is the central control point for user management and access control for the Program's network and its applications. IT management uses AD to enable and disable user access to the network and to each application. Application access must still be specified at the application level. AD enables the information security office to disable a user's access quickly and completely.

3.5.1. User Identification and Authentication

Control	Status	Description
Applications secured by user identification and password	In-Place	Most Program applications use the program's central Active Directory for user authentication and authorization.
Password Policy	In-Place	The Program's password policy is reproduced in Appendix N: Password Policy (Summary).
Guidelines for creating secure passwords	In-Place	The Program's instructions for creating secure passwords are reproduced at Appendix O: Techniques for Creating Secure Passwords The Program's information security training includes guidelines for creating secure passwords.
Password complexity requirements	In-Place	Passwords must be: – At least eight characters, with alpha, numeric and special characters – Changed by the user every 90 days, enforced by the network – Different from the last 12 previously used passwords
Password change requirements	In-Place	Users are obliged to change their passwords, if compromised. Password changes are done through a link from the main application menu. Users are trained on their obligations for password handling, the prohibition against sharing IDs, etc., during new-hire security awareness training.
Unique user identifiers	In-Place	The Program's network and all applications require user identifiers (IDs) and passwords for identification and authentication. User IDs are formulated based on the user's first name, last name and organization.

User IDs used in accountability controls	In-Place	User accountability is enforced by application and system audit functions. Actions associated with each user account, including Internet activity, are logged in an audit file.
Two-factor authentication	Not applicable	The Program's systems do not use hardware tokens or biometrics for user authentication. No requirement for them has been identified.
Password entry obscured	In-Place	Passwords are masked (hidden from view) on the input screen when a user is logging into the system.
Limit to unsuccessful login attempts	In-Place	After three unsuccessful login attempts, the user account is disabled.
Mechanism for password reset	In-Place	The user must contact the system administrator in person to have the account enabled. CGI Access Management staff verifies the identity of the user with the user's manager, prior to enabling the account.
Default user accounts disabled	In-Place	All system default accounts are either changed or removed from each system prior to operation. When a system undergoes a modification, the system administrator verifies that the default accounts are configured correctly.
Login screen warning banner	In-Place	The ▇▇▇▇▇ IT Services network implements screen warning banners at the client level. Each node connected to the network is configured to display a system warning banner identifying the following guidance and notice: **"INSERT LOGON BANNER TEXT."** Removal of the above message from the screen requires that the user press a key to continue, acknowledging the warning. This banner has been approved by ▇▇▇▇▇ IT SERVICES APPROVAL AUTHORITY.

3.5.2. Logical Access Controls

Control	Status	Description
User-based network access controls	In-Place	Internal network access controls limit who can logon, what network resources will be available, what each user can do with these resources, when and from where access is available. The Access Management group has developed procedures to address access authorization and justification for information resources. The procedures include actions for terminating the access of departing users. These procedures included an expedited procedure for users terminated for cause.
Machine-based network access controls	Planned	Work is in progress by the Infrastructure and Information Security to lock down network endpoints by MAC address. The expected completion date is October 31, 2009.
User-based system access controls	In-Place	User access controls determine how, when, and where Program users will gain access to Program systems. Setting up user security profiles includes the following tasks: – Specify group memberships and roles – Specify logon and logout settings – Specify logon times and session expiration – Disable a user's access These tasks are specified and documented in the Access Management Form. All user access appears to be managed according to job roles, with few functions assigned on a per-user basis. Session time-outs are handled by each application
Network file access controls	In-Place	File security is determined by the level of security that is imposed on the directory in which the file resides. (Individual files can be secured by employing "password protection" or other security mechanisms allowed by the specific application software.) Each directory has an access rights list (ARL) that consists of user names and access levels.

Application-Level Access Controls

Control	Status	Description
eGrants access controls	In-Place	eGrants access is controlled through Active Directory. The eGrants application groups its privileges into nine user roles. It implements a configurable 60-minute session timeout at the application level.
eGrants access controls	Planned	The application contains PII, and has no confidentiality-specific controls, such as backend encryption or data masking.
	Planned	At least one security-related application-level bug has come to the administrators' attention: The URL includes the case number, and typing in a different case number retrieves the other case record, bypassing security controls.
BlueStreak access controls	In-Place	The BlueStreak application enables transaction access by roles. User account access is administered by the ███████ IT Services Build Team (formerly ICF). The user administration role has access to the User Profile Tool and the Role Management Tool. The BlueStreak audit function uses a user account with no roles assigned. It has access to an administration form for running queries against the audit records. Access is read-only.
BlueStreak access controls	Planned	Not all of these roles are completely documented. IT staff have an on-going project for documenting them.

Controls on Network Access

These controls determine how outside users and servers can access the resources in the LAN from outside the ▮▮▮▮▮ IT Services network. Remote access is only available through the Citrix VPN. The MS-Exchange mail system is available through its Outlook Web Access interface.

Application access is controlled centrally from Active Directory groups. Users are presented with only the application they have access to.

Control	Status	Description
Web filtering	In-Place	CGI has implemented BlueCoat for web filtering. The product works from vendor-supplied blacklists, and from whitelists (exceptions to the blacklists) that are entered by the CGI Access Management group. They are re-organizing the whitelists, to assign entries by business unit. Requests for whitelist entries go through the AMF system. BlueCoat is secured by Active Directory. Each whitelist entry is identified by the user's AD group, and is available only to that group. Among other things, BlueCoat is used to enforce the policy prohibiting the use of external web-based mail systems, social networking sites and streaming media. The original decisions on sites to be whitelisted were made by State of ▮▮▮▮▮ management – Lara Robertson, Neal Underwood and Tom Burkes.
Web filtering	Planned	- The Access Management group will introduce a formal procedure for requesting, reviewing, approving and implementing whitelist changes. - The Access Management group has requested a baseline whitelist from the State. They would modify this baseline to fit the Program's specific needs. - In the long term, the Access Management group will differentiate BlueCoat entries by business group. - When other transition work is complete, the Access Management group will generate BlueCoat policy violations logs and top-10 surfers reports, and distribute them to business managers.

| Firewall rules / ACLs | In-Place | Firewall rulebases, tunnels and access lists are managed by NTG, who execute change requests from the Services Delivery area. NTG has a list of authorized ███████ IT Service staff who may request changes.

As an example of the balancing of security and business needs, the Information Security Office allows the GoogleTalk instant message application through the firewall. Program users can request access, stating their business need for it, and if accepted, CGI IT staff will install the GoogleTalk client. Users cannot install the software themselves. |
|---|---|---|
| Business partner access | In-Place | HGI is restricted to 4 IP they can reach, inside the Program network. The IPs are for file servers and the data warehouse. |
| VPN access | In-Place | VPN access is controlled through user profiles, which are managed by the Information Security Office, using the Access Management Form. It features strong audit support.

Citrix access is restricted via excluded address ranges, such as addresses from China. |
| Internal network | In-Place | The ███████ IT Services network staff has implemented the following internal network security measures:
- Unused switch ports are disabled. If an attacker were to enable an unused port and plug in a device, the change would be flagged and network staff would receive an alert.
- Network staff would receive an alert of a rogue laptop were plugged into the internal network.
- Switches operate in failover mode, with auto-rollover.
- Core devices use SSH for maintenance.
- Most MAC addresses are locked down. |
| Internal network | Planned | - Some core devices use telnet for maintenance, which is less secure than SSH. Changing this requires an IOS upgrade.
- When the transition is complete, network staff will implement port security. Currently, there is too much turnover of staff and equipment to use it. |

		- Network staff are considering implementing a VLAN Management Policy Server (VMPS) to automate some of the work they now do by hand.
Dedicated workstations for personal Internet use	Planned	When the physical re-location is complete, the Information Security Office will set up kiosk workstations in public break rooms. The kiosks will be used for personal Internet activities that are not allowed on Program workstations, like personal email. The kiosks will not be connected to any other Program components. The Information Security Office has created the artifacts that will support the kiosks, in anticipation of the move.

Malicious Software Controls

Control	Status	Description
Host-based virus protection	In-Place	The ▆▆▆▆ IT Services requires that all servers and workstations run anti-virus software and keep their signature files up to date. Visitors' laptops are also required to have up-to-date AV software running. The ▆▆▆▆ IT Services Acceptable Use Policy prohibits users from disabling the anti-virus software on a program workstation.
Prohibition on USB-mountable disk drives	In-Place	The program's policy against USB drives eliminates the risk from these devices as a means of introduction of infected files.
Perimeter malicious software protection	In-Place	The ArcSight product detects viruses in Internet traffic

Integrity Verification

Control	Status	Description
Data integrity verification	In-Place	▆▆▆▆ IT Services does not use any explicit form of data integrity verification, beyond the built-in functionality provided by its databases. Data modification rights are carefully restricted, and no requirement has been identified for additional integrity controls or protections from malicious tampering.

Audit Trail Mechanisms

Control	Status	Description
Component audit logs	In-Place	The ▓▓▓▓▓ IT Services uses audit logs as a user accountability control. Audit logs are maintained on each server and network component. They trace user activities to the responsible individual. The log is protected from unauthorized modification, destruction, and access by the limited rights assigned by the system administrator using the operating system software. The audit logs are reviewed daily by the system administrator for instances of possible abuse. Users are notified during new-hire security awareness training, as well as in the logon security banner, that their actions are subject to monitoring and review by CGI management. The audit log records or has the capability to record the following events: − Which user logs in and uses the system − Actions the user takes. − Some actions taken by system administrators, such as the creation of new domains or admin accounts, generate email alerts to staff in other areas. For each recorded event, the audit record identifies: − Date and time of the event − User ID − Origin of the event (e.g., terminal ID, MAC address) − Type of event − Success or failure of the event
System and firewall log monitoring	In-Place	The Access Management group uses the ArcSight product to monitor system and firewall logs. Service Delivery staff review the logs for core switches and routers, though not for non-core components. They do not have staff time available for reviewing all components.
System and firewall log reporting	In-Place	The Access Management group uses ArcSight's basic reports. They plan to use its reporting features more fully.

Login monitoring	In-Place	Login monitoring is authorized and detailed in the ▮▮▮▮ IT Service Login Monitoring Policy. Users are notified that logins are monitored during security awareness training.
Collection of application logs	In-Place	Each application has its own transaction logs. Some of these are available through the application user interface, mainly intended to help program supervisors oversee and measure their staff's work. Some logs must be requested for retrieval by application technical staff.
Review of application logs	Planned	Application logs are rarely reviewed by Program managers. Program managers do review reports that show how much work each staff member is doing. The application logs serve only for after-the-fact investigation, if there were some other indication of a problem. A better approach would be routine, periodic reviews by managers of their staff's logs.
Automated correlation of server, application and network logs.	Planned	This would involve selection and implementation of a commercial tool, and a very significant investment of staff time.
Dedicated logging / network security server	Planned	In the long term, the Service Delivery area will implement a dedicated syslog server and / or a Cisco AAA server.

3.5.3.   Confidentiality Controls

The confidentiality of information accessed and processed on the Program network is protected using a variety of methods. The methods involve the use of Operational, Technical, and Administrative controls defined in previous sections of this plan. See the following sections:

> Operational Controls - Physical and Environmental Protection and Production Input/Output Controls,
> Security Awareness and Training – Security Awareness and Training Measures,
> Technical Controls – User Identification and Authentication and Authorization/Access Controls.

Control	Status	Description
Disk-to-disk backup	In-Place	The Program limits its confidentiality risk by using disk-based backups. Disks are mirrored off-site, and there is no physical handling of removable media containing PII. This eliminates the risk of backup media being lost or stolen. Backups also serve as integrity and availability controls.

Business partner agreements	Planned	Written agreements stating the obligations with respect to confidentiality of PII, for the Program's external entities, such as service providers (Venyu) and downstream customers (HGI, SBA and First American). The agreement would include how the Information Security Office will verify each organization's compliance, and penalties for failure to comply. The ISO would work with each organization on its plan for meeting its obligations.

3.5.4.   System and Information Integrity Controls

Perimeter security is managed by Venyu (formerly NTG), the Program's managed service provider. CGI staff report that Venyu's performance and responsiveness have been very good.

Venyu submits an *Asset Audit Report Form* each month. This report lists all servers, storage and logging devices, switches, routers, software and power equipment hosted at Venyu for the Program, and confirms that the component was verified for the one-month period.

Intrusion Prevention / Intrusion Detection
The CGI Access Management group invests heavily in staff time for monitoring network anomalies. Access Management staff have a large part of each workday devoted to responding to perimeter security alerts. Suspicious events such as rogue traffic or intrusion attempts are reported to Venyu, who quickly implement firewall rules changes to block the offending source.

Control	*Status*	*Description*
Intrusion detection	In-Place	The CGI Access Management group uses the SourceFire product for intrusion prevention and malicious code protection at network layer 2. The product monitors network traffic and compares the contents and patterns to known vulnerabilities and exploits. CGI staff have procedures in place to update signature files. They also have incident response and escalation procedures.
Log management	In-Place	The CGI Access Management group uses the ArcSight product for log management, reporting, alerts and forensics of perimeter network logs. The Access Management group actively reviews the logs several times per day and pursues any unexplained activity.

3.5.5.   Data Integrity and Validation Controls

Control	Status	Description
Application security compliance	Planned	The Program's collection of applications will be certified for processing using the completion of a system compliance checklist. The checklist verifies that the configuration associated with the operating system software and hardware requirements are in compliance with established guidelines.

Database-Specific Controls

The core elements of the Program's database involve PII. Almost all application and access is read-only. Overall, the database has controls against tampering with data or destroying it, but less protection against improper disclosure.

Control	Status	Description
Database access controls	In-Place	Database access is role-based. Applications are assigned roles. There are two roles each for HDS and STR. Applications connect using resource accounts. Applications can do some INSERTs but they cannot do UPDATEs or DROPs. Some batch jobs do DROPs.
Database monitoring	Planned	There is currently no monitoring of the Oracle database. The DBAs will begin doing so once the major tasks involved in the transition are complete. The DBAs have requested the purchase of the Oracle GRID management tool, which includes performance monitoring.
Database configuration management	Planned	The DBAs plan to implement Oracle Configuration Manager, which is part of Oracle Enterprise Manager.
Database auditing	Planned	The DBAs plan to selectively activate database auditing. There is currently no way to trace work that was done in the database to fulfill a data request.

3.5.6.   General Office System Controls

Email Protection

Control	Status	Description
Email scanning for confidential content	In-Place	CGI has implemented the Proofpoint product for email security. ProofPoint is a mail content filter that scans messages using lexicon that detect PII, such as social security numbers. If an outbound message is thought to contain PII, it is quarantined, a warning message is sent to the sending user, the user contacts the ▮▮▮▮▮ IT Services helpdesk, and the helpdesk opens a ticket for the Access Management group. The Access Management group inspects the message and if it does not contain PII, releases it. The process is labor intensive but it mitigates the major confidentiality risk of PII in email.
Controls on email destinations	In-Place	ProofPoint controls the domains with which Program users can exchange email. Email domains are specified in permitted whitelists and denied blacklists. Domains and users in turn are controlled through Active Directory.
Group-specific controls on email	Planned	When other transition work is complete, the Access Management group will implement finer-grain email domain restrictions. For example, ACS staff will be allowed access to a mail domain they need, but that no one else needs.
Email scanning for malicious content	In-Place	FrontBridge strips executable attachments, which carry a risk of virus infection, and works to protect system integrity.
Email filtering for spam	In-Place	CGI has implemented the anti-spam functionality of Microsoft's Exchange Hosted Services, formerly marketed as the FrontBridge product. It is operated by Venyu as part of its managed service, and requires no work on the part of CGI staff. Its performance is very good, as very little spam gets through and the number of reported false positives (i.e. blocked legitimate messages) is very low.
Email usage policy	In-Place	The *Acceptable Use Policy* and *Sanctions Policy* warn users against sending PII in email.

Email encryption	In-Place	CGI has implemented ZixMail email encryption, which protects mail messages from disclosure and tampering. The product scans each outbound message, using a lexicon of terms and patterns that identify PII. If it determines that a message contains PII, the message is automatically encrypted and re-routed. The recipient receives a message saying that a secure email is waiting, with the sending user's name and a link to the message on the ZixMail server (road2la-securemail.org).
Email encryption policy	In-Place	There is no policy that would instruct users on when to use secure mail
Email retention	In-Place	State of ▮▮▮▮ requirements state that all email messages must be retained indefinitely. The Program journals all emails to storage at the Venyu data center. Journaling is an availability control and gives the program some liability protection.

Workstation and Office Application Protections

Control	*Status*	*Description*
Workstation anti-virus protection	In-Place	All workstations use anti-virus protection. The anti-virus system intercepts filesystem calls and scans files before users open them. This supports confidentiality, system integrity and availability, since many viruses involve the theft of information from the host.
Windows account limitations	In-Place	Ordinary users are not given Windows administrator access, meaning they cannot install software, including browser plug-ins. This acts as a mitigation against the spread of malicious software.
Windows account limitations	Planned	Some software vendors have software (browser plug-ins) that require local Windows administrator rights to run. Allowing this would open up a large range of risks. The Information Security Office is in contact with the vendors.

3.6. Planned Implementation of Security Tools

Planned: The Information Security Office has expressed the need for several new tools, listed below. These are generally classified as auditing tools, but they are very useful for troubleshooting and day-to-day management.

- **Hyena** – This tool displays the entire contents of an Active Directory instance. It is used for managing object properties, searching, reporting and auditing. It includes functionality for managing Windows domains, groups, shares, devices, and events.
  Status: Acquisition is progress. The product has not yet been delivered or implemented.
- **Total Network Inventory** – Tool to enumerate network filesystem shares, looking for illegal or hazardous files.
  Status: Acquisition is progress. The product has not yet been delivered or implemented.
- **SAINT** – A network vulnerability scanner and penetration testing tool.
  Status: The Information Security Office is negotiating this request with management.
- **CORE Technologies Hawk-I** – A tool for network asset identification, vulnerability scanning, and tracking policy compliance.
  Status: The Information Security Office is negotiating this request with management.
- License-checking tools, such as Microsoft System Center Configuration Manager, VMWare LMTools or HP Quick Test Pro
  Status: Primary selection stages
- **Oracle GRID** for the DBAs, to monitor database use and performance
  Status: Purchase has been requested

In the past the Information Security Office used the TRACE product. In addition to its shortcomings (many false positives), it is now off maintenance.

4.   Noted Risks

Governance Risk – For the ▮▮▮▮▮▮ IT Services security program to work effectively, the State of ▮▮▮▮▮ must buy in to it. As an initiative by a service provider (CGI), the security program will not ultimately succeed, regardless of the investment of technology and staff.
Mitigations in place: The Information Security Office is in constant contact with Program management, communicating its overall security strategy and day-to-day security decisions.
Planned mitigations: When the transition activities are complete and the organization has arrived at a steady state of operations, the State of ▮▮▮▮▮ must use its position as the ultimate authority over Program security to endorse the Information Security Office and marshal the support of all State managers and workforce.

Organizational Risk – Information security duties are divided across State of ▮▮▮▮▮ staff, CGI personnel, and others from other companies. Information Security Office has no authority or leverage for ensuring the proper people are hired or that their skill levels are maintained, that they are motivated, or to direct their work.
Mitigations in place: From CGI's position as a partner to the State, the Information Security Director works with State management staff to set goals and priorities and make recommendations towards meeting those goals.
Planned mitigations: The Information Security Office will continue to focus on communication with State management and staff.

Risk from Transition – The Program is changing physical facilities and contracting companies at the same time. There are many staffing changes going on, and anecdotal evidence suggests that communications concerning employee transitions are not good.
Mitigations in place: The Information Security Office is putting extra effort into communications during the transition. Other short-term measures are unlikely to pay off in the brief period before the next relocation.
Planned mitigations: The Information Security Office is using the transition period to its advantage, cleaning up and re-organizing user accounts, groups and roles. This work removes temporary and redundant IDs, eliminates excess accumulated user privileges.

Risk of Accumulation of User Privileges – The Information Security Office has made a large investment in time, cleaning up over 3000 user accounts. There is still a risk that users have more access than they should.
Mitigations in place: The Information Security Office has completed a re-organization and record-by-record review of all user accounts.
Planned mitigations: In the long term, an integrated identity management system would allow managers to review all of a user's rights in one place.

Risk of PII in Email – Controls are in place to capture and quarantine messages containing obvious PII such as social security numbers, and to sanction users for violations. These controls have some benefit, but they require large amounts of staff time to release improperly quarantined messages, and a motivated user can circumvent them. Ultimately the only effective measure is proper user procedures. The email system is accessible through the Outlook web interface.
Mitigations in place: This risk is addressed through training and communication. Users are notified that their email messages are monitored and reviewed, which has some preventive benefit.
Planned mitigations: The Information Security Office will continue to focus on user awareness and communication.

Risk from the Large Size of the Oracle Database – The database used by the eGrants and JIRA applications occupies a large amount of storage (more than 6TB). This limits CGI's options for securing it.
Mitigations in place: The Information Security, Database and Service Delivery areas have explored all available alternatives and settled on the current state as the best available in cost-benefit terms.
Planned mitigations: The eventual upgrade to Oracle 11 may present additional alternatives.

Risks from MS-Office Files Stored in the Database – Several applications support the storage and retrieval of binary files, including MS-Office files, which are attached to application records. These files are prone to contain malicious content. An infected file could be stored intentionally or unintentionally by a user, and when opened would release its content inside the Program's network.
Mitigations in place: This risk is mitigated by the on-file-open virus protection installed on the Program's workstations.
Planned mitigations: Two additional measures would be to implement a programmatic call to an anti-virus program to scan the files before they are loaded into the database, and to programmatically exclude executable files, such as .exe and .vbs files.

Risks from Access Control in Third-Party Applications – Many of the program's applications are COTS software with minor customizations. They use out-of-the-box sets of user roles and groups, and these often do not fit the Program's structure of staff duties. The result is that administrators must grant excessive privileges to users, in order to give them enough access to do their jobs.
Mitigations in place: Program staff have re-structured some tasks and duties to fit the available access control structures.
Planned mitigations: Negotiate with vendors for enhancements in future software releases.

Risks from Hard-Copy PII – The *Sanctions for Privacy Violations Policy*, lists the following directives on the handling of printed PII:
- The Security Director will report inappropriate access of hard copy PII to the ▮▮▮ / ▮▮ designated representative, and sanctions will be applied by the Contractor, as stated in the policy.
- The policy names the following actions as eligible for sanctions:
  - Improper disposal of PII
  - Improper protection of records or other PII
  - Leaving records on a desk or where otherwise accessible by unauthorized individuals.
  - Leaving any documents that contain PII in inappropriate areas

Despite the controls that are in place, it is extremely difficult to detect or prevent a user mis-handling paper, so the risk remains high. For example, there are many fax machines in the building.

Mitigations in place: The CGI Security Director stresses proper handling of printed PII during security awareness training, and in follow-up bulletins. The CAC building has lockboxes for shredding next to most of the high-capacity printers. For example, in the HGI support area, a posted large-print notice states, "Please note that due to personally identifiable information (PII) left on the copy machine, sheets will be discarded every hour."
Planned mitigations: Unknown

Risk from Lack of an Information Management Policy – The Program's policy coverage is very good. It would benefit from an information management policy. Such a policy would specify how the Program will create, store, retrieve and dispose of information. It would apply to (e.g.) applicant and non-applicant data, emails, employee records.
Mitigations in place: Elements of a policy are in place in different documents and business practices.
Planned mitigations: Unknown. Creation of a policy would require a commitment from the State of ▮▮▮▮▮▮

Risks from Technical Staff Access to Production Data - Developers and DBAs have access to application data, including PII. They require this access for application maintenance and troubleshooting.
Mitigations in place: There are no reasonable mitigations available.
Planned mitigations: Oracle 11 may have enhancements that mitigate this risk.

Risks from External Access Through Citrix - External users accessing Program applications through Citrix come from environments that are not under the control of the Information Security Office. The hygiene at these external environments is unknown.
Mitigations in place: Some known-risk domains (such as China) are explicitly excluded from initiating Citrix connections.
Planned mitigations: The Information Security Office is acquiring network sniffing and analysis tools that will provide visibility into Citrix activity, along with other network traffic. They will use these tools to detect and block improper activity on high-risk channels such as Citrix connections.

Risks from Connections to Program Partners - The Program's business partners (SBA, HGI, First American) have limited access to the Program's network, but their access is not well segregated. The Program has no control over the security at these external sites. Some of these sites, such as ICS, are changing status through the organizational transition.
Mitigations in place: Unknown
Planned mitigations: The Director of Information Security plans to implement network traffic analysis tools that would segregate out traffic from these Program partners, and detect patterns of misbehavior being carried out by using these connections.

Physical Access Risks - Access within the CAC facility cannot be restricted by badge. Letting a person past the front door gives him or her access to the entire building, except for the Document File Area, the network operations areas which has a keypad, and the data center. Staff entry and exit are not electronically logged.

Mitigations in place: Some informal controls (Do Not Enter signs) are in place.

Planned mitigations: This risk will be revisited when transition work is complete.

Plan Milestones

- Complete transition-related work
- Complete risk assessment for post-transition environment
- Complete internal audit and review of security controls
- Complete independent audit and review of security controls
- Work on gaps
- Implement planned tools
- Implement planned controls

5. Appendices

Appendix A: Acceptable Use Policy April 2009 (Summary)

Purpose

The purpose of the Information Security Acceptable Use Policy is to communicate appropriate behavior in order to not only ensure the Confidentiality, Integrity and Availability of information stored on or transmitted over the ██████ IT Services computer networks or telephony systems, but also make certain Local, State and Federal Regulations are being followed.

This policy states, in summary:

1. The ██████ IT Services organization may access, intercept, copy, review, disclose, and delete any information stored on or transmitted over ██████ IT computer networks or telephony systems to the fullest extent legally permitted.
2. Users must not leave a transportable computer unattended without password-locking and cable-locking it, or check it as luggage.
3. Each user is responsible for all activity performed with his or her user ID. Each user must use only his or her own ID. Users must keep their passwords secret, and change them if they may have been compromised.
4. Users must not delete, disable, or deactivate virus detection or other system software.
5. Circumventing user authentication or security of any ██████ system is prohibited.
6. Users must not connect devices such as PCs and wireless access points not issued or approved by ██████ IT to any ██████ network.
7. At any time and without prior notice, ██████ IT will examine all Internet traffic content stored on or passing through its computer systems and networks, including email.
8. ██████ IT will block access to certain web sites and block the downloading of certain file types.
9. Users must not use the ██████ provided Internet access to abuse, defame, stalk, harass or threaten anyone or violate local or international laws.
10. Users must not disclose internal ██████ or other information through the Internet without proper approval from the information owner and comply with directives regarding the safeguarding of sensitive information and PII.
11. Data that requires encryption must use an encryption process approved by the Information Security Office.
12. Users must use the ██████ email system primarily for business purposes. Personal use must not interfere with normal business activities.
13. Users must not open e-mail attachments unless they were expected from a trusted sender, and only after these attachments have been scanned by an approved anti-virus software package.
14. Users who need to receive a file containing executable code from an external source must use a method other than e-mail because e-mails containing such material will be blocked.

Appendix B: Computer Security Incident Response & Reporting Policy, (Summary)

I.   Purpose
The purpose of the Computer Security Incident Response Policy is to communicate appropriate behavior in order to not only ensure the Confidentiality, Integrity and Availability of information stored on or transmitted over the ███████ ‑ ███████ computer networks or telephony systems, but also make certain Local, State and Federal Regulations are being followed

II.   NOTICE OF AUTHORITY
As the primary IT services contractor for ██████████████████ ███████████ ("███████ CGI is authorized by ██████ to specify, communicate and monitor THE ███████████ PROGRAM WIRELESS ACCEPTABLE USE POLICY and the INFORMATION TECHNOLOGY ACCEPTABLE USE POLICY (collectively, "Policies"), based on policy requirements provided by ████████ Enforcement of the Policies is the responsibility of ████████ through the assistance of CGI. All ████████ contractors are required to provide that all staff members are educated on the Policies, and are responsible for providing that employees and subcontractors comply with the Policies.

III.   POLICY
1. The Information Security Department has organized and maintains a Computer Security Incident Response Team (CSIRT) that will be the ████████ Program's primary coordinator of security incident reporting and response. The (CSIRT) provides accelerated notification, damage control, and problem correction services when a security incident occurs. The (CSIRT) includes the Information Security Director and other professionals as deemed necessary. The specific responsibilities and scope of the (CSIRT) is defined in the (CSIRT) Procedures document.
2. Team members have an easy to use and effective process for reporting security incidents. All team members are regularly made aware of this process.
3. A team member must not prevent another member from reporting a security incident.
4. The (CSIRT) must appropriately respond to all security incidents that are reported to it via the security incident reporting process.
5. When responding to an incident, the (CSIRT) must take all appropriate actions to ensure that the confidentiality, integrity, and availability of information systems have not been compromised.
6. When evidence shows that a ████████ Program information system has been subject to a security incident, an investigation must be conducted by the ████████ Program (CSIRT). Such investigations should provide sufficient information to ensure that:
   - Vulnerabilities that lead to the incident(s) are identified.
   - Appropriate security controls are established to mitigate the above vulnerabilities.

- The (CSIRT) must create and document formal guidelines on security incident evidence collection. These guidelines must be regularly reviewed and revised as necessary.
- For purposes of analysis and possible prosecution, the Information Security Officer for ██████████ Program must collect appropriate evidence regarding security incidents.
- Information System Security for the ██████████ Program effectively detects and responds to security incidents in order to protect the confidentiality, integrity, and availability of its information systems.

Appendix C: Access Management Policy (Summary)

1. The ████████ Program has a formal, documented process for granting, tracking, logging, reviewing and revising users' access to PII.
2. Users are not allowed access to information systems until they are properly authorized.
3. The type and extent of access they receive will be based on risk analysis, taking into account the importance of each application, the value and sensitivity of its PII, and connections to other systems.
4. ████████ ████████ Program system owners or their formally designated delegates must define and authorize all access to systems containing PII.
5. Only users who need access to PII in order to perform a specific job function will be granted access.
6. ████████ workforce members must not attempt to gain access to systems containing PII for which they do not have proper authorization.
7. This policy applies to all business units and contractors that use or disclose PII for any purpose.

Appendix D: Sanctions for Privacy Violations Policy, (Summary)
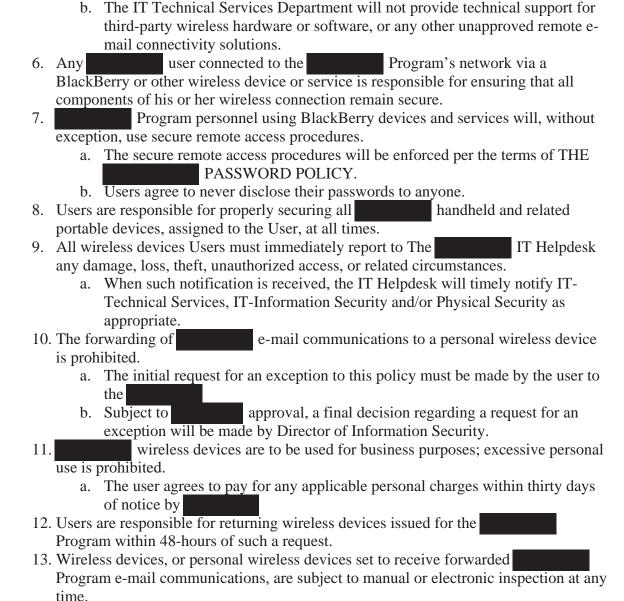
This policy specifies the guidelines for discipline of ███████ workforce members, and recommended sanctions for policy violations. It states, in summary:

1. ████████ users' activities will be logged and audited.
2. Each contractor is responsible for their team members' access, and for the execution of sanctions, which are stated in the policy.
3. The Security Director will report violations of the Acceptable Use policies to the ████ / ████ designated representative.
4. The Security Director will report inappropriate access of hard copy PII to the ████ / ████ designated representative, and sanctions will be applied by the Contractor, as stated in the policy.
5. The policy names the following actions as eligible for sanctions:

Nature of the Violation	Examples of Violations	Recommended Sanction
1. Accidental or incidental access or disclosure of (PII).	- Failing to sign off a given computer terminal containing PII when not using it - Accessing own record in computer system - Accidental misdirection of fax, mail or email of confidential information - Improper disposal of PII - Improper protection of records or other PII - Leaving records on a desk or where otherwise accessible by unauthorized individuals. - Leaving any documents that contain PII in inappropriate areas - Not properly verifying individuals by phone, in person or in writing - Verbal discussions including confidential information in inappropriate locations (i.e. elevators, cafeteria, etc.) - Inappropriate use of the internet can include but is not limited to surfing, messaging, or excessive use of personal email, streaming or inappropriate use of network resources	**1st Offense** Documented review and retraining on policies that address access, use and disclosure of confidential information. **2nd Offense** Additional documented training and education and verbal warning. **3rd Offense** Training and written warning.
2. Unacceptable number of previous accidental or incidental violations.	4 (Four) or more documented accidental or incidental violations in a 12 month period 5 (Five) or more documented accidental or incidental violations in a 12 month period	**Final Warning** Discharge from ██████ ████ Program
3. Purposeful violation of the IT Acceptable Use policy without disclosure of PII, i.e. inappropriate Internet activity in violation of the HR Sexual harassment policy	- Using another user's access code - Sharing personal access code with another person - Accessing the record of a client without having a legitimate reason to do so - Intentional surfing of pornographic web sites	**1st Offense** Documented Final Warning **2nd Offense** Discharge from ████ ████ Program

4. Purposeful violation of IT policies with associated potential to do harm.	• Deliberate disclosure of PII to unauthorized individual or company • Sale of PII to any source • Any uses or disclosures that could invoke harm to a client or The ▇▇▇▇▇ Program.	**1st Offense** Discharge from ▇▇▇ ▇▇▇ Program

Appendix E: Wireless Acceptable Use Policy (Summary)

PURPOSE

The purpose of this policy is to define the standards, procedures, and restrictions for the procurement and ongoing use of wireless devices for the ▮▮▮▮▮ Program. The goal of this policy is to provide for the use of program resources in a secure and cost effective manner while protecting these resources and data from unauthorized use.

SCOPE

This policy applies to all Blackberries, mobile phone, wireless internet or other wireless devices procured for the ▮▮▮▮▮ Program. Users authorized to use privately owned personal wireless devices are also subject to this policy. This policy applies to all ▮▮▮▮▮ Program staff currently using, or planning to use, wireless-based technology to access the Program's data and networks.

NOTICE OF AUTHORITY

As the primary IT services contractor for ▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮ ▮▮▮▮▮▮▮▮ ("▮▮▮▮▮▮" CGI is authorized by ▮▮▮▮▮ to specify, communicate and monitor THE ▮▮▮▮▮ PROGRAM WIRELESS ACCEPTABLE USE POLICY and the INFORMATION TECHNOLOGY ACCEPTABLE USE POLICY (collectively, "Policies"), based on policy requirements provided by ▮▮▮▮▮ Enforcement of the Policies is the responsibility of ▮▮▮▮▮ through the assistance of CGI. All ▮▮▮▮▮ contractors are required to provide that all staff members are educated on the Policies, and are responsible for providing that employees and subcontractors comply with the Policies.

POLICY AND APPROPRIATE USE GUIDELINES
1. All Users are subject to THE ▮▮▮▮▮ PROGRAM I.T. ACCEPTABLE USE POLICY.
2. All hardware, software, and related components that provide wireless-related connectivity for the ▮▮▮▮▮ Program will be managed by Information Technology.
3. Authorization for individual user access to the ▮▮▮▮▮ Program network, hardware, software, and related components must be requested from and granted by the Information Security Office.
4. The installation and use of wireless-related hardware, software, and related components not approved by the Information Security Office is not allowed.
5. In order to provide reliable and secure services, Information Technology will only support, provide access, and e-mail redirection from the ▮▮▮▮▮ Blackberry Enterprise Server.
   a. Redirection of e-mail that does not utilize the ▮▮▮▮▮ Blackberry Enterprise Service will not be supported.

    b. The IT Technical Services Department will not provide technical support for third-party wireless hardware or software, or any other unapproved remote e-mail connectivity solutions.

6. Any ██████ user connected to the ██████ Program's network via a BlackBerry or other wireless device or service is responsible for ensuring that all components of his or her wireless connection remain secure.

7. ██████ Program personnel using BlackBerry devices and services will, without exception, use secure remote access procedures.
    a. The secure remote access procedures will be enforced per the terms of THE ██████ PASSWORD POLICY.
    b. Users agree to never disclose their passwords to anyone.

8. Users are responsible for properly securing all ██████ handheld and related portable devices, assigned to the User, at all times.

9. All wireless devices Users must immediately report to The ██████ IT Helpdesk any damage, loss, theft, unauthorized access, or related circumstances.
    a. When such notification is received, the IT Helpdesk will timely notify IT-Technical Services, IT-Information Security and/or Physical Security as appropriate.

10. The forwarding of ██████ e-mail communications to a personal wireless device is prohibited.
    a. The initial request for an exception to this policy must be made by the user to the ██████
    b. Subject to ██████ approval, a final decision regarding a request for an exception will be made by Director of Information Security.

11. ██████ wireless devices are to be used for business purposes; excessive personal use is prohibited.
    a. The user agrees to pay for any applicable personal charges within thirty days of notice by ██████

12. Users are responsible for returning wireless devices issued for the ██████ Program within 48-hours of such a request.

13. Wireless devices, or personal wireless devices set to receive forwarded ██████ Program e-mail communications, are subject to manual or electronic inspection at any time.

Appendix F: Termination Policy (Summary)

Purpose   The purpose of the ██████████ Termination Policy is to communicate appropriate behavior in order to not only ensure the Confidentiality, Integrity and Availability of information stored on or transmitted over the ████████ - ████████ computer networks or telephony systems, but also make certain Local, State and Federal Regulations are being followed

NOTICE OF AUTHORITY

As the primary IT services contractor for ██ ██████ (" ██████████ CGI is authorized by ██████████ to specify, communicate and monitor The ██████████ Termination Policy based on requirements provided by ██████████ Enforcement of the Policies is the responsibility of ██████████ through the assistance of CGI. All ██████████ contractors are required to provide that all staff members are educated on the Policies, and are responsible for providing that employees and subcontractors comply with the Policies.

Policy The ██████████ Program has created and implemented a formal, documented process for terminating access to Protected Identifiable Information when the employment of a workforce member ends. It is the policy of The ██████████ Program that when a workforce members employment ends, their information systems privileges, both internal and remote, must be disabled or removed in a timely manor. The ██████████ Program information system privileges include, but are not limited to, workstation and server access, data access, network access, email accounts, application user accounts.

Procedures   Upon the termination or resignation of any ██████████ employee, contractors shall utilize their specific Human Resources procedures and will also be required to submit a Termination Form to the IT Security Team via the Access Management Form (AMF). This request includes disabling of systems access and instructions for the disposition of existing email and voicemail accounts.

Termination Forms must be submitted at least 1 business day prior to exit date (if possible). The IT Security Team should ensure that all processes associated with the Termination request are performed by midnight of the employee's exit date.

It is the responsibility of each program contractor's management to ensure that any outstanding voicemail messages and emails are captured prior to the employees' exit date and addressed within 48 hours after the exit. Additionally, applicant advisor reassignment should occur within 48 hours of exit.

Contractor Management should ensure that all ██████████ Property is collected from each exiting employee prior to the exit date. Contractor Management will coordinate with IT to properly log the return of the equipment. This includes, but is not limited to:
- ID badge, access cards, keys
- Laptop computer, BlackBerry, cell phone, air card, camera, GPS

The policy goes on to quote *The ██████████ Managers Guide to Access Management* for the exact steps for requesting the IT organization to disable a user's access.

Appendix G: Backup Policy (Summary)

I. **Purpose:** This policy reflects the ████████ ████████ Program's commitment to have a formal documented process for backing up appropriate data on the ████████ ████ ████ Program information systems containing PII.

II. **NOTICE OF AUTHORITY:** As the primary IT services contractor for ████████ ██ ("████████ CGI is authorized by ████████ to specify, communicate and monitor THE ████████ PROGRAM, Data Backup policy is based on requirements provided by ████████ Enforcement of the Policies is the responsibility of ████████ through the assistance of CGI. All ████████ contractors are required to provide that all staff members are educated on the Policies, and are responsible for providing that employees and subcontractors comply with the Policies.

III. **POLICY:** The ████████ Program information systems and electronic media are regularly backed up and securely stored. Backup and restoration procedures for defined systems are regularly tested.

IV. **DEPARTMENTS AFFECTED:** All ████████ ████████ contractors and sub-contractors.

V. **DEFINITIONS:**

Workstation means an electronic computing device, for example, a laptop or desktop computer, a mobile device or any other device that performs similar functions, and electronic media stored in its immediate environment.

Backup means creating a retrievable, exact copy of data.

Restoration means the retrieval of files previously backed up and returning them to the condition they were at the time of backup.

VI. **GUIDELINES:**

A. Backup copies of electronic media and information systems are made regularly. This includes both PII received and created by The ████████ Program. Backups are also preformed for mobile media, provided the users, use their network drives to save a final or copy of data stored on local or mobile memory media.

B. Information systems and electronic media for which this policy applies include, but are not limited to, computers (both desktop and laptops), floppy disks, backup tapes, CD-ROMs, zip drives, portable hard drives and mobile technology.

C. The program adequately back's up systems that reasonably ensure that all PII can be recovered following a disaster or media failure. These systems are regularly tested.

D. Backup of PII on identified information systems and electronic media, together with accurate and complete records of the backup copies and documented restoration procedures, are stored in a secure remote location.

E. Backup copies of PII stored at secure remote locations are accessible to authorized team members for timely retrieval of the information.

F. The backup media containing PII at the remote backup storage site is given an appropriate level of physical and environmental protection consistent with the standards applied physically at The ████████ Program.

G. Backup and restoration procedures for electronic media and information systems are regularly tested to ensure that they are effective and that they can be completed within a reasonable amount of time.

H. This policy shall be reviewed annually to determine if the policy complies with current Security regulations. In the event that significant regulatory changes occur, the policy shall be reviewed and updated as needed.

Appendix H: Disaster Recovery Policy (Summary)

    I. **Purpose:** This policy reflects The ▮▮▮▮▮▮ Program's commitment to implement a disaster recovery plan to recover its information systems if they are impacted by a disaster.

    II. **NOTICE OF AUTHORITY**

    III. As the primary IT services contractor for ▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮ ("▮▮▮▮▮▮ CGI is authorized by ▮▮▮▮▮ to specify, communicate and monitor THE ▮▮▮▮▮ PROGRAM; Disaster Recovery Policy is based on policy requirements provided by ▮▮▮▮ Enforcement of the Policies is the responsibility of ▮▮▮▮ through the assistance of CGI. All ▮▮▮▮ contractors are required to provide that all staff members are educated on the Policies, and are responsible for providing that employees and subcontractors comply with the Policies.

    IV. **Policy:** The ▮▮▮▮▮ Program has created and documented a disaster recovery plan to recover its information systems if they are impacted by a disaster. The plan is reviewed regularly and revised as necessary.

    V. The recovery plan includes but is not limited to:

- The conditions for activating the plan.
- Identification and definition of The ▮▮▮▮▮ Program workforce member responsibilities.
- Resumption procedures (manual and automated) which describe the actions to be taken to return The ▮▮▮▮▮ Program information systems to normal operations within required time frames.
- The order in which information systems will be recovered.
- Notification and reporting procedures.
- Procedure(s) for allowing appropriate employee's physical access to The ▮▮▮▮▮ Program facilities so that they can implement recovery procedures in the event of a disaster.

    VI. All appropriate The ▮▮▮▮▮ Program workforce members must have a current copy of the plan and an appropriate number of current copies of the plan must be kept off-site.

    VII. **Scope/Applicability:** This policy is applicable to all departments that use or disclose electronic Protected Identifiable Information for any purposes.

    VIII. This policy's scope includes all Protected Identifiable Information.

Appendix I: Risk Management Policy (Summary)

CGI/▮▮▮▮▮▮▮ Program has implemented security measures that reduce the risks to its information systems containing PII to reasonable and appropriate levels. Selection and implementation of such security measures is to be based on a formal, documented risk management process. CGI/▮▮▮▮▮▮ Program conducts risk management on a continuous basis and all selected and implemented security measures ensure the confidentiality, integrity and availability of CGI/▮▮▮▮▮▮ Program information systems containing PII.

Purpose:

The purpose of the Risk Management Policy is to communicate appropriate behavior in order to not only ensure the Confidentiality, Integrity and Availability of information stored on or transmitted over the ▮▮▮▮▮▮ - ▮▮▮▮▮▮ computer networks or telephony systems, but also make certain Local, State and Federal Regulations are being followed

NOTICE OF AUTHORITY:

As the primary IT services contractor for ▮▮▮▮▮▮▮▮▮▮▮▮▮▮ ("▮▮▮▮▮▮ CGI is authorized by ▮▮▮▮▮▮ to specify, communicate and monitor THE ▮▮▮▮▮ PROGRAM WIRELESS ACCEPTABLE USE POLICY and the INFORMATION TECHNOLOGY ACCEPTABLE USE POLICY (collectively, "Policies"), based on policy requirements provided by ▮▮▮▮▮▮ Enforcement of the Policies is the responsibility of ▮▮▮▮▮▮ through the assistance of CGI. All ▮▮▮▮▮▮ contractors are required to provide that all staff members are educated on the Policies, and are responsible for providing that employees and subcontractors comply with the Policies.

Policy:

1. CGI/▮▮▮▮▮▮ Program has implement security measures that reduce the risks to its information systems containing PII to reasonable and appropriate levels.

2. Selection and implementation of such security measures are based on a formal, documented risk management process. CGI/▮▮▮▮▮▮ Program's risk management process includes the following:

- Assessment and prioritization of risks to CGI/▮▮▮▮▮▮ Program information systems containing PII.
- . Selection and implementation of reasonable, appropriate and cost-effective security measures to manage, mitigate, or accept identified risks.
- CGI/▮▮▮▮▮▮ Program has implemented workforce member training and awareness on implemented security measures.
- Regular evaluation and revision, as necessary, of CGI/▮▮▮▮▮▮ Program's security measures.

3. CGI/▮▮▮▮▮▮ Program manages risk on a continuous basis and all selected and implemented security measures ensure the confidentiality, integrity and availability of CGI/▮▮▮▮▮▮ Program information systems containing PII. Strategies for managing risk are appropriate with the risks to such systems.   One or more of the following methods are used to manage risk:

- Risk acceptance
- Risk avoidance
- Risk limitation
- Risk transference

4. CGI/████████ Program's risk management process is based on the following steps:
   - **Inventory.** CGI/████████ Program conducts a regular inventory of its information systems containing PII and the security measures protecting those systems. CGI/████████ Program is able to identify its information systems and the relative value and importance of those systems.
   - **Risk prioritization.** Based on the risks defined by CGI/████████ Program's risk analysis, risks is prioritized on a scale from high to low based on the potential impact to information systems containing PII and the probability of occurrence. When deciding what CGI/████████ Program resources should be allocated to identified risks, highest priority must be given to those risks with unacceptably high risk rankings.
   - **Method selection.** CGI/████████ Program will select the most appropriate security methods to minimize or eliminate identified risks to CGI/████████ Program information systems containing PII. Such selections are based on the nature of a specific risk and the feasibility and effectiveness of a specific method.
   - **Cost-benefit analysis**. CGI/████████ Program identifies and defines the costs and benefits of implementing or not implementing specific security methods to the best of their ability.
   - **Security method selection.** Based on its cost-benefit analysis, CGI/████████ Program determines the most appropriate, reasonable and cost-effective security method(s) for reducing identified risks to CGI/████████ Program information systems containing PII.
   - **Security method evaluation.** Selected security method(s) are regularly evaluated and revised as necessary.
.

Scope/Applicability:

This policy is applicable to all business units that use or disclose protected identifiable information for any purposes.

This policy's scope includes all electronic protected identifiable information, as described in Definitions below.

Appendix J: Awareness Training & Reminders Policy (Summary)

I.   PURPOSE

The purpose of the Security Awareness Policy is to communicate appropriate behavior in order to not only ensure the Confidentiality, Integrity and Availability of information stored on or transmitted over the ███████ – ███████ computer networks or telephony systems, but also make certain Local, State and Federal Regulations are being followed.

II.   NOTICE OF AUTHORITY

As the primary IT services contractor for ████████████ ███████████████████████████ ("████████ CGI is authorized by ████████ to specify, communicate and monitor THE ████████ PROGRAM WIRELESS ACCEPTABLE USE POLICY and the INFORMATION TECHNOLOGY ACCEPTABLE USE POLICY (collectively, "Policies"), based on policy requirements provided by ████████ Enforcement of the Policies is the responsibility of ████████ through the assistance of CGI. All ████████ contractors are required to provide that all staff members are educated on the Policies, and are responsible for providing that employees and subcontractors comply with the Policies.

II.   DEPARTMENTS AFFECTED:

All departments that use or disclose PII for any purposes.

III.   GUIDELINES:

A.   Each workforce member who has access to The ████████ Program information systems understands how to protect the confidentiality, integrity, and availability of the systems.

B.   The ████████ Program has developed, implemented, and regularly reviews the formal, documented program for regularly providing appropriate security training and awareness to workforce members.

C.   All workforce members are provided with sufficient regular training and/or supporting reference materials to enable them to appropriately protect information systems. Such training includes, but is not limited to:

1.   All appropriate information security policies, procedures and standards.

2.   The secure use of information systems (e.g. log-on procedures, allowed software).

3.   Significant risks to information systems and data.

4.   Legal and business responsibilities for protecting its information systems and data.

5.   Security best practices (e.g. how to construct a good password, how to report a security incident).

D.   Business associates or sub-contractors are informed of security policies and procedures on a regular basis. Such awareness occurs through contract language or other means.

E.   All information security policies and procedures are readily available for reference and review by appropriate team members, business associates, sub-contractors, and third-party workers.

F.   All workforce members responsible for implementing safeguards to protect information systems receives formal training that enables them to stay abreast of current security practices and technology.

G.   The ▮▮▮▮▮▮ Program regularly trains and reminds its workforce members about its process for guarding against, detecting, and reporting malicious software that poses a risk to its information systems and data. At a minimum, The ▮▮▮ ▮▮▮ Program protection from malicious software training and awareness covers topics including, but not limited to:
   1.   How to identify malicious software.
   2.   How to report malicious software.
   3.   How to avoid downloading or receiving malicious software.
   4.   How to identify malicious software hoaxes.

H.   The ▮▮▮▮▮▮ Program regularly trains and reminds its workforce members about its process for monitoring log-in attempts and reporting discrepancies.

I.   The ▮▮▮▮▮▮ Program regularly trains and reminds its workforce members about its process for creating, changing and safeguarding passwords.

J.   All team members receive appropriate computer security training before being provided with access or accounts on The ▮▮▮▮▮▮ Program information systems. After such training, each employee verifies that he or she has received the training, understood the material presented, and agrees to comply with it.

K.   In addition to providing regular information security awareness, The ▮▮▮▮▮▮ Program provides security information and awareness to all of its workforce members when any of the following events occur:
   1.   Significant revisions to information security policies or procedures.
   2.   Significant new information security controls are implemented.
   3.   Substantial changes are made to significant information security controls.
   4.   Significant changes occur to information security legal or business responsibilities.
   5.   Significant new threats or risks against information systems or data.

L.   Methods for providing security information and awareness can include, but are not limited to:
   1.   Email reminders
   2.   Posters
   3.   Letters
   4.   Department meetings
   5.   Information system sign-on messages
   6.   Portal Intranet postings

M.   The Information Systems Security is responsible for ensuring that workforce members receive regular security information and awareness.

Appendix K: Security Risk Management Procedure

Security Risk
Management Procedu

Appendix L: Computer Incident Response Procedures

C:\Documents and
Settings\jahewitt\Des

Appendix M: Log-In Monitoring Policy (Summary)

Purpose

The purpose of the Log-in Monitoring Policy is to communicate appropriate behavior in order to not only ensure the Confidentiality, Integrity and Availability of information stored on or transmitted over the ▮▮▮▮▮▮ - ▮▮▮▮▮▮▮ computer networks or telephony systems, but also make certain Local, State and Federal Regulations are being followed

NOTICE OF AUTHORITY

As the primary IT services contractor for ▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮ ▮▮▮ ("▮▮▮▮▮▮▮▮ CGI is authorized by ▮▮▮▮▮▮▮ to specify, communicate and monitor THE ▮▮▮▮▮▮▮▮ PROGRAM WIRELESS ACCEPTABLE USE POLICY and the INFORMATION TECHNOLOGY ACCEPTABLE USE POLICY (collectively, "Policies"), based on policy requirements provided by ▮▮▮▮▮▮▮ Enforcement of the Policies is the responsibility of ▮▮▮▮▮▮ through the assistance of CGI. All ▮▮▮▮▮▮ contractors are required to provide that all staff members are educated on the Policies, and are responsible for providing that employees and subcontractors comply with the Policies.

Policy: The ▮▮▮▮▮▮ Program has developed, implemented, and regularly review a formal, documented process for monitoring log-in attempts and reporting discrepancies.

Guide Lines:

Access to all The ▮▮▮▮▮▮ Program information systems are via a secure log-in process. The process includes:

- No display of information system or application identifying information until the log-in process has been successfully completed.
- The ▮▮▮▮▮▮ Program Systems display a notice that the computer must only be accessed by authorized users.
- Systems do not provide help messages during the log-in procedure that would assist an unauthorized user.
- Limit the number of unsuccessful log-in attempts allowed.

The ▮▮▮▮▮▮ Program information systems' log-in process must include the ability to:
- Record unsuccessful log-in attempts.s
- After a specific number of failed log-in attempts, enforce a time delay before further log-in attempts are allowed or reject any further attempts without authorization from an appropriate The ▮▮▮▮▮▮ Program employee.
- Limit the maximum time allowed for the log-in procedure.
- Display the following information on completion of a successful log-in:
- Date and time of the previous successful log-in.

At a minimum, The ▮▮▮▮▮▮ Program log-in monitoring training and awareness covers topics including, but not limited to:
- How to effectively use The ▮▮▮▮▮▮ Program's secure log-in processes.
- How to detect log-in discrepancies.
- How to report log-in discrepancies.

Scope/Applicability: This policy is applicable to all departments that use or disclose Personally Identifiable Information for any purposes.

This policy's scope includes all *Protected Identifiable Information*.

Appendix N: Password Policy (Summary)

I.   Purpose

The purpose of the Password Policy is to communicate appropriate behavior in order to not only ensure the Confidentiality, Integrity and Availability of information stored on or transmitted over the ████████ - ████████ computer networks or telephony systems, but also make certain Local, State and Federal Regulations are being followed

II.   NOTICE OF AUTHORITY

As the primary IT services contractor for ████████████████████████ ████████ ("████████ CGI is authorized by ████████ to specify, communicate and monitor THE ████████ PROGRAM WIRELESS ACCEPTABLE USE POLICY and the INFORMATION TECHNOLOGY ACCEPTABLE USE POLICY (collectively, "Policies"), based on policy requirements provided by ████████ Enforcement of the Policies is the responsibility of ████████ through the assistance of CGI. All ████████ contractors are required to provide that all staff members are educated on the Policies, and are responsible for providing that employees and subcontractors comply with the Policies.

III.   POLICY;

All passwords created and used by authorized individuals to access any network, system, or application, and used to create, view, transmit, receive, or store Protected Identifiable Information (PII) are properly safeguarded.

IV.   DEPARTMENTS AFFECTED:

All departments that use or disclose PII for any purposes.

V.   DEFINITIONS:

Authorized Individuals – any person who has permission to utilize any electronic application, including those that create, store or transmit PII.

VI. **GUIDELINES:**

    A.   Passwords must be at least four characters in length. If a system allows a password longer than four characters, then passwords should be a **minimum of Eight characters**.

    B.   Passwords should contain a combination of alphabetic, numeric and special characters/symbols. Avoid using any words found in a dictionary. Passwords should not be trivial, predictable or obvious.

        1.   Obvious passwords include names of persons, pet, relatives, cities, streets, your LogonID, birth date, car license plate, etc.

        2.   Predictable passwords include days of the week, months, or a new password that has only one or two characters different from the previous one.

        3.   Trivial passwords include common words like "secret", "password", "computer".

    C.   A password should not be the same as the User/LogonID. If you have access to a number of systems that required the entry of a password, such as a medical application and a Local Area Network (LAN), it is recommended not to use the same password for both systems.

    D.   A good password is relatively easy to remember but hard for someone else to guess. There are a variety of techniques you can use to choose secure passwords. See the attachment for examples of some of these techniques.

    E.   All passwords are changed a minimum of every 30 days.

    F.   The Director of Information Security in conjunction with ███████ is responsible for monitoring and enforcement of this policy.

    G.   This policy shall be reviewed annually to maintain currency with the Best Practices Security Standards. In the event that significant related regulatory changes occur, the policy will be reviewed and updated as needed.

Appendix O: Techniques for Creating Secure Passwords

This document is an attachment to the Password Policy.

The following are examples only and should not be used by readers as personal passwords.

1.   Use a word with one or two digits embedded in it.
          Examples: TAB45LE, TUES87DAY, X05MAS
2.   Make up an acronym based on a nursery rhyme, a favorite song or movie, or a sentence.
          Examples: MCNT# - **M**y **C**at **N**o **T**ail#
                            TQBF – **T**he **Q**uick **B**rown **F**ox
                            TGIF@5 **T**hank **G**od **I**t's **F**riday at 5
3.   Use a three character pronounceable word suffixed or prefixed with a one- or two-digit suffix or prefix.
          Examples: CAR56, WAR34, 56DIG
4.   Make up nonsense words that mean something to you by combining the first syllables of two words. However, avoid using standard abbreviations like "Jan, Feb, Mar, etc." as part of your password.
          Examples: PERPOL – Personal Policy
5.   Drop vowels or drop everything but the first 6 letters of a long word or two words.
          Examples: MESDSK1 – One messy desk
                            Meds@12 - Medication at 12
                            YRDWOK# - Yard work
6.   Use special characters like #, $ and @. These too, can be inserted anywhere.
          Example: UNI$VEROFAL – University of Alabama
7.   Misspell a word, drop a couple of letters or add some.
          Examples: ACLARAR@ - accelerate
                            CELER# - cellar
                            DEPSN@W$- Deep Snow

Please do not use actual examples noted above as personal passwords.

XXXXXXXXX Technical Workgroup

Joshua Norman
February 19th 2013

CGI

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Agenda

- Review 2013 Technical Upgrades
- Client Roadmap Summary
- XXXXXXXXX 5 Year Plan
- Module Technology Plans
- Third Party Product Lifecycle
- New Third Party Products
- Forward Planning

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Technical Upgrades Review

- Windows Vista support
  - De-supported in 2013 releases. Windows 7 is the supported operating system.
- Oracle 11g
  - Supported in 2013 planned releases.
- .NET Framework 4.0 Client Side and 4.5 Server Side
- XXXXX Releases
  - Server components will be compiled as 64 bit.
- Non XXXXX Releases
  - Server components will be compiled as 32 bit.

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Client Roadmap Summary

Client Roadmap – Key Technical Areas

- Current State:
    - Desktop OS – Win 7, Vista, XP
    - Server OS – Server 2003/Server 2008 R2
    - Browser – IE 7,8, soon 9(3M)
    - Database – MSSQL 2008 R2, Oracle 10, Oracle 11
- Future State:
    - Desktop OS – Most moving to Win 7 now, with some XP & Vista still around in 2013.
    - Server OS – Windows Server 2008 R2 by 2013
    - Browser – IE 8,9, 10 – Dates vary or are mostly unknown
    - Database – Oracle 10,11,12*, MSSQL 2008 R2, MSSQL 2012

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XXXXXXXXX 5 Year Plan

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CGI 5 Year Plan – Release View

	2013	2014	2015	2016	2017
XXX Module	1.0	2.0	3.0	4.0	5.0
YYY Module	12.0	TBD			
ZZZ Module	12.0				
		TBD			
XXX Module	6.0	TBD			
YYY Module	4.0	5.0	6.0	7.0	8.0
AAA Module	4.0	5.0	6.0	7.0	8.0
Initiatives *(Primary Impacted Modules)*	SAP/ERP Integration (IN) XXXXXXXXX360 (A) Product Hazard Data (O) XXXXXXXXX360 (O, D)	Product Hazard Data (O) XXXXXXXXX360 (O, D)	XXXXXXXXX360 (O, D)	TBD	TBD
Technical Upgrades	Platform Modernization (O, D) De-Support Windows Vista Microsoft .NET 4.5 on Server Side Oracle 11	Platform Modernization (O, D)	Platform Modernization (O, D)	TBD	TBD

(A) – XXX Module
(O) – YYY Module

(D) – ZZZ Module
(L) – XXX Module

(UM) – YYY Module
(IN) – AAA Module

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XXXXXXXXX Release

XXXXXXXXX360 (XXXXX) Release

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CGI 5 Year Plan – Technology View

	2013	2014	2015	2016	2017
Client OS	Windows7	Windows 7	Windows 7	Windows 7/?	Windows ?
Server OS	Windows Server 2008 R2	Win Server 2008 R2	Win Server 2008 R2/ Windows Server 2012	Win Server 2012	Win Server 2012
DBMS	Oracle 11g SQL Server 2008 R2	Oracle 11g SQL Server 2008 R2/2012?	Oracle 11g/12g ? SQL Server 2008 R2/2012?	Oracle 12 SQL Server 2012	Oracle 12 SQL Server 2012
Internet Information Services (IIS)	7.5	7.5	7.5/8.0(?)	8.0	8.0
Framework	.NET 4.0, SL 5 – Client Side .NET 4.5 – Server Side	.NET 4.5, SL 5	.NET 4.5?, SL 5?	.NET 4.5?, SL 5?	.NET 4.5?, SL 5?
PowerBuilder	10.5.2	10.5.2	10.5.2	De-supported?	De-supported?
Internet Browser	Internet Explorer 8.0 / IE9(Regression Testing)	IE 9.0 (Win7)/10?	IE 9.0 (Win7)/10?	IE 9.0 (Win 7/?)/10?	IE 9.0 (Win ?)/10?
Text Editor	TX Text Control 13/Telerik RichTextBox	Telerik RichTextBox	Telerik RichTextBox	Telerik RichTextBox	Telerik RichTextBox
Adobe Reader	10/X	11/XI	12/XII	13/XIII	14/XIIII
CDROM DBMS	SQLite	SQLite	SQLite	SQLite	SQLite

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5 Year Technology Plan: XXX Module

	XXXXXA 1.0 2013	XXXXXA 2.0 2014	XXXXXA 3.0 2015	XXXXXA 4.0 2016	XXXXXA 5.0 2017
Client OS	Windows 7	Windows 7	Windows 7	Windows 7/(?)	Windows ?
Server OS	Windows Server 2008 R2	Windows Server 2008 R2	Win Server 2008 R2/ Windows Server 2012	Win Server 2012	Win Server 2012
DBMS	Oracle 11g SQL Server 2008 R2	Oracle 11g SQL Server 2008 R2/2012?	Oracle 11g/12g ? SQL Server 2008 R2/2012?	Oracle 12 SQL Server 2012	Oracle 12 SQL Server 2012
Internet Information Services (IIS)	7.5	7.5	7.5/8.0(?)	8.0	8.0
Framework	.NET 4.0, SL 5 – Client .NET 4.5 – Server	.NET 4.5, SL 5	.NET 4.5?, SL 5?	.NET 4.5?, SL 5?	.NET 4.5?, SL 5?
PowerBuilder	10.5.2	De-supported	De-supported	De-supported	De-supported
Internet Browser	Internet Explorer 8.0 (Win7) Internet Explorer 9.0 *SQL Server Testing	IE 9.0 (Win7)/10?	IE 9.0 (Win7)/10?	IE 9.0 (Win 7/?)/10?	IE 9.0 (Win ?)/10?
Text Editor	Telerik RichTextBox	Telerik RichTextBox	Telerik RichTextBox	Telerik RichTextBox	Telerik RichTextBox

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5 Year Technology Plan: YYY Module

	YYY Module 12 2013	YYY Module 13?/ XXXXXO 1.0? 2014	XXXXXO 1.0/2.0 2015	XXXXXO 2.0/3.0 2016	XXXXXO 3.0/4.0 2017
Client OS	Windows 7	Windows 7	Windows 7	Windows 7/(?)	Windows ?
Server OS	Windows Server 2008 R2	Win Server 2008 R2	Win Server 2008 R2/ Windows Server 2012	Win Server 2012	Win Server 2012
DBMS	Oracle 11g SQL Server 2008 R2	Oracle 11g SQL Server 2008 R2/2012?	Oracle 11g/12g ? SQL Server 2008 R2/2012?	Oracle 12 SQL Server 2012	Oracle 12 SQL Server 2012
Internet Information Services (IIS)	7.5	7.5	7.5/8.0(?)	8.0	8.0
Framework	.NET 4.0 – Client Side .NET 4.5 – Server Side	.NET 4.5, SL 5?	.NET 4.5?, SL 5?	.NET 4.5?, SL 5?	.NET 4.5?, SL 5?
PowerBuilder	10.5.2	10.5.2(?)	10.5.2(?)	De-supported	De-supported
Internet Browser	Internet Explorer 8.0 (Win7) Internet Explorer 9.0 *SQL Server Testing	IE 9.0 (Win7)/10?	IE 9.0 (Win7)/10?	IE 9.0 (Win 7/?)/10?	IE 9.0 (Win ?)/10?
Text Editor	TX Text Control 13	TX Text Control 13/Telerik RichTextBox(?)	TX Text Control 13/Telerik RichTextBox(?)	Telerik RichTextBox	Telerik RichTextBox
Adobe Reader	10/X	11/XI	12/XII	13/XIII	14/XIIII
CDROM DBMS	SQLite	SQLite	SQLite	SQLite	SQLite

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5 Year Technology Plan: ZZZ Module

	ZZZ Module 12? 2013	Distr 13?, XXXXXD 1.0? 2014	XXXXXD 1.0/2.0 2015	XXXXXD 2.0/3.0 2016	XXXXXD 3.0/4.0 2017
Client OS	Windows 7	Windows 7	Windows 7	Windows 7/(?)	Windows ?
Server OS	Windows Server 2008 R2	Win Server 2008 R2	Win Server 2008 R2/ Windows Server 2012	Win Server 2012	Win Server 2012
DBMS	Oracle 11g SQL Server 2008 R2	Oracle 11g SQL Server 2008 R2/2012?	Oracle 11g/12g ? SQL Server 2008 R2/2012?	Oracle 12 SQL Server 2012	Oracle 12 SQL Server 2012
Internet Information Services (IIS)	7.5	7.5	7.5/8.0(?)	8.0	8.0
Framework	.NET 4.0 – Client Side .NET 4.5 – Server Side	.NET 4.5, SL 5?	.NET 4.5?, SL 5?	.NET 4.5?, SL 5?	.NET 4.5?, SL 5?
PowerBuilder	10.5.2	10.5.2(?)	10.5.2(?)	De-supported	De-supported
Internet Browser	Internet Explorer 8.0 (Win7) Internet Explorer 9.0 *SQL Server Testing	IE 9.0 (Win7)/10?	IE 9.0 (Win7)/10?	IE 9.0 (Win 7/?)/10?	IE 9.0 (Win ?)/10?
Text Editor	TX Text Control 13 TX Text Control 14	TX Text Control 13/Telerik RichTextBox(?)	TX Text Control 13/Telerik RichTextBox(?)	Telerik RichTextBox	Telerik RichTextBox
Aspose.Pdf	6.1/7.2(?)	6.1/7.2(?)	6.1/7.2(?)	6.1/7.2(?)	6.1/7.2(?)

CGI

5 Year Technology Plan: XXX Module

	XXXXXA 1.0 2013	TBD 2014	TBD 2015	TBD 2016	TBD 2017
Server OS	Windows Server 2008 R2	Windows Server 2008 R2	Win Server 2008 R2/ Win Server 2012	Win Server 2012	Win Server 2012
DBMS	Oracle 11g SQL Server 2008 R2	Oracle 11g SQL Server 2008 R2/2012?	Oracle 11g/12g ? SQL Server 2008 R2/2012?	Oracle 12 SQL Server 2012	Oracle 12 SQL Server 2012

CGI

5 Year Technology Plan: YYY Module

	YYY Module 4 2013	UM 5 2014	UM 6 2015	UM 7 2016	UM 8 2017
Client OS	Windows 7	Windows 7	Windows 7	Windows 7/(?)	Windows ?
Server OS	Windows Server 2008 R2	Win Server 2008 R2	Win Server 2008 R2/ Windows Server 2012	Win Server 2008 R2/ Win Server 2012	Win Server 2008 R2/ Win Server 2012
DBMS	Oracle 11g SQL Server 2008 R2	Oracle 11g SQL Server 2008 R2/2012?	Oracle 11g/12g ? SQL Server 2008 R2/2012?	Oracle 12 SQL Server 2012	Oracle 12 SQL Server 2012
Internet Information Services (IIS)	7.5	7.5	7.5/8.0(?)	8.0	8.0
Framework	.NET 4.0 – Client Side .NET 4.5 – Server Side	.NET 4.5	.NET 4.5?	.NET 4.5?	.NET 4.5?
Internet Browser	Internet Explorer 8.0 (Win7) Internet Explorer 9.0 *SQL Server Testing	IE 9.0 (Win7)/10?	IE 9.0 (Win7)/10?	IE 9.0 (Win 7/?)/10?	IE 9.0 (Win ?)/10?

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5 Year Technology Plan: AAA Module

	AAA Module 4 2013	IN 5 2014	IN 6 2015	IN 7 2016	IN 8 2017
Client OS	Windows 7	Windows 7	Windows 7	Windows 7/(?)	Windows ?
Server OS	Windows Server 2008 R2	Win Server 2008 R2	Win Server 2008 R2/ Windows Server 2012	Win Server 2008 R2/ Win Server 2012	Win Server 2008 R2/ Win Server 2012
DBMS	Oracle 11g SQL Server 2008 R2	Oracle 11g SQL Server 2008 R2/2012?	Oracle 11g/12g ? SQL Server 2008 R2/2012?	Oracle 12 SQL Server 2012	Oracle 12 SQL Server 2012
Internet Information Services (IIS)	7.5	7.5	7.5/8.0(?)	8.0	8.0
.Net Framework	.NET 4.0 – Client Side .NET 4.5 – Server Side	.NET 4.5	.NET 4.5?	.NET 4.5?	.NET 4.5?
Internet Browser	Internet Explorer 8.0 (Win7) Internet Explorer 9.0 *SQL Server Testing	IE 9.0 (Win7)/10?	IE 9.0 (Win7)/10?	IE 9.0 (Win 7/?)/10?	IE 9.0 (Win ?)/10?

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Third Party Product Lifecycle

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Third Party Product Lifecycle

- Development Language/Environments
  - PowerBuilder 10.5.x – No longer supported by Sybase
  - Visual Studio 2005/2010/2012 (.NET)
- Desktop Operating System
  - Windows 7 - 1/13/2015 (End of Mainstream Support)
  - Windows 8 – End of Mainstream support not available
- Server Operating System
  - Windows Server 2008 R2 – 1/13/2015 (End of Mainstream Support)
  - Windows Server 2012 – 1/9/2018 (End of Mainstream Support)

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Third Party Product Lifecycle Cont'd

- Database Management System
  - Oracle 11g - (Oracle de-support date - 1/31/2015)
  - MS SQL Server 2008 R2 - 7/8/2014 (End of Mainstream Support)
  - MS SQL Server 2012 - 7/11/2017 (End of Mainstream Support)
- YYY Module CDROM DBMS
  - SQLite
- Adobe Reader
  - Adobe X

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Third Party Product Lifecycle Cont'd

- Document Editor
  - TextControl 13 – No de-support date provided by vendor
  - TextControl 14 (ZZZ Module Processors only)
  - XXXXX: Telerik RichTextBox Control
- Post Script PDF Converter
  - Aspose.PDF version 6.1/7.2
- Internet Browser
  - Internet Explorer 8.0/Internet Explorer 9.0
  - Internet Explorer 10.0 support timing?

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New Third Party Products

New Third Party Products - XXX Module

Component	Type	Description
ANTLR (ANother Tool for Language Recognition)	Open Source	Provides powerful parser generator for reading, processing, executing, or translating structured text or binary files. Used to support XXX Module expression evaluator functionality/document generation.
SilverFlow	Open Source	Provides multiple/floating windows interface for Silverlight. Used to provide workspace environment for XXXXXA.
Imagetools	Open Source	Provides additional functionality for loading, saving and manipulation images from different sources and with different formats.
Telerik RadControls for Silverlight	Vendor	Powerful grid controls and high-performance data visualization with a modern look-and-feel. Used as overall UI control platform for XXXXXA.

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New Third Party Products/Integration - YYY Module

Component	Type	Description
SQLite	Open Source	Provides in memory database capabilities. Used to support YYY Module "zero install" functionality.
Aspose.PDF	Vendor	Provides PDF integration/manipulation capabilities within .NET control. Used to support creating and modification of PDF documents as well as PDF form filling capabilities which is needed for CIS reporting requirements.
AAA Module	CGI IP	Provides cross platform integration capabilities. Used to support generation of PDF files for CIS reporting requirements.

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Forward Planning

- Proposed dates:
  - 2013
    - May 21st, 2013 – 10:00am – 11:00AM EST
    - August 20th , 2013 – 10:00am – 11:00AM EST
    - November 19th , 2013 – 10:00am – 11:00AM EST
  - One meeting will be replaced with the PSUG meeting.
  - Client roadmap updates
    - Mobility platform if applicable
  - Suggestions for TWG

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Questions/Comments

- Any questions or comments?

CGI

Help Desk Plan

Version 1.6

June 5, 2009

Table of Contents

Revision Log

Date	Version No.	Description	Author	Reviewer	Review Date
2/20/2008	V1.0	Initial Publication	Janice Keywell, Debra Sherrill	Janice Keywell	
4/13/09	V1.1	Updated Phone Call Support – added ███████ ██████████	Debra Sherrill, Marcia Wheeler	Marcia Wheeler	
4/14/09	V1.2	Updates added throughout, to include current support details including ██████ web	Debra Sherrill, Marcia Wheeler	Marcia Wheeler	
5/19/09	V1.3	Updates added throughout, to include training matrix	Marcia Wheeler	Debra Sherrill	05/22/09
5/26/09	V1.4	Updated formatting and proofed for clarity	Debra Sherrill, Marcia Wheeler	Kristi Garrett	5/26/09
05/27/09	V1.5	CGI Federal Acceptance	Debra Sherrill	Bob Hungate	
06/03.09	V1.6	Changed reference to ADMINs to ███ Technician	Debra Sherrill	Kristi Garrett	6/5/09

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1. Introduction

The External User Services (███ Help Desk provides operational support to the provider community via the Individuals Authorized Access to ███████████████████████████████████ ████████████████████████████████, and organizational official approval process.

As a Tier 1 help desk, ████ offers ongoing support for the ███████ provider community for all aspects of the ████████ and ████████ web self registration and profile/management process, along with escalating user issues and actions to the Tier 2 ██████ Admin Help Desk managed by █████ which ████ is not scoped or contracted to support.

The ████████ offers improved security access for ████ applications. It allows █████ to maintain a single identity for each user and assure that all ████ business application users are known.

1.1   Assumptions

The following are major assumptions related to the staffing and operation of the ████ Help Desk:

- CGI and █████ work together to influence how and when the user population accesses the help desk. This includes communication and instructions for the ████████ provider community.

- While CGI's ability to staff in concert with changing demand is dynamic, it is not instantaneous. Some degree of latency is to be expected in the event CGI is requested to manipulate staffing levels in response to changing demand.

  ‣ Weekly statistical reports relating to call volume, average wait time, peak call hours, etc., are used to help determine staffing levels.

- EUS's hours of operation are from 7:00 A.M. to 7:00 P.M. EST. CGI is flexible and will consider altering the hours of operation to better service the ████████ provider community as needed.

- The ████████ provider community using the █████████ help desk includes those individuals registering under the following ██████ and ████████ user roles:

  ‣ Security Officials (SO)

  ‣ Authorized Officials (AO)

  ‣ Back Up Security Official (BSO)

  ‣ User Group Administrator (UGA)

  ‣ End User (EU)

  ‣ Individual Practitioner (IP)

  ‣ Surrogate Users (SU)

1.2 Scope of Activities

The ▮▮ Help Desk was initially created to support the ▮▮ Provider Community (▮▮▮▮ Since its inception, EUS's support scope has expanded to include the ▮▮ web applications.

The Provider Community represents the Individual Practitioners and provider organizations that use ▮▮ web-based applications.

The ▮▮ Help Desk is expected to perform the following basic functions:

- Call support to the Provider Community – provide information and guidance as it relates to the ▮▮ ▮▮ delegated authority model. Escalate technical incidents to the ▮▮ Tier 2 help desk and ▮▮ Application Critical Response Team (CRT).

- Manually process requests for access to ▮▮ and ▮▮ – follow the designed process that approves or rejects a Security Official and organization's application to access ▮▮ Once approved for ▮▮ the security official is given an Individual User ID and the authority to grant access to others in their organization. An organization must go through a similar process to approve or reject an Authorized Official when requesting access to ▮▮ Web.

- An organization must make an additional request to access ▮▮ a ▮▮ web-based application.

- Deliver periodic management reports that provide call volume, approval processing, and ticket escalation and resolution data.

To perform these functions, the staff of the ▮▮ Help Desk is required to learn ▮▮ functionality and the various processes designed to communicate between ▮▮ ▮ the ▮▮ Admin Help Desk, and providers. To achieve the level of performance that meets ▮▮ expectations, training is provided on the system and processes that ▮▮ Admins utilize. ▮▮ admins also have access to a SharePoint site and an internal web page, called ▮▮ Online, where they can access resources and read announcements along with other items that will keep them up to date on the latest communications from ▮▮ and ▮▮ CGI management.

▮▮ management meets on a weekly basis to ensure expectations between ▮▮ CGI Federal, and CGI Central & South are aligned according to policy for the successful functioning of the ▮▮ Help Desk.

As ▮▮ assesses the need and more web-based applications are made available to the provider community, ▮▮ Help Desk's responsibilities may be increased.

1.3   Help Desk Requirements

In continued support of the ▮▮▮▮▮▮ provider community, CGI will provide expanded help desk support for the ▮▮▮▮▮▮ and any associated applications as well as ▮▮▮▮▮ Web; this includes application registration, questions, and issues.

The expanded help desk support services required is divided into four areas:

- Script Creation and Training

- Phone Call Support (e.g., answer calls to help assist with the registration process)

- Manual Processing (e.g., approve Security Officials, process IRS documents and Security Consent Forms, etc.)

- Email Support (e.g., answer any questions or concerns received via email)

▮▮▮ Admins will also follow desk processes that provide detailed instructions for performing their daily tasks.

Each ▮▮▮ Help Desk Administrator will be provided with the following equipment.

Exhibit 1-1 ▮▮▮ Admin Issued Equipment

Computer Hardware	Software	Peripherals
Standard Dell Desktop	IAC system	Access to network printer, scanner, fax
Nortel ACD Phone	Adobe PDF, Microsoft Office suite, and SharePoint	
Plantronics Headset	Remedy and ▮▮▮ internal database	
Earphones	Call and desktop monitoring software (CXM)	

2 Roles and Responsibilities

The following table describes the roles and responsibilities of the resources involved with the ███ Help Desk project.

Exhibit 2-1 ███ Roles and Responsibilities

Role	Responsibilities	Responsible Organization
Project Manager	• Handle management level activities, including CMMI compliance, CGI Federal requirements, financial management, and client relationship. • Maintain communications with ███ to keep abreast of ███ schedule and developments. • Facilitate communication of ███ expectations to ███ . • Design, develop, and deliver training for ███ staff as changes, updates, and implementations related to ███ occur. • Review, approve, and release reports from ███ to ███ • Oversee and maintain the ███ and ███ PM SharePoint sites, including authorization of other team members to have Administrator rights to the site. • Provide updates to SharePoint as necessary.	CGI Federal
███ Technician Level Project Lead III	• Manage day-to-day activities of the ███ Help Desk, including ███ Tech staffing, interviewing, hiring, performance management, quality assurance, performance improvement, and contribute information for separations. • Manage day to day staffing plans and operations. • Maintain the relationship with personnel contractor. • Provide training and quality control. • Communicate issues to SDM as necessary in a timely fashion.. • Organize and oversee staff development. • Ensure that staff meets SLAs as identified by CGI management and ███ client. • Facilitate the escalation process . • Analyze call volume trends to anticipate staffing needs.	CGI USCS Tier 1 ███

▮▮ Technician Level III	• Provide support to Tech I and II ▮▮ Techs as necessary. • Assist with oversight of quality initiatives. • Receive phone calls from the ▮▮ Provider Community and provide support per the training and information provided in the ▮▮ Help Desk Guide, ▮▮ SharePoint site, and ▮▮ Online. • Open Remedy tickets. • Save data to the Access database as required by documented procedures. • Provide accurate and clear descriptions in Remedy tickets and Access database according to the Escalation Grid, ▮▮ Help Desk Guide, SharePoint site, and ▮▮ Online. • May provide training to team.	CGI USCS Tier 1 ▮▮
▮▮ Technician Level II	• Receive phone calls from the ▮▮ Provider Community and provide support per the training and information provided in the ▮▮ Help Desk Guide, ▮▮ SharePoint site, and ▮▮ Online. • Open Remedy tickets and save data to Access database as required • Provide accurate and clear descriptions in Remedy tickets and Access database according to the Escalation Grid, ▮▮ Help Desk Guide, SharePoint site, and ▮▮ Online.	CGI USCS Tier 1 ▮▮
▮▮ Technician Level I	• Receive phone calls from the ▮▮ Provider Community and provide support per the training and information provided in the ▮▮ Help Desk Guide, ▮▮ SharePoint site, and ▮▮ Online. • Open Remedy tickets and save data to Access database as required • Provide accurate and clear descriptions in Remedy tickets and Access database according to the Escalation Grid, ▮▮ Help Desk Guide, SharePoint site, and ▮▮ Online.	CGI USCS Tier 1 ▮▮

3 Staffing Strategy and Schedule

The operational support services required to support the FI/MACs and Provider Community is divided into four areas:

- Phone Call Support (e.g., answer calls to help assist with the registration process – use of the ▮▮▮ system is required)
- Manual Processing (e.g., authenticate an organization's Security Official, etc.)
- Application Specific Manual Processing (e.g., process ▮▮▮ Security Consent Forms)
- Email Support (e.g., respond to any questions or concerns received via email)

CGI has identified the following for each call-related process identified:

- The probability of the operational support staff receiving a certain type of call each day (each type of call is tied to a process/script that must be performed by the operational support staff).
- The average transaction time required to process each type of call received.
- The expected call volume broken down by month.
- The number of FTEs required to support the anticipated call volume.
- Initial months peak activity and the subsequent steady state projections for all of the above.

Other factors may affect call volume, such as Federal requirements or distribution of ▮▮▮ communications to the FI/MACs and Provider Community.

CGI has also identified the manual processes involved in support activities. A manual process could be triggered via the receipt of U.S. mail, phone call, an on-line user action via ▮▮▮ or an integrated ▮▮▮ Internet application. For each of these processes, CGI has estimated the following:

- The total number of units of work anticipated to enroll the provider community.
- The average transaction time required to complete a unit of work.
- By month, the number of FTEs required to support the receipt of work.
- Initial months peak activity and the subsequent steady state projections for all of the above.

3.1 Strategy

At the time of the go live date, November 20, 2007, ▮▮ had 19 fully trained ▮▮ Help Desk Admins. At present the ▮▮ staff level is at 35 FTEs. This is subject to change as expected call demand and other factors change per agreement from the client.

Based on the initial projected call volume for the first month of go-live activity, the call volume was projected to be below 600. Using the Workload Management Reports (described in Section 7.1 Workload Management Reports) to analyze the amount and types of calls, CGI is able to predict the amount of calls and necessary staffing on a month-by-month basis. The ▮▮ Help Desk has access to a state of the art resource management tool, IEX Open View, through CGIs Montreal Help Desk. The tool provides estimates based on a combination of factors. Negotiations are currently underway for the procurement of the IEX Open View workforce estimation software tool locally at ▮▮ Help desk in San Antonio.

Below is an example From the IEX Open View tool:

Exhibit 3-2 Resource estimation

RESSOURCE ESTIMATE	▮▮ 1000
Monday to Friday (hrs/day)	12.0
Saturday (hrs/day)	0
Sunday (hrs/day)	0
Service Level (%)	85%
Threshold (sec.)	30
Contacts Phone	1000.0
Contact Email	130
Total Contacts	1130
Average Talk Time (sec)	540.0
Average Not Ready (sec)	180.0
Total FTE Required	6.6

3.2 Staffing Plan

The ▮▮ staffing plan is sensitive to timing around implementations that require providers to use ▮▮ to access ▮▮ applications. Three applications were made available through ▮▮ online in 2008 and 2009:

- PQRI (Physician Quality Reporting Initiative) 7/2008
- PS&R (Provider Statistical and Reimbursement) 3/2009

▮▮ was made available through a separate set of systems and deployed starting in late 2008 and continuing in the spring of 2009:

- ▮▮ (Provider Enrollment Chain and Ownership System) 11/2008 for Phase I and 03/2009 for Phase II

Each of these applications has an anticipated registering population that numbers the range from up to one million (███████ to tens of thousands (PS&R).
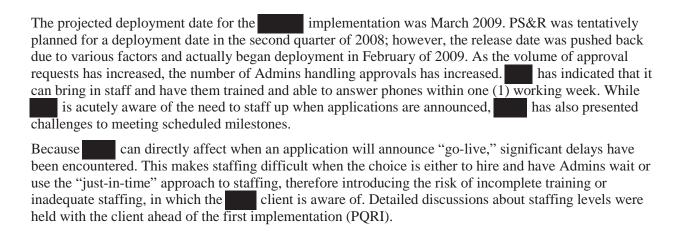
Ahead of the announcement of implementation, the ███ staffing plan was to acquire resources to adequate levels in order to support the anticipated caller demand. The ███ help desk operation includes the use of three levels of technical administrators I, II and III.

The following table describes the qualifications for the different Tech levels.

Exhibit 3-3 ███ Admin Technician Levels

Tech Level	Description
Tech I	• Minimum one year related experience in a customer service support in a call center/help desk. • Basic computer skills, such as general knowledge of Microsoft Office applications. • Ability to work in a fast paced environment and to handle a constant volume of phone inquiries is necessary. • Good oral and written communication skills. • High School Diploma.
Tech II	• Minimum three year related experience in a customer service support in a call center/help desk. • Basic computer skills, such as general knowledge of Microsoft Office applications. • Ability to work in a fast paced environment and to handle a constant volume of phone inquiries is necessary. • Good oral and written communication skills. • High School Diploma.
Tech III	• Minimum four years call center/help desk experience in customer service support and team lead\supervisory experience. • Ability to work in a fast paced environment and to handle a constant volume of phone inquiries is necessary. • Demonstrated and proven analytical, organizational, team building and listening skills. • Excellent oral and written communication skills. • High School Diploma.

The projected deployment date for the ▌▌▌▌ implementation was March 2009. PS&R was tentatively planned for a deployment date in the second quarter of 2008; however, the release date was pushed back due to various factors and actually began deployment in February of 2009. As the volume of approval requests has increased, the number of Admins handling approvals has increased. ▌▌▌ has indicated that it can bring in staff and have them trained and able to answer phones within one (1) working week. While ▌▌▌ is acutely aware of the need to staff up when applications are announced, ▌▌▌ has also presented challenges to meeting scheduled milestones.

Because ▌▌▌ can directly affect when an application will announce "go-live," significant delays have been encountered. This makes staffing difficult when the choice is either to hire and have Admins wait or use the "just-in-time" approach to staffing, therefore introducing the risk of incomplete training or inadequate staffing, in which the ▌▌▌ client is aware of. Detailed discussions about staffing levels were held with the client ahead of the first implementation (PQRI).

4   US Activities

The expanded help desk support services required is divided into four areas:

▪ Script Creation and Training

▪ Phone Call Support (e.g., answer calls to help assist with the registration process)

▪ Manual Processing (e.g., approve Security Officials, process IRS documents and Security Consent Forms, etc.)

▪ Email Support (e.g., respond to any questions or concerns received via email)

4.1   New Hire Training

███ New Hire Training Outline

Time	Topic
Day 1 Monday	
8:00-9:00	• Introductions, Ice Breaker, General discussion of the job
9:00 – 10:00	• CGI Overview & Tier 1 Organization • ███ Impact on Operation • Pictures • Badge Forms
10:00 – 10:15	**Break**
10:15 – 11:00	• Facilities Tour • Schedules/Phone is your time clock
11:00 – 12:00	• ███ Overview/Security PowerPoint
12:00 – 1:00	**Lunch**
1:00 – 4:00	• Intro to Delegated Authority
4:00 – 5:00	• Questions & Answers • Miscellaneous ███ Administrative
Day 2 Tuesday	
8:00 – 9:00 **Welcome**	• Introduction • Guidelines and Class Expectations • Test Requirements • Impact on Scores
9:00 – 10:45	Recap Delegated Authority
10:45-11:00	**Break**

11:00 – 12:00	• ███ responsibilities to ███ and other Provider Community Applications
	• ███ relationship to:
	    ◦ ███
	    ◦ ███

	• Tier 2 ▮ Admin Help Desk
12:00 – 1:00	**Lunch**

1:00 – 4:00
▮ **Demo**
and Hands –
On
	1:00 – 2:00- 1 Hour Demo highlighting ▮ Admin and IPC
	functions
	• ▮ Admin Screens
	• My Profile
	• Modify Account Profile
	• Additional Screens
	• IPC Console
	    • ▮ capabilities
	    • ▮ Admin capabilities
	    • User Capabilities
	2:00 – 3:00 1 Hour New Hire practice – Logging In, using
	▮ and IPC functions
	    • Difference between VAL and Production environments
	    • VAL environment:
	        • Available for practice and testing ▮ behavior
	        • Updates will be trained – new functionality
	    • Distribute User IDs
	    • Password and authentication questions
	    • Lock-Outs
	        • Consequences of repeated Lock-Outs
	3:00 – 4:00 1 Hour New Hire practice – Registration,
	Creating roles in an organization
	    • ▮
	    • Modify Account Profile
	    • Change Answers to Authentication Questions
	    • Change Password
	    • Pending Approvals
	    • Search and View Pending Approvals
	    • ▮ Administration Page
	• IPC (▮ Community Administration Interface)
	    • View Edit Individual Practitioner
	    • Search Organizations
	    • SO request approver in VAL
	• Creation of 3-person teams (SO, UGA, EU)
	    • Practice Self-Registration

4:00 – 4:30
Quiz
	• Twenty Question Quiz – ▮ Overview, ▮ Roles and
	Responsibilities, ▮ Hands-On Demo
	    • Multiple Choice
	    • True/False

4:30 – 5:00	Question and Answer – Open Session
Day 3 Wednesday	
8:00-9:00	Soft Skills/Q&A

9:00 – 10:00	█ Review
10:00-10:15	**Break**

10:15 – 11:15 ██ **Desk Processes**	• Desk Processes
	  • Daily Routine (How to start, equipment, etc.)
	  • Ticketing Format (Intro to Remedy)

11:15-12:00	SO Approval Process
12:00 – 1:00	**Lunch**

1:00 – 2:00 ██ **Resources Overview and Study**	• ██ Online 2.0
	• Sharepoint
	  • Demonstration
	  • Hands-on navigation exercise
	  • "Old" Help Desk User Guide

2:00 – 3:15 **Practice**	**2:00 – 3:00 New Hire Hands-On Practice** • Organization creation • Multiple groups • 5 – 6 team participants
3:15-3:30	**Break**
3:30-4:30	**3:00 – 4:00 Customer Service** • Scenarios based on most frequent requests • Demonstrate "World Class Support"

4:30 – 5:00 **Quiz**	• Twenty Question Quiz – ██ Desk Processes, ██ Online Resources, Sharepoint, Remedy, Difference between Individual Practitioner and Organization, SO Approval capabilities
	  • Multiple choice
	  • True/False

Day 4 Thursday	
8:00 -9:00	Soft Skills/Q&A
9:00 – 10:00	PQRI Overview
10:00-10:15	**Break**
10:15 – 11:30	PQRI Roles and Responsibilities
11:30 – 12:00	PS&R
12:00 – 1:00	**Lunch**
1:00 – 3:00	Test Environment and walk through of Org Setup

3:00 – 3:45 **Quality Incident Descriptions**	• Remedy Work Log Description
	  • Expectations (PPT)
	  • Escalation Grid
	  • New Hire Practice pending time

3:45-4:00	**Break**

4:00 – 5:00 ██ **Quality Processes**	• (Still in Progress)
	  • Call Monitoring System
	  • How Ticket is reviewed and graded on criteria

Day 5 Friday	
8:00-10:00	5.1 Phase I Pecos Web Overview
10:00-10:15	**Break**

10:15-12:00	5.1 Phase I practice in Alpha
12:00 – 1:00	**Lunch**
1:00-3:00	5.3 Phase II Pecos Web Overview
3:00-3:15	**Break**
3:15-5:00	5.3 Phase II Practice in Alpha
Day 6 Tuesday	
TBD	Transition to the floor (Sitting with Admins Y-jacking, mirroring etc.)

4.2   Script Creation and Recurrent Training

CGI creates detailed scripts as guidance for the Help Desk staff in their support activities. The scripts are listed in the Help Desk Guide table of contents as links in ███ Online, and they are also posted in the ███ SharePoint site under the Project management folder. As functionality is added or changed, scripts are maintained in both resources. New material will be flagged and Admins will receive recurring training as necessary.

Scripts include the title of the issue submitted, a step by step approach to resolving the issue along with instructions to the caller and additional information that the Help Desk agent can offer to facilitate resolution.

Additionally, an escalation grid posted and maintained on SharePoint, tells Admins which calls need to be escalated to the escalation team and the information that should be captured for these calls.

███ Admins are required to read and learn the Help Desk Guide or the equivalent associated documentation, for example in the "virtual help guides" resident on each personal desktop computer. All ███ Admins also must be familiar with ███ Online, and maintain awareness of other resources that provide information about ███ functionality. ███ management administers tests periodically to ensure that Admins are keeping up with the release of new information or any updates to old information and processes.

In the Help Desk Guide, Exhibit 3-3 Change Password: User Performs Task is an example of how scripts are designed. Each script is presented in table format, with five columns.

- **Step** - provides a count of the numbered step in the script.

- **Summary** - describes the essential task that the Admin should perform with the caller.

- **Instructions to Caller -** provides the scripted language the Admin should use.

- **Additional Information if applicable** - provides various information to support the admin, such as, policy, functionality to watch for, or options the caller may have.

- **Screen Shot -** provides a link to an ███ screen shot in the Help Desk Guide. At the screen shot, a link is provided to return to the script.

Exhibit 3-3 Change Password: User Performs Task

Step	Summary	Instructions to Caller	Addition Information if applicable	Screen Shot
1	Make sure the caller is logged into the system	Have you logged into your user account yet? If not, please use your User ID and Password and do that at this time.	The ▇ Password Policy': • The password must be changed at least every 60 days.	N/A
2	Navigate to the 'Change Password' page	From the 'My Profile' page, click on the **Change Password** link.	• The password must be 8 characters long.	9.3.1
3	Change the password	You will be brought to the 'Change Password' page. You must enter your new password once, and then confirm it by entering it again in the second blank field. Make sure that your password follows the specifications outlined in the '▇ Password Policy' on the bottom of the page. When you are finished entering and reentering your new password, click the **Change Password** button.	• The password must contain at least 2 letters and 1 number. • Letters must be mixed case (i.e., your password must have at least 1 upper case letter and 1 lower case letter). • The password must not contain your user UID. • The password must not contain 4 consecutive characters from any of your previous 6 passwords.	9.3.2
4	Receive confirmation page	You should now see the 'Change Password Results' page, with a note that your password change was successful. Click the **OK** button to return to the 'My Profile' page.	• The password must be different from your previous 6 passwords.	9.3.3

4.3 Phone Call Support

█████ Admins are responsible for providing phone call support to the FI/MACs and the Provider Community. The Provider Community, provider organizations and their staff, individual practitioners, and the contractors hired to perform work may call for assistance with registration or general use of the █████ system, or to understand certain processes or procedures. Callers may also report problems with █████ When calling the █████ Help Desk, the caller is presented with the following script and options:

You have reached the External User Services desk for █████████ is the gateway to web applications for the Centers for █████ and Medicaid Services. Our hours of operation are Monday through Friday, 7 AM to 7 PM, Eastern Standard Time.

Exhibit 4-1 Telephone System Numerical Call Prompts

Please select from the following menu options:	
For assistance with registration in █████ or with an existing █████ ticket,	please press 1
For PQRI or PS&R related inquiries, or to report a system service outage	please press 2
To check on the status of a pending registration approval request, or for an explanation of a registration request that was denied	please press 3.
For assistance with User Account support such as password and authentication questions, updating a user profile, or requesting a role	please press 4
If you are a provider organization Security Official or a User Group Administrator needing assistance with approving new users, registering a group, associating to a group, or updating a group profile	please press 5
For assistance with █████ Web provider Enrollment and NPPES,	please press 6 or stay on the line.
For all other matters or to speak to an administrator	please press 7

Sub menus	
When a caller selects 4 they will hear this submenu	
For assistance with user self registration	please press 1
For assistance with a forgotten user ID or password	please press 2
To change your password or the answers to your authentication questions	please press 3
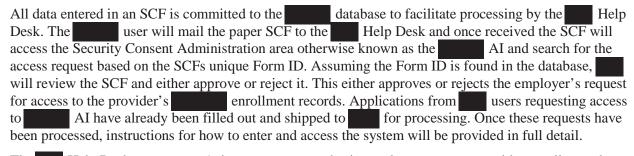
For all other User Account Actions, (this will include "Assist with User Profile Update," "Change Users Role/Grant Access to Applications," and "Disable/Enable User")	please press 4
When a caller selects 5, they will hear this submenu:	
For assistance with user group registration or deletion	please press 1
For assistance with a user group profile update or to add a new user group association	please press 2
To remove a user group association, and for all other Group Actions	please press 3

█████ Admins use a number of scripts, job aids and documents to provide phone call support. Above all, █████ Admins present themselves as representatives of █████ and confine their conversations to █████ and █████ Web policies and procedures. When they are unable to resolve a caller's problem, they capture all relevant data that will describe the incident for the Escalation Team, who then decides whether to escalate the incident to █████ Admin (the Tier 2 support desk at █████ or for █████ issues, to the Project Manager.

4.4   Security Consent Forms

Each time an SCF is generated, the following actions are performed by the Provider Enrollment Interface (PEI):

- A unique Form ID is established for the SCF

- A PDF of the SCF is generated when the user selects the 'View and Print' link on the results page(s).

All data entered in an SCF is committed to the █████ database to facilitate processing by the █████ Help Desk. The █████ user will mail the paper SCF to the █████ Help Desk and once received the SCF will access the Security Consent Administration area otherwise known as the █████ AI and search for the access request based on the SCFs unique Form ID. Assuming the Form ID is found in the database, █████ will review the SCF and either approve or reject it. This either approves or rejects the employer's request for access to the provider's █████ enrollment records. Applications from █████ users requesting access to █████ AI have already been filled out and shipped to █████ for processing. Once these requests have been processed, instructions for how to enter and access the system will be provided in full detail.

The █████ Help Desk can approve/reject requests to authorize or deny access to provider enrollment data associated with a given employer. Note: The Employer EIN and Employer Legal Business name represent the User Group TIN/SSN and User Group Legal Business Name fields as stated on the SCF.

4.5   Email Support

A separate ▇▇▇ Admin(s) are used to process contacts received by email. This process includes creating a ticket and responding to the email. The email team handles many of the same issues that are also received via phone. Standard responses for common issues that are received on a regular basis have been created.

The email team also handles forwarding documentation received from users by email which is required for our approval process to be carried out by the Approval Team.

5   Issue Tracking and Resolution

5.1   Tools Used for Tracking

█████ Admins use two tools that provide data for the tracking and reporting requirements.

- Remedy is the incident management tool used to document, track, and escalate reported incidents.

- The ████ database is used to track the disposition of Security Official approval request and IRS documents.

5.1.1   Remedy Ticket Fields and Admin Instructions

The following table illustrates the field label, field description, and admin instruction for each field used for ████ ████ support.

Field	Field Desription	Admin Instructions
		Go to first column top left of screen
Summary	Caller information and a brief description of the incident or question.	"████ caller's Main Issue or Problem (e.g., Wrong Number, Registration Questions, Reset Password…)
Description: **Example:**	Detailed description of the incident including pertinent caller information.	Type *Caller's Organization, *First name Last name of the caller, *Caller's Phone Number, *Request Number if applicable Texas Medical Clinic*Mary Smith*210-555-1111*Request Number N/A

All information should be collected If you do not get all the information from the caller just put N/A in that field. For example if you are missing the phone number just put N/A instead.

Example: *Texas Medical*Mary Smith*N/A*Req N/A |
Client	The client designation field.	The client name is chosen from a drop down "████ ████
Category	This field drives the categorization of the incident. The category field is custom for each client.	Based on the reason for the call, the ████ Admin chooses the appropriate category from a drop down menu.. see section _ for the list of custom categories.
Type	The type is associated with the category to further organize the specific incident. The item field is also client specific.	Based on the reason for the call, the ████ Admin chooses the associated type from a drop down menu.. see section _ for the list of custom types.
Item	The item is associated	Based on the reason for the call, the ████ Admin chooses

	with the category and type to take the categorization of the incident one step further. The item field is also client specific.	the associated item from a drop down menu.. See section _ for the list of custom item.
		Go to Next/Middle column
Case ID	This is the unique id, auto populated by the system and assigned to each incident ticket.	Populated by the system
Group	The Field is used to identify the group in which the incident is associated.	"CGI-███"
Individual	This field is used to identify the type of individual the incident is in reference to.	The ███ ███ admin will select the appropriate provider type: • Security Official • Backup Security Official • User Group Administrator • Application Approver • End User • Individual Practitioner If none of the above is applicable then select Team Lead's name.
		Go to next column/far left
Case Type	The case type identifies the function of the Remedy ticket.	The ███ Admin will select the appropriate case type choose from drop down "Incident or Question".
Status	The status indicates the disposition of the ticket.	choose from drop down "Resolved"
Closure Code	The status indicates the disposition of the ticket at closure.	choose from drop down "Successful"
Impact	Default setting based on CTI	(Leave Default setting)
Urgency	Default setting based on CTI	(Leave Default setting)
Priority	Default setting based on CTI	(Leave Default setting)
Source	Default setting based on CTI	(Leave Default setting)
Submitted by	The Remedy users name is auto populated based on the log in.	Leave Default setting) = Your Name

Confirmation Resolution	This field is a drop down menu for you to select appropriate resolution	Choose from drop down "Close Case"
		Click on Activity Tab – located in the middle of the screen, second tab from the left.
Work Log	The work log is used to document all actions taken, people contacted, etc. related to this incident.	Click in the box for Document in detail the questions/concerns of the caller. The Information/Guidance you provided to the caller. Caller's understanding/satisfaction regarding the information you provided. Detail is important. See Writing Descriptions for ▮ Admin located in SharePoint.
Save	The save buton saves all the activity related to the incident ticket.	Click on Save located at the bottom left corner of the screen.
		Ticket is complete and closed.

5.1.2   ▮   Access Database Fields and Administrator Instructions

The following table illustrates the field label, field description, and admin instruction for each field used for ▮ ▮ support.

Field	Field Description	Admin Instructions
		Click on Add Request
Request	Request Number Security Official receives after registration process before approval.	Input Request Number
TIN	Tax Identification Number	Input TIN
SSN	Social Security Number, Used if Organization doesn't have a TIN number.	Input SSN
Organization Name	Organization's Legal Business Name	Input Organizations Name
Request Received	Date the request was received.	Input Date
Deferred	Date we deferred the organization.	Current Date by Default
Email Sent	Date we sent an email to the Security Official to have them send IRS documentation back to us.	Current Date by Default
IRS Doc Received	Date we received the IRS document by mail, fax or email.	Input Date
IRS Doc Apr/Rejected	Date we approve or reject an	Input Date

	IRS Document.	
SO Verified	Date we call the organization to verify Security Official employment.	Input Date
SO Approved Rejected	Date we either approved or rejected the Security Official.	Input Date
IRS Doc Scanned	Date we scanned the IRS Document.	Input Date
Approval Duration	Formulated field to display the number of days the approval process has taken.	No input needed field is formulated for you
Last Modified By:	Select your name from drop down identifying who last modified the record.	Select [Your Name]
IRS Document	Select the radio button that describes the IRS Document being received by mail, email or fax.	Select Appropriate Radio Button
Security Official	Select whether the Security Official is either pending approved or rejected depending on the approval process point and employment verification.	Select appropriate radio button
Active Request	Select whether the request is still active or NOT active, request after 60 days are no longer active.	Check Reports By Date and Select the SO Pending >60 days report to verify all inactive approvals and change the records accordingly
IRS Document	Select whether the IRS document is pending, approved or rejected.	Select the radio button pending the IRS document Status
Notes	Place any notation needed like the Security Officials Name, the reason the IRS Document or Security Official was rejected.	Input notes accordingly
Save	The save button saves the record and opens a new blank record.	Click Save
		Click Close Form When Finished

5.2   Issue Tracking and Resolution Process

Issue tracking requires each Admin to open a ticket for each call, contact, or approval that is performed by ▮▮▮ in order to track to closure. The purpose of the classification is for trend identification, reporting, and prioritization. There are three types of ticket resolution:

- Internal ▮▮▮ resolutions
- Issues escalated to ▮▮▮ (▮▮▮ Admin)
- Issues escalated to Project Manager

5.2.1   Issue Resolution for Issues Internal to ▮▮▮ (not escalated to ▮▮▮

Tickets relating to ▮▮▮ or ▮▮▮ policy or procedural questions are not escalated to ▮▮▮ Admin. The Floor Supervisor may need to check with the Project Manager (PM) to decide how to move the issue forward. The PM may also discuss the ticket as an action item with ▮▮▮ stakeholders to obtain resolution.

5.2.2   Issues Escalated to ▮▮▮

Issues that ▮▮▮ is not able to resolve will be escalated to the ▮▮▮ ▮▮▮ help desk. See the Escalation Process in the ▮▮▮ Help Desk Guide.

5.2.2.1   Issues

Following are the known types of issues that will be escalated to ▮▮▮

- System Errors
  - ‣ Database Connectivity Issues
  - ‣ Duplicate requests
  - ‣ Page Cannot Be Found Errors
  - ‣ System Down
  - ‣ SSN Validation Not Working Properly
  - ‣ Verification Code Not Working
- Anything that ▮▮▮ cannot fix or is not responsible for
  - ‣ Closing accounts
  - ‣ Archiving accounts
  - ‣ User does not have SSN (not U.S. citizen)
  - ‣ Removing and/or switching roles

5.2.2.1.1 Email

Email will be used as necessary to communicate provider's acknowledgement of receipt, reminders, or requests for information. Some of the known forms of email communications include:

- Request for official IRS document

▪ ■■■ Security Consent Form receipt acknowledgements

Text of any communication sent by email must be vetted and approved by ■■■

5.2.2.1.2 Security Official (SO) and Authorized Official (AO) Approval Process

The SO Approval Process is detailed in the Help Desk Guide/■■■ Online. Briefly, the original registration request by a Security Official (SO) follows a process that is similar to delegated authority. To keep the number of overall item replications down in the ■■■ system, the SO's registration requests are received by the Provider Service Supervisor (PSS), whom then routes the requests to the ■■■ Admins performing the various roles in the SO/Organization Approval Process.

The AO vetting and approval process is……

The first ■■■ Admin handles the deferral by preparing and sending the email request for official IRS documentation from the provider. The text for the email request can be seen in the ■■■ Help Desk Guide.

The next ■■■ Admin handles documentation validation against information in ■■■ and SO verification by calling the organization contact information. In this part of the approval process, the organization is validated by checking the Taxpayer Identification Number and Legal Business Name in the official IRS documentation that the provider sends to ■■■ The SO is validated with a phone call to the organization contact designated in the provider's registration to confirm the SO's employment and qualifications to approve ■■■ web application users.

At each step, each ■■■ Admin records the date and steps taken in the Access database for reporting purposes.

5.2.2.1.3 ■■■ Security Consent Form Approval Process

The ■■■ Security Consent Form (SCF) Approval Process is detailed in the Help Desk Guide/■■■ Online. The ■■■ SCF Approval Process relates to implementation of the ■■■ web application. When ■■■ users request access to the application through ■■■ the requests must be approved according to a structure that includes an Authorized Official (■■■ Administrator) who identifies an individual (also an ■■■ user) who then approves access for those end users who will perform data entry and submit information in ■■■

Using the Security Consent Form document sent by the provider, ■■■ performs manual processing to verify the Authorized Official in ■■■ and validates the identity of the identified approver. ■■■ can also terminate ■■■ access for a user group based on the request of the Authorized Official or ■■■ Approver.

5.2.2.1.4 Ticket Escalation Process

The Ticket Escalation Process is detailed in the Help Desk Guide/■■■ Online. Escalation is determined by the Escalation Grid located in the Help Desk Guide/■■■ Online. If an ■■■ Admin receives a call or contact that falls into the category of escalation, there are two possible stops for the Remedy ticket s/he creates.

The first stop should always be the Escalation Team. The Escalation Team evaluates the incident to decide whether it can be resolved within ■■■ or needs to be escalated to the Tier 2 ■■■ Admin Support Desk.

Remedy tickets escalated to the Tier 2 ██████ Admin Support Desk are tracked by the Escalation Team until they are closed.

6 Quality Management

The ▮▮▮ ▮▮▮ Help Desk was created to service the Provider Community as it registers and maintains it organizations within ▮▮▮▮ and ▮▮▮▮ Our client, ▮▮ (Centers for ▮▮▮▮ and Medicaid Services), requires that ▮▮ Help Desk Administrators (Admins) are proficient and effective purveyors of ▮▮▮ communications and competent operators with regard to ▮▮▮▮ administration and maintenance.

To ensure ▮▮ Help Desk Administrators are meeting ▮▮ requirements with regard to processing and customer contact, Audit and Quality Assurance policies and procedures have been implemented.

The Audit, Quality Assurance and Control policies and procedures are under continual review to ensure best practices are implemented as the ▮▮▮▮ call center grows.

6.1 Quality Assurance and Quality Control

Quality Assurance (QA) is planned and systematic activities implemented in a quality system so that quality requirements for a product or service are fulfilled.

Quality Control (QC) is the observation technique and activities used to fulfill requirements for quality.

6.1.1 Support Services that Require Audits or QA and QC.

- **Manual Approvals** for Security Officials and Authorized Officials. Approvals are audited on a regular basis by the *Approvals Team Lead.*

- **Remedy (Fry) Incident Tickets** completed by ▮▮ Admins for the purpose of tracking and documenting customer contact. Tickets are subject to Q/A and Q/C by the *Quality Assurance Administrator for accuracy and quality of incident descriptions.*

- **Call Monitoring** either live or recorded is conducted by *Leads*, *Quality Assurance Administrator,* and *Managers* to evaluate the ▮▮ Admins customer contact skills. Call Monitoring is subject to QA and QC.

7 Workload Management Reports, Measures and SLEs

█████ will produce weekly and monthly workload reports. █████ and █████ will agree to service levels that are appropriate for supporting the ████ ████ Provider Community.

7.1 Workload Management Reports

At a minimum, the workload reports will include:

- ████ Week to Month Rollup Report located on the ████ SharePoint. It is sent to CGI Federal weekly (Monday before or at 11:00am EST)
- ████ Tickets Escalated and Resolved per Month located on the ████ SharePoint. It is sent to CGI Federal weekly (Monday before or at 11:00am EST)

7.1.1 Week to Month Rollup Report

Every Monday and the last day of every month, ███ will produce the ███ Week to Month Rollup Report. This report will provide the total calls, total SO approval requests received, total SO approval requests deferred, and total SO approvals processed per week broken down by day. Additional information included in the report includes the time to approve SO requests, rejected document logs, and a breakout of the number of documents received by mail, email, and fax. ████ will perform a quality check on the report. The PM will deliver the report to ████ the next working day.

7.1.2 Issues Resolved Per Month

The next working day after the last day of each month, ███ will produce the ███ Tickets Escalated and Resolved Report. This report includes the Remedy TT (trouble ticket) log where all items escalated to ████ Admin are tracked (including date opened), description, tracking numbers, and resolution. The report indicates the month, total tickets open, total tickets escalated, total tickets that ████ Admin opened, total tickets closed in ███ Remedy, and the remaining open tickets. ████ will perform a quality check on the report. The PM will deliver the report to ████ the next working day.

7.1.3 ██████ Security Consent Forms Processed Per Month

The next working day after the last day of each month, ███ will produce the ██████ Security Consent Forms (SCF) processed per Month Report. The data for ██████ SCF processing will be included in the ████ Week to Month Rollup Report.

7.2 Additional Measures to be reported on and Service Level Expectations (SLE)

Refer to Appendix A

Appendix A: Service Level Expectations
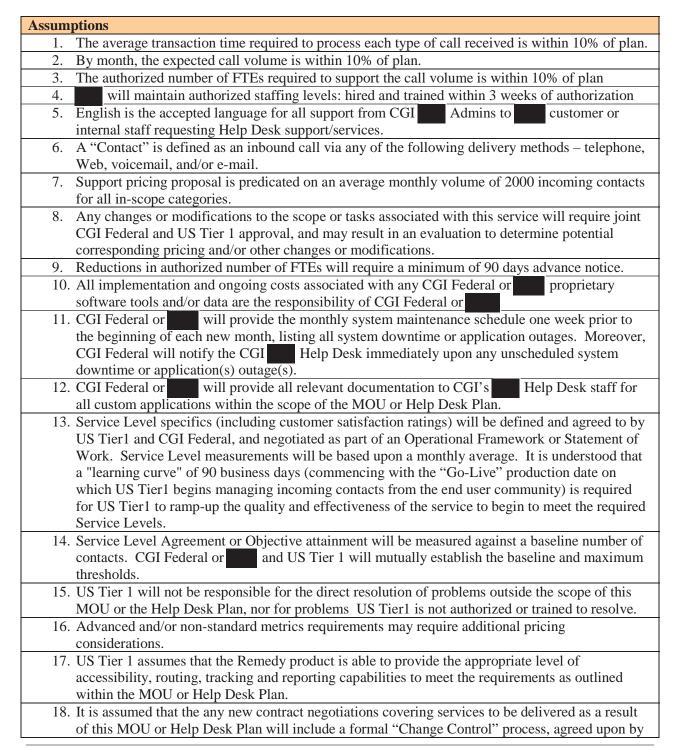
Metric Description	Service Level	Objective	Source	Assumptions	Measurement	Data Collection Method
Time to Answer	85% < 30 Seconds	Answer calls coming in to the service desk in quick and efficient manner	Phone Data Base from the Automated Call Distribute or (ACD)	30 second clock begins after the message about recorded for quality purposes.	85% of calls will be answered = <30 seconds	Calls Answer Delay/Calls Answered
Maximum Hold Time	95% < 2 minutes	Minimize length of time a caller is placed on hold/in queue	Phone DB- Automated Call Distributor	30 second clock begins after the message about recorded for quality purposes.	95% of calls on hold will be answered within 2 minutes	Calls held over 2 minutes - total call total calls / total calls
Abandonment Rate	>6%	Answer call coming into the service desk in a quick and efficient manner	Phone DB- Automated Call Distributor	ACD - Factor out twice-daily "test" calls placed by Help Desk. Calls released with in the first 20 seconds are not considered abandoned.	Maintain less than 6% of call abandonment	Calls Abandoned/ Calls offered x 100 Based on ICMI the norm for call abandonment rate is 6%.

Metric Description	Service Level	Objective	Source	Assumptions	Measurement	Data Collection Method
Security Approvals Processed	100% of daily requests received before 5:00 PM Central deferred; 85% of organization documents processed on day of receipt	Stay up to date on SO approvals and ███ SCF approvals	███ Week to Month Rollup Report	Requests that arrive after hours or on the weekend are counted the following business day; ███ system is functioning properly	███ Week to Month Rollup Report	
Reports Delivered	100% of weekly and monthly reports delivered on schedule and with accuracy	Provide accurate and timely data to client	███ Week to Month Rollup Report	Report due dates are as indicated in Help Desk Plan	Client receives reports on days and by time indicated in Help Desk Plan	

Appendix B: Assumptions

Assumptions
1. The average transaction time required to process each type of call received is within 10% of plan.
2. By month, the expected call volume is within 10% of plan.
3. The authorized number of FTEs required to support the call volume is within 10% of plan
4. ▮▮▮ will maintain authorized staffing levels: hired and trained within 3 weeks of authorization
5. English is the accepted language for all support from CGI ▮▮▮ Admins to ▮▮▮ customer or internal staff requesting Help Desk support/services.
6. A "Contact" is defined as an inbound call via any of the following delivery methods – telephone, Web, voicemail, and/or e-mail.
7. Support pricing proposal is predicated on an average monthly volume of 2000 incoming contacts for all in-scope categories.
8. Any changes or modifications to the scope or tasks associated with this service will require joint CGI Federal and US Tier 1 approval, and may result in an evaluation to determine potential corresponding pricing and/or other changes or modifications.
9. Reductions in authorized number of FTEs will require a minimum of 90 days advance notice.
10. All implementation and ongoing costs associated with any CGI Federal or ▮▮▮ proprietary software tools and/or data are the responsibility of CGI Federal or ▮▮▮
11. CGI Federal or ▮▮▮ will provide the monthly system maintenance schedule one week prior to the beginning of each new month, listing all system downtime or application outages. Moreover, CGI Federal will notify the CGI ▮▮▮ Help Desk immediately upon any unscheduled system downtime or application(s) outage(s).
12. CGI Federal or ▮▮▮ will provide all relevant documentation to CGI's ▮▮▮ Help Desk staff for all custom applications within the scope of the MOU or Help Desk Plan.
13. Service Level specifics (including customer satisfaction ratings) will be defined and agreed to by US Tier1 and CGI Federal, and negotiated as part of an Operational Framework or Statement of Work. Service Level measurements will be based upon a monthly average. It is understood that a "learning curve" of 90 business days (commencing with the "Go-Live" production date on which US Tier1 begins managing incoming contacts from the end user community) is required for US Tier1 to ramp-up the quality and effectiveness of the service to begin to meet the required Service Levels.
14. Service Level Agreement or Objective attainment will be measured against a baseline number of contacts. CGI Federal or ▮▮▮ and US Tier 1 will mutually establish the baseline and maximum thresholds.
15. US Tier 1 will not be responsible for the direct resolution of problems outside the scope of this MOU or the Help Desk Plan, nor for problems US Tier1 is not authorized or trained to resolve.
16. Advanced and/or non-standard metrics requirements may require additional pricing considerations.
17. US Tier 1 assumes that the Remedy product is able to provide the appropriate level of accessibility, routing, tracking and reporting capabilities to meet the requirements as outlined within the MOU or Help Desk Plan.
18. It is assumed that the any new contract negotiations covering services to be delivered as a result of this MOU or Help Desk Plan will include a formal "Change Control" process, agreed upon by

Assumptions
both parties (CGI Federal and US Tier1) that will govern and manage all changes in scope, coverage, pricing, etc. throughout the term of the contract.

Phase III Release 2 Training Plan

Version No. 2

Reference Contract No:

Prepared for

<

Prepared by

CGI

4050 Legato Road

Fairfax, Virginia 22033

<

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Phase III Release 2 Training Plan
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Document Version Control

The following table contains the revision history of this document:

Version	Date Approved	Author	Modifications Made
■ 1.0		■ Sarah Cheng, CGI ■ Jodi Jaranko, CGI	■ N/A
■ 2.0		■ Sarah Cheng, CGI	■ Updated document to address <███████s comments on the draft training plan.

Phase III Release 2 Training Plan
<███████

1 Introduction

1.1 Background and Scope

The ▮▮▮▮▮ will take the lead role in training ▮▮▮▮▮ end users on the TEMPO Release 2 software, with detailed planning and training support from CGI. CGI will provide the EEMS team with TEMPO "train-the-trainer" training, as well as training for Captivate developers. The purpose of this Training Plan is to present the methodology and approach CGI will take in training EEMS's TEMPO trainers and Captivate developers, document the training session curricula, and describe the training materials that will be developed as part of the trainer training effort.

This Training Plan presents an instructionally-sound approach that will address training requirements for ▮▮▮▮▮s trainers.

1.2 Points of Contact

The following points of contact have been identified for the TEMPO training effort:

- CGI Project Manager—John Horstman
- CGI Training Specialists— TBD
- ▮▮▮▮▮ Project Manager—▮▮▮▮▮
- ▮▮▮▮▮ Training Lead—▮▮▮▮▮

1.3 Document Organization

This Training Plan is organized according to the outline provided in the State of ▮▮▮▮▮ Systems Development Life Cycle documentation. The Training Plan contains the following sections:

- Introduction—introduces the training plan, identifies key training points of contact, and defines terms used throughout the remainder of the training plan.
- Instructional Analysis—summarizes CGI's approach to developing training materials and recommendations for training ▮▮▮▮▮ trainers and Captivate developers. This section also documents the user groups that will participate in the training sessions, summarizes their training needs, and describes the system tasks each group will need to learn in order to effectively train end users of the TEMPO system.
- Requirements Included in Trainer Training—documents the requirements from Task Order 4 that will be addressed during trainer training.
- Requirements Not Included in Trainer Training—documents requirements from Task Order 4 that will not be addressed during the trainer training and explains why they will not be addressed.
- Instructional Methods—describes CGI's "train-the-trainer" training methodology.

Phase III Release 2 Training Plan
▮▮▮▮▮

- Training Resources—describes the attendance, resource, and facility requirements and provides a detailed schedule for training. This schedule includes Captivate developer training and sample modules.
- Training Curriculum—provides the outline-syllabus for each of the Training Sessions.
- Training Materials—describes the training materials that will be used during the Training Sessions.

1.4   Glossary

This section provides a glossary of terms and acronyms used in the training plan.

- GBS—Goal Based Scenario. An example business scenario used by session participants for hands-on practice during the training sessions. Each GBS allows participants to think through a real-to-life business process (e.g., draft a permit, record a complaint) and solve the problem using a particular set of TEMPO skills.
- SOP—Standard Operating Procedure. Each program will document the steps their personnel will take in order to complete their job functions using TEMPO. These SOPs, developed by each program with the assistance of the EEMS team, provide a streamlined approach to using the TEMPO software to complete day-to-day responsibilities.
- ARMA—Air and Radiation Management Administration.
- WAS—Waste Administration.
- WMA—Water Management Administration.
- OS—Office of the Secretary.
- EEMS—Enterprise Environmental Management System.
- CBT—Computer Based Training utilizing Captivate modules.

Phase III Release 2 Training Plan

2 Instructional Analysis

2.1 Development Approach

CGI's approach to developing training curriculum and materials is based on our successful experience implementing training programs at other State environmental agencies, feedback from EEMS release 1 end user training, and our proven Training Techniques courseware that has been delivered to a wide range of organizations.

CGI reviewed the list of requirements included in Task Order 4 to determine which would be addressed during the trainer training sessions. Additionally, we documented those requirements that would not be addressed and indicated the reason for not addressing them. For example, there were many technical requirements that had little to do with how end users perform their jobs. To keep the training sessions focused on skills that the end users need in order to do their jobs, these requirements are not covered in the training sessions. Sections 4 and 5 include a complete list of both the included and excluded requirements.

Next, CGI mapped the included requirements to the appropriate audiences in order to determine which requirements to cover in each training session. This mapping is included in Section 4. Based on these mappings, CGI planned the curriculum and schedule for each trainer training session. The GBSs to accompany the sessions will be determined during training material development.

After soliciting feedback from ▇▇▇▇▇▇▇▇ on the training curriculum, CGI will proceed with developing the Goal Based Scenarios (GBSs) for each session. For each GBS, CGI identifies a real-to-life scenario that ▇▇▇▇▇▇▇▇ personnel might encounter when using the system to perform their jobs (e.g., receiving a revised registration form). CGI then crafts the GBSs to guide participants through the steps they should take to complete each scenario using the system. To encourage participants to think through the system steps required to complete the scenarios, GBSs do not provide detailed, step-by-step instructions but instead list the high-level step to be performed. GBSs therefore give participants the opportunity to practice not only performing the detailed steps, but also figuring out what those steps should be based on each scenario.

Due to the tight release schedule, ▇▇▇▇▇▇▇▇ is not scheduled to complete its reference data prior to the development of the training materials. As a result, the GBSs will be based on possible scenarios and the data indicated may differ from reference data that ▇▇▇▇▇▇▇▇ develops. Assuming ▇▇▇▇▇▇▇▇ completes the Standard Operating Procedures (SOPs) on schedule, CGI will ensure that the GBSs are not in conflict with the SOPs). The intent of the GBSs therefore is to orient participants to the capabilities and features of the system that are available to help them perform their jobs.

The project schedule provides ▇▇▇▇▇▇▇▇ with the opportunity to review the draft training plan and sample training materials, and provide clear, concise feedback on the contents. CGI then incorporates the mutually agreed upon changes into the final version of the documents.

To promote high quality in our training plan and materials, the draft and final training plans and GBSs are reviewed by CGI Training Specialists prior to their delivery to ▇▇▇▇▇▇▇▇

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2.2   Issues and Recommendations

<███████████> should complete the following actions prior to the training sessions by the schedule provided in the attached Gannt chart:

- Develop SOPs–The Release 2 Project Management Plan includes tasks for developing SOPs. <███████████> should provide their final SOPs to CGI by the dates specified in the project Gantt chart so that CGI can take the SOPs into account while developing the GBSs, as well as answer any SOP-related questions that arise during the training sessions. Additionally, <███████> should provide copies of the SOPs to all training session participants.
- Set up and configure the training database.
- Provide Student IDs with access to the Training database.
- Provide training participants with completed SOPs and Users Guide.
- Set up training room.
- Identify Support Contacts for Implementation Period–CGI plans to address troubleshooting procedures during the training sessions. As part of this overview, CGI would like to provide participants with a list of EEMS team contacts. In particular, CGI would like <███████> to identify the following contacts:
  - Master File Contacts–for requesting changes to Master File Data;
  - Reference & Requirements Data Contact–for requesting changes or clarifications on reference data;
  - Data Administrator–for requesting help fixing data issue (e.g., accidentally locked a document that should be unlocked);
  - SOP Contact–for answering questions on <███████>s SOPs or for clarification on how to perform activities in the TEMPO system;
  - Software Contact–for reporting software issues (and, at <███████>s discretion, suggesting enhancements). Contact is responsible for determining whether issues go to CGI or to <███████>s system administrators; and
  - User and Security Contact–for requesting user IDs, passwords reset, and additional security privileges.
  - Report Contact–for requesting reports.
  - Data Quality Contact–for identifying and reporting data issues, inconsistencies.
- Identify five desired Captivate modules before the Captivate developer training session.
- Procure a Captivate license.

2.3   Needs and Skills Analysis

CGI will train the following groups of TEMPO participants:

- Air and Radiation Management (ARMA) trainers

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- Waste Administration (WAS) trainers
- Water Management Administration (WMA) trainers
- eDMR Industry Liaisons
- Captivate developers

The following subsections provide a brief overview of the current skills and training needs of these groups, as well as descriptions of the skills they will need to learn in order to train end users to perform their jobs using the TEMPO system.

2.3.1   ARMA Trainers

ARMA trainers must be familiar with Windows operating systems and have experience with Microsoft Office applications such as Word and Excel. In addition, the ARMA trainers should already have basic familiarity with the EEMS Release 1 system and working system model functionality relating to ARMA's permitting and compliance & enforcement business functionality.

<█████████>s ARMA trainers are responsible for the end user training of ARMA's permitting, compliance and enforcement, planning, and management staff. The staff responsibilities include the following job functions:

- Entering permitting data into TEMPO.

- Entering compliance and enforcement data into TEMPO.

- Creating incident records in the system.

- Tracking the progress of personnel on air and radiation activities and reassigning tasks as necessary.

2.3.2   WAS Trainers

WAS trainers must be familiar with Windows operating systems and have experience with Microsoft Office applications such as Word and Excel. In addition, the WAS trainers should already have basic familiarity with the EEMS Release 1 system and working system model functionality relating to WAS' permitting and compliance & enforcement business functionality.

<█████████>s WAS trainers are responsible for the end user training of WAS's permitting, compliance and enforcement, and management staff. The staff responsibilities include the following job functions:

- Entering permitting data into TEMPO.

- Entering compliance and enforcement data into TEMPO.

- Create incident records in the system.

- Tracking the progress of personnel on hazardous waste activities and reassigning tasks as necessary.

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2.3.3   WMA Trainers

WMA trainers must be familiar with Windows operating systems and have experience with Microsoft Office applications such as Word and Excel. In addition, the WMA trainers should already have basic familiarity with the EEMS Release 1 system and working system model functionality relating to WMA's permitting and compliance & enforcement business functionality.

<██████████>s WMA trainers are responsible for the end user training of WMA's permitting, compliance and enforcement, and management staff. The staff responsibilities include the following job functions:

- Entering permitting data into TEMPO.

- Entering compliance and enforcement data into TEMPO.

- Create incident records in the system.

- Tracking the progress of personnel on wastewater activities and reassigning tasks as necessary.

2.3.4   eDMR Industry Liaisons

eDMR Industry Liaisons must be familiar with Windows operating systems and have experience with Microsoft Office applications such as Word and Excel. In addition, eDMR Industry Liaisons should already have basic familiarity with the EEMS Release 1 system.

<██████████>s eDMR Industry Liaisons are responsible for training industry to interface with eTEMPO to create eDMRs.

2.3.5   Captivate Developers

Captivate developers must be familiar with Windows operating systems and have experience with Microsoft Office applications such as Word and Excel. In addition, the captivate developers should participant in the trainer training sessions as appropriate, to gain an understanding of the TEMPO modules for which they will be responsible for developing Captivate modules..

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3 Requirements Included in Trainer Training

This section lists the requirements from Task Order 4 that will be addressed by the trainer training sessions. A separate column has been included for each training session indicating if the session will address the requirement, as well as indicating the program (role) affected. For requirements specific to a program, but where the functionality to address the requirement would be used by all programs, only the program that the requirement is related to is listed. Whereas the functionality may be covered in additional training sessions, the context in which the functionality is used as described in the requirement would only be discussed in the indicated training sessions.

Program/Role Key: P = Permitting Role, C = Compliance/Enforcement Role, L = Planning Role

Reqt #	Category	TEMPO Module	Requirement (final text)	ARMA	WAS	WMA	TEMPO Functionality Meeting Requirement
NEW-20	AGENCY	Compliance & Enforcement	Change DEQ Attorney Assigned to Attorney Assigned	C	C	C	The DEQ Attorney Assigned field has been changed to Attorney Assigned on the Header tab of the Enforcement Action Screen document.
R032	AGENCY	Master File	Ensure duplicate entries for a single Regulated Entity are not created for each different Department programs	C, P	C, P	C, P	TEMPO tools assist user in finding possible duplicates, but does not prevent duplicates from being entered. Driven by <██████████ business process.
R034	AGENCY	Permitting	Provide process verification mechanisms for: origin of data, data authentication, staff review process for completeness and accuracy, update of EEMS database.	C, P	C, P	C, P	This requirement is met by TEMPO's Work Activity Log and Completeness Check features, in addition to security and PIN mgmt. Specific requirements are addressed at the program level.

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Reqt #	Category	TEMPO Module	Requirement (final text)	ARMA	WAS	WMA	TEMPO Functionality Meeting Requirement
R052	AGENCY	Electronic Submittal	Provide verification mechanisms for: origin of data, data authentication, staff review process for completeness and accuracy, update of EEMS database.	C, P	C, P	C, P	This requirement is met by TEMPO's Work Activity Log and Completeness Check features, in addition to security and PIN mgmt. Specific requirements are addressed at the program level.
R080	AGENCY	Compliance & Enforcement	Prepare a pre-inspection checklist for a multimedia (Air, Water, and Waste) inspection.	C	C	C	This requirement is met through TEMPO's requirements library and compliance evaluation features. Specific requirements are addressed at the program level.
R091	AGENCY	Compliance & Enforcement	Record, track and produce environmental reports on: Enforcement actions Compliance assistance activities Pollution prevention activities (within regulated entities)-by specific activity and/or industrial processes/equipment.	C, P	C, P	C, P	Reporting module and from TEMPO search capabilities. Use of search engines and filters will be covered during the training.
R121	AGENCY	Compliance & Enforcement	Assemble information on any and all Regulated Entities where any standard for any contaminant has been exceeded.	C	C	C	The CMR Nightly Cycle processors can flag exceedence violations in compliance monitoring shells (e.g., monitoring data). Users can then view and search for these violations on the Violations List.

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Reqt #	Category	TEMPO Module	Requirement (final text)	ARMA	WAS	WMA	TEMPO Functionality Meeting Requirement
R126	AGENCY	Reporting	Provide features to accommodate electronic distribution of information.	C, P	C, P	C, P	Users can save results to electronic files or print reports to electronic files such as PDF or image files (assuming users have software that handles this).
R147	AGENCY	Reporting	Allow for the export of data into a variety of formats including spreadsheets and documents,	C, P	C, P	C, P	TEMPO allows for the saving of data from most screens to a variety of formats. In addition, <█████████> can apply the reporting tool.
13	Compliance	Activity Tracking	Track Attorney's signature/approval	C	C	C	This requirement is met by the activity tracking features of TEMPO.
74	Compliance	Batch Processing	Mail Merge Functionality	C, P	C, P	C, P	<████████> can use LetterBuilder to create letters and other mailings.
75	Compliance	Central File	Assign unique identifiers to permits and facilities	C, P	C, P	C, P	TEMPO assigns a unique Agency Interest ID to each facility. The combination of the Agency Interest ID and the activity ID defines a unique effective permit.
79	Compliance	Central File	Integrate Permitting, Inspection, Compliance and Enforcement Data	C, P	C, P	C, P	As an enterprise system, TEMPO integrates these types of data.
80	Compliance	Central File	Capture additional data such as photos, maps, etc.	C, P	C, P	C, P	Any electronic document can be stored as an attachment in the TEMPO Central File.

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Reqt #	Category	TEMPO Module	Requirement (final text)	ARMA	WAS	WMA	TEMPO Functionality Meeting Requirement
81	Compliance	Central File	Multimedia View of all Data Available to Permitting/Compliance/Enforcement Staff	C, P	C, P	C, P	TEMPO is a multi-media system and stores permitting, compliance, and enforcement data.
131	Compliance	Compliance & Enforcement	Track violations at a multi-media level.	C	C	C	This requirement is met by the TEMPO Violations List; it is a multi-media list of violations.
144	Compliance	Compliance Monitoring	Add Refer to Violations List Button on Blank Compliance Monitoring Report documents.	C	C	C	This requirement is met by the functionality for referring rows to the violations list on the blank compliance monitoring screen. Users will have to decide on the rows to refer. Once a document is locked, rows are no longer referable. This KY-specific functionality was moved to the baseline version to meet <████████>s needs.
154	Compliance	Electronic Submittal	Provide eDMRs or electronic submittals, possibly through website			C	<████████> can use the eDMR web submittal functionality built for MS to meet this need.
155	Compliance	Electronic Submittal	Capture electronic signature			C	This requirement is met by using the existing pin functionality within eTEMPO (assumes implementation of eTEMPO)
197	Compliance	Compliance & Enforcement	Ability to Track a History of Changes to Penalties and Corrective Actions with Dates, Reasons, and Comments.	C	C	C	<████████> can use the bring forward enforcement action functionality to meet this need.

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Reqt #	Category	TEMPO Module	Requirement (final text)	ARMA	WAS	WMA	TEMPO Functionality Meeting Requirement
199	Compliance	Compliance & Enforcement	Track requirements in an enforcement action	C	C	C	This requirement is met by TEMPO's enforcement action document; this document allows users to create requirements as part of the enforcement action.
357	Compliance	Compliance & Enforcement	Track Sewer Overflows			C	This requirement is met by TEMPO'S incidents module where <███████ can track most information about sewer overflows. The Location Tab on the Incident Detail has been modified to include the fields needed to capture the map page, letter grid, number grid, and ADC map references. The Incident Detail has also been modified to capture whether the affected waterbody will be posted as being contaminated.
358	Compliance	Compliance & Enforcement	Track receipt and follow up for submittals	C, P	C, P	C, P	This requirement is met by work activity logs in conjunction with submittal action requirements. This can be used to track submittals and to track follow up tasks.
360	Compliance	Compliance & Enforcement	Track noncompliance reporting form	C	C	C	<███████ can use the Incidents module to track noncompliance information.

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Reqt #	Category	TEMPO Module	Requirement (final text)	ARMA	WAS	WMA	TEMPO Functionality Meeting Requirement
361	Compliance	Compliance & Enforcement	Track information for Regulated Entities that are not in the system	C	C	C	This requirement is met by the Incidents module that TEMPO provides. <██████████ can use this module to enter information about non-Agency Interest sources.
362	Compliance	Compliance & Enforcement	Track 5 Day Notice	C	C	C	This requirement is met by using task-based submittal actions to track this information. This functionality can be used to receive alerts when notices are not received within 5 days of certain events.
479	Compliance	Master File	Cross-reference for Historical Names for Facilities	C, P	C, P	C, P	This requirement is met by TEMPO's Alternate/Historic ID functionality. <██████████ can capture historical names as alternate/historic agency interest identifiers. TEMPO allows users to search by these historic names.
641	Compliance	Permitting	Capture NPDES Notification Requirements	P	P	P	<██████████ can capture these requirements as submittal action requirements within TEMPO.
642	Compliance	Permitting	Identify Standard, Modified, and Custom Requirements	P	P	P	This requirement is met by the Requirements Development window. On this screen there is a column to display whether each requirement is a standard, modified, or customer requirement. This information is also conveyed by the text color.

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Reqt #	Category	TEMPO Module	Requirement (final text)	ARMA	WAS	WMA	TEMPO Functionality Meeting Requirement
752	Compliance	Water	Create and bulk mail blank DMR forms to all facilities required to submit DMRs.			C	This requirement is met by the Batch Monitoring Results creation window. This window can be used to batch create blank DMR forms. <████████> can use the Monitoring Results Preprint Production window to print paper versions of these forms and mailing labels.
NEW-41	Compliance	Compliance & Enforcement	Capture toxicity testing data			C	<████████> can enter their toxicity testing requirements as permit requirements and can then use the compliance monitoring preprint reports to capture testing results from both acute and chronic toxicity testing. <████████> will also use the CMR nightly cycle process to verify that the reported data do not exceed permit limits. The toxicity result values might include < or >, which the nightly cycle process can handle. If the program determines based on results that additional testing is required, then these requirements can be added as corrective action requirements in enforcement action documents.

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Reqt #	Category	TEMPO Module	Requirement (final text)	ARMA	WAS	WMA	TEMPO Functionality Meeting Requirement
8	Discharges	Activity Tracking	Track Public Notices	P	P	P	This requirement is met by using the Activity Tracking functionality. <████████ can track public notices as public notice activities and the newspapers used to publish public notices as related organizations.
9	Discharges	Activity Tracking	Clock Functionality	C, P	C, P	C, P	This requirement is met by the activity tracking clock functionality.
10	Discharges	Activity Tracking	Generate forms on a schedule (e.g. renewals and reports)	C, P	C, P	C, P	This requirement is met by the batch processing screen; this screen can be used to generate renewal letters.
12	Discharges	Activity Tracking	Track User Name, Date, and Time Changes on Activity Tracking Screens	C, P	C, P	C, P	This requirement is met by the Activity Tracking functionality. TEMPO security restricts who can make these changes.

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Reqt #	Category	TEMPO Module	Requirement (final text)	ARMA	WAS	WMA	TEMPO Functionality Meeting Requirement
77	Discharges	Exams & Licensing	Maintain a list of certified inspectors	P		P	<▮▮▮▮▮▮▮> currently maintains database lists of Sand Mount Installers and Septic System Inspectors. Information stored includes the person name, address, and phone number (which can be stored as the AI name, address, and phone number) and the employer's name, address, and phone number (which can be stored as a related organization name, address, and phone number). For Sand Mount Installers, <▮▮▮▮▮▮▮> also captures the exam date and score. <▮▮▮▮▮▮▮> has agreed that it can create a record for each exam (one/year) in the Exams and Licensing module, enter the attendees in Master File, schedule the attendees for the exam through the E&L Application document, and then enter exam scores. For Septic System Inspectors, <▮▮▮▮▮▮▮> could create a work activity log containing a task that corresponds to the date the applicant took the course. Alternately, this information could be entered into the General-level work activity log.

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Reqt #	Category	TEMPO Module	Requirement (final text)	ARMA	WAS	WMA	TEMPO Functionality Meeting Requirement
78	Discharges	Central File	Ability to categorize facilities	C, P	C, P	C, P	This functionality is met by using the Agency Interest type field.
155	Discharges	Electronic Submittal	Send copy of permit to EPA	Work Activity Log – C, P Reporting Tool – Not covered	Work Activity Log – C, P Reporting Tool – Not covered	Work Activity Log – C, P Reporting Tool – Not covered	This requirement is met by the Work Activity Log functionality. <u>Reporting will not be included in these training sessions.</u>
155	Discharges	Electronic Submittal	Send electronic copies of permits to EPA	Work Activity Log – C, P Reporting Tool – Not covered	Work Activity Log – C, P Reporting Tool – Not covered	Work Activity Log – C, P Reporting Tool – Not covered	This requirement is partially met by using the Work Activity Log to track the task associated with submitting a permit to EPA for review. The program can use the third party reporting tool to create its permit reports, and can then print these or save them in electronic format to send to EPA. <u>Reporting will not be included in these training sessions.</u>
477	Discharges	Master File	Capture Lat/Long for facilities and components	C, P	C, P	C, P	This requirement is met in that TEMPO can capture latitudes and longitudes in both decimal degrees and in another coordinate system (such as MD state plane coordinates). This conversion from state plane coordinates to decimal degrees has been added to system functionality.

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Reqt #	Category	TEMPO Module	Requirement (final text)	ARMA	WAS	WMA	TEMPO Functionality Meeting Requirement
477	Discharges	Master File	Track/Cross-reference additional information for Facilities (e.g. tax ID, county, zip, etc.)	C, P	C, P	C, P	This requirement is met by the Location Subject Item Details window, the Location tab of the Incident Detail, and the conversion to decimal degrees. The Location Subject Item Details window has been modified to add 20 new fields plus a District grid datawindow. The Location tab of the Incident Detail has been modified to add approximately 10 new fields. Additionally, the ability to capture coordinates using the MD grid and state plane coordinate system and convert these values into decimal degrees has be added.
639	Discharges	Permitting	Track Preliminary Site Evaluation	P	P	P	The program indicated that this information is captured in TEMPO.
640	Discharges	Permitting	Track permit activities	P	P	P	<███████ can track permitting activities using the Activity Tracking functionality.

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Reqt #	Category	TEMPO Module	Requirement (final text)	ARMA	WAS	WMA	TEMPO Functionality Meeting Requirement
559b	Discharges	Master File	The program needs the ability to capture information collected on applications for coverage under general permits.			P	This requirement is met by the existing Agency Interest and related organization and person functionality. Also, a Water General Permit SI Detail window, a new Outfall SI Detail window, and a new Wastewater (MD) SI Detail window have been created. The Effluent Testing SI Details window will also be used.
559c	Discharges	Master File	The program needs the ability to capture information collected on Municipal Wastewater Discharge Permit applications forms. The program uses the federal form for major municipal facilities and has a MD form for minor municipal facilities.			P	This requirement is met by the existing Agency Interest and related organization and person functionality. Also, a Water General Permit SI Detail window, a new Outfall SI Detail window, and a new Wastewater (MD) SI Detail window have been created. The Effluent Testing SI Details window will also be used.
NEW-43	Discharges	Compliance & Enforcement	Capture results from pretreatment inspections			C	TEMPO allows for the completed inspection document to be attached within the Central File for the Agency Interest. In addition, the ability to add new inspection data has been added to the Compliance Evaluation document.

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Reqt #	Category	TEMPO Module	Requirement (final text)	ARMA	WAS	WMA	TEMPO Functionality Meeting Requirement
NEW-47	Discharges	Master File	Maintain interest lists	C, P	C, P	C, P	This requirement is met by using TEMPO functionality that allows <█████████> to create Organizations for each interest list; <█████████> can track the people/organizations/facilities on these lists as related people, organizations, and agency interests.
NEW-49	Discharges	Master File	The program needs the ability to track facilities granted exemptions under the Bay Restoration fund.			P	This requirement is met by using TEMPO functionality that allows <█████████> to create an activity folder for the exemption and attach a document containing more detailed information into this activity folder.
NEW-51	Discharges	Permitting	Need to be able to specify that requirements apply only to a specific time period within the permit's effective period.	P	P	P	This requirement is met by using TEMPO functionality that allows <█████████> to designate a list of permit phases (e.g., first year, middle years, last year). At the time each permit is made effective, users can enter the date range for each phase. TEMPO will then apply requirements for that phase during the specified date range. Note that phases must be consecutive with no overlaps or gaps.

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Reqt #	Category	TEMPO Module	Requirement (final text)	ARMA	WAS	WMA	TEMPO Functionality Meeting Requirement
NEW-52	Discharges	Permitting	Support event-based phases.	P	P	P	The program needs to apply certain requirements only during certain phases of the permit lifecycle. Some of these phases are event-based, so <▮▮▮▮▮▮▮▮ needs the ability to enter phase dates after making the permit effective. Although phase dates are required in order to make a permit effective, <▮▮▮▮▮▮▮▮ could populate the phase dates with initial values in the future (for example, near the permit end date) and then modify them once the actual phase dates are known. Note that phase dates can only be changed when preprints have not yet been generated for the phase.
NEW-53	Discharges	Permitting	Track monitoring-only permit requirements	P	P	P	This requirement is met by existing TEMPO functionality which allows users to enter monitoring-only requirements (e.g., without an associated limit).
NEW-54	Discharges	Permitting	Support requirements that only apply during certain months.	P	P	P	TEMPO includes a Which Months field that allows users to specify which months a requirement applies during. The program indicated that this was sufficient for their needs.

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Reqt #	Category	TEMPO Module	Requirement (final text)	ARMA	WAS	WMA	TEMPO Functionality Meeting Requirement
NEW-56	Discharges	Permitting	Store fact sheet information in TEMPO			P	The permit fact sheets can be attached in the same Central File folder as the permit. The general functionality for attaching files to the Central File will be covered for each program.
121	Haz. Waste	Compliance & Enforcement	Schedule inspections based on grant requirements or other criteria	C	C	C	This requirement is met by TEMPO functionality which allows the program to use the Scheduling capabilities to schedule inspections.
143	Haz. Waste	Compliance Monitoring	Maintain sampling and analytical data from inspections.	C	C	C	The program can use the existing Compliance Monitoring Report functionality to meet this need.
143	Haz. Waste	Compliance Monitoring	Receive sampling and analytical data submissions from facilities in response to permit requirements.	C	C	C	The program can use the existing Compliance Monitoring Report functionality to meet this need.
358	Haz. Waste	Compliance & Enforcement	Record when and where was a follow up.	C, P	C, P	C, P	This requirement is met by the existing Incidents functionality.
365	Haz. Waste	Compliance & Enforcement	Refer incidents to other programs/agencies, receive incident referrals from other programs/incidents were referred from or to	C	C	C	This requirement is met by the existing Incidents functionality.

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Reqt #	Category	TEMPO Module	Requirement (final text)	ARMA	WAS	WMA	TEMPO Functionality Meeting Requirement
542	Haz. Waste	Master File	Track information on Application for Certification as a Controlled Hazardous Substances Hauler		P		This requirement is met by a new HW Hauler SI Details Window that has been added to the system. This screen will be used to capture waste types and description, hazard classes and description, quantity and units, any permit or certificate revocation information and description, any violation penalty information and description, and if the hauler meets motor fuel tax requirements and description.

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Reqt #	Category	TEMPO Module	Requirement (final text)	ARMA	WAS	WMA	TEMPO Functionality Meeting Requirement
543	Haz. Waste	Master File	Track information on Hazardous Substance Vehicle Certification		P		This requirement is met by a new HW Vehicle (MD) SI Details Window that has been added to the system. This screen will capture waste types and description, hazard classes and description, vehicle type, exemption/specification #, if testing/inspection requirements were met, a grid for the type of test and date, capacity and units, # of compartments, whether it meets all applicable CFR requirements, a description of safety equipment, a grid for the container type and specification #, and whether the vehicle complies with safety standards. The waste type and hazard classes will be filtered based on what is provided on the Hauler Certification (HW Hauler (MD) SI Details window)
545	Haz. Waste	Master File	Track information on Interstate Floater Certificate		P		This requirement is met by tracking the dates that the report was received and that the floater certificate was used in a Work Activity Log.

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Reqt #	Category	TEMPO Module	Requirement (final text)	ARMA	WAS	WMA	TEMPO Functionality Meeting Requirement
546	Haz. Waste	Master File	Track information on Application for Controlled Hazardous Substances Driver Certificate		P		This requirement is met by a new HW Driver (MD) SI Details Window. This screen will capture basic information about the driver as well as if the driver has had any violations, suspensions, and if any courses taken.
686	Haz. Waste	Permitting	Issue permits and certifications	P	P	P	<▮▮▮▮▮▮▮▮ can use the existing permitting functionality within TEMPO to meet this need.
690	Haz. Waste	Permitting	Track which vehicles and drivers are associated with a hauler.		P		This requirement is met by using vehicles as subject items associated with a hauler Agency Interest. The Drivers can be related agency interests of the hauler agency interests.
691	Haz. Waste	Permitting	Terminate vehicle certifications if the corresponding hauler certification is terminated or expires.		P		This requirement is met by adding a custom task of 'Terminated' to the Work Activity Logs for the hauler and vehicle certifications to indicate that these certifications have been terminated.

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Reqt #	Category	TEMPO Module	Requirement (final text)	ARMA	WAS	WMA	TEMPO Functionality Meeting Requirement
748	Haz. Waste	Waste	Generate violations if biennial reports are not submitted		C		This requirement is met by identifying which Agency Interests should submit biennial reports and setting up submittal action requirements in the permits or certification documents for these Agency Interests. When <█████████> makes the permits effective, this will generate tasks for biennial report submittal in the Work Activity Logs and the Overdue Task processor will flag potential violations if no received dates (i.e., completed dates) are entered into the system.
750	Haz. Waste	Waste	Collect annual reports on low level radioactive waste		C		This requirement is met by the new Low Level Radioactive Waste Report that has been added to the system. This report will capture the total number of packages, volume and activity for each of the stored waste, waste shipped out, and waste waiting to be shipped, as well as the inventory date.
NEW-33	Haz. Waste	Master File	Track insurance bond information for hazardous waste haulers.		P		This requirement is met by using either the Financial Assurance or the Liability Insurance SI Details window to capture this information.

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Reqt #	Category	TEMPO Module	Requirement (final text)	ARMA	WAS	WMA	TEMPO Functionality Meeting Requirement
55	OS	Activity Tracking	Store Public Participation Requirements (Environmental Justice)				<███████ can track public participation as activity tracking tasks. The number of people in attendance can be entered in the Comments field. Additionally, requirements for certain types of public participation can be included as standard requirements in permits.
69	OS	Batch Processing	Generate Batch Letters (EPSC)	C, P	C, P	C, P	This requirement is met by generating letters in batch using the TEMPO Batch Processing functionality. (Note that this process needs to be initiated by a user and will not happen automatically.)
70	OS	Batch Processing	Auto-Generate Renewal Notices (EPSC)	P	P	P	This requirement is met by generating renewal notices in batch using the TEMPO Batch Processing functionality. (Note that this process needs to be initiated by a user and will not happen automatically.)
81	OS	Central File	Ability to View a Facility at a Multi-Media Level (OSP)	C, P	C, P	C, P	TEMPO is a multi-media system and can therefore meet this need.
81	OS	Central File	Multi-Media Access to Data (OSP)	C, P	C, P	C, P	TEMPO is a multi-media system and can therefore meet this need.

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Reqt #	Category	TEMPO Module	Requirement (final text)	ARMA	WAS	WMA	TEMPO Functionality Meeting Requirement
81	OS	Central File	Multi-Media Access to Permits (EPSC)	C, P	C, P	C, P	TEMPO is a multi-media system and can therefore meet this need.
81	OS	Central File	Multi-Media View of Environmental Data (Communication)	C, P	C, P	C, P	TEMPO is a multi-media system and can therefore meet this need.
92	OS	Central File	Track Permit and Penalty Activities (EPSC)	P,C	P,C	P,C	This requirement is met by the Activity Tracking, Permitting, and Enforcement Action functionality.
93	OS	Central File	Track Follow-up Activities for Exceptions Reports (EPSC)	C, P	C, P	C, P	This requirement is met by Activity Tracking combined with their reporting tool. <██████████> will track other information outside of TEMPO. Reporting will not be included in these training sessions.
359	OS	Compliance & Enforcement	Track Complaints in relation to Specific Facilities (Environmental Justice)	C, P	C, P	C, P	This requirement is met by the Incidents module which is used to track complaints. Additionally, <██████████> can see statistics such as number of complaints in the past year on the AI Summary window.
363	OS	Compliance & Enforcement	Track Compliance and Activities (EPSC)	C, P	C, P	C, P	This requirement can be met by creating a gray bar for such activities and attach a Word document with further information in the Central File. Alternately, <██████████> could use the Incidents module to track this information.

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Reqt #	Category	TEMPO Module	Requirement (final text)	ARMA	WAS	WMA	TEMPO Functionality Meeting Requirement
385	OS	Compliance & Enforcement	Track Complaints (EPSC)	C, P	C, P	C, P	<▮▮▮▮▮▮▮> can use the Incidents module to track complaints.
387	OS	Compliance & Enforcement	Indicate whether facility is interested in scheduling an on-site pollution prevention assessment	C	C	C	The inspector or other <▮▮▮▮▮▮▮> staff could create an activity folder in TEMPO, which could contain work activity tasks assigned to the pollution prevention staff.
477	OS	Master File	Add Legislative District and Congressional District to the Location SI Details screen and Location tab of the Incidents Detail screen	C, P	C, P	C, P	Deferred to Requirement 477-WMA Discharges.
552	OS	Master File	Identify the Number of Employees of Specific Type (OSP)				This requirement is met by using the Title field on the Person Definition window to capture information about the employee. This information could be used in conjunction with <▮▮▮▮▮▮▮>s reporting tool to determine the number of employees of each type. <u>Reporting will not be included in these training sessions.</u>
553	OS	Master File	Ability to Categorize Regulated Entities (OSP)	C, P	C, P	C, P	This requirement is met by using the Agency Interest Type field, which will allow <▮▮▮▮▮▮▮> to categorize regulated entities.
555	OS	Master File	Access Facility Information (Environmental Justice)	C, P	C, P	C, P	TEMPO stores facility information in the Master File.

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Reqt #	Category	TEMPO Module	Requirement (final text)	ARMA	WAS	WMA	TEMPO Functionality Meeting Requirement
587	OS	Other	Track SOPs within the Department (Audit)	C, P	C, P	C, P	This requirement is met by using Activity Tracking within TEMPO. Standard operating procedure tasks can be tracked as Activity Tracking Tasks. Additionally, <███████████> can make its SOPs accessible via the system under the guidance help. These SOPs will also exist elsewhere within <███████>
592	OS	Other	Ability to Archive Information (OSP)	C, P	C, P	C, P	TEMPO allows users to lock documents in order to store historical information and protect it from further updates.
594	OS	Other	Ability to Classify or Categorize Documents (OSP)				If desired, <██████████> can create activity tracking tasks to track the document retention schedule and requirements.
699	OS	Reporting	Generate Mailing Lists (EPSC)	C, P	C, P	C, P	<███████████> can use the Batch Processing screen to generate mailing labels. <███████████> can create Agency Interests or Organizations to track mailing lists and can relate people and organizations to these lists to track members.

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Reqt #	Category	TEMPO Module	Requirement (final text)	ARMA	WAS	WMA	TEMPO Functionality Meeting Requirement
636R	Planning & Monitoring	Air – Emissions	Capture data reported in annual emissions certifications.	C, L			This requirement is met by the new Emissions screen that will display the calculated emissions values at the process, subject item, and Agency Interest level. The emissions document generation has been modified to include subject items that have a ▮▮▮▮ date within the reporting year.
NEW-03	Planning & Monitoring	Central File	Track information about state air quality plans	L			This requirement is met by creating agency interests to correspond to the areas covered by its state air quality plans. The development of these plans can be tracked using work activity logs and the draft and final plans can be stored in the TEMPO Central File.
NEW-04	Planning & Monitoring	Central File	Track consent orders for facilities that cannot meet state air quality plan requirements.	C			This requirement is met by creating an activity type for these consent orders. Each time a consent order is granted, a folder for this activity can be created in TEMPO. The Work Activity Log can be used to track the process for granting the consent order and can store correspondence related to the consent order in the TEMPO Central File.

Reqt #	Category	TEMPO Module	Requirement (final text)	ARMA	WAS	WMA	TEMPO Functionality Meeting Requirement
NEW-15	Planning & Monitoring	Master File	Accommodate coordinates entered in UTM Zones	C, P	C, P	C, P	The ability to capture coordinates using the MD grid and state plane coordinate system and convert these values into decimal degrees has been added to TEMPO.
NEW-16	Planning & Monitoring	Master File, Compliance	Capture and calculate information about air stacks	C, L, P			This requirement is met by using the existing Stacks SI Details window. This screen captures the stack height, diameter, temperature, flow rate, and velocity. It also calculates velocity in ft/sec if flow rate is entered in cfm.
NEW-17	Planning & Monitoring	Master File, Compliance	Record coordinate information and height for stacks.	C, L, P			This requirement is met by using subject items to report stacks in TEMPO. This will allow the program to use the Location SI Details window to report the geographic coordinates and height of the stack.
NEW-18	Planning & Monitoring	Master File, Compliance	Track which stacks receive the emissions from which pieces of equipment	C, L, P			This requirement is met by using both equipment and stacks as Subject Items. The Related Subject Items SI Details window can be used to specify which stack the emissions from each piece of equipment go to. This approach will support <░░░░░░░░░░>s need to have multiple pieces of equipment associated with the same stack.

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Reqt #	Category	TEMPO Module	Requirement (final text)	ARMA	WAS	WMA	TEMPO Functionality Meeting Requirement
NEW-19	Planning & Monitoring	Requirements Library	Capture requirements that originate in state air quality plans	L			The state air quality plan requirements can be added to the TEMPO Requirements Library. Requirement profiles can be created corresponding to the area that the plan covers and associate the requirements from the plan with this profile. When developing permits, <▮▮▮▮▮▮▮> could then apply this profile to facilities within the area covered by the plan.
9	Restoration	Activity Tracking	A mechanism to start the "clock" associated with Public Meetings held in addition to other VCP Approval Process Activities.	C, P	C, P	C, P	This requirement is met by using the activity tracking clocks. To meet the need that the clock start after the last of a set of tasks (that can occur in any order) is completed, the program can designate a separate 'start clock' task and use it to start the count down.
86	Restoration	Central File	Maintain a centralized database for site information (EXCEL, ACCESS, or ASCII) collected for each site	C, P	C, P	C, P	This requirement is met by the Master File functionality.
108	Restoration	Compliance & Enforcement	Conduct inspections, site assessments and site visits	C	C	C	TEMPO provides the ability to attach the results of these site visits into the Central File.
109	Restoration	Compliance & Enforcement	Capture results from inspections, site assessments and site visits	C	C	C	TEMPO provides the ability to attach the results of these site visits into the Central File.

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Reqt #	Category	TEMPO Module	Requirement (final text)	ARMA	WAS	WMA	TEMPO Functionality Meeting Requirement
121	Restoration	Compliance & Enforcement	Schedule inspections based on grant requirements or other criteria	C	C	C	If desired, the program could use the Scheduling capabilities within TEMPO to schedule inspections.
359	Restoration	Compliance & Enforcement	Track incidents and complaints related to Restoration		C		TEMPO provides an Incidents module that can be used to track this information.
365	Restoration	Compliance & Enforcement	Track referral of incidents to other programs/agencies	C	C	C	This requirement is met by the existing Incidents functionality.
410	Restoration	Data-Merge Word Processing	Send VCP applicants various kinds of approval letters/certificates (VCP Acceptance Letter, No Further Requirements Letter, Notice of Response action plan needed, Acceptance of Response Action Plan, Certificate of Completion, Brownfield's Acceptance letter,		P		This requirement is met by the LetterBuilder capabilities that TEMPO provides.
517	Restoration	Master File	Track information provided on the following application: Voluntary Cleanup Program (VCP) Application		P		This requirement is met by the new Voluntary Cleanup Program (VCP) Subject Item Detail window that has been added to the system. This window will capture information entered on VCP Applications.
560	Restoration	Master File	Track Institutional Control information and Status for VCP and State Superfund		C, P		This requirement is met by the addition of an optional field for Date Recorded on the Institutional Control (KY version) SI Detail window.

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Reqt #	Category	TEMPO Module	Requirement (final text)	ARMA	WAS	WMA	TEMPO Functionality Meeting Requirement
567	Restoration	Other	Freedom of Information Act (FOIA) requests would be automated or easily handled by a designated specialist without specific knowledge of the internal workings of our program (i.e. a designated FOIA specialist could handle requests for ALL programs in <▮▮▮▮▮	C, P	C, P	C, P	The program's FOIA representative can use the existing search features within the system to locate and view information needed to respond to requests.
576	Restoration	Other	A service to allow the generation and management phone logs for project communications	C, P	C, P	C, P	Program staff can maintain their phone logs in excel or other electronic format and attach them into the TEMPO Central File. They can check these logs out and in as necessary to update them.
598	Restoration	Permitting	Perform checklist-based reviews of applications.	P	P	P	This requirement is met by using the Technical Completeness Check document.
605	Restoration	Permitting	Receive applications and letters of application	P	P	P	This requirement is met by using the application template within TEMPO.
614	Restoration	Permitting	Ability to track the various milestones associated with a VCP Approval (Varies by Applicant)		P		This requirement is met by using the Activity Tracking features of the system to track milestones.
615	Restoration	Permitting	A mechanism to track the elapsed time for completing Activity Milestones	C, P	C, P	C, P	This requirement is met by using the Activity Tracking features of the system to track milestones.

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Reqt #	Category	TEMPO Module	Requirement (final text)	ARMA	WAS	WMA	TEMPO Functionality Meeting Requirement
668	Restoration	Permitting	Provide group wide organization and structure to [user modifiable] letters, applications, standards, and other documents maintained for use in the WAS: ERRP program.		C, P		This requirement is met by the LetterBuilder feature that TEMPO provides. General functionality of LetterBuilder will be demonstrated to all programs.
670	Restoration	Permitting	Track information on meetings conducted during the course of the process (for VCP)		C, P		This requirement is met by using the Central File to attach documents such as memos from meetings. Additionally, Work Activity Logs can be used to track the dates that meetings occurred.
671	Restoration	Permitting	Track Site information for Voluntary Cleanup program, Brownfield's program and Superfund program		P		The information needed for VCP is captured under requirement 517. <▮▮▮▮▮▮▮> plans to use the existing Superfund and Brownfields SI details windows in release 2.
NEW-35	Restoration	Compliance & Enforcement	Attach electronic files containing lab data.		C	C	TEMPO provides the capabilities to attach external documents to the Central File. Electronic files such as those containing lab data can be stored here.
NEW-36	Restoration	Compliance & Enforcement	Track monitoring requirements for a site	C	C	C	This requirement is met by using the Standard Requirements Library. TEMPO provides the ability to use the requirements development window to set up Monitoring Requirements for the site.

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Reqt #	Category	TEMPO Module	Requirement (final text)	ARMA	WAS	WMA	TEMPO Functionality Meeting Requirement
NEW-37	Restoration	Compliance & Enforcement	Track time spent per task and project for VCP projects		C, P		TEMPO provides a To Do List feature that can be used to enter the hours needed to complete tasks.
NEW-61	Restoration	Master File	The program needs the ability to search for parcels by address. Multiple parcels may exist within what is considered to be a single site by other programs.		C, P		This requirement is met by using Agency Interests to track sites and their related parcels (or set of parcels addressed together). Parcels may be set up as separate Agency Interests which will allow programs to search for the parcels by address. Programs will need to navigate to another AI to see other programs' information about an entire site.
56R	Stationary Sources	Air – CEM	Receive results from continuous emissions monitoring	C			This requirement is met by a new general level window that has been added to capture information about continuous emissions monitors (CEM). A CEM Report window has also been added to capture data from CEM quarterly reports.
57	Stationary Sources	Air – Stack Test	Capture Results of Stack Tests	C			This requirement is met by the addition of two new fields to the existing Stack Test document to capture stack test results. <█████████ will use Work Activity Logs to capture related activities, such as whether a protocol is received.

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Reqt #	Category	TEMPO Module	Requirement (final text)	ARMA	WAS	WMA	TEMPO Functionality Meeting Requirement
108	Stationary Sources	Compliance & Enforcement	Conduct checklist-based AutoBody Shop Inspections.	C			This requirement is met by the existing TEMPO compliance evaluation document.
108	Stationary Sources	Compliance & Enforcement	Conduct checklist-based Dry-cleaning Inspections.	C			This requirement is met by the existing TEMPO compliance evaluation document.
108	Stationary Sources	Compliance & Enforcement	Conduct checklist-based Federally Required Inspections.	C			This requirement is met by the existing TEMPO compliance evaluation document.
108	Stationary Sources	Compliance & Enforcement	Conduct checklist-based General Inspections.	C			This requirement is met by the existing TEMPO compliance evaluation document.
108	Stationary Sources	Compliance & Enforcement	Conduct checklist-based inspections in response to complaints and incidents.	C			This requirement is met by the existing TEMPO compliance evaluation document and incidents compliance evaluation.
108	Stationary Sources	Compliance & Enforcement	Conduct checklist-based Stage 2 – Vapor Recovery Inspections.	C			This requirement is met by the existing TEMPO compliance evaluation document.
110	Stationary Sources	Compliance & Enforcement	Track violations discovered during inspections and for failure to submit reports.	C	C	C	This requirement is met by the existing TEMPO violations list. TEMPO also provides a nightly cycle process to identify submittals such as reports that have not been received. CGI verified that the program will have the ability to see the SI Designation in both the violations list and enforcement action document.

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Reqt #	Category	TEMPO Module	Requirement (final text)	ARMA	WAS	WMA	TEMPO Functionality Meeting Requirement
111	Stationary Sources	Compliance & Enforcement	Issue notices of violation and other enforcement communications.	C	C	C	This requirement is met by both the existing Enforcement Action document and Letter builder functionality.
112	Stationary Sources	Compliance & Enforcement	Assess penalties and fines as part of enforcement actions.	C	C	C	This requirement is met by using the penalty fields within the existing Enforcement Action document.
115	Stationary Sources	Compliance & Enforcement	Capture results from inspections and other compliance assistance activities conducted.	C	C	C	This requirement is met by using existing screens that capture action codes, penalty amounts, parameters tested, and inspection results. This information is extracted for upload into AFS by the KY AFS submittal routine.
116	Stationary Sources	Compliance & Enforcement	Prepare inspection report after inspection/review by supervisor.	C	C	C	This requirement is met by the Produce Report functionality inside the compliance evaluation document which can be used to print the report. Alternately, managers could view the report directly through TEMPO.
117	Stationary Sources	Compliance & Enforcement	Refer some violations to the Office of the Attorney General Environmental Crimes Unit.	C	C	C	This requirement is met by the Activity Tracking functionality that TEMPO provides.
118	Stationary Sources	Compliance & Enforcement	Track court referrals when a civil lawsuit is initiated seeking remedies in cases where final orders have been violated.	C	C	C	This requirement is met by the Activity Tracking functionality that TEMPO provides.

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Reqt #	Category	TEMPO Module	Requirement (final text)	ARMA	WAS	WMA	TEMPO Functionality Meeting Requirement
119	Stationary Sources	Compliance & Enforcement	Track court referrals when court approval is sought to block an action that the violator is considered unlikely to address and that is likely to damage the environment.	C	C	C	This requirement is met by the Activity Tracking functionality that TEMPO provides.
120	Stationary Sources	Compliance & Enforcement	Receive compliance report submissions from facilities in response to regulatory/permit requirements.	C	C	C	This requirement is met by using submittal actions to track the receipt of compliance reports. The compliance evaluation document can be used to track any violations found in these reports and then can be referred to the violations list. Activity category, class, and type can be used to distinguish these types of records reviews from on-site inspections.
143	Stationary Sources	Compliance & Enforcement	Maintain sampling and analytical data from inspections.	C	C	C	This requirement is met by the Compliance Monitoring Report documents that TEMPO provides.
358	Stationary Sources	Compliance & Enforcement	Record if and when there was a follow up without over counting complaints received.	C	C	C	This requirement is met by using the Actions tab within the Incidents module to track the follow up for a complaint. The Link Incidents functionality can be used to link incidents that represent multiple reports of a single event to avoid over counting them.

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Reqt #	Category	TEMPO Module	Requirement (final text)	ARMA	WAS	WMA	TEMPO Functionality Meeting Requirement
359	Stationary Sources	Compliance & Enforcement	Track air quality complaints related to Air Quality.	C			This requirement is met by using the Incidents module that TEMPO provides to track this information.
364	Stationary Sources	Compliance & Enforcement	Ability for all complainants to remain confidential outside of <▮▮▮▮▮▮▮ (Name, address information, etc.)	C	C	C	This requirement is met by the Anonymous option on the Incidents Report tab within the Incident detail.
365	Stationary Sources	Compliance & Enforcement	Refer complaints to other programs/agencies.	C	C	C	This requirement is met by using the Organizations Contacted box on the Description tab of the Incident Details window to capture this information. Alternately, the Actions tab can be used to record the organizations that incidents are referred to (although they will be required to enter an <▮▮▮▮▮▮ staff person as well, so this may work better for internal referrals).
366	Stationary Sources	Compliance & Enforcement	Track numbers of compliance assistance activities performed.	C	C	C	TEMPO will track Compliance Assistance information, and the program will use <▮▮▮▮▮▮s internal reporting tool to track numbers. TEMPO's search screens might also be employed in determining simple counts.
416	Stationary Sources	Exams & Licensing	Approve and track Initial and renewal Incinerator Operator Training Courses.	P		P	This requirement is met by using the TCH windows within the Exams and Licensing Module to track this information

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Reqt #	Category	TEMPO Module	Requirement (final text)	ARMA	WAS	WMA	TEMPO Functionality Meeting Requirement
418	Stationary Sources	Exams & Licensing	Track information provided on the Incinerator Operator Certifications	P		P	The program believes it will be able to track the information it collects for Incinerator Operator Certifications using the E&L module. The original gap for this requirement was related to no longer requiring board review documents, which is a change that KY has already made.
419	Stationary Sources	Exams & Licensing	Maintain list of individuals that have taken Incinerator Operator training and passed exam issued by certified training provider and send training providers certification IDs for those individuals.	P		P	The program can use the E&L module to create licenses and license numbers for operators who pass training courses.
NEW-11	Stationary Sources	Exams & Licensing	Print incinerator operator certificates from the system.	Create LetterBuilder Template - not covered. Batch Processing - P		Create LetterBuilder Template - not covered. Batch Processing - P	The program can develop a LetterBuilder template for their certification. This template can be configured to pull the name of the certified individual and the date certified from TEMPO. Although it was not discussed during the session, <▮▮▮▮▮▮▮▮> could use the Batch Processing functionality to create these certificates in batch for operators who recently passed training courses.

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Reqt #	Category	TEMPO Module	Requirement (final text)	ARMA	WAS	WMA	TEMPO Functionality Meeting Requirement
NEW-46	Discharges	Master File	Generate mailing labels for sand mound installers	P		P	<▮▮▮▮▮> can use the Batch Processing window to generate mailing labels for sand mount installers, assuming they have been entered as Agency Interests.
598	Stationary Sources	Permitting	Perform checklist-based reviews of applications and letters of requests.	P	P	P	This requirement is met by using a combination of the Work Activity Log, Administrative and Technical Completeness Check documents.
605	Stationary Sources	Permitting	Receive applications and letters of request.	P	P	P	This requirement is met by the Master File, Central File and Activity Tracking functionality.
607	Stationary Sources	Permitting	Track information provided on the Permits to Construct application	P			This requirement is met by the addition of a new Air (MD) SI details window containing equipment and process tabs and an emissions pop-up window. This window will be used to capture type to capture information about equipment, operating processes, and emissions. A field for 'Distance to Property Line' has also been added to the Air (BASE) SI Details window. The General Info SI Details window has been modified to add a field for Governing Body Units.

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Reqt #	Category	TEMPO Module	Requirement (final text)	ARMA	WAS	WMA	TEMPO Functionality Meeting Requirement
608	Stationary Sources	Permitting	Track information provided on the Air Quality Registration	P			This requirement is met by the addition of a new Air (MD) SI details window containing equipment and process tabs and an emissions pop-up window. This window will be used to capture type to capture information about equipment, operating processes, and emissions. A field for 'Distance to Property Line' has also been added to the Air (BASE) SI Details window. The General Info SI Details window has been modified to add a field for Governing Body Units.
609	Stationary Sources	Permitting	Track information provided on the Non-attainment New source Review Approval application	P			This requirement is met by the addition of a new Air (MD) SI details window containing equipment and process tabs and an emissions pop-up window. This window will be used to capture type to capture information about equipment, operating processes, and emissions. A field for 'Distance to Property Line' has also been added to the Air (BASE) SI Details window. The General Info SI Details window has been modified to add a field for Governing Body Units.

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Reqt #	Category	TEMPO Module	Requirement (final text)	ARMA	WAS	WMA	TEMPO Functionality Meeting Requirement
610	Stationary Sources	Permitting	Track information provided on the Prevention of Significant Deterioration Approval application	P			This requirement is met by the addition of a new Air (MD) SI details window containing equipment and process tabs and an emissions pop-up window. This window will be used to capture type to capture information about equipment, operating processes, and emissions. A field for 'Distance to Property Line' has also been added to the Air (BASE) SI Details window. The General Info SI Details window has been modified to add a field for Governing Body Units.
611	Stationary Sources	Permitting	Track information provided on the Certificate of Public Convenience and Necessity	P			This requirement is met by the addition of a new Air (MD) SI details window containing equipment and process tabs and an emissions pop-up window. This window will be used to capture type to capture information about equipment, operating processes, and emissions. A field for 'Distance to Property Line' has also been added to the Air (BASE) SI Details window. The General Info SI Details window has been modified to add a field for Governing Body Units.

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Reqt #	Category	TEMPO Module	Requirement (final text)	ARMA	WAS	WMA	TEMPO Functionality Meeting Requirement
612	Stationary Sources	Permitting	Track information provided on the State Permits to Operate	P			This requirement is met by the addition of a new Air (MD) SI details window containing equipment and process tabs and an emissions pop-up window. This window will be used to capture type to capture information about equipment, operating processes, and emissions. A field for 'Distance to Property Line' has also been added to the Air (BASE) SI Details window. The General Info SI Details window has been modified to add a field for Governing Body Units.
613R	Stationary Sources	Permitting	Track information provided on the Part 70 (Title V) Operating Permits	P			This requirement is met by the addition of a new Air (MD) SI details window containing equipment and process tabs and an emissions pop-up window. This window will be used to capture type to capture information about equipment, operating processes, and emissions. A field for 'Distance to Property Line' has also been added to the Air (BASE) SI Details window. The General Info SI Details window has been modified to add a field for Governing Body Units.

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Reqt #	Category	TEMPO Module	Requirement (final text)	ARMA	WAS	WMA	TEMPO Functionality Meeting Requirement
614	Stationary Sources	Permitting	Ability to track the various milestones/workload activities associated with Approvals.	P	P	P	This requirement is met by the Master File, Central File and Activity Tracking functionality.
615	Stationary Sources	Permitting	A mechanism to track the elapsed time for completing Activity Milestones.	C, P	C, P	C, P	This requirement is met by the Master File, Central File and Activity Tracking functionality.
616R	Stationary Sources	Air – Emissions	Ability to calculate emissions based estimated operating times and estimated quantities	C			TEMPO has been modified to calculate Emission Total in lbs/day, Actual Annual Emissions in tons per year, and Calculated Annual Emissions in tons per year. This information is present on the Emissions Summary Window.
617	Stationary Sources	Other	Generate IDs for facilities, equipment, and actual equipment registration numbers. These are state/federal numbers (AFS#s) in relation to Permits to Construct and Air Quality Registrations	P			TEMPO has been modified to automatically generate IDs for facilities, equipment, and actual equipment registration numbers.
618	Stationary Sources	Permitting	Ability to establish consistency in department's basis for responses to individuals in relation to Requests for Determination.	P			This requirement is met by the Master File, Central File, Activity Tracking and LetterBuilder functionality. Users can create or find appropriate Agency Interest(s), then create Request for Determination Activity, update appropriate tasks, generate LetterBuilder or other standard letter and attach the document in Activity Folder.

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Reqt #	Category	TEMPO Module	Requirement (final text)	ARMA	WAS	WMA	TEMPO Functionality Meeting Requirement
619	Stationary Sources	Permitting	Issue initial permits, registrations and certifications.	P	P	P	This requirement is met by the Master File, Central File, Activity Tracking and Effective Dates screen. <▮▮▮▮▮▮▮>s reporting tool will be used to create new permit report formats (Reporting will not be included in these training sessions). One editable sequence number column has been added to the Requirements Development screen, allowing the user to specify a print order within the document sequencing. (This feature will not be available in RADIUS.)
620	Stationary Sources	Permitting	Process and issue modification and renewal permits, registrations and certifications.	P	P	P	This requirement is met by the Master File, Central File, Activity Tracking, Bring Forward and Batch Processing functionality, as well as the Effective Dates screen.
773	Stationary Sources	Permitting	Impose requirements on permitted facilities.	P	P	P	This requirement is met by the Master File, Central File, Subject Item details, and Requirements Development functionality.
New-05	Stationary Sources	Compliance & Enforcement	Search for incidents by reporter name or source entity address.	C	C	C	This requirement is met with the addition of two new search fields (Reporter Name, Source Entity Address Line 1) on the Incident Selection window.

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4 Requirements Not Included in Trainer Training

This section documents the requirements from Task Order 4 that will not be addressed by the trainer training sessions and indicates why they will not be addressed (e.g., covered by system administration training, covered by reference table training).

Reqt #	Category	TEMPO Module	Requirement (final text)	Reason Not Included	TEMPO Functionality Meeting Requirement
R003	AGENCY	Electronic Submittal	Allowing regulated entities to submit environmental monitoring data electronically	< ███████ does not plan to use RADIUS.	RADIUS (and e-gov). Specific requirements are addressed at the program level.
R005	AGENCY	Master File	Accommodate location with none, one or more Regulated Entities	This requirement is addressed via other requirements.	The requirement will be addressed with detail requirements at the program level.
R017	AGENCY	Master File	Maintain Location information data compatible with ESRI's ArcSDE GIS database interface.	Technical requirement; no end user training required.	Latitudes and longitudes are converted to and stored in decimal degrees.
R040	AGENCY	Permitting	Accommodates other agency input as required to process the permit and other permits concurrently.	This requirement is addressed via other requirements.	This requirement will be addressed with detail requirements at the program level.
R043	AGENCY	Permitting	Calculate permit limits using pre-established mathematical formulas used in approvals	No enhancements were identified at the program level.	This requirement will be addressed with detail requirements at the program level.
R045	AGENCY	Fiscal	Calculate fees, issue invoices and track the collection of fees.	Out of scope for release 2.	The fiscal module will not be included in Release 2 implementation.

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Reqt #	Category	TEMPO Module	Requirement (final text)	Reason Not Included	TEMPO Functionality Meeting Requirement
R048	AGENCY	Exams & Licensing	Provide for certification of regulated individuals (e.g. tank installer, etc.)	Specific requirements addressed separately.	Exams and licensing (program specific). Specific requirements are addressed at the program level.
R049	AGENCY	Electronic Submittal	Provide mechanisms and features that allow for the receipt of electronically submitted data into the database to: generate permit applications, generate compliance reports, Initiate service reports, and Update facility information.	<▇▇▇▇▇▇ does not plan to use RADIUS.	RADIUS (and e-gov). Specific requirements are addressed at the program level.
R050	AGENCY	Interfaces	Accommodate the transfer of monitoring data to federal databases.	Technical requirement; no end user training required.	This requirement will be addressed with detail requirements at the program level.
R051	AGENCY	Electronic Submittal	Electronically transfer environmental data.	Technical requirement; no end user training required.	This requirement will be addressed with detail requirements at the program level.
R073	AGENCY	Reporting	Provide a mechanism to share appropriate violation information with the public	Technical requirement; no end user training required.	TEMPO data available for reporting, both internal and external (IBI).
R110	AGENCY	Fiscal	Track payment status.	Out of scope for release 2.	The fiscal module will not be included in Release 2 implementation.
R113	AGENCY	Fiscal	Track invoice and payment history information by legal entity, Regulated Entity, and program.	Out of scope for release 2.	The fiscal module will not be included in Release 2 implementation.

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Reqt #	Category	TEMPO Module	Requirement (final text)	Reason Not Included	TEMPO Functionality Meeting Requirement
R115	AGENCY	Activity Tracking	Query permit activity information for available statistics so that Sam can award prime parking spaces to the quarter's most productive permit writers.	Reporting tool is outside of TEMPO Administrator	This requirement will be handled by the reporting tool rather than by TEMPO. TEMPO stores the information that is queried, but the reporting tool performs the query.
R116	AGENCY	Activity Tracking	Query program specific metrics for statistics that are tracked which might identify bottlenecks or opportunities to streamline processes.	Reporting tool is outside of TEMPO Administrator.	This requirement will be handled by the reporting tool rather than by TEMPO. TEMPO stores the information that is queried, but the reporting tool performs the query.
R117	AGENCY	Activity Tracking	Identify programmatic areas for managers where there may be opportunities for improvement in the performance of tasks.	Reporting tool is outside of TEMPO Administrator.	This requirement will be handled by the reporting tool rather than by TEMPO. TEMPO stores the information that is queried, but the reporting tool performs the query.
R119	AGENCY	Central File	Compile information to document environmental outcomes.	This requirement is addressed via other requirements.	This requirement will be addressed with detail requirements at the program level.
R124	AGENCY	Activity Tracking	Compile information on the time that it takes to complete tasks related to: Permitting Compliance Enforcement Surveillance	Reporting tool is outside of TEMPO Administrator.	This requirement will be handled by the reporting tool rather than by TEMPO. TEMPO stores the information that is queried, but the reporting tool performs the query.
R133	AGENCY	Interfaces	Exchange data in templated data records that are in a structure-based batch file - (see detail in RFP Section 3)	Technical requirement; no end user training required.	This requirement will be addressed with detail requirements at the program level.
R134	AGENCY	Interfaces	Exchange data interactively with another system external to EEMS, e.g., EPA's Central Data Exchange-(CDX) and current air, waste, and water systems (PCS) and STORET.	Technical requirement; no end user training required.	This requirement will be addressed with detail requirements at the program level.

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Reqt #	Category	TEMPO Module	Requirement (final text)	Reason Not Included	TEMPO Functionality Meeting Requirement
R136	AGENCY	Interfaces	Be capable of exchanging data via Internet through-Web-based textual and graphic presentation. Computer interpretable data via Extensible Markup Language (XML). Computer interpretable data via simple Object Access Protocol (SOAP) TCP/IP	Technical requirement; no end user training required.	This requirement will be addressed with detail requirements at the program level.
R139	AGENCY	Interfaces	Exchange data via standard facsimile (FAX) transmission protocols.	Technical requirement; no end user training required.	TEMPO can print to FAX drivers. Specific requirements are addressed at the program level.
R140	AGENCY	Interfaces	Support interfaces to a separate reporting system such as data warehouse.	Technical requirement; no end user training required.	TEMPO's industry-standard database allows for interfacing with a separate reporting system (such as a data warehouse).
R141	AGENCY	Interfaces	Support the interconnectivity established with other software products and systems. - (see detail in RFP Section 3).	Technical requirement; no end user training required.	This requirement will be addressed with detail requirements at the program level.
R146	AGENCY	Reporting	Provide on-line remote access to reports	Reporting tool is outside of TEMPO Administrator.	This requirement will be handled by the reporting tool rather than by TEMPO. TEMPO stores the information that is queried, but the reporting tool performs the query.
R149	AGENCY	Reporting	Provide reports on all information for active and inactive Regulated Entities.	Reporting tool is outside of TEMPO Administrator.	This requirement will be handled by the reporting tool rather than by TEMPO. TEMPO stores the information that is queried, but the reporting tool performs the query.
R150	AGENCY	Reporting	Provide for batch submittal of report generation.	Reporting tool is outside of TEMPO Administrator.	TEMPO's LetterBuilder feature can be used for batch creation of predefined reports. Otherwise, this requirement will be handled by the reporting tool rather than by TEMPO. TEMPO stores the information that is queried, but the reporting tool performs the query.

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Reqt #	Category	TEMPO Module	Requirement (final text)	Reason Not Included	TEMPO Functionality Meeting Requirement
R151	AGENCY	Reporting	Generate reports on at least five levels by Regulated Entity, facility, permit type, location and statewide. These reports will provide information on both a summary and a detail level.	Reporting tool is outside of TEMPO Administrator.	This requirement will be handled by the reporting tool rather than by TEMPO. TEMPO stores the information that is queried, but the reporting tool performs the query.
R152	AGENCY	Reporting	Provide the capability of requesting any type of reports based on user supplied range of data within a single or multiple data elements.	Reporting tool is outside of TEMPO Administrator.	This requirement will be handled by the reporting tool rather than by TEMPO. TEMPO stores the information that is queried, but the reporting tool performs the query.
R154	AGENCY	Reporting	Allow report requests to be created regardless of access method (i.e. direct, web) assuming the security profile of the user issuing the request is suitable to allow such a request.	Reporting tool is outside of TEMPO Administrator.	This requirement will be handled by the reporting tool rather than by TEMPO. TEMPO stores the information that is queried, but the reporting tool performs the query.
R185	AGENCY	Other	Provide a variety of color selections capable of producing a range of contrast levels when the COTS software permits a user to adjust and contrast the settings.	Technical requirement; no end user training required.	<▮▮▮▮▮▮▮> agrees that this requirement is met although many data fields within TEMPO have fixed white, grey, and black colors indicating whether fields are read-only. The background of TEMPO windows and buttons use standard Windows colors, which can be controlled via desktop settings.
R187	AGENCY	Other	When electronic forms are used, the form will allow people using assisted technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.	Technical requirement; no end user training required	For Section 508 compliance, tags will be added as necessary throughout eTEMPO to specifically associate labels with fields (via "label for" tags). "fieldset" and "legend" tags will be added in appropriate locations to provide context. Other modifications for Section 508 compliance are detailed in separate requirements.

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Reqt #	Category	TEMPO Module	Requirement (final text)	Reason Not Included	TEMPO Functionality Meeting Requirement
R188	AGENCY	Other	Integrate with following software currently being used at <████████> to support web applications: Web Server: Microsoft IIS 5.0 Operating System-Windows 2000 Advance Server Database: SQL server 7.0, SWL Server 2000, Microsoft Access 98, 2000 Languages: HTML, AS	Technical requirement; no end user training required.	This requirement applies to any elements of EEMS that are implemented on the web, meaning eDMR for Release 2. <████████> has agreed to accept the TEMPO standard of J2EE, which is consistent with the <████████> state-wide standard, using Macromedia's Jrun application server, which <████████> has already implemented for use with Xaware.
R189	AGENCY	Other	Provide a text equivalent for every non-text element, including both images and animated objects.	Technical requirement; no end user training required	This requirement applies to any elements of EEMS that are implemented on the web. This is a Section 508 compliance issue (see R187). In the web portal, add "alt" tags to header graphic and graphical buttons throughout the application.
R190	AGENCY	Other	Provide equivalent alternatives for any multimedia presentation to be synchronized with the presentation.	Technical requirement; no end user training required.	This requirement applies to any elements of EEMS that are implemented on the web. This is a Section 508 compliance issue (see R187). It is met because TEMPO does not use multi-media presentations.
R192	AGENCY	Other	Organize documents so they are readable without requiring an associated style sheet.	Technical requirement; no end user training required.	This requirement applies to any elements of EEMS that are implemented on the web. This is a Section 508 compliance issue (see R187). TEMPO's Enterprise Portal does not use style sheets.
R195	AGENCY	Other	Identify row and column headers for data tables.	Technical requirement; no end user training required.	This requirement applies to any elements of EEMS that are implemented on the web. This is a Section 508 compliance issue (see R187). In the web portal, tag changes will be made to tables to facilitate accurate use with screen readers. Adjust tables as needed to ensure clear definition of table rows for assistive technology.
R196	AGENCY	Other	Use of markup to associate data cells and header cells for data tables that have two or more logical levels of row or column headers.	Technical requirement; no end user training required.	This requirement applies to any elements of EEMS that are implemented on the web. This is a Section 508 compliance issue (see R187). In the web portal, modify the DMR Data Entry screen table to appropriately mark up the headers.

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Reqt #	Category	TEMPO Module	Requirement (final text)	Reason Not Included	TEMPO Functionality Meeting Requirement
R197	AGENCY	Other	Title frames with text that facilitates frame identification and navigation.	Technical requirement; no end user training required.	This requirement applies to any elements of EEMS that are implemented on the web. This is a Section 508 compliance issue (see R187). TEMPO's Enterprise Portal does not use frames.
R200	AGENCY	Other	Identify information provided by the script with functional text that can be read by assistive technology - (see detail in RFP Section 3).	Technical requirement; no end user training required.	This requirement applies to any elements of EEMS that are implemented on the web. This is a Section 508 compliance issue (see R187). In the web portal, add tags to the Log Out button and the Activity Number column link in the Central File Activity View screen.
R201	AGENCY	Other	When a Web page requires that an applet, plug-in or other application be present on the client system to interpret page content, provide a link to the required plug-in or applet.	Technical requirement; no end user training required.	This requirement applies to any elements of EEMS that are implemented on the web. This is a Section 508 compliance issue (see R187). In the web portal, add link to allow users to acquire the Adobe Acrobat reader.
R203	AGENCY	Other	Provide a method that permits users to skip repetitive navigation links.	Technical requirement; no end user training required.	This requirement applies to any elements of EEMS that are implemented on the web. This is a Section 508 compliance issue (see R187). In the web portal, move the title page so it cannot be skipped. Add "skip navigation" link to the beginning of the page.
R204	AGENCY	Other	Provide a mechanism to alert and give the user sufficient time to indicate more time is required, when a timed response is required.	Technical requirement; no end user training required.	This requirement applies to any elements of EEMS that are implemented on the web. This is a Section 508 compliance issue (see R187). In the web portal, add a message box to alert the user if the inactivity time limit approaches.
R210	AGENCY	Other	Provide automated logoff capabilities for work stations.	Technical requirement; no end user training required.	TEMPO has been enhanced as part of release 2 to include functionality to monitor a user's idle time and display a screen that covers the application after a system option-specified time, allowing the user only to close the session or log back in. See also R272n

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Reqt #	Category	TEMPO Module	Requirement (final text)	Reason Not Included	TEMPO Functionality Meeting Requirement
R212	AGENCY	Other	Make effective use of bandwidth to remote field offices.	Technical requirement; no end user training required.	This is met if ▮▮▮▮▮ meets requirements outlined in Software Fit Report.
R215	AGENCY	Other	Support up to 600 concurrent users.	Technical requirement; no end user training required.	Application has no particular restrictions. In practical terms, this requires maintaining a hardware/software environment in accordance with the Software Fit Report.
R216	AGENCY	Other	Support printing needs using laser, dot matrix, and ink jet printers in an on-line networked environment.	Technical requirement; no end user training required.	TEMPO supports Windows-compatible printers. Ink jet and laser printers will work with all TEMPO output. However, there are a few types of output (e.g., DMRs) that will not print correctly or efficiently on dot matrix printers. Letters, reports and similar documents will work on dot matrix printers. ▮▮▮▮▮ agrees that dot matrix printers will not be supported without specific program level requirements.
R219	AGENCY	Other	Identify other proprietary software components utilized by the COTS software.	Technical requirement; no end user training required.	Refer to proposal and Software Fit Report.
R224	AGENCY	Other	Allow certain types of customers to access the system by submitting service applications and/or other processing requests via alternative, non-real-time service delivery mechanisms.	Excluded by ▮▮▮▮▮	Excluded by ▮▮▮▮▮ Specific requirements are addressed at the program level.
R225	AGENCY	Other	Allow users to conduct selected service transactions, at the discretion of the ▮▮▮▮▮ via the exchange of traditional, paper-based mail messages (U.S. Mail).	Excluded by ▮▮▮▮▮	Excluded by ▮▮▮▮▮ Specific requirements are addressed at the program level.

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Reqt #	Category	TEMPO Module	Requirement (final text)	Reason Not Included	TEMPO Functionality Meeting Requirement
R226	AGENCY	Other	Notify the user of any external databases that are inactive, inoperable or unreachable when accessing them or performing a query	Excluded by <████████	Excluded by <████████ Specific requirements are addressed at the program level.
R228	AGENCY	Other	Accept service requests such as applications and renewals via all <████████ supported service delivery mechanisms.	Excluded by <████████	Excluded by <████████ Specific requirements are addressed at the program level.
R235	AGENCY	Other	Automatically verify, according to <████████ specifications governing each transaction type that each submitted service request contains the correct list of documents - (see detail in RFP Section 3).	Excluded by <████████	Excluded by <████████ Specific requirements are addressed at the program level.
R236	AGENCY	Other	Automatically reject any service requests including submissions over the Internet that supply insufficient amount of key customer identifying information to the extent that proper customer identify cannot be established - (see detail in RFP Section 3).	Technical requirement; no end user training required.	This requirement applies to any elements of EEMS that are implemented on the web. TEMPO's Enterprise Portal requires submission of key customer information before a user ID is granted.
R237	AGENCY	Other	Accommodate the capturing of incomplete document submissions over the Internet that supplies a sufficient amount of key customer identifying information - (see detail in RFP Section 3).	Technical requirement; no end user training required.	This requirement applies to any elements of EEMS that are implemented on the web. Both the Enterprise Portal and eDMR modules allow saving of incomplete submissions.
R252	AGENCY	Other	Support EPA's proposed regulatory requirements for electronic reporting and recordkeeping. - (see detail in RFP Section 3).	Excluded by <████████	Excluded by <████████ Specific requirements are addressed at the program level.

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Reqt #	Category	TEMPO Module	Requirement (final text)	Reason Not Included	TEMPO Functionality Meeting Requirement
R257	AGENCY	Other	The number of pages per second that are paged out of memory to disk or paged into memory from disk (Pages/Sec Counter) should not exceed 0 for extended lengths of time (10 minutes or more).	Excluded by <█████████	Excluded by <███████ Specific requirements are addressed at the program level.
R258	AGENCY	Other	Processor Queue Length Counter should not be higher than 2 for extended lengths of time (10 minutes or more).	Technical requirement; no end user training required.	This requirement applies to any elements of EEMS that are implemented on the web.
R259	AGENCY	Other	Buffer Cache Hit Ratio Counter should exceed 90%.	Technical requirement; no end user training required.	This requirement applies to any elements of EEMS that are implemented on the web. This is met if <██████ meets requirements outlined in Software Fit Report.
R272	AGENCY	Other	Adhere to prevailing policies and standards of the State of <████████ Information security Policies, Standards and Guidance (See Attachment J).	Technical requirement; no end user training required.	See items R272a – R272r listed below.
R272a	AGENCY	Other	All users must be uniquely identified.	Technical requirement; no end user training required.	Each user has unique ID.
R272b	AGENCY	Other	The password must not be the same as the user id.	Technical requirement; no end user training required.	Met through Oracle security profile that implements these requirements through a variation of the Oracle script utlpwdmg.sql.
R272c	AGENCY	Other	Passwords must never be displayed on the screen.	Technical requirement; no end user training required.	Passwords are only displayed as asterisks when entered into TEMPO.

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Reqt #	Category	TEMPO Module	Requirement (final text)	Reason Not Included	TEMPO Functionality Meeting Requirement
R272d	AGENCY	Other	The user must select passwords unless randomly generated.	Technical requirement; no end user training required.	Users select their passwords in TEMPO.
R272e	AGENCY	Other	Initial passwords and password resets distributed to the user must be issued "pre-expired" forcing the user to change them upon logon.	Technical requirement; no end user training required.	As part of release 2, TEMPO has been enhanced to automatically expire new users' passwords when the logon is first created. This forces new users to change their passwords before they can log in to the system for the first time.
R272f	AGENCY	Other	Passwords must be a minimum of eight (8) characters and consist of mixed alphabetic and numeric characters. Passwords must not consist of all numbers, all special characters, or all alphabetic characters.	Technical requirement; no end user training required.	Met through Oracle security profile that implements these requirements through a variation of the Oracle script utlpwdmg.sql.
R272g	AGENCY	Other	Passwords must not contain leading or trailing blanks.	Technical requirement; no end user training required.	
R272h	AGENCY	Other	Passwords must not contain more than two (2) consecutive identical characters.	Technical requirement; no end user training required.	Met through Oracle security profile that implements these requirements through a variation of the Oracle script utlpwdmg.sql.
R272i	AGENCY	Other	Password reuse must be prohibited for a minimum of six (6) months	Technical requirement; no end user training required.	Met through Oracle security profile.

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Reqt #	Category	TEMPO Module	Requirement (final text)	Reason Not Included	TEMPO Functionality Meeting Requirement
R272j	AGENCY	Other	Where possible, users should be prohibited from only changing or adding one (1) character to their previous password (i.e. users should be prohibited from using passwords that are similar to their previous password).	Technical requirement; no end user training required.	Functionality was added to TEMPO as part of release 2 that prevents users from changing their passwords by adding or modifying only a single character.
R272k	AGENCY	Other	Automated controls must ensure that passwords are changed at least as frequently as every forty-five (45) days.	Technical requirement; no end user training required.	TEMPO release 2 has been enhanced to track password life span, to provide a grace period for changing a password, and to expire a password after that date.
R272l	AGENCY	Other	Passwords older than its expiration date must be changed before any other system activity is performed.	Technical requirement; no end user training required.	TEMPO release 2 has been enhanced to check for expired password during the logon process and require user to reset expired password before continuing.
R272m	AGENCY	Other	User ids associated with a password must be disabled after not more than four (4) consecutive failed login attempts and require security administration to reactivate the id.	Technical requirement; no end user training required.	Met through Oracle security profile.
R272n	AGENCY	Other	Implement an automated process to ensure that individual user sessions either time out or initiate a password protected screen saver after a period of thirty (30) minutes of inactivity.	Technical requirement; no end user training required.	See R210.
R272p	AGENCY	Other	Implement a process/system to ensure that access privileges are traceable to a unique user ID.	Technical requirement; no end user training required.	TEMPO employs Oracle user IDs and also associates access to specific screens/modules with unique IDs.

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Reqt #	Category	TEMPO Module	Requirement (final text)	Reason Not Included	TEMPO Functionality Meeting Requirement
R272q	AGENCY	Other	Implement an automated display, after a successful logon, showing the date and time of last successful logon and the number of unsuccessful logon attempts since the last successful logon.	Technical requirement; no end user training required.	As part of release 2, TEMPO has been enhanced to add a splash screen as described when successful login to TEMPO is completed. The screen also indicates of which database (e.g. Production, Training, etc.) the user is connecting to.
R272r	AGENCY	Other	Log additions, changes, or deletions to data produced by IT systems.	Technical requirement; no end user training required.	TEMPO provides the time and user for the last update to each TEMPO database record. The standard Oracle redo logs have been implemented to capture the who (user ID), what (insert, update, delete), where (table), and when of database transactions. Oracle provides the LogMiner tool to analyze and view these logs, although its configuration is outside the scope of this project.
R275	AGENCY	Security	Employ a "three strikes" rule for user log-in, where the user account is locked/suspended after the third unsuccessful log-on attempt.	Technical requirement; no end user training required.	TEMPO users are associated with an Oracle security profile that implements this requirement.
R279	AGENCY	Security	Provide IT administrators the ability to grant default general public access, with restricted access to a user if no other user security profile can be found.	Excluded by <███████	Pending definition of "default general public access", this requirement is excluded by <███████
R283	AGENCY	Other	Provide accommodation for state and or federal confidentiality laws for the disclosure of confidential data, medical or information protected from disclosure.	Technical requirement; no end user training required.	Although TEMPO does not have pre-defined rules for privacy and disclosure, its security model allows confidential information to be hidden from users who do not "need to know." This, coupled with Departmental policies regarding disclosure, has been successfully used by other states.
R288	AGENCY	Security	Provide capability to restrict the access of users to performance and productivity data and reports/queries.	Excluded by <███████	Excluded by <███████ To be met through the reporting tool.

Reqt #	Category	TEMPO Module	Requirement (final text)	Reason Not Included	TEMPO Functionality Meeting Requirement
R289	AGENCY	Security	Provide capability to restrict on-line and on-demand access to transaction data listed or compiled by user or date range (i.e., for auditing/management purposes) to supervisors only.	Excluded by < ■■■■■■	Excluded by < ■■■■■■■ To be met through the reporting tool.
R292	AGENCY	Security	Provide capability to configure network connections to external systems and clients outside of the < ■■■■■■ firewall to be controlled in accordance with prevailing State security standards.	Excluded by < ■■■■■■	Excluded by < ■■■■■■■ This requirement is outside of TEMPO.
R294	AGENCY	Other	Provide an audit trail containing user ID, data, time, and transaction code (e.g. adjustment, reversal, new entry) for any transaction performed in the system. These log files should be re-sequenced fresh every 24 hours.	Technical requirement; no end user training required.	TEMPO provides the time and user for the last update to each TEMPO database record. The standard Oracle redo logs have been implemented to capture the who (user ID), what (insert, update, delete), where (table), and when of database transactions. Oracle provides the LogMiner tool to analyze and view these logs, although its configuration is outside the scope of this project.
R296	AGENCY	Other	User logon ID should contain 40 maximum available spaces.	Technical requirement; no end user training required.	Requirement revised permanently to 10 maximum available spaces, consistent with TEMPO.
R298	AGENCY	Other	Provide case sensitive passwords with a minimum of 8 characters and maximum of 10 characters. Passwords must automatically expire after an adjustable, predetermined system parameter.	Technical requirement; no end user training required.	Requirement revised by < ■■■■■■ to not require case sensitivity (unavailable in Oracle). Minimum/maximum characters are met by Oracle security profile. TEMPO was enhanced as part of Release 2 to automatically expire users' passwords after an adjustable, predetermined period of time.
R300	AGENCY	Other	Not permit usercode/passwords to be passed in plain text. They should be encrypted at the client PC (browser) and decrypted at the server.	Technical requirement; no end user training required.	This is configurable through Oracle.
R304	AGENCY	Other	Provide timely notification to IT System Administrators of environment changes.	Excluded by < ■■■■■■	Excluded by < ■■■■■■ This requirement is outside of TEMPO.

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Reqt #	Category	TEMPO Module	Requirement (final text)	Reason Not Included	TEMPO Functionality Meeting Requirement
R306	AGENCY	Other	The OFFEROR must complete a "design review" for each implementation Task Order of the proposed COTS software for acceptance by the Project Manager and review by to be designated subject matter experts with a goal of ensuring accurate system and en	Excluded by 	Excluded by This requirement is outside of TEMPO.
R307	AGENCY	Other	Provide disaster recovery and restart capabilities in order to minimize the loss of data and maximize system availability	Technical requirement; no end user training required.	Disaster recovery procedures were included in the Data Migration and System Configuration Plan (Deliverable 3.1.2) for Release I.
R308	AGENCY	Other	Provide recovery procedure that describes all data file rebuild processes from the backup copy and/or audit trail.	Technical requirement; no end user training required.	Disaster recovery procedures were included in the Data Migration and System Configuration Plan (Deliverable 3.1.2) for Release I.
91	OS	Central File	Access to Environmental and Fiscal Activities (Audit)	Out of scope for Release 2.	The information stored in TEMPO, used in conjunction with s reporting tool, meets this need.
129	Compliance	Compliance & Enforcement	Network access from 4 field offices	Technical requirement; no end user training required.	Users in s field offices can access TEMPO so long as they can access s network.
229	Compliance	Fiscal	Ability to Refer Late Invoice Payments to the Violations List	Out of scope for Release 2.	The fiscal module will not be included in Release 2 implementation.
11	Discharges	Activity Tracking	Track Public Notices	Duplicate requirement. Refer to requirement 8.	These requirements are met by the existing activity tracking functionality.
107	Discharges	COMPASS	Capture STORET type information	Out of scope for Release 2.	 has indicated that this requirement will be met outside of TEMPO. (will continue to use STORET.)

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Reqt #	Category	TEMPO Module	Requirement (final text)	Reason Not Included	TEMPO Functionality Meeting Requirement
127	Discharges	Compliance & Enforcement	Compliance for Septic Systems	Out of scope for Release 2.	None. This is classified as a future requirement.
155	Discharges	Electronic Submittal	Provide electronic signatures and/or scanning capability	Outside of TEMPO Administrator.	The program indicated that it can use the existing pin functionality within eTEMPO instead of capturing actual electronic signatures. Additionally, users can attach scanned documents into the Central File.
225	Discharges	Fiscal	Flexibility to add or change fee amounts	Out of scope for Release 2.	The fiscal module will not be included in Release 2 implementation.
226	Discharges	Fiscal	Assess fees by permit writers	Out of scope for Release 2.	The fiscal module will not be included in Release 2 implementation.
227	Discharges	Fiscal	Create an Assessment for fees	Out of scope for Release 2.	The fiscal module will not be included in Release 2 implementation.
340	Discharges	I-map	GIS view of NPDES discharge permits for watershed permitting	Reporting tool and GIS tools are outside of TEMPO Administrator.	None. ▮▮▮▮▮ will use the reporting tool and GIS tools outside of TEMPO to meet this requirement.
558	Discharges	Master File	Capture each field in PERTS	See referenced requirements.	This requirement has been broken out into separate requirements based on permit application type. Please see requirements 559a, 559b, etc for more information.
559	Discharges	Master File	Include 20 fields missing from PERTS	See referenced requirements.	This requirement has been broken out into separate requirements based on permit application type. Please see requirements 559a, 559b, etc for more information.
566	Discharges	Other	Track Public Participation Outreach	This requirement is addressed via other requirements.	None. The program indicated that this need should instead be discussed with OS. Requirements from that session are documented separately in this document.

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Reqt #	Category	TEMPO Module	Requirement (final text)	Reason Not Included	TEMPO Functionality Meeting Requirement
714	Discharges	Security	Provide different levels of updating based on data and user (e.g. read only)	Technical requirement; no end user training required.	< ▮▮▮▮▮ can use the Security features of system to assign privileges based on screen and user.
263	Haz. Waste	Fiscal	Assess and collect application fees for CHS permits and vehicle and driver certifications. Fee amounts are flat fees based on permit type.	Out of scope for Release 2.	The fiscal module will not be included in Release 2 implementation.
264	Haz. Waste	Fiscal	Assess and collect annual fees for CHS permits. Fee amounts are calculated based on site specific factors and information in the permit.	Out of scope for Release 2.	The fiscal module will not be included in Release 2 implementation.
266	Haz. Waste	Fiscal	Refund application fees for certain permits if they are not issued within specified timeframes	Out of scope for Release 2.	The fiscal module will not be included in Release 2 implementation.
NEW-10	Stationary Sources	Electronic Submittal	Accept electronic signatures	< ▮▮▮▮▮ does not plan to use RADIUS.	This requirement is met by the pin number approach currently used in RADIUS and the web portal.
NEW-13	Stationary Sources	Exams & Licensing	Create incinerator operator certification numbers.	Using LetterBuilder to create templates will not be covered in training..	TEMPO creates its own unique License IDs for each license. The program could use the TEMPO license numbers in conjunction with the activity code for its certification numbers, which are based on certification type. LetterBuilder could be configured to concatenate these values and print them on the certification forms.
NEW-32	Haz. Waste	Fiscal	Invoice facilities to recoup public notice costs.	Out of scope for Release 2.	The fiscal module will not be included in Release 2 implementation.

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Reqt #	Category	TEMPO Module	Requirement (final text)	Reason Not Included	TEMPO Functionality Meeting Requirement
NEW-34	Haz. Waste	Master File	Apply previously paid fees to another invoice	Out of scope for Release 2.	If <███████> decides to instead apply the payment that was already received to the facility's annual fees, then <███████> can use the Issue Refund wizard to record the refund and then the Mark No Further Action wizard to close the original invoice. <███████> can then use the Record Payment wizard to apply the check to the new invoice.
94	OS	Central File	Ability to Standardize Classifications (OSP)	Related to SOPs Development.	The TEMPO reference data provides a mechanism for standardizing terms. <███████> will need to implement SOPs in conjunction with TEMPO to meet this need.
157	OS	Fiscal	Support online payments	Out of scope for Release 2.	The fiscal module will not be included in Release 2 implementation.
387	OS	Compliance & Enforcement	Track pollution prevention regulations	Technical requirement; no end user training required.	<███████> would like to include pollution prevention regulations in the TEMPO Requirements Library.
387	OS	Compliance & Enforcement	Track Pollution Prevention Voluntary Program Participation (OSP)	Technical requirement; no end user training required.	<███████> would like to track information such as whether an organization participates in Businesses for the Bay and whether the organization is ISO certified. The list of items <███████> needs to track changes over time. <███████> could set up organizations for these lists and could track the organizations on the list as related organizations. Alternately, <███████> could create a regulatory program record in TEMPO for 'Voluntary Programs' and could have subprograms corresponding to the different initiatives.
695	OS	Reporting	Ability to Report to EPA (Fair Practices)	Out of scope for Release 2.	None. <███████> indicated that the information needed for this report (grant information) will not be tracked in TEMPO until the next release.
695	OS	Reporting	Create Ad-Hoc Reports (OSP)	Reporting tool is outside of TEMPO Administrator.	None. <███████> can prepare this report using its reporting tool. <███████> indicated during the session that the data needed for this report appear to exist within TEMPO.

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Reqt #	Category	TEMPO Module	Requirement (final text)	Reason Not Included	TEMPO Functionality Meeting Requirement
695	OS	Reporting	Generate a Report on Inspection Frequencies (OSP)	Reporting tool is outside of TEMPO Administrator.	None. <██████> can prepare this report using its reporting tool. <██████> indicated during the session that the data needed for this report appear to exist within TEMPO.
695	OS	Reporting	Generate Exceptions Report (EPSC)	Reporting tool is outside of TEMPO Administrator.	None. <██████> can prepare this report using its reporting tool. <██████> indicated during the session that the data needed for this report appear to exist within TEMPO.
695	OS	Reporting	Generate Monthly Enforcement Action and Permit Reports (OSP)	Reporting tool is outside of TEMPO Administrator.	None. <██████> can prepare this report using its reporting tool. <██████> indicated during the session that the data needed for this report appear to exist within TEMPO.
695	OS	Reporting	Produce Monthly Activity Reports (EPSC)	Reporting tool is outside of TEMPO Administrator.	None. <██████> can prepare this report using its reporting tool. <██████> indicated during the session that the data needed for this report appear to exist within TEMPO.
695	OS	Reporting	Provide Data to Outside Agencies (EPSC)	Reporting tool is outside of TEMPO Administrator.	None. <██████> can prepare this report using its reporting tool. <██████> indicated during the session that the data needed for this report appear to exist within TEMPO.
NEW-24	OS	Fiscal	Record cash receivables	Out of scope for Release 2.	The fiscal module will not be included in Release 2 implementation.
NEW-25	OS	Fiscal	Suspend Invoices	Out of scope for Release 2.	The fiscal module will not be included in Release 2 implementation.
NEW-26	OS	Fiscal	Support multiple remittance addresses	Out of scope for Release 2.	The fiscal module will not be included in Release 2 implementation.
NEW-27	OS	Fiscal	Create invoices	Out of scope for Release 2.	The fiscal module will not be included in Release 2 implementation.
NEW-28	OS	Fiscal	Print invoices	Out of scope for Release 2.	The fiscal module will not be included in Release 2 implementation.
251	Restoration	Fiscal	Assess and collect application fees for VCP approvals. Fee amounts are flat fees.	Out of scope for release 2.	The fiscal module will not be included in Release 2 implementation.

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Reqt #	Category	TEMPO Module	Requirement (final text)	Reason Not Included	TEMPO Functionality Meeting Requirement
NEW-38	Restoration	Fiscal	A mechanism to identify that a check for an application fee has not been received.	Out of scope for Release 2.	The fiscal module will not be included in Release 2 implementation.
207	Stationary Sources	Fiscal	Refund application fees for certain permits if they are not issued because they were not required or if applicant does not meet requirements for permit.	Out of scope for Release 2.	The fiscal module will not be included in Release 2 implementation.
208	Stationary Sources	Fiscal	Collect fees for penalties and fines	Out of scope for Release 2.	The fiscal module will not be included in Release 2 implementation.
204b	Stationary Sources	Fiscal	Assess and collect application fees for New Source Review Approvals/PSD.	Out of scope for Release 2.	The fiscal module will not be included in Release 2 implementation.
NEW-21	Stationary Sources	Fiscal	Assess and collect application fees for New Source Review Approvals/PSD. Fee amounts are flat fees based on permit type.	Out of scope for release 2.	The fiscal module will not be included in Release 2 implementation.

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5   Instructional Methods

5.1   Training Methodology

CGI strongly believes that effective training consists of lectures, discussions, demonstrations and hands-on exercises. To supplement our demonstrations of TEMPO functionality, our Trainer training includes extensive use of Goal-Based Scenarios (GBSs). Simply stated, GBS training is a way to teach skills through experiential learning via skill-related scenarios. The conventional way of teaching computer software skills of "point here, click here" is not disregarded. Instead, CGI enhances the conventional approach by presenting real-to-life scenarios and allowing users to think through each process and solve each problem using a particular set of TEMPO skills. This approach not only teaches software skills to the trainees, but also provides context for how the skills will be used in the end users daily jobs.

An example of a TEMPO GBS might be:

> *As a result of an anonymous call, a gasoline spill has been identified at Fort Knox.*
> *Proceed to enter this information into the TEMPO system.*

Based on CGI's TEMPO demonstrations and using their notes, as well as referring to the SOPs, the participants will determine which steps are required to enter the information and will use a "hands-on" approach to practice the necessary steps. During the exercise, the instructor(s) will monitor the participants work for comprehension and retention. The instructors will also provide one-on-one guidance and will answer individual's questions. There will be a discussion and debrief of the exercises following the completion of each GBS. The scenarios will reinforce *how* something is done in TEMPO and the discussion questions will help support *why* these skills are necessary. Thus, the participants are able to assess situations, solve problems, and adapt to changing requirements.

5.2   Training Database

The training sessions will be conducted against <███████████> s Training database instance.

Database preparation activities must be completed prior to the training. These activities include loading <███████████> s reference data, configuring the training database, migrating legacy data to the training database in accordance with the Final Data Migration Plan, and providing student IDs with access to the training database. The schedule for these activities has been included in the attached Gantt chart. It is critical that database preparation activities are completed before the training sessions.

In addition to the preparation activities, CGI will set up example data in the training database to use for system demonstrations during the training sessions.

5.3   Testing and Evaluation

The Trainer training sessions will not include end-of-session tests, but will include teach-back sessions where the < ████████ Trainers deliver a component of the courseware to receive feedback and remediation.

6 Training Resources

6.1 Schedule

The training for Release 2 will consist of the following sessions:

- ARMA Session—9 days of Trainer training covering functionality used to perform Air and Radiation activities.
- WAS Session—8 days of Trainer training covering functionality used to perform Hazardous Waste Administration activities.
- WMA Session—9 days of Trainer training covering functionality used to maintain the Waste Water activities.
- eDMR Session—1 day of training covering functionality used to setup eDMR shells and create and submit eDMRs.
- Captivate Developer Training—1 day of training covering the development of CBTs (Computer Based Training) using captivate. In addition to Captivate developer training, 5 example modules will be developed by CGI. One will be created before the start of the Captivate developer training.

In addition, four 'work-days' will be held, one for each of the ARMA, WMA, WAS, and Captivate developer training sessions, approximately two weeks after the program-specific training is completed. During this work-day, the participants will work together in the training room on their regularly assigned job functions, in the presence of the CGI trainer(s). This will allow the participants another chance to ask questions and receive help from the CGI trainers after the training sessions are completed. Please refer to the attached Gantt chart for the detailed schedule of the work-days.

Section 8 provides the training curriculum for the ARMA, WAS, WMA, eDMR, and Captivate developer sessions and includes a tentative day by day schedule of topics. Topics may be shifted between days during the training based on participants' progress.

In conjunction with this Training Plan, CGI has provided a detailed Gantt chart that that illustrates the tasks, due dates, dependencies, and responsible parties for the training activities. Once the Training Plan is accepted, this Gantt chart will be incorporated into the project-level Gantt chart.

6.2 Course Administration

Training will be conducted from 9 am – 3:30 pm on scheduled training days, with a half hour break for lunch. Participants are expected to be present during all scheduled training hours for the units indicated based on their role. Should it be necessary to extend a day of training past 3:30 pm to cover all topics, participants are expected to stay until training is complete. Participants attending a multi-day session are expected to attend all units of the session indicated for their role.

Due to the individual attention necessary during these sessions, the number of participants in each session will be limited as follows:

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- ARMA Session—10 < ███████ > staff
- WAS Session—10 < ██████ > staff
- WMA Session—10 < ██████ > staff
- eDMR Session—10 < ██████ > staff
- Captivate Developer Session—3 < ██████ > staff

An EEMS team member should be present for each session. If the EEMS team member actively participates in the session (e.g., asks questions, performs guided practice and GBSs), then that user will count toward the participant limit. Alternatively, the EEMS team member can audit the session by observing the training and providing answers to SOP and policy questions, as necessary.

6.3   Resources and Facilities

< █████ > will provide training rooms sufficiently large to accommodate the trainers and all trainees. The training rooms should include ample space for the instructors to move between participant workstations.

Each room will be equipped with the following resources:

- One (1) PC for each training session participant. < █████ > should install the Oracle client software and TEMPO software on each PC and verify connectivity from the PCs to the training database prior to the training sessions. < █████ > should also verify that each PC is connected to a nearby printer.
- One (1) PC to be used for training demonstrations. < █████ > should install the Oracle client software and TEMPO software on each PC and verify connectivity from the PCs to the training database and local printer prior to the training sessions. Additionally, < █████ > should verify that Microsoft PowerPoint and Microsoft Word are installed on the demonstration PC.
- One (1) LCD projector.
- Two (2) flipcharts and stands.

Additionally, < █████ > should provide participants with the following materials prior to the training sessions:

- ARMA Standard Operating Procedures
- WAS Standard Operating Procedures
- WMA Standard Operating Procedures
- TEMPO Baseline Users Guide.

Electronic format for these materials is acceptable provided users can access the electronic documents from the training PCs during the training sessions.

7 Training Curriculum

The following sections provide an outline-syllabus for each of the Training Sessions described in the Schedule section of this training plan.

For each Training Unit, CGI will start by describing the topics that will be covered and skills that will be taught as part of the unit. Next, CGI will present and demonstrate the features included in the training unit. At the end of each demonstration, participants will have time to practice the skills that were demonstrated and ask questions.

After every few training units, participants will perform a GBS that covers the skills taught in previous units. The training instructors will circulate through the classroom to answer questions, provide coaching, and monitor participant progress while participants work on each GBS. At the end of each GBS, the instructors will lead a group debrief of the GBS and will discuss the questions listed in the GBS with the participants.

The Participant Groups column indicates the groups of participants required to attend based on job function or role, not < ▮▮▮▮▮▮ department. For example, trainers responsible for water general permits must attend the WMA sessions indicating a Permitting role, even though these trainers may be from the Compliance department. Only those trainers responsible for the indicated roles are required to attend the training unit.

The curriculum uses only twenty-seven of the thirty-one days allocated for the training (excluding one day of captivate training). The remaining four days will be used as 'work-days'. One work-day will be held for each of the Trainer training sessions as well as the Captivate training session approximately two weeks after the program-specific training is completed. During this work-day, the participants will work together in the training room on their regularly assigned job functions, in the presence of the CGI trainers. This will allow the participants another chance to ask questions and receive help from the CGI trainers after the training sessions are completed. Please refer to the attached Gantt chart for the detailed schedule for the work-days.

7.1 ARMA Session

The ARMA session will cover the following functional areas:

Training Unit	Participant Groups	Topics Covered	Skills Learned
Day 1 AM and PM Session			

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Training Unit	Participant Groups	Topics Covered	Skills Learned
Training Preparation	- Compliance & Enforcement Role - Permitting Role - Planning Role	- Training Styles and Techniques - Questioning Techniques - Training Tips - Classroom Management - Teach Back - Training Delivery Practice Sessions - Standard Operating Procedure (SOPs) based training - Coaching Skills	By the end of this session, participants should be able to: - Describe how to use different training methods to reach students with different learning styles. - Demonstrate proper use of eye contact, movement, voice, and gestures during TEMPO Training - Follow basic guidelines to increase effectiveness, quality, and confidence in delivering TEMPO training. - Explain how organization, behavior control, and communication can ensure effective classroom management - Use effective question and answer techniques to extend student thinking and acknowledge and respond to student questions. - Demonstrate how to turn role-based training into SOP-based training for end users.
Day 1 AM Session			
Introduction to TEMPO	- Compliance & Enforcement Role - Permitting Role - Planning Role	- TEMPO Modules and Capabilities - Central File and Master File - eTEMPO	By the end of this session, participants should be able to: - Describe the TEMPO Central File and Master File - Recognize the basic features and capabilities of TEMPO Modules - Recognize the basic features of eTEMPO
General TEMPO Features	- Compliance & Enforcement Role - Permitting Role - Planning Role	- TEMPO Desktop - TEMPO Terminology - TEMPO General Features - Using the TEMPO Help - Changing Passwords	By the end of this session, participants should be able to: - Identify key TEMPO components, such as windows, menus, and datawindows - Recognize and use general features of TEMPO, such as toolbars, shortcut keys, pick lists, type-to, error checking, saving to external files, exporting data, and printing. - Navigate to a topic of interest using the TEMPO Help and Guidance Help - Change their system password

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Training Unit	Participant Groups	Topics Covered	Skills Learned
Master File – Entities	▪ Compliance & Enforcement Role ▪ Permitting Role ▪ Planning Role	▪ Agency Interests ▪ Subject Items ▪ Organizations and People ▪ Relationships	By the end of this session, participants should be able to: ▪ Search for an entity in the TEMPO Master File by its Master ID or other criteria ▪ Categorize entities
Day 2 PM Session			
Master File – Subject Items	▪ Compliance & Enforcement Role ▪ Permitting Role ▪ Planning Role	▪ Subject Item Details	By the end of this session, participants should be able to: ▪ Create Subject Items ▪ Link an Agency Interest to a program interest ▪ Describe the difference between replicating, retrieving, and sharing Subject Items ▪ Utilize the Locations SI Details window, General Info SI Details window, SCC SI Details window (SIC and NAIC portions only), Regulatory Program SI Details window, and the Requirements Profiles SI Details window ▪ Request changes to Master File data
Central File	▪ Compliance & Enforcement Role ▪ Permitting Role ▪ Planning Role	▪ Creating new documents ▪ Checking in/out ▪ Locking documents ▪ Renaming documents ▪ Toggling Sensitive/Private status ▪ Creating an alias ▪ Creating a sticky note ▪ Agency Interest Summary	By the end of this session, participants should be able to: ▪ View and filter activities and documents associated with an Agency Interest ▪ Create documents in the TEMPO Central File ▪ Attach electronic files in the Central File (e.g. fact sheets, exemption information, site assessments, site visits, air quality plan information, photographs, maps, phone logs, etc.) ▪ Check documents in and out ▪ Lock (archive) documents ▪ Rename documents ▪ Mark documents as private ▪ Create an alias of a document ▪ Create a sticky note on a document ▪ View the Agency Interest Summary report

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Training Unit	Participant Groups	Topics Covered	Skills Learned
Correspondence	■ Permitting Role ■ Compliance & Enforcement Role ■ Planning Role	■ LetterBuilder ■ Batch Processing	By the end of this session, participants should be able to: ■ Generate LetterBuilder documents ■ Describe possible uses for LetterBuilder dcuments ■ Generate forms on a schedule
Day 3 AM Session			
Permit Applications	■ Permitting Role	■ SI Details screens	By the end of this session, participants should be able to: ■ Create applications ■ Generate IDs for facilities, equipment, and actual equipment registration numbers ■ Capture Air data utilizing the SCC SI Details window (SCC portion only), Air (MD) SI Details window, Stacks (Air BASE) SI Details window, and the Air Program Codes AI, Air Program Codes SI Details window
Day 3 PM Session			
Application Review	■ Permitting Role	■ Administrative Completeness Checks ■ Technical Completeness Checks	By the end of this session, participants should be able to: ■ Run an administrative completeness check ■ Create a technical review checklist and report results
Day 4 AM Session			
Permit Creation	■ Permitting Role	■ Reconciliation ■ Bring forward ■ Permit Modification	By the end of this session, participants should be able to: ■ Lock and reconcile applications and permits ■ Describe the different bring forward cases ■ Bring locked applications forward into permits or other applications ■ Process and issue modification and renewal permits, registrations, and certifications

Training Unit	Participant Groups	Topics Covered	Skills Learned
Permit Requirements	■ Permitting Role	■ Requirements Development ■ Limits and Monitoring Requirements ■ Effective Dates	By the end of this session, participants should be able to: ■ Describe the 5 different types of requirements ■ Enter requirements profiles ■ Load and edit requirements ■ Set effective and anchor dates ■ Identify standard, modified, and custom requirements
Day 4 PM Session			
Exams & Licensing	■ Permitting Role	■ Exams & Licensing	By the end of this session, participants should be able to: ■ Approve and track courses ■ Create and Schedule exams ■ Record exam scores ■ Create licenses and license numbers
Day 5 AM Session			
Inspections	■ Compliance & Enforcement Role	■ Compliance Evaluations ■ Bring Forward ■ Inspection Requirements ■ Scheduler	By the end of this session, participants should be able to: ■ Prepare an inspection checklist ■ Enter inspection results ■ Refer inspection results to the violations list ■ Prepare and print an inspection report ■ Bring forward an inspection ■ Prepare an inspection checklist in response to complaints and incidents ■ Receive and maintain sampling and analytical data from facility inspections ■ Load requirements into an inspection document ■ Schedule inspections based on grant requirements or other criteria
Day 5 PM Session			
Violations	■ Compliance & Enforcement Role	■ Violation Search ■ Violation Details ■ Violations Report ■ Nightly Cycle ■ Include in Enforcement Action	By the end of this session, participants should be able to: ■ Describe the different ways violations are created ■ Search for and view violations ■ Edit violation details ■ Include violations in enforcement actions ■ Print a violation report

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Training Unit	Participant Groups	Topics Covered	Skills Learned
Enforcement Actions	■ Compliance & Enforcement Role	■ Enforcement Action ■ Bring forward	By the end of this session, participants should be able to: ■ Create an enforcement action ■ Assess penalties ■ Assign and track corrective actions ■ Bring forward an enforcement action ■ Make an enforcement action effective ■ Issue notices of violation ■ Track requirements in an enforcement action
Day 6 AM Session			
Monitoring Reports	■ Compliance & Enforcement Role	■ Blank Compliance Monitoring Reports (CMRs) ■ CMR Preprints	By the end of this session, participants should be able to: ■ Create blank CMR documents ■ Create CMR preprints ■ Printing a CMR Preprint ■ Enter data and make corrections on blank CMR documents and CMR preprints ■ Explain the error checking performed on CMR preprints ■ Refer non-compliance instances as violations ■ Capture toxicity testing results
Day 6 PM Session			
Incidents	■ Compliance & Enforcement Role ■ Permitting Role	■ Incident Search ■ Incident Details ■ Incident Compliance Evaluations	By the end of this session, participants should be able to: ■ Create a new incident and enter information about it ■ Search for an existing incident ■ Track activities performed to resolve the incident. ■ Enter data from incident inspections. ■ Capture data related to the location of the incident and other relevant information ■ Track non-compliance incidents ■ Track information related to non-Agency Interest sources ■ Refer and receive incidents from other programs ■ Track complaints related to incidents ■ Enter anonymous incident reports

Training Unit	Participant Groups	Topics Covered	Skills Learned
Day 7 AM Session			
Planning	▪ Planning Role	▪ Air Quality Planning	By the end of the session, participants should be able to: ▪ Capture requirements that originate in air quality plans
Day 7 PM Session			
Emissions	▪ Permitting Role ▪ Compliance & Enforcement Role ▪ Planning Role	▪ Stack Test ▪ Emissions Certifications ▪ Continuous Emissions Monitoring (CEM) Inventory ▪ Continuous Emissions Monitoring (CEM) Report	By the end of this session, participants should be able to: ▪ Create a stack test report and enter data ▪ Create violations based on stack tests ▪ Create an Emissions Survey document ▪ View Emissions Summary results for an Agency Interest ▪ Enter CEM usage information for facilities ▪ Create CEM Reports ▪ Refer violations from CEM Reports ▪ Capture data reported in Annual Emissions Certifications
Day 8 AM Session			
Permitting High-Level Overview	▪ Compliance & Enforcement Role ▪ Planning Role	▪ Applications and Permits ▪ Permit Requirements	By the end of this session, participants should be able to: ▪ Understand the types of documents used in TEMPO (e.g., permits) ▪ Understand how permits are related to compliance and enforcement documents ▪ Identify where different types of information are stored in TEMPO and how to search this information
Day 8 PM Session			

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Training Unit	Participant Groups	Topics Covered	Skills Learned
Compliance & Enforcement High-Level Overview	■ Permitting Role ■ Planning Role	■ Inspections ■ Violations List ■ Enforcement Actions ■ Monitoring Reports ■ Incidents	By the end of this session, participants should be able to: ■ Understand the types of documents used in TEMPO (e.g., inspection reports) ■ Understand how these documents are related to TEMPO permits ■ Identify where different types of information are stored in TEMPO and how to search for this information ■ Create and enter information about an incident ■ Search for incidents within TEMPO ■ Track preliminary site evaluations.
Day 9 AM Session			
Work Activity Tracking	■ Compliance & Enforcement Role ■ Permitting Role ■ Planning Role	■ Work Activity Logs ■ To Do Lists ■ Agency Interest Activity Summary ■ Task Summary	By the end of this session, participants should be able to: ■ Describe the purposes of the 4 different Activity Tracking screens ■ Enter completed dates for tasks ■ Understand how milestone statuses are set ■ Describe how to start and stop an activity clock ■ Add a standard or custom task ■ Understand what tasks are added by making a permit effective ■ Assign staff to Agency Interests and functional areas ■ Reassign tasks to different staff ■ Track submittal and follow-up tasks
Troubleshooting	■ Compliance & Enforcement Role ■ Permitting Role ■ Planning Role	■ Troubleshooting Procedures	By the end of this session, participants should be able to: ■ Identify the <███████ contact to talk to about problems using the TEMPO Software ■ Collect and provide all information required on the Defect Claim Form
Day 9 PM Session			
Teach-Back	■ Compliance & Enforcement Role ■ Permitting Role ■ Planning Role	■ Training Practice	During this training unit participants will deliver a component of the courseware to receive feedback and remediation.

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Training Unit	Participant Groups	Topics Covered	Skills Learned
ARMA work-day to follow, approximately 2 weeks after completion of the ARMA training session.			

7.2 WAS Session

The WAS training sessions will cover the following functional areas:

Training Unit	Participant Groups	Topics Covered	Skills Learned
Day 1 AM and PM Session			
Training Preparation	■ Compliance & Enforcement Role ■ Permitting Role ■ Restoration Role	■ Training Styles and Techniques ■ Questioning Techniques ■ Training Tips ■ Classroom Management ■ Teach Back - Training Delivery Practice Sessions ■ Standard Operating Procedure (SOPs) based training ■ Coaching Skills	By the end of this session, participants should be able to: ■ Describe how to use different training methods to reach students with different learning styles. ■ Demonstrate proper use of eye contact, movement, voice, and gestures during TEMPO Training ■ Follow basic guidelines to increase effectiveness, quality, and confidence in delivering TEMPO training. ■ Explain how organization, behavior control, and communication can ensure effective classroom management ■ Use effective question and answer techniques to extend student thinking and acknowledge and respond to student questions. ■ Demonstrate how to turn role-based training into SOP-based training for end users.
Day 2 AM Session			
Introduction to TEMPO	■ Compliance & Enforcement Role ■ Permitting Role ■ Restoration Role	■ TEMPO Modules and Capabilities ■ Central File and Master File ■ eTEMPO	By the end of this session, participants should be able to: ■ Describe the TEMPO Central File and Master File ■ Recognize the basic features and capabilities of TEMPO Modules ■ Recognize the basic features of eTEMPO

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Training Unit	Participant Groups	Topics Covered	Skills Learned
General TEMPO Features	■ Compliance & Enforcement Role ■ Permitting Role ■ Restoration Role	■ TEMPO Desktop ■ TEMPO Terminology ■ TEMPO General Features ■ Using the TEMPO Help ■ Changing Passwords	By the end of this session, participants should be able to: ■ Identify key TEMPO components, such as windows, menus, and datawindows ■ Recognize and use general features of TEMPO, such as toolbars, shortcut keys, pick lists, type-to, error checking, saving to external files, exporting data, and printing. ■ Navigate to a topic of interest using the TEMPO Help and Guidance Help ■ Change their system password
Master File - Entities	■ Compliance & Enforcement Role ■ Permitting Role ■ Restoration Role	■ Agency Interests ■ Subject Items ■ Organizations and People ■ Relationships	By the end of this session, participants should be able to: ■ Search for an entity in the TEMPO Master File by its Master ID or other criteria ■ Categorize entities
Day 2 PM Session			
Master File – Subject Items	■ Compliance & Enforcement Role ■ Permitting Role ■ Restoration Role	■ Subject Item Details	By the end of this session, participants should be able to: ■ Create Subject Items ■ Link an Agency Interest to a program interest ■ Describe the difference between replicating, retrieving, and sharing Subject Items ■ Utilize the Locations SI Details window, General Info SI Details window, SCC SI Details window (SIC and NAIC portions only), Regulatory Program SI Details window, and the Requirements Profiles SI Details window ■ Request changes to Master File data

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Training Unit	Participant Groups	Topics Covered	Skills Learned
Central File	■ Compliance & Enforcement Role ■ Permitting Role ■ Restoration Role	■ Creating new documents ■ Checking in/out ■ Locking documents ■ Renaming documents ■ Toggling Sensitive/Private status ■ Creating an alias ■ Creating a sticky note ■ Agency Interest Summary	By the end of this session, participants should be able to: ■ View and filter activities and documents associated with an Agency Interest ■ Create documents in the TEMPO Central File ■ Attach electronic files in the Central File (e.g. fact sheets, exemption information, site assessments, site visits, photographs, maps, phone logs, VCP memos, lab data, etc.) ■ Check documents in and out ■ Lock (archive) documents ■ Rename documents ■ Mark documents as private ■ Create an alias of a document ■ Create a sticky note on a document ■ View the Agency Interest Summary report
Correspondence	■ Permitting Role ■ Compliance & Enforcement Role ■ Restoration Role	■ LetterBuilder ■ Batch Processing	By the end of this session, participants should be able to: ■ Generate LetterBuilder documents (e.g. VCP Acceptance letters, No Further Requirements letters, Notice of Response Action Plan Needed, Acceptance of Response Action Plan, Certificate of Completion, Brownfields Acceptance Letter, etc.) ■ Describe possible uses for LetterBuilder documents ■ Generate forms on a schedule
Day 3 AM Session			
Permit Applications	■ Permitting Role	■ SI Details screens	By the end of this session, participants should be able to: ■ Create applications ■ Capture hazardous waste data utilizing the Hazardous Waste Driver SI Details window, Hazardous Waste Hauler SI Details window, Hazardous Waste Vehicle SI Details window, Financial Assurance SI Details window, and the Liability Insurance SI Details windows
Day 3 PM Session			

Phase III Release 2 Training Plan

Training Unit	Participant Groups	Topics Covered	Skills Learned
Application Review	▪ Permitting Role	▪ Administrative Completeness Checks ▪ Technical Completeness Checks	By the end of this session, participants should be able to: ▪ Run an administrative completeness check ▪ Create a technical review checklist and report results
Day 4 AM Session			
Permit Creation	▪ Permitting Role	▪ Reconciliation ▪ Bring forward ▪ Permit Modification	By the end of this session, participants should be able to: ▪ Lock and reconcile applications and permits ▪ Describe the different bring forward cases ▪ Bring locked applications forward into permits or other applications ▪ Process and issue modification and renewal permits, registrations, and certifications
Permit Requirements	▪ Permitting Role	▪ Requirements Development ▪ Limits and Monitoring Requirements ▪ Effective Dates	By the end of this session, participants should be able to: ▪ Describe the 5 different types of requirements ▪ Enter requirements profiles ▪ Load and edit requirements ▪ Set effective and anchor dates ▪ Identify standard, modified, and custom requirements
Day 4 PM Session			
Permit Applications	▪ Restoration Role	▪ SI Details screens	By the end of this session, participants should be able to: ▪ Create applications ▪ Capture hazardous waste data utilizing the VCP SI Details window, Institutional Controls SI Details window, Superfund SI Details window, and the Brownfields SI Details window
Day 5 AM Session			
Application Review	▪ Restoration Role	▪ Administrative Completeness Checks ▪ Technical Completeness Checks	By the end of this session, participants should be able to: ▪ Run an administrative completeness check ▪ Create a technical review checklist and report results

Training Unit	Participant Groups	Topics Covered	Skills Learned
Day 5 PM Session			
Permit Creation	■ Restoration Role	■ Reconciliation ■ Bring forward ■ Permit Modification	By the end of this session, participants should be able to: ■ Lock and reconcile applications and permits ■ Describe the different bring forward cases ■ Bring locked applications forward into permits or other applications ■ Process and issue modification and renewal permits, registrations, and certifications
Permit Requirements	■ Restoration Role	■ Requirements Development ■ Limits and Monitoring Requirements ■ Effective Dates	By the end of this session, participants should be able to: ■ Describe the 5 different types of requirements ■ Enter requirements profiles ■ Load and edit requirements ■ Set effective and anchor dates ■ Identify standard, modified, and custom requirements
Day 6 AM Session			
Inspections	■ Compliance & Enforcement Role	■ Compliance Evaluations ■ Bring Forward ■ Inspection Requirements ■ Scheduler	By the end of this session, participants should be able to: ■ Prepare an inspection checklist ■ Enter inspection results ■ Refer inspection results to the violations list ■ Print an inspection report ■ Bring forward an inspection ■ Load requirements into an inspection document ■ Schedule inspections based on grant requirements or other criteria
Day 6 PM Session			

Training Unit	Participant Groups	Topics Covered	Skills Learned
Violations	▪ Compliance & Enforcement Role	▪ Violation Search ▪ Violation Details ▪ Violations Report ▪ Nightly Cycle ▪ Include in Enforcement Action	By the end of this session, participants should be able to: ▪ Describe the different ways violations are created ▪ Search for and view violations ▪ Edit violation details ▪ Include violations in enforcement actions ▪ Print a violation report
Enforcement Actions	▪ Compliance & Enforcement Role	▪ Enforcement Action ▪ Bring forward	By the end of this session, participants should be able to: ▪ Create an enforcement action ▪ Assess penalties ▪ Assign and track corrective actions ▪ Bring forward an enforcement action ▪ Make an enforcement action effective ▪ Track requirements in an enforcement action
Day 7 AM Session			
Monitoring Reports	▪ Compliance & Enforcement Role	▪ Blank Compliance Monitoring Reports (CMRs) ▪ CMR Preprints ▪ Annual LLRW Reports	By the end of this session, participants should be able to: ▪ Create blank CMR documents ▪ Create CMR preprints ▪ Printing a CMR Preprint ▪ Enter data and make corrections on blank CMR documents and CMR preprints ▪ Explain the error checking performed on CMR preprints ▪ Refer non-compliance instances as violations ▪ Capture toxicity testing results ▪ Receive and maintain sampling and analytical data from facility inspections ▪ Enter information for low-level radioactive waste reports
Day 7 PM Session			

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Training Unit	Participant Groups	Topics Covered	Skills Learned
Incidents	■ Compliance & Enforcement Role ■ Permitting Role	■ Incident Search ■ Incident Details ■ Incident Compliance Evaluations	By the end of this session, participants should be able to: ■ Create a new incident and enter information about it ■ Search for an existing incident ■ Track activities performed to resolve the incident. ■ Enter data from incident inspections. ■ Capture data related to the location of the incident and other related information. ■ Track non-compliance incidents ■ Track information related to non-Agency Interest sources ■ Refer and receive incidents from other programs ■ Track incidents and complaints ■ Enter anonymous incident reports
Day 8 AM Session			
Permitting High-Level Overview	■ Compliance & Enforcement Role	■ Applications and Permits ■ Permit Requirements	By the end of this session, participants should be able to: ■ Understand the types of documents used in TEMPO (e.g., permits) ■ Understand how permits are related to compliance and enforcement documents ■ Identify where different types of information are stored in TEMPO and how to search this information
Day 8 PM Session			
Compliance & Enforcement High-Level Overview	■ Permitting Role	■ Inspections ■ Violations List ■ Enforcement Actions ■ Monitoring Reports ■ Incidents	By the end of this session, participants should be able to: ■ Understand the types of documents used in TEMPO (e.g., inspection reports) ■ Understand how these documents are related to TEMPO permits ■ Identify where different types of information are stored in TEMPO and how to search this information ■ Create and enter information about an incident ■ Search for incidents within TEMPO ■ Track preliminary site evaluations
Day 9 AM Session			

Phase III Release 2 Training Plan

Training Unit	Participant Groups	Topics Covered	Skills Learned
Work Activity Tracking	▪ Compliance & Enforcement Role ▪ Permitting Role ▪ Restoration Role	▪ Work Activity Logs ▪ To Do Lists ▪ Agency Interest Activity Summary ▪ Task Summary	By the end of this session, participants should be able to: ▪ Describe the purposes of the 4 different Activity Tracking screens ▪ Enter completed dates for tasks ▪ Understand how milestone statuses are set ▪ Describe how to start and stop an activity clock ▪ Add a standard or custom task (track public notices, track 5-day notices, public participation, SOPs, etc.) ▪ Understand what tasks are added by making a permit effective ▪ Assign staff to Agency Interests and functional areas ▪ Reassign tasks to different staff ▪ Track submittal and follow-up tasks ▪ Track information on Interstate Floater Certificates ▪ Understand how to use the Work Activity Log to terminate certifications that have expired or been terminated ▪ Track the various milesones and tasks associated with VCP Approvals ▪ Track time spent per task for VCP projects (to-do lists)
Troubleshooting	▪ Compliance & Enforcement Role ▪ Permitting Role ▪ Restoration Role	▪ Troubleshooting Procedures	By the end of this session, participants should be able to: ▪ Identify the <▉▉▉▉▉▉▉ contact to talk to about problems using the TEMPO Software ▪ Collect and provide all information required on the Defect Claim Form
Day 9 PM Session			
Teach-Back	▪ Compliance & Enforcement Role ▪ Permitting Role ▪ Restoration Role	▪ Training Practice	During this training unit participants will deliver a component of the courseware to receive feedback and remediation.
WAS work-day to follow, approximately 2 weeks after completion of the WAS training session.			

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7.3 WMA Session

The WMA training session will cover the following functional areas:

Training Unit	Participant Groups	Topics Covered	Skills Learned
Day 1 AM and PM Session			
Training Preparation	■ Compliance & Enforcement Role ■ Permitting Role	■ Training Styles and Techniques ■ Questioning Techniques ■ Training Tips ■ Classroom Management ■ Teach Back - Training Delivery Practice Sessions ■ Standard Operating Procedure (SOPs) based training ■ Coaching Skills	By the end of this session, participants should be able to: ■ Describe how to use different training methods to reach students with different learning styles. ■ Demonstrate proper use of eye contact, movement, voice, and gestures during TEMPO Training ■ Follow basic guidelines to increase effectiveness, quality, and confidence in delivering TEMPO training. ■ Explain how organization, behavior control, and communication can ensure effective classroom management ■ Use effective question and answer techniques to extend student thinking and acknowledge and respond to student questions. ■ Demonstrate how to turn role-based training into SOP-based training for end users.
Day 2 AM Session			
Introduction to TEMPO	■ Compliance & Enforcement Role ■ Permitting Role	■ TEMPO Modules and Capabilities ■ Central File and Master File ■ eTEMPO	By the end of this session, participants should be able to: ■ Describe the TEMPO Central File and Master File ■ Recognize the basic features and capabilities of TEMPO Modules ■ Recognize the basic features of eTEMPO

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Training Unit	Participant Groups	Topics Covered	Skills Learned
General TEMPO Features	■ Compliance & Enforcement Role ■ Permitting Role	■ TEMPO Desktop ■ TEMPO Terminology ■ TEMPO General Features ■ Using the TEMPO Help ■ Changing Passwords	By the end of this session, participants should be able to: ■ Identify key TEMPO components, such as windows, menus, and datawindows ■ Recognize and use general features of TEMPO, such as toolbars, shortcut keys, pick lists, type-to, error checking, saving to external files, exporting data, and printing. ■ Navigate to a topic of interest using the TEMPO Help and Guidance Help ■ Change their system password
Master File - Entities	■ Compliance & Enforcement Role ■ Permitting Role	■ Agency Interests ■ Subject Items ■ Organizations and People ■ Relationships	By the end of this session, participants should be able to: ■ Search for an entity in the TEMPO Master File by its Master ID or other criteria ■ Categorize entities
Day 2 PM Session			
Master File – Subject Items	■ Compliance & Enforcement Role ■ Permitting Role	■ Subject Item Details	By the end of this session, participants should be able to: ■ Create Subject Items ■ Link an Agency Interest to a program interest ■ Describe the difference between replicating, retrieving, and sharing Subject Items ■ Utilize the Locations SI Details window, General Info SI Details window, SCC SI Details window (SIC and NAIC portions only), Regulatory Program SI Details window, and the Requirements Profiles SI Details window ■ Request changes to Master File data

Training Unit	Participant Groups	Topics Covered	Skills Learned
Central File	■ Compliance & Enforcement Role ■ Permitting Role	■ Creating new documents ■ Checking in/out ■ Locking documents ■ Renaming documents ■ Toggling Sensitive/Private status ■ Creating an alias ■ Creating a sticky note ■ Agency Interest Summary	By the end of this session, participants should be able to: ■ View and filter activities and documents associated with an Agency Interest ■ Create documents in the TEMPO Central File ■ Attach electronic files in the Central File (e.g. fact sheets, exemption information, inspection documents, site assessments, site visits, photographs, maps, phone logs, lab data, etc..) ■ Check documents in and out ■ Lock (archive) documents ■ Rename documents ■ Mark documents as private ■ Create an alias of a document ■ Create a sticky note on a document ■ View the Agency Interest Summary report
Correspondence	■ Permitting Role ■ Compliance & Enforcement Role	■ LetterBuilder ■ Batch Processing	By the end of this session, participants should be able to: ■ Generate LetterBuilder documents ■ Describe possible uses for LetterBuilder documents ■ Generate forms on a schedule
Day 3 AM Session			
Permit Applications	■ Permitting Role	■ SI Details screens	By the end of this session, participants should be able to: ■ Create applications ■ Capture hazardous waste water data utilizing the Water General Permit SI Details window, Outfall SI Details window, Wastewater (MD) SI Details window, and Effluent Testing SI Details window
Day 3 PM Session			
Application Review	■ Permitting Role	■ Administrative Completeness Checks ■ Technical Completeness Checks	By the end of this session, participants should be able to: ■ Run an administrative completeness check ■ Create a technical review checklist and report results

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Training Unit	Participant Groups	Topics Covered	Skills Learned
Day 4 AM Session			
Permit Creation	▪ Permitting Role	▪ Reconciliation ▪ Bring forward ▪ Permit Modification	By the end of this session, participants should be able to: ▪ Lock and reconcile applications and permits ▪ Describe the different bring forward cases ▪ Bring locked applications forward into permits or other applications ▪ Process and issue modification and renewal permits, registrations, and certifications
Permit Requirements	▪ Permitting Role	▪ Requirements Development ▪ Limits and Monitoring Requirements ▪ Effective Dates	By the end of this session, participants should be able to: ▪ Describe the 5 different types of requirements ▪ Enter requirements profiles ▪ Load and edit requirements ▪ Set effective and anchor dates ▪ Identify standard, modified, and custom rquirements
Day 4 PM Session			
Exams & Licensing	▪ Permitting Role	▪ Exams & Licensing	By the end of this session, participants should be able to: ▪ Approve and track courses ▪ Create and Schedule exams ▪ Record exam scores ▪ Create licenses and license numbers
Day 5 AM Session			
Inspections	▪ Compliance & Enforcement Role	▪ Compliance Evaluations ▪ Bring Forward ▪ Inspection Requirements ▪ Scheduler	By the end of this session, participants should be able to: ▪ Prepare an inspection checklist ▪ Enter inspection results ▪ Refer inspection results to the violations list ▪ Print an inspection report ▪ Bring forward an inspection ▪ Load requirements into an inspection document ▪ Schedule inspections based on grant requirements or other criteria
Day 5 PM Session			

Training Unit	Participant Groups	Topics Covered	Skills Learned
Violations	▪ Compliance & Enforcement Role	▪ Violation Search ▪ Violation Details ▪ Violations Report ▪ Nightly Cycle ▪ Include in Enforcement Action	By the end of this session, participants should be able to: ▪ Describe the different ways violations are created ▪ Search for and view violations ▪ Edit violation details ▪ Include violations in enforcement actions ▪ Print a violation report
Enforcement Actions	▪ Compliance & Enforcement Role	▪ Enforcement Action ▪ Bring forward	By the end of this session, participants should be able to: ▪ Create an enforcement action ▪ Assess penalties ▪ Assign and track corrective actions ▪ Bring forward an enforcement action ▪ Make an enforcement action effective ▪ Track requirements in an enforcement action
Day 6 AM Session			
Monitoring Reports	▪ Compliance & Enforcement Role	▪ Blank Compliance Monitoring Reports (CMRs) ▪ CMR Preprints	By the end of this session, participants should be able to: ▪ Create blank CMR documents ▪ Create CMR preprints ▪ Printing a CMR Preprint ▪ Enter data and make corrections on blank CMR documents and CMR preprints ▪ Explain the error checking performed on CMR preprints ▪ Refer non-compliance instances as violations ▪ Capture toxicity testing results ▪ Receive and maintain sampling and analytical data from facility inspections
Day 6 PM Session			

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Training Unit	Participant Groups	Topics Covered	Skills Learned
Incidents	■ Compliance & Enforcement Role ■ Permitting Role	■ Incident Search ■ Incident Details ■ Incident Compliance Evaluations	By the end of this session, participants should be able to: ■ Create a new incident and enter information about it ■ Search for an existing incident ■ Track activities performed to resolve the incident. ■ Enter data from incident inspections. ■ Capture data related to the location of the incident and other relevant information ■ Track non-compliance incidents ■ Track information related to non-Agency Interest sources ■ Refer and receive incidents from other programs ■ Track complaints related to incidents ■ Enter anonymous incident reports
Day 7 AM Session			
Permitting High-Level Overview	■ Compliance & Enforcement Role	■ Applications and Permits ■ Permit Requirements	By the end of this session, participants should be able to: ■ Understand the types of documents used in TEMPO (e.g., permits) ■ Understand how permits are related to compliance and enforcement documents ■ Identify where different types of information are stored in TEMPO and how to search this information
Day 7 PM Session			
Compliance & Enforcement High-Level Overview	■ Permitting Role	■ Inspections ■ Violations List ■ Enforcement Actions ■ Monitoring Reports ■ Incidents	By the end of this session, participants should be able to: ■ Understand the types of documents used in TEMPO (e.g., inspection reports) ■ Understand how these documents are related to TEMPO permits ■ Identify where different types of information are stored in TEMPO and how to search this information ■ Create and enter information about an incident ■ Search for incidents within TEMPO ■ Track preliminary site evaluations
Day 8 AM Session			

Training Unit	Participant Groups	Topics Covered	Skills Learned
Work Activity Tracking	■ Compliance & Enforcement Role ■ Permitting Role	■ Work Activity Logs ■ To Do Lists ■ Agency Interest Activity Summary ■ Task Summary	By the end of this session, participants should be able to: ■ Describe the purposes of the 4 different Activity Tracking screens ■ Enter completed dates for tasks ■ Understand how milestone statuses are set ■ Describe how to start and stop an activity clock ■ Add a standard or custom task ■ Understand what tasks are added by making a permit effective ■ Assign staff to Agency Interests and functional areas ■ Reassign tasks to different staff ■ Track submittal and follow-up tasks
Troubleshooting	■ Compliance & Enforcement Role ■ Permitting Role	■ Troubleshooting Procedures	By the end of this session, participants should be able to: ■ Identify the <███████ contact to talk to about problems using the TEMPO Software ■ Collect and provide all information required on the Defect Claim Form
Day 8 PM Session			
Teach-Back	■ Compliance & Enforcement Role ■ Permitting Role	■ Training Practice	During this training unit participants will deliver a component of the courseware to receive feedback and remediation.
WMA work-day to follow, approximately 2 weeks after completion of the WMA training session.			

7.4   eDMR Session

The eDMR training session will include the following topics:

Training Unit	Participant Groups	Topics Covered	Skills Learned
Day 1 AM and PM Session			

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Training Unit	Participant Groups	Topics Covered	Skills Learned
eDMRs	■ Industry Liasons	■ Electronic Discharge Monitoring Reports (eDMRs)	By the end of the session, participants should be able to: ■ Create eDRM shells in TEMPO ■ Enter parameter data for a specific Agency Interest ■ Correct previously entered parameter data for a specific Agency Interest ■ Certify and submit eDMRs to the appropriate agencies ■ Review the status of eDMR shells within eTEMPO ■ View the corresponding eDMR data within TEMPO

7.5   Captivate Developer Training Session

The Captivate developer session will cover the following topics:

Training Unit	Participant Groups	Topics Covered	Skills Learned
Day 1 Session			
Captivate Development	■ Captivate Developers	■ Captivate Overview ■ Recording Settings ■ Add Labels, Hints, Highlights, and Mouse clicks ■ Add Interactivity ■ Save As Formats ■ Review and Correct Timing ■ Launch WBT	By the end of this session, participants should be able to: ■ Utilize captivate to generate captivate modules for use in end user training.
CBT work-day to follow, approximately 2 weeks after completion of the CBT training session.			

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8   Training Materials

As agreed by   and CGI, the training materials for the Trainer training sessions will consist of GBSs that allow participants to practice common business processes using the TEMPO system. These GBSs will be developed on the schedule provided on the attached Gantt chart.

Several of the GBSs will make use of example data that instructors will provide to students during the training session. It is CGI's preference to develop this example data after   completes its reference data, as it will allow our example values to better match the data that will exist in the   s TEMPO system. If   agrees to this approach, the example data will not be considered part of the Training Materials deliverable and will instead be provided one week prior to the first training session. The content of the example data will be determined during the GBSs development.

In addition to providing GBSs and example data to participants, CGI will provide each participant with a copy of the outline-syllabus that is appropriate for their training session.

Phase III Release 2 Training Plan

9.   Appendix E – Financial Capabilities

9.1 Appendix E.1 - Bank References

Bank of America
Merrill Lynch

July 6, 2011

CGI Technologies and Solutions Inc.
Attn: Ms. Robin Layton
1130 Sherbrooke Street West, 4th Floor
Montreal Quebec H3A 2M8 Canada

RE: Bank Account Verification
CGI Technologies and Solutions, Inc.
Account # 3299027153

To Whom It May Concern:

Please use this letter as your verification that account number ⬛⬛⬛⬛⬛ titled CGI Technologies and Solutions, Inc. is an open and active account at Bank of America. All ACH/EFT transactions sent to this account should use the ABA/Routing number 061000052. Wire Transfers should be directed to ABA ⬛⬛⬛⬛⬛

Please feel free to contact me if you should require additional information.

Regards,

Christine Wynimko

VP – Dedicated Service Director
Bank of America
888-715-1000 x86221

Bank of America
Merrill Lynch

June 14, 2012

CGI Technologies and Solutions, Inc.
1130 Sherbrooke Street West, 4Th Floor
Montreal Quebec H3A 2M8 Canada

RE: Account Verification for CGI Technologies and Solutions Inc.
Account :

To Whom It May Concern:

Please use this letter as verification that 3752064485 is an open and active account at Bank of America. Please use the below routing instructions for ACH/Wires.

Bank Name: Bank of America
Bank Address: 540 W Madison St
                         Chicago, IL 60661

Account Name: CGI Technologies and Solutions Inc
Account Number:

ACH ABA Number:

Domestic Wire ABA:

International Wire SWIFT:

Please feel free to contact me if you should require additional information.

Regards,

Valerie Clay

Valerie Clay
VP, Dedicated Service Consultant
Bank of America Merrill Lynch

9.2 Appendix E.2 – Financial Statement

Experience
the commitment®

CGI

The CGI Constitution

Our dream

To create an environment in which we enjoy working together and, as owners, contribute to building a company we can be proud of.

Our mission

To help our clients with professional services of outstanding quality, competence and objectivity, delivering the best solutions to fully satisfy client objectives in information technology, business processes and management. In all we do, we foster a culture of partnership, intrapreneurship, teamwork and integrity, building a world class IT and business process services company.

Our vision

To be a world class IT and business process services leader helping our clients succeed.

Our values

PARTNERSHIP AND QUALITY

For us, partnership and quality are both a philosophy and a way of life. We develop and follow the best management practices and we entrench these approaches into client relationships and service delivery frameworks in order to foster long-term and strong partnerships with our clients. We listen to our clients and we are committed to their total satisfaction in everything we do.

OBJECTIVITY AND INTEGRITY

We exercise the highest degree of independent thinking in selecting the products, services and solutions we recommend to clients. In doing so, we adhere to the highest values of quality, objectivity and integrity. Consequently, strict rules of business and professional conduct are applied. We do not accept any remuneration from suppliers.

INTRAPRENEURSHIP AND SHARING

Our success is based on the competence, commitment and enthusiasm of our members. Therefore, we promote a climate of innovation and initiative where we are empowered with a sense of ownership in supporting clients, thus ensuring the firm's profitable growth. Through teamwork, sharing our know-how and expertise, we bring the best of CGI to our clients. As members, we share in the value we create through equity ownership and profit participation.

RESPECT

As a global company, we recognize the richness that diversity brings to the company and welcome this diversity while embracing the overall CGI culture. In all we do, we are respectful of our fellow members, clients, business partners and competitors.

FINANCIAL STRENGTH

We strive to deliver strong, consistent financial performance, which sustains long-term growth and rewards our members and shareholders. Financial strength enables us to continuously invest and improve services and business solutions to the benefit of our clients. To this end, we manage our business to generate industry superior returns.

CORPORATE SOCIAL RESPONSIBILITY

Our business model is designed to ensure that we are close to our clients and communities. As members, we embrace our social responsibilities and contribute to the continuous development of the communities in which we live and work.

Visit our online annual report to access the complete financial report and learn how our committed approach achieves results for our clients.

cgi.com/2012-ar

For 36 years, CGI has been a reliable and trusted partner committed to our clients' success, providing flexibility, accountability and quality through our client proximity business model and the application of our Management Foundation.

Historically, CGI has profitably doubled its size every three to five years. With the combination of CGI and Logica, we now have the scale to offer our clients greater presence, service capabilities and expertise around the world. We are also better positioned to provide our professionals, or members as we refer to them, with opportunities to build rewarding careers and to deliver shareholders superior results and industry-leading returns for the long term.

CGI: Experience the commitment®

CGI:
Built to grow
and last.

Serge Godin
Founder and Executive Chairman of the Board

Michael E. Roach
President and Chief Executive Officer

Experience has taught us that clients, employees and shareholders want to be associated with the best—the best partner, the best employer and the best investment.

We are passionate about building and operating a sound, stable and growing business for the benefit of all stakeholders.

Clients:

Fostering long-term relationships with 10,000 global clients

For CGI, global growth is not an option; it is a necessity. As markets globalize, so does a significant portion of our client base. In fact, 60% of our largest clients have a presence in both North America and in Europe, while approximately a third are in North America, Europe and Asia. We are dedicated to growing and expanding our capabilities to serve all of our clients wherever they are.

In line with this commitment and consistent with our profitable growth strategy, 2012 will be remembered as a milestone year for CGI. On August 20, 2012 we enthusiastically welcomed 41,000 new colleagues into the CGI family as we merged with UK-based Logica. We did so, not with an eye on becoming the biggest, but to become the best. We strive to deliver performance that sustains long-term growth, increases client loyalty and rewards our members and shareholders.

In addition, we now have access to the European IT market, which we consider very attractive as it represents approximately 30% of the global IT spend. Perhaps more acutely than ever, Europe's ongoing economic and social challenges will require IT investments to increase efficiency and achieve the cost curtailment required to remain competitive.

We are now stronger than ever, significantly expanding our reach and bringing critical mass to both local and global clients. As we expand alongside them, both at home and abroad, we understand that our success as a business is measured by our clients' success and directly linked to their trust and confidence in CGI. Our track record of profitable and rapid growth, including more than 70 successful integrations, provide us the necessary execution experience and confidence to ensure synergies are delivered and efficiencies are gained quickly and seamlessly.

Together, as a team of 72,000 members across a network of 400 local offices in 40 countries, our model is designed to empower local decision making and accountability. With strong market positions in North America, Europe and Asia Pacific, CGI is now the fifth largest independent IT services provider worldwide, generating more than $10 billion in combined annual revenue and providing a balanced blend of onshore, nearshore and offshore delivery options that bring our vast experience and expertise to clients' front doors.

Revenue growth

13%

Recurring revenue of

64%

We pride ourselves on the long-term and deep relationships we've developed with our clients, which have been the guiding force behind many of our innovations and service offerings. By aligning our future strategies to clients' critical business imperatives, we have become a leader in such technologies as cloud computing and health information exchanges and are at the forefront of cybersecurity and biometrics.

This culture of innovation has helped us prepare not only for today's needs, but also for the opportunities and challenges that tomorrow will bring. It is through innovative thinking and a consultative approach to doing business with our clients that we have booked $5.2 billion in new business during fiscal 2012, increasing our backlog to $17.6 billion.

"Ownership is empowering, fosters engagement and instills accountability"

In fiscal 2012, we continued our tradition of high client satisfaction, scoring an average of 9.1 out of 10 based on signed client assessments CGI rigorously conducts with its clients. As important, we received a 9.4 rating for client loyalty, denoting our clients' intent to continue to use and recommend CGI's services to others. Client loyalty is important in any business, but in a services business like ours, it is vital. That is why we are prioritizing the roll out of our client assessment program across the Logica client base in fiscal 2013.

Members:
Building a company we can be proud of

As members, we are encouraged to be owners, enjoy our work and benefit from the success that comes from building a company that best satisfies the needs of all our stakeholders. This is why the motivation of our members differentiates us. At CGI, we are easier to do business with because we are driven, individually and collectively, to satisfy our clients and grow our company.

While most companies have a vision and mission, CGI goes a step beyond. We have a company dream:

"To create an environment in which we enjoy working together and, as owners, contribute to building a company we can be proud of."

A key aspect of our management approach is ownership, because it is empowering, fosters engagement and instills accountability among our members.

As a result, we have one of the lowest attrition rates in the industry. Our ability to attract and retain top talent provides clients with the best experts and long-term partners to drive the innovation, cost reductions and improved operations critical to their success. In fact, our clients' satisfaction is the top driver of our members' satisfaction based on our annual member consultation.

Shareholders:
Creating sustainable value for the long term

At CGI, we've always understood that to be a strong global company we need to be strong financially. Our financial strength is a cornerstone of our commitment to be the best. It has enabled us to continuously invest in and improve services, to innovate and to profitably grow CGI for the benefit of all stakeholders.

This consistent and disciplined approach has provided the necessary fuel to successfully execute our "Build and Buy" profitable growth strategy, delivering both strong organic growth and accretive acquisitions throughout our history.

During fiscal 2012, CGI's share price increased by approximately 35%, adding $3 billion to the market value of CGI. Consistent with our acquisition history, we expect the Logica transaction to create additional shareholder value and be accretive to our earnings per share by 25-30% before acquisition related and integration costs in fiscal 2013 and continue accelerating throughout the three-year integration period.

Market cap up 58% to

$8.1 billion

Annual revenue to exceed

$10 billion

Our ability to generate consistent results with industry leading margins is proof that adhering to the fundamentals of operational and delivery excellence is key to running a sound and stable business.

We greatly appreciate the trust our shareholders have placed in us. We are committed to creating long-term value, while maintaining the flexibility to capitalize on new opportunities as they arise.

Committed to being the best

In all we do, we strive to be the best — continuously expanding our capabilities so that we can meet our commitments, earn new business and, ultimately, exceed expectations. Going forward, this continues to be our goal and our passion.

We want to thank you for your continued interest and commitment to CGI. Together, we will remain a strong, stable company anchored in profitable growth — today and in the years to come.

[signed]

Serge Godin

Founder and
Executive Chairman of the Board

[signed]

Michael E. Roach

President and
Chief Executive Officer

Satisfying clients is our business
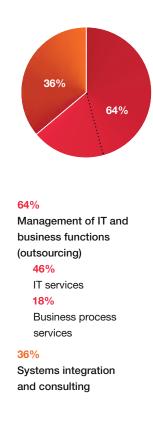
Through a consistent, disciplined and accountable delivery approach, CGI has achieved an industry-leading track record of on-time, on-budget projects, helping clients leverage current investments while adopting new technology. As a result of this approach, our average client satisfaction score for the past 10 years has measured consistently higher than 9 out of 10.
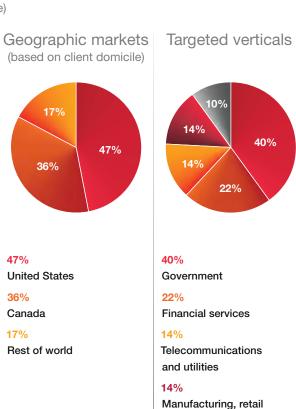
CGI's geographical reach covers 85% of global IT spending. With this global presence, CGI is well positioned to help our clients win and grow. In addition, our high level of recurring revenue enables us to maintain long-term relationships and invest in the future for the benefit of our clients.

Business highlights*

(based on fiscal 2012 revenue)

Contract types

64%
Management of IT and business functions (outsourcing)

46%
IT services

18%
Business process services

36%
Systems integration and consulting

Geographic markets
(based on client domicile)

47%
United States

36%
Canada

17%
Rest of world

Targeted verticals

40%
Government

22%
Financial services

14%
Telecommunications and utilities

14%
Manufacturing, retail and distribution

10%
Health

Backlog of long-term signed contracts

$17.6 billion

New contract bookings

$5.2 billion

cgi.com/2012-ar/at-a-glance

*Includes Logica revenue from August 20, 2012.

Global rank

5th

among independent
IT and BPS firms

Proven performance

95%

on-time, on-budget

Client loyalty

9.4

out of 10 based
on signed clients
assessments

Our approach

Clients tell us the way we deliver services is a primary reason they select CGI. These are the key characteristics that distinguish our approach.

People—Our members are motivated, as owners, to build our company and best satisfy client needs.

Proximity—Our members across 400 local offices are empowered with local decision making while bringing global capabilities.

Quality—Consistent processes across our operations enable consistent outcomes which are measured and continuously improved.

Services—Industry and technology expertise, end to end services and rich IP-based solutions deliver performance.

Creativity—We drive innovation together with our clients to better support their business strategies.

Financial strength—36 years of disciplined performance and sustained growth facilitate long-term relationships and large-scale engagements.

Our services

CGI offers a full spectrum of services, solutions and industry know-how to accelerate clients' business transformation.

High-end business and IT consulting—Vast array of services, including business and IT strategy, enterprise architecture, process redesign, change management and performance measurement.

Systems integration—System architecture, system development and implementation of business and technology solutions.

Application development and management—Design, development, implementation, maintenance and improvement of business applications.

Infrastructure services—Comprehensive infrastructure management capabilities that adapt to business requirements and service priorities.

Business process services—Management of back-office business processes to streamline operations.

IP-based solutions—Deep portfolio of 100+ mission-critical solutions.

Our industries

CGI offers its end-to-end services to a selected set of economic sectors covering 90% of global IT spend.

Financial services—Helping financial institutions, including most major banks and top insurers, reduce cost, increase efficiency and improve customer service.

Government—Supporting over 2,000 government organizations in reducing costs and improving the efficiency, quality and accountability of public services, all while increasing citizen engagement.

Health—Helping more than 1,000 healthcare facilities, hospitals and departments of health implement solutions for better care, better business and better outcomes.
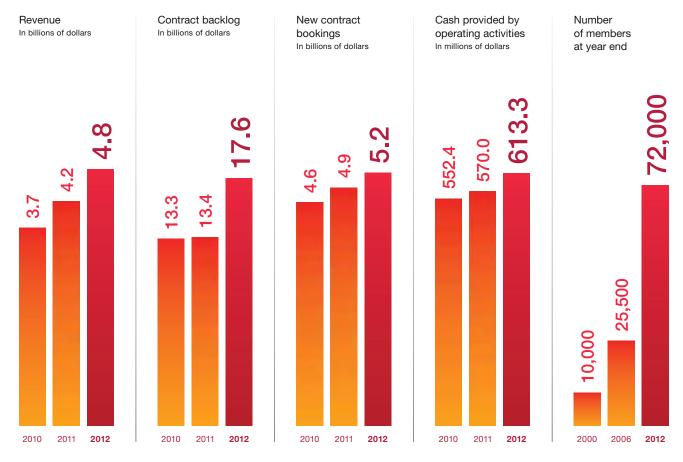
Telecommunications and utilities—Helping 6 of the top 10 global telecom providers and 9 of the top 10 European utilities deliver new revenue streams and improve productivity and service.

Manufacturing, retail and distribution—Enabling business transformation for more than 2,000 clients by improving efficiency and loyalty, lowering costs and boosting sustainable growth.

Oil and gas—Helping our clients, including 3 of the top 6 oil companies, extract more value from every aspect of their supply chains.

Creating significant shareholder value over time

The strength of our profitability, cash flow and recurrent revenue streams reflect the discipline that allowed us to build a sound and stable enterprise for the long term. Our successful "Build and Buy" profitable growth strategy balances strong organic growth and the successful integration of more than 70 acquisitions. We are committed to creating additional value for our shareholders over time as we continue to adhere to the same fundamentals that have guided us throughout our 36-year history.

Revenue
In billions of dollars

2010	2011	2012
3.7	4.2	4.8

Contract backlog
In billions of dollars

2010	2011	2012
13.3	13.4	17.6

New contract bookings
In billions of dollars

2010	2011	2012
4.6	4.9	5.2

Cash provided by operating activities
In millions of dollars

2010	2011	2012
552.4	570.0	613.3

Number of members at year end

2000	2006	2012
10,000	25,500	72,000

CGI's 2012 and 2011 financial results are reported under IFRS and the 2010 results are reported under Canadian GAAP.

Corporate social responsibility

Promoting a caring culture

As one of our core values, CSR represents a key aspect of our business model, which is designed to bring us closer to our members, clients, shareholders and communities. We've always believed that balancing this equilibrium between our stakeholders is key to our long term sustainability. Last year, we linked all our best practices to a new global policy formalizing our approach and identifying the following commitments:

Provide our professionals with training, health, wellness and ownership programs that positively influence their well-being and satisfaction

Partner with our clients to deliver energy and environmental sustainability solutions and to collectively support charitable causes

Support our communities through causes that improve their social, economic and environmental well-being

Improve the environment through environmentally-friendly operating practices, community service activities and green IT offerings

Continue operating with the highest level of integrity through a strong code of ethics and good corporate governance

Extend our CSR commitments to our supply chain

As a further step, we published a roadmap, which has brought our policy to life by defining objectives and measures to support our commitments. This coming year, we will publish our first global CSR report to present quantitative and qualitative results, identify achievements and list key indicators on which we aim to set our objectives going forward. We look forward to sharing our progress with you, and continuing our journey as a responsible and caring partner.

cgi.com/csr

Creativity to transform and add value

Driving innovation, reducing costs and improving operations are strategic business imperatives. CGI members work alongside our clients locally, while bringing the depth and breadth of our global resources to solve these complex challenges—and more.

CGI offers innovative solutions to gain operating efficiencies, reduce costs and improve competitive advantage. Technology is usually at the heart of every solution—this is where CGI adds value. We believe in finding practical answers not always found in the R&D lab. We operate under an open, collaborative approach that encompasses the entire business process. CGI gathers the best ideas from markets, clients, partners, academia and our members and tests them against real world scenarios to find the right solution. Best of all, we are smart about finding creative ways to make the most of our clients' current assets—combining them with new technologies and business innovations that make the most business sense.

With a track record of 95% of projects delivered on time and within budget, we align our teams in lockstep with our clients' business strategies to achieve significant top-to-bottom line results.

These are some representative wins from our $5.2 billion in fiscal 2012 bookings.

Visit cgi.com/newsroom for the full announcements.

CGI AWARDED US$143 million
contract to deliver intelligence support to the U.S. Army Training and Doctrine Command

THE UK DEPARTMENT OF HEALTH
CHOOSES LOGICA, NOW PART OF CGI, FOR DELIVERY OF PAYROLL FOR ITS ARMS LENGTH BODIES

CGI's U.S. public sector tax and revenue clients collect more than $2 billion in additional revenues

CGI launches fraud detection service for the insurance industry, solution powered by SAS

CGI'S ERP PROGRAM HONORED AS

"BEST FIT INTEGRATOR"
FOR 5TH YEAR BY THE CENTER FOR DIGITAL GOVERNMENT

ISS AND CGI STRIKE NORDIC **PARTNERSHIP** DEAL

CGI secures IT partnership agreement with Countrywide

RSA RENEWS IT SERVICES AGREEMENT WITH CGI FOR 6 YEARS

Rio Tinto and CGI renew and expand their IT outsourcing contract

CGI SELECTED TO BUILD U.S.-WIDE COMPETITIVE HEALTH INSURANCE EXCHANGE

THE CITY OF VÄSTERÅS

signs **£27 million deal** with Logica, now part of CGI, to manage its IT operations

CGI TO TRANSITION THE NUCLEAR REGULATORY COMMISSION'S FINANCIAL SYSTEMS TO THE MOMENTUM COMMUNITY CLOUD

CGI partners with the Centers for Medicare & Medicaid Services to deliver Medicare.gov multi-platform experience for

47 MILLION USERS

CGI signs new, expanded

THREE-YEAR PARTNERSHIP

agreement with Société Générale Corporate & Investment Banking

CGI SIGNS

MULTI-MILLION DOLLAR

MANAGED COLLECTIONS AGREEMENT WITH WORLD OMNI FINANCIAL CORP.

National Bank of Canada and CGI sign new

FIVE-YEAR AGREEMENT

WORTH $350M
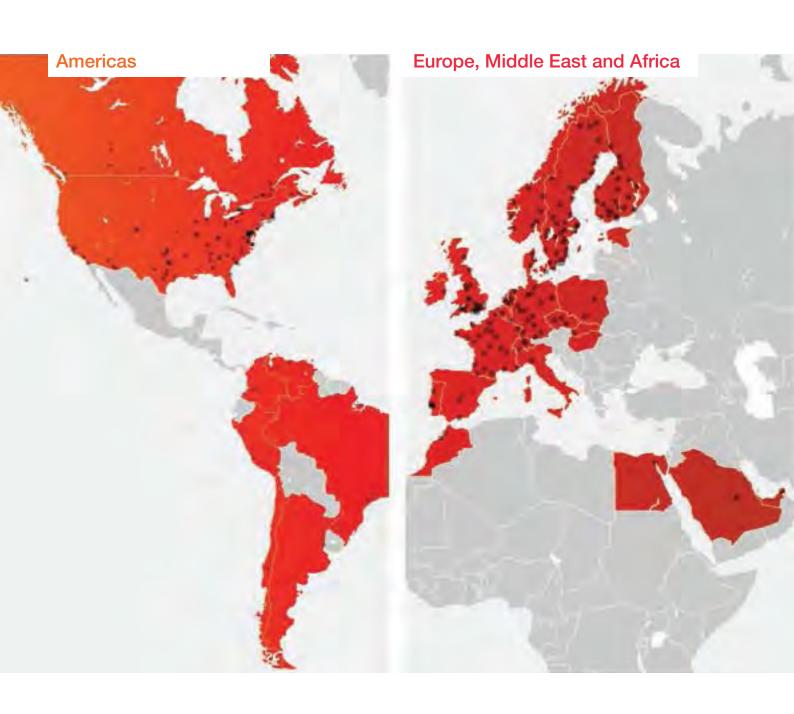
John Hancock selects CGI for data center consolidation and the provision of highly secure on-demand Cloud services

cgi.com/2012-ar/clients

A strong local presence in 400 communities around the world

Americas

Europe, Middle East and Africa

Asia Pacific

Americas
ARGENTINA
BRAZIL
CANADA
CHILE
COLOMBIA
PERU
UNITED STATES
VENEZUELA

Europe, Middle East and Africa
BELGIUM
CZECH REPUBLIC
DENMARK
EGYPT
ESTONIA
FINLAND
FRANCE
GERMANY
HUNGARY
IRELAND
ITALY
LUXEMBOURG
MOROCCO
NETHERLANDS
NORWAY
POLAND
PORTUGAL
SAUDI ARABIA
SLOVAKIA
SPAIN
SWEDEN
SWITZERLAND
UNITED ARAB EMIRATES
UNITED KINGDOM

Asia Pacific
AUSTRALIA
INDIA
MALAYSIA
PHILIPPINES
SINGAPORE

● Indicates local CGI office(s)

Board of directors

Claude Boivin (a)
Director since 1993
Director of Companies

Bernard Bourigeaud (b)
Director since 2008
Director of Companies

Jean Brassard (a)
Director since 1978
Director of Companies

Robert Chevrier (b)
Director since 2003
Chair of the Human
Resources Committee, CGI
President, Roche
Management Co. Inc.

Dominic D'Alessandro (b)
Director since 2010
Director of Companies

Thomas P. d'Aquino (c)
Director since 2006
Lead Director, CGI
Chief Executive,
Intercounsel Ltd

Paule Doré (c)
Director since 1995
Director of Companies

Richard B. Evans (a)
Director since 2009
Director of Companies
Chairman of the Board,
Resolute Forest Products

Serge Godin
Director since 1976
Founder and Executive
Chairman of the Board, CGI

André Imbeau
Director since 1976
Founder, Executive
Vice-Chairman of the
Board and Corporate
Secretary, CGI

Leadership team: Corporate Services

Serge Godin
Founder and Executive
Chairman of the Board

André Imbeau
Founder, Executive
Vice-Chairman
of the Board and
Corporate Secretary

Michael E. Roach
President and
Chief Executive Officer

R. David Anderson
Executive VP and
Chief Financial Officer

Jame Cofran
Senior VP and
Chief Marketing Officer

Benoit Dubé
Executive VP and
Chief Legal Officer

Leadership team: Global Operations

UNITED STATES

George Schindler
President

Pete Ihrig
US Enterprise Markets

Mark Boyajian
US Mid-Atlantic

Dave Delgado
US West

Robert Farrell
Global Infrastructure Services

Dave Henderson
US Central-South

Christopher James
IP Solutions

Gregg Mossburg
US Northeast

Donna Ryan
President, CGI Federal

Amy Bleken
Defense Agency Programs

Cheryl Campbell
Health & Compliance Programs

Barbara Fast
Army & Defense Intelligence
Programs

Tim Hurlebaus
National Security Programs

Tom Kirk
Government Secure Solutions

Toni Townes-Whitley
Civilian Agency Programs

ASIA PACIFIC & MIDDLE EAST

Colin Holgate
President

S. Chandramouli
India

Michael Shepherd
Australia

Hervé Vincent
Southeast Asia

CANADA

Douglas McCuaig
President

Claude Marcoux
Chief Operating Officer

Réjean Bernard
Global Infrastructure Services

Shawn Derby
Western Canada

Michael Godin
National Capital Region

Jamie Holland
IP Solutions

Roy Hudson
Communication Services Business

Bernard Labelle
Québec City

Marie MacDonald
Greater Toronto

Jay MacIsaac
Atlantic Canada

Guy Vigeant
Greater Montreal

Gilles Labbé (a)
Director since 2010
Chair of the Audit and
Risk Management
Committee, CGI
President and Chief
Executive Officer,
Héroux-Devtek Inc.

Eileen A. Mercier (c)
Director since 1996
Chair of the Corporate
Governance Committee, CGI
Director of Companies

Donna Morea
Director since 2012
Director of Companies

Michael E. Roach
Director since 2006
President and
Chief Executive Officer, CGI

(a) Member of the Audit and Risk Management Committee
(b) Member of the Human Resources Committee
(c) Member of the Corporate Governance Committee

Julie Godin
Executive VP,
Human Resources
and Strategic Planning

Lorne Gorber
Senior VP, Global
Communications
and Investor Relations

Eva Maglis
Executive VP,
Global Chief
Information Officer

Luc Pinard
Executive VP, Corporate
Performance and
Knowledge
Management

Daniel Rocheleau
Executive VP and
Chief Business
Engineering Officer

Claude Séguin
Senior VP, Corporate
Development and
Strategic Investments

CENTRAL & EASTERN EUROPE

Serge Dubrana
President

Ron de Mos
Netherlands

Dariusz Gorzen
Poland

Torsten Strass
Germany & Switzerland

Stefan Szabó
Czech Republic & Slovakia

Hans Vets
Belgium

FRANCE

Jean-Marc Lazzari
President

Jean-Michel Baticle
Regions

Philippe Bouron
Paris

Mohamed Lakhlifi
Morocco

José Lopez
Business Consulting

Patrick Navarro
I²B

UNITED KINGDOM

Timothy Gregory
President

David Fitzpatrick
Global Infrastructure Services

Melba Foggo
Business Consulting

Andrew Marsh
Business Processing Services

Paula Sussex
Public Sector

Steve Thorn
Application Services

Mike Whitchurch
Commercial Sector

NORDICS, SOUTHERN EUROPE & SOUTH AMERICA

João Baptista
President

Gisle Eckhoff
Norway

José Carlos Gonçalves
Southern Europe & Latin America

Björn Ivroth
Sweden

Edson Leite
Brazil

Heikki Nikku
Finland & Estonia

Martin Petersen
Denmark

Shareholder information

Shareholder information listing

IPO: 1986
Toronto Stock Exchange, April 1992: GIB.A
New York Stock Exchange, October 1998: GIB

Number of shares outstanding as of September 30, 2012:
273,771,106 Class A subordinate shares
33,608,159 Class B shares

High/low of share price from October 1, 2011
to September 30, 2012:

	TSX (CDN$)	NYSE (U.S.$)
High:	27.00	27.71
Low:	17.88	17.01

The certifications by CGI's Chief Executive Officer and Chief Financial Officer concerning the quality of the Company's public disclosure pursuant to Canadian regulatory requirements are filed in Canada on SEDAR (sedar.com). Similar certifications pursuant to Rule 13a-14 of the U.S. Securities Exchange Act of 1934 and Section 302 of the Sarbanes-Oxley Act of 2002 are exhibits to our Form 40-F filed on EDGAR (sec.gov). The Company has also filed with the New York Stock Exchange the certification required by Section 303A.12 of the exchange's Listed Company Manual.

CGI's corporate governance practices do not differ in any significant way from those required of domestic companies under New York Stock Exchange listing standards and they are set out in the CGI Management Proxy Circular, which is filed with Canadian and U.S. securities authorities and is therefore available on SEDAR and EDGAR, respectively, as well as on CGI's website (cgi.com).

Auditors

Ernst & Young LLP

Transfer agent

Computershare Trust Company of Canada
100 University Avenue, 9th Floor
Toronto, Ontario M5J 2Y1
Telephone: 1 800 564-6253
www.investorcentre.com/service

Investor relations

For further information about the Company, additional copies of this report or other financial information, please contact:

CGI Group Inc.
Investor Relations
Email: ir@cgi.com
Twitter: CGI_IR
Web: cgi.com/investors
1350 René-Lévesque Blvd West
Montréal, Québec H3G 1T4
Canada
Tel.: (514) 841-3200

Annual general meeting of shareholders

Wednesday, January 30, 2013 at 11:00 a.m.
Omni Mont-Royal Hotel
Saisons A & B
1050 Sherbrooke West
Montréal, Québec H3A 2R6

A live webcast of the Annual General Meeting will be available via cgi.com/investors. Complete instructions for viewing the webcast will be available on CGI's website. To vote by phone or by using the Internet, please refer to the instructions provided in the CGI Management Proxy Circular.

The online version of CGI's annual report is available at cgi.com/2012-ar

Le rapport annuel 2012 de CGI est aussi publié en français et disponible sur cgi.com/2012-ra.

Our aspiration:
To be the best

At CGI, we are connected through a common culture, a disciplined management approach and a network of vast capabilities and expertise. These connections deliver results.

For our clients

A track record of 95% on-time, on-budget delivery fuels high client satisfaction, which has measured consistently greater than 9 out of 10 for the past 10 years.

For our members

With a majority of our members as owners, we foster a performance-based culture that allows members to benefit from their company's success.

For our shareholders

CGI has a track record of industry-leading margins that demonstrates our ability to run a sound and stable business for the long term, and an average annual return of more than 30% over the last 15 years.

As a global leader, CGI will continue to strive to be the best to satisfy the needs of our clients, offer rewarding careers for our members and provide a superior return over time for our shareholders.

cgi.com

CGI

Experience the commitment®

Numbers

CGI
Experience the commitment®

The CGI Constitution

Our dream

To create an environment in which we enjoy working together and, as owners, contribute to building a company we can be proud of.

Our mission

To help our clients with professional services of outstanding quality, competence and objectivity, delivering the best solutions to fully satisfy client objectives in information technology, business processes and management. In all we do, we foster a culture of partnership, intrapreneurship, teamwork and integrity, building a world class IT and business process services company.

Our vision

To be a world class IT and business process services leader helping our clients succeed.

Our values

PARTNERSHIP AND QUALITY

For us, partnership and quality are both a philosophy and a way of life. We develop and follow the best management practices and we entrench these approaches into client relationships and service delivery frameworks in order to foster long-term and strong partnerships with our clients. We listen to our clients and we are committed to their total satisfaction in everything we do.

OBJECTIVITY AND INTEGRITY

We exercise the highest degree of independent thinking in selecting the products, services and solutions we recommend to clients. In doing so, we adhere to the highest values of quality, objectivity and integrity. Consequently, strict rules of business and professional conduct are applied. We do not accept any remuneration from suppliers.

INTRAPRENEURSHIP AND SHARING

Our success is based on the competence, commitment and enthusiasm of our members. Therefore, we promote a climate of innovation and initiative where we are empowered with a sense of ownership in supporting clients, thus ensuring the firm's profitable growth. Through teamwork, sharing our know-how and expertise, we bring the best of CGI to our clients. As members, we share in the value we create through equity ownership and profit participation.

RESPECT

As a global company, we recognize the richness that diversity brings to the company and welcome this diversity while embracing the overall CGI culture. In all we do, we are respectful of our fellow members, clients, business partners and competitors.

FINANCIAL STRENGTH

We strive to deliver strong, consistent financial performance, which sustains long-term growth and rewards our members and shareholders. Financial strength enables us to continuously invest and improve services and business solutions to the benefit of our clients. To this end, we manage our business to generate industry superior returns.

CORPORATE SOCIAL RESPONSIBILITY

Our business model is designed to ensure that we are close to our clients and communities. As members, we embrace our social responsibilities and contribute to the continuous development of the communities in which we live and work.

Visit our online annual report to access the complete financial report and learn how our committed approach achieves results for our clients.

cgi.com/2012-ar

For 36 years, CGI has been a reliable and trusted partner committed to our clients' success, providing flexibility, accountability and quality through our client proximity business model and the application of our Management Foundation.

Historically, CGI has profitably doubled its size every three to five years. With the combination of CGI and Logica, we now have the scale to offer our clients greater presence, service capabilities and expertise around the world. We are also better positioned to provide our professionals, or members as we refer to them, with opportunities to build rewarding careers and to deliver shareholders superior results and industry-leading returns for the long term.

CGI: Experience the commitment®

Management's Discussion and Analysis of Financial Position and Results of Operations

November 28, 2012

Basis of Presentation

This Management's Discussion and Analysis of the Financial Position and Results of Operations ("MD&A") is the responsibility of management and has been reviewed and approved by the Board of Directors. This MD&A has been prepared in accordance with the requirements of the Canadian Securities Administrators. The Board of Directors is ultimately responsible for reviewing and approving the MD&A. The Board of Directors carries out its responsibility mainly through its Audit and Risk Management Committee, which is appointed by the Board of Directors and is comprised entirely of independent and financially literate directors.

Throughout this document, CGI Group Inc. is referred to as "CGI", "we", "our" or "Company". This MD&A provides information management believes is relevant to an assessment and understanding of the consolidated results of operations and financial condition of the Company. This document should be read in conjunction with the audited consolidated financial statements and the notes thereto for the years ended September 30, 2012 and 2011. CGI's accounting policies are in accordance with International Financials Reporting Standards ("IFRS") of the International Accounting Standards Board ("IASB"). All dollar amounts are in Canadian dollars unless otherwise indicated.

First Year Reporting under IFRS

The year's audited consolidated financial statements and this MD&A represent our first fiscal year reporting under IFRS. Under the rules and regulations of the U.S. Securities and Exchange Commission, CGI is classified as a foreign private issuer and is therefore permitted to use IFRS. CGI transitioned from Canadian Generally Accepted Accounting Principles ("Canadian GAAP") to IFRS on October 1, 2010 and adjusted the financial results of fiscal 2011 to reflect the adoption of IFRS. Note 33 to the audited consolidated financial statements for the year ended September 30, 2012 contains a detailed description of our conversion to IFRS, including a reconciliation of key items from Canadian GAAP to IFRS. Periods prior to October 1, 2010 presented in this MD&A have not been adjusted and are in accordance with Canadian GAAP.

Although the adoption of IFRS resulted in adjustments to our consolidated financial statements, it did not materially impact the underlying cash flows or profitability trends of our operating performance, debt covenants or compensation arrangements.

Materiality of Disclosures

This MD&A includes information we believe is material to investors. We consider something to be material if it results in, or would reasonably be expected to result in, a significant change in the market price or value of our shares, or if it is likely that a reasonable investor would consider the information to be important in making an investment decision.

Forward-Looking Statements

All statements in this MD&A that do not directly and exclusively relate to historical facts constitute "forward-looking statements" within the meaning of that term in Section 27A of the United States Securities Act of 1933, as amended, and Section 21E of the United States Securities Exchange Act of 1934, as amended, and are "forward-looking information" within the meaning of Canadian securities laws. These statements and this information represent CGI's intentions, plans, expectations and beliefs, and are subject to risks, uncertainties and other factors, of which many are beyond the control of the Company. These factors could cause actual results to differ materially from such forward-looking statements or forward-looking information. These factors include but are not restricted to: the timing and size of new contracts; acquisitions and other corporate developments; the ability to attract and retain qualified members; market competition in the rapidly evolving information technology industry; general economic and business conditions; foreign exchange and other risks identified in the MD&A, in CGI's Annual Report on Form 40-F filed with the U.S. Securities and Exchange Commission (filed on EDGAR at www.sec.gov), the Company's Annual Information Form filed with the Canadian securities authorities (filed on SEDAR at www.sedar.com), as well as assumptions regarding the foregoing. The words "believe," "estimate," "expect," "intend," "anticipate," "foresee," "plan," and similar expressions and variations thereof, identify certain of such forward-looking statements or forward-

looking information, which speak only as of the date on which they are made. In particular, statements relating to future performance are forward-looking statements and forward-looking information. CGI disclaims any intention or obligation to publicly update or revise any forward-looking statements or forward-looking information, whether as a result of new information, future events or otherwise, except as required by applicable law. Readers are cautioned not to place undue reliance on these forward-looking statements or on this forward-looking information. You will find more information about the risks that could cause our actual results to differ significantly from our current expectations in Section 10 – Risk Environment.

Non-GAAP Measures

The reader should note that the Company reports its financial results in accordance with IFRS. However, in this MD&A, certain non-GAAP financial measures are used:

1. Earnings before acquisition-related and integration costs, finance costs, finance income, other income, share of profit on joint venture, and income tax expense ("adjusted EBIT");

2. Constant currency growth;

3. Days Sales Outstanding ("DSO");

4. Return on Invested Capital ("ROIC");

5. Return on Equity ("ROE"); and

6. Net Debt to Capitalization ratio.

Management believes that these non-GAAP measures provide useful information to investors regarding the Company's financial condition and results of operations as they provide additional measures of its performance. These non-GAAP measures do not have any standardized meaning prescribed by IFRS and are therefore unlikely to be comparable to similar measures presented by other issuers. These measures should be considered as supplemental in nature and not as a substitute for the related financial information prepared in accordance with IFRS.

A reconciliation of adjusted EBIT to its closest IFRS measure can be found on page 14. Definitions of constant currency growth, DSO, ROIC, ROE, and net debt to capitalization are provided on pages 6 and 7. A discussion of DSO, ROIC, ROE and net debt to capitalization can be found on page 19.

Change in Reporting Segments

In 2012, we modified our basis of reporting such that the growth and profitability of the India activities were reallocated from our previously combined U.S. and India segment to each reporting segment, namely: Global Infrastructure Services ("GIS"), Canada, U.S., and Europe & Asia Pacific. This view reflects each segment's utilization of our delivery centres in India; the segmented results for the year and three months ended September 30, 2011 were therefore retrospectively revised. In Q4 2012, our acquisition of Logica plc ("Logica") became effective six weeks before our fiscal year-end. As at September 30, 2012, the operations of Logica were managed and reviewed as one component and is therefore being presented as its own operating segment. As a result of changes

in the management reporting structure effective October 1, 2012, the Company will change its operating segments beginning in the first quarter of 2013 as follows: Canada; United States of America; Nordics, Southern Europe and South America; Central and Eastern Europe (including Netherlands, Germany and Belgium); United Kingdom; Asia Pacific (including Australia, India, Philippines and the Middle East); and France (including Luxembourg and Morocco). For more details on how our operations are managed, please refer to Note 27 of the audited consolidated financial statements.

MD&A Objectives

— Provide a narrative explanation of the audited consolidated financial statements through the eyes of management;

— Provide the context within which the audited consolidated financial statements should be analyzed, by giving enhanced disclosure about the dynamics and trends of the Company's business; and

— Provide information to assist the reader in ascertaining the likelihood that past performance is indicative of future performance.

Corporate Overview
ABOUT CGI

Founded in 1976 and headquartered in Montreal, Canada, CGI is one of the largest independent providers of end-to-end information technology services ("IT services") and business process services ("BPS") to clients worldwide. CGI has approximately 72,000 members across the globe. The Company's proximity model provides for work to be delivered onsite at clients' premises, on-shore, near-shore or through one of its global offshore delivery centres. We also have a number of leading business solutions that support long-term client relationships. Our services are broken down as:

— Consulting – CGI provides a full range of IT and management consulting services, including business transformation, IT strategic planning, business process engineering and systems architecture.

— Systems integration – CGI integrates and customizes leading technologies and software applications to create IT systems that respond to clients' strategic needs.

— Management of IT and business functions ("outsourcing"). Clients delegate entire or partial responsibility for their IT or business functions to CGI to achieve significant savings and access the best suited technology, while retaining control over strategic IT and business functions. As part of such agreements, we implement our quality processes and practices to improve the efficiency of the clients' operations. We also integrate clients' operations into our technology network. Finally, we may take on specialized professionals from our clients, enabling our clients to focus on key operations. Services provided as part of an outsourcing contract may include development and integration of new projects and applications; applications maintenance and support; technology infrastructure management (enterprise and end-user computing and network services); transaction and business processing such as payroll, insurance processing, and document management services. Outsourcing contracts typically have terms from five to ten years.

CGI offers its end-to-end services to a focused set of industry vertical markets where we have developed extensive and deep subject matter expertise. This allows us to fully understand our clients' business realities and to have the knowledge and solutions needed to advance their business goals. Our targeted vertical markets include government, financial services, manufacturing, retail & distribution ("MRD"), telecommunications & utilities, and health.

CGI has a wide range of proprietary business solutions which help shape opportunities and drive value for our clients and shareholders. Examples of these include Enterprise Resource Planning solutions, energy management, credit and debt collections, tax management, claims auditing and fraud detection.

We take great pride in delivering high quality services to our clients. To do so consistently, we have implemented and continue to maintain the International Organization for Standardization ("ISO") quality program. By designing and implementing rigorous service delivery and quality standards, followed by monitoring and measurement, we are better able to satisfy our clients' needs. As a measure of the scope of our ISO 9001 program, all of the legacy CGI's business units continue to be certified and we will initiate the work on improving Logica's processes and applying for the same certification.

VISION AND STRATEGY

At CGI, we derive our business vision from our dream which is to create an environment in which members enjoy working together and, as owners, contribute to building a company we can be proud of. That dream led to CGI's vision of being a world-class IT and BPS leader, helping its clients win and grow. Our build and buy strategy is refined through a four-pillar growth strategy that combines organic growth and acquisitions.

The first two pillars of our strategy focus on organic growth. The first pillar focuses on smaller contract wins, renewals and extensions. The second involves the pursuit of new large, long-term outsourcing contracts, leveraging our end-to-end services, global delivery model and critical mass.

The third pillar of our growth strategy focuses on the acquisition of smaller firms or niche players. We identify niche acquisitions through a strategic mapping program that systematically searches for targets that will strengthen our vertical market knowledge or increase the richness of our service offerings.

The fourth pillar involves the pursuit of transformational acquisitions focused on expanding our geographic presence and critical mass. This approach further enables us to strengthen our qualifications to compete for large outsourcing contracts. CGI continues to be a consolidator in the IT services industry.

Throughout its history, CGI has been highly disciplined in following this four-pillar growth strategy, with an emphasis on earnings accretion and maximizing shareholder value.

COMPETITIVE ENVIRONMENT

As a global provider of end-to-end information technology and business process services, CGI operates in a highly competitive and rapidly evolving global industry. Our competition comprises a variety of global players, from niche companies providing specialized services to other end-to-end service providers, mainly in the U.S., Europe and India, all of whom are competing to deliver some or all of the services we provide.

Recent mergers and acquisition activity has resulted in CGI being positioned as one of the few remaining IT services firms that operates independently of any hardware or software vendor. This independence allows CGI to deliver the best-suited technology available globally to our clients.

CGI offers its end-to-end services to a select set of targeted vertical markets in which we have deep business and technical expertise covering 90% of global IT spend. To compete effectively, CGI focuses on high-end systems integration, consulting and outsourcing where vertical market industry knowledge and expertise are required.

Our client proximity metro markets business model combined with our global delivery model results in highly responsive and cost competitive delivery. CGI's global delivery model provides clients with a unique blend of onshore, nearshore and offshore delivery options that caters to their strategic and cost requirements. CGI also has a number of leading business solutions that support long-term client relationships. Moreover, all of CGI's business operations are executed based on the same management foundation, ensuring consistency and cohesion across the Company.

There are many factors involved in winning and retaining IT and BPS contracts, including the following: total cost of services; ability to deliver; track record; vertical market expertise; investment in business solutions; local presence; global delivery capability; and the strength of client relationships. CGI compares favourably with its competition with respect to all of these factors.

In summary, CGI's competitive value proposition encompasses the following: end-to-end IT and BPS capability; expertise and proprietary business solutions in five vertical markets covering the majority of global IT spending; a unique global delivery model, which includes industry leading delivery capabilities; a disciplined management foundation; and our focus on client satisfaction which is supported by our client proximity business model. Based on this value proposition and CGI's growing critical mass in our target markets which collectively cover approximately 84% of global IT spending – we are in a position to compete effectively on an international scale and win large contracts.

Highlights and Key Performance Measures

FISCAL 2012 HIGHLIGHTS

— Revenue of $4.8 billion, increase of 12.1% year-over-year on a constant currency basis;

— Bookings of $5.2 billion resulting in a book-to-bill ratio of 109%;

— Backlog of $17.6 billion;

— Strong underlying profitability delivered across legacy CGI operations;

— Accelerating profitable growth and bookings in U.S. operations; and

— Cash from operations of $613.3 million, or $2.24 per share.

Acquisition of Logica plc

On August 20, 2012, CGI completed its acquisition of Logica for $1.63 (105 pence) per ordinary share equivalent to a total purchase price of $2.7 billion plus the assumption of Logica's net debt of $0.9 billion. The cash acquisition of all the outstanding ordinary shares of Logica was effected by means of a Court-sanctioned scheme of arrangement in the United Kingdom. Our results for the year incorporate the operations of Logica subsequent to August 20, 2012.

Logica is a business and technology services company, employing 41,000 people. It provides business consulting, systems integration and outsourcing services to clients around the world, including many of Europe's largest businesses.

The acquisition was funded through a combination of:

— The issuance of 46.7 million Class A shares in CGI for a consideration of $1.0 billion from the Caisse de dépôt et placement du Québec ("CDPQ");

— Additional debt funding through a term loan of $1.9 billion from a syndicate of international financial institutions; and

— The remaining financing requirements of $0.8 billion were drawn from CGI's existing credit facility and cash.

Based on the impact of the issuance of the new debt and equity and the realization of some of the planned synergies, the transaction is expected to be accretive in the range of 25% to 30% in the first 12 months to CGI's earnings per share excluding acquisition-related and integration costs. As the Company continues to realize an approximate amount of $300 million of annual business synergies over the next three years at an approximate cost of $400 million, we expect the accretion level of EPS to increase.

The combined company has approximately 72,000 members in more than 40 countries and pro-forma revenue of $10.4 billion, offering clients across the world the best mix of business and technology expertise as well as an unmatched combination of local and global delivery options. In addition to operational breadth and depth, the combined business has critical mass and blue chip client relationships. CGI incurred $0.3 billion in acquisition-related and integration costs over the last half of fiscal 2012.

Credit Facility and Debt Private Placement

On December 7, 2011, the Company renewed its unsecured revolving credit facility of $1.5 billion for an additional five years, through December 2016. The facility, which can be extended annually, includes an accordion feature providing for an additional $750.0 million, bringing the facility's potential capacity to $2.25 billion. In addition, during the first quarter of fiscal 2012, the Company received the proceeds of the US$475.0 million debt private placement financing with U.S. institutional investors.

KEY PERFORMANCE MEASURES DEFINED

We use a combination of financial measures, ratios, and non-GAAP measures to assess our Company's performance. The table below summarizes our most relevant key performance measures. The calculated results and the discussion of each indicator follow in the subsequent sections.

Profitability	— Adjusted EBIT – is a measure of earnings before items not directly related to the cost of operations, such as financing costs, acquisition-related and integration costs and income taxes (see definition on page 3). Management believes this best reflects the profitability of our operations. — Diluted earnings per share – is a measure of earnings generated for shareholders on a per share basis, assuming all dilutive elements are exercised.
Liquidity	— Cash provided by operating activities – is a measure of cash generated from managing our day-to-day business operations. We believe strong operating cash flow is indicative of financial flexibility, allowing us to execute our corporate strategy. — Days sales outstanding – is the average number of days to convert our trade receivables and work in progress into cash. Management tracks this metric closely to ensure timely collection, healthy liquidity, and is committed to a DSO target of 45 days.
Growth	— Constant currency growth – is a measure of revenue growth before foreign currency impacts. This growth is calculated by translating current period results in local currency using the conversion rates in the equivalent period from the prior year. We believe that it is helpful to adjust revenue to exclude the impact of currency fluctuations to facilitate period-to-period comparisons of business performance. — Backlog – represents management's best estimate of revenue to be realized in the future based on the terms of respective client agreements in effect at a point in time. — Book-to-Bill ratio – is a measure of the proportion of the value of our contract wins to our revenue in the period. This metric allows management to monitor the Company's business development efforts to ensure we grow our backlog and our business over time. Management remains committed to maintaining a target ratio greater than 100% over a 12-month period. Management believes that the longer period is a more effective measure as the size and timing of bookings could cause this measurement to fluctuate significantly if taken for only a three-month period.
Capital Structure	— Net Debt to Capitalization ratio – is a measure of our level of financial leverage net of our cash and cash equivalents, short-term investments and marketable long-term investments. Management uses this metric to monitor the proportion of debt versus capital used to finance our operations and it provides insight into our financial strength. — Return on Equity – is a measure of the rate of return on the ownership interest of our shareholders. Management looks at ROE to measure its efficiency at generating profits for the Company's shareholders and how well the Company uses the invested funds to generate earnings growth. — Return on Invested Capital – is a measure of the Company's efficiency at allocating the capital under its control to profitable investments. Management examines this ratio to assess how well it is using its money to generate returns.

SELECTED YEARLY INFORMATION & KEY PERFORMANCE MEASURES

As at and for the years ended September 30 *(in thousands of dollars unless otherwise noted)*	**2012** **IFRS**	2011 IFRS	**Change** **2012/2011**	2010 CDN GAAP
Growth				
Backlog *(in millions of dollars)*[1]	**17,647**	13,398	**4,249**	13,320
Bookings *(in millions of dollars)*	**5,180**	4,875	**305**	4,643
Book-to-bill ratio	**109%**	115%	**(6%)**	124%
Revenue	**4,772,454**	4,223,942	**548,512**	3,732,117
Year-over-year growth[2]	**13.0%**	15.8%	**(2.8%)**	(2.4%)
Constant currency growth[2]	**12.1%**	18.9%	**(6.8%)**	3.4%
Profitability				
Adjusted EBIT[3]	**546,729**	536,347	**10,382**	511,902
Adjusted EBIT margin	***11.5%***	*12.7%*	***(1.2%)***	*13.7%*
Net earnings	**131,529**	438,139	**(306,610)**	362,766
Net earnings margin	***2.8%***	*10.4%*	***(7.6%)***	*9.7%*
Basic EPS *(in dollars)*	**0.50**	1.65	**(1.15)**	1.27
Diluted EPS *(in dollars)*	**0.48**	1.59	**(1.11)**	1.24
Liquidity				
Cash provided by operating activities	**613,262**	570,002	**43,260**	552,367
As a percentage of revenue	***12.9%***	*13.5%*	***(0.6%)***	*14.8%*
Days sales outstanding[4]	**70**	53	**17**	47
Capital structure				
Net debt to capitalization ratio[5]	**46.6%**	27.4%	**19.2%**	30.6%
Net debt	**3,105,313**	918,968	**2,186,345**	1,010,816
Return on equity[6]	**5.0%**	19.6%	**(14.6%)**	16.4%
Return on invested capital[7]	**11.4%**	13.7%	**(2.3%)**	16.3%
Balance sheet				
Cash and cash equivalents, bank overdraft and short-term investments	**127,562**	70,839	**56,723**	141,020
Total assets	**10,453,442**	4,657,354	**5,796,088**	4,607,191
Long-term financial liabilities[8]	**4,124,342**	238,151	**3,886,191**	1,159,198
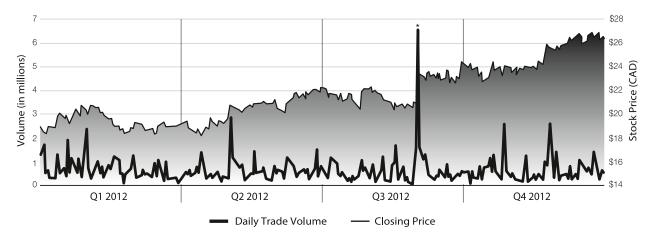
[1] Backlog includes new contract wins, extensions and renewals ("bookings"), partially offset by the backlog consumed during the year as a result of client work performed and adjustments related to the volume, cancellation and/or the impact of foreign currencies to our existing contracts. Backlog incorporates estimates from management that are subject to change. Fiscal 2012 backlog includes the backlog from Logica. The bookings and book-to-bill ratio include the results of Logica for the period from August 20, 2012.

[2] Constant currency growth is adjusted to remove the impact of foreign currency exchange rate fluctuations. Please refer to page 11 for details. The reader should note that both the year-over-year and constant currency growth rates for fiscal 2011 have not been restated as fiscal 2010 numbers under IFRS are not available.

[3] Adjusted EBIT is a non-GAAP measure for which we provide the reconciliation to its closest IFRS measure on page 14.

[4] Days sales outstanding are obtained by subtracting deferred revenue from trade accounts receivable and work in progress; the result is divided by the quarter's revenue over 90 days.

[5] The net debt to capitalization ratio represents the proportion of debt net of cash and cash equivalents, short-term and marketable long-term investments ("net debt") over the sum of shareholders' equity and debt. Net debt and capitalization are both net of the fair value of forward contracts.

[6] The return on equity ratio is calculated as the proportion of earnings for the last 12 months over the last four quarters' average equity.

[7] The return on invested capital ratio represents the proportion of the after-tax adjusted EBIT for the last 12 months, over the last four quarters' average invested capital, which is defined as the sum of equity and debt, less cash and cash equivalents, short-term and marketable long-term investments, net of the impact of the fair value of forward contracts.

[8] Long-term financial liabilities include the long-term portion of debt, long-term provisions, retirement benefits obligations and other long-term liabilities.

STOCK PERFORMANCE

CGI STOCK PRICES (TSX) FOR FISCAL 2012

* May 31, 2012 – Logica acquisition announcement date; 6.7 million shares were traded on the TSX.

Fiscal 2012 Trading Summary

CGI's shares are listed on the Toronto Stock Exchange ("TSX") (stock quote – GIB.A) and the New York Stock Exchange ("NYSE") (stock quote – GIB) and are included in the S&P/TSX Composite Index, the S&P/TSX Capped Information Technology and Midcap Indices, and the Dow Jones Sustainability Index.

TSX	(CDN$)	NYSE	(US$)
Open:	19.50	Open:	18.56
High:	27.00	High:	27.71
Low:	17.88	Low:	17.01
Close:	26.40	Close:	26.86
CDN average daily trading volumes:	1,013,111	U.S. average daily trading volumes:	186,414

Includes the average daily volumes of both the TSX and alternative trading systems.

Share Repurchase Program

On February 1, 2012, the Company's Board of Directors authorized and subsequently received the approval from the TSX for the renewal of the Normal Course Issuer Bid ("NCIB") to purchase up to 10% of the public float of the Company's Class A subordinate shares over the next 12 months. The NCIB enables CGI to purchase, on the open market, up to 22,064,163 Class A subordinate shares for cancellation. The Class A subordinate shares may be purchased under the NCIB commencing February 9, 2012 and ending on the earlier of February 8, 2013, or the date on which the Company has either acquired the maximum number of Class A subordinate shares allowable under the NCIB, or elects to terminate the NCIB.
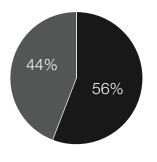
During fiscal 2012, the Company repurchased 5,368,000 of its Class A subordinate shares for $102.8 million at an average price of $19.16 under the previous and current programs. As at September 30, 2012, the Company may purchase up to an additional 21.0 million shares under the current NCIB.
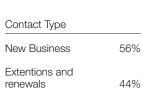
Capital Stock and Options Outstanding (as at November 23, 2012)
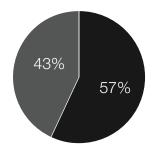
— 273,976,033 Class A subordinate shares

— 33,608,159 Class B shares

— 18,578,393 options to purchase Class A subordinate shares
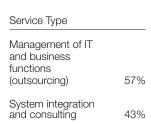
Financial Review
BOOKINGS AND BOOK-TO-BILL RATIO
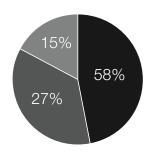
The Company achieved a book-to-bill ratio of 109% for the year, while bookings for the fiscal year were $5.2 billion. The breakdown of the $5.2 billion in bookings signed during the year is as follows:

Contact Type

New Business	56%
Extentions and renewals	44%

Service Type

Management of IT and business functions (outsourcing)	57%
System integration and consulting	43%

Client Geography

U.S.	58%
Canada	27%
Europe and rest of world	15%
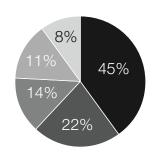
Vertical Markets

Government	45%
Financial services	22%
Health	14%
Manufacturing, retail & distribution	11%
Telecommunications & utilities	8%

Information regarding our bookings is a key indicator of the volume of our business over time. However, due to the timing and transition period associated with outsourcing contracts, the realization of revenue related to these bookings may fluctuate from period to period. The values initially booked may change over time due to their variable attributes, including demand-driven usage, modifications in the scope of work to be performed caused by changes in client requirements as well as termination clauses at the option of the client. As such, information regarding our bookings is not comparable to, nor should it be substituted for an analysis of our revenue; it is instead a key indicator of our future revenue used by the Company's management to measure growth.

FOREIGN EXCHANGE

The Company operates globally and is exposed to changes in foreign currency rates. We report all dollar amounts in Canadian dollars. Accordingly, we value assets, liabilities and transactions that are measured in foreign currencies using various exchange rates as prescribed by IFRS.

CLOSING FOREIGN EXCHANGE RATES
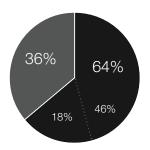
As at September 30,	2012	2011	Change
U.S. dollar	0.9837	1.0389	(5.3%)
Euro	1.2646	1.3971	(9.5%)
Indian rupee	0.0186	0.0212	(12.3%)
British pound	1.5869	1.6231	(2.2%)
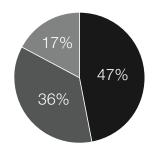
AVERAGE FOREIGN EXCHANGE RATES

For the years ended September 30,	2012	2011	Change
U.S. dollar	1.0074	0.9866	2.1%
Euro	1.3077	1.3759	(5.0%)
Indian rupee	0.0192	0.0219	(12.3%)
British pound	1.5878	1.5845	0.2%
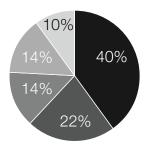
REVENUE DISTRIBUTION

The following charts provide additional information regarding our revenue mix for the year:

Service Type	
Management of IT and business functions (outsourcing)	64%
IT Services	46%
Business process services	18%
Systems integration and consulting	36%

Client Geography
Based on client's domicile

U.S.	47%
Canada	36%
Europe and rest of the world	17%

Vertical Markets	
Government	40%
Financial services	22%
Telecommunications & utilities	14%
Manufacturing, retail & distribution	14%
Health	10%

Client Concentration

IFRS guidance on Segment Disclosures defines a single customer as a group of entities that are known to the reporting enterprise to be under common control. The Company considers the federal government, the provincial or territorial government, the local government, or a foreign government each to be a single customer. Our work for the U.S. federal government including its various agencies represented 28.0% of our revenue for fiscal 2012 as compared to 29.2% in fiscal 2011.

Revenue variation and revenue by segment

Our operations are managed in four operating segments based on our delivery model incorporating domestic activities as well as services from utilizing our unique global delivery model. The GIS segment incorporates all services we provide to our clients globally for the management of their technology infrastructure. The other segments are based on our geographic delivery model: United States ("U.S."), Europe & Asia Pacific ("Europe"), and Canada which include their respective utilization of our delivery centres in India. For the year ended September 30, 2012, we added another segment – Logica, which incorporates the results of the acquired company as of August 20, 2012.

The following table provides a summary of our revenue variation, in total and by segment, separately showing the impacts of foreign currency exchange rate variations between the fiscal 2012 and 2011 periods. The fiscal 2011 revenue by segment was recorded reflecting the actual foreign exchange rates for that period. The foreign exchange impact is the difference between the current period's actual results and the current period's results converted with the prior year's foreign exchange rates.

For the years ended September 30, *(in thousands of dollars except for percentage)*	**2012**	2011	**Change**
Total CGI revenue	**4,772,454**	4,223,942	**13.0%**
Variation prior to foreign currency impact	**12.1%**		
Foreign currency impact	**0.9%**		
Variation over previous period	**13.0%**		
U.S.			
Revenue prior to foreign currency impact	**2,044,878**	1,896,002	**7.9%**
Foreign currency impact	**46,234**		
U.S. revenue	**2,091,112**	1,896,002	**10.3%**
Canada			
Revenue prior to foreign currency impact	**1,212,791**	1,287,056	**(5.8%)**
Foreign currency impact	**(176)**		
Canada revenue	**1,212,615**	1,287,056	**(5.8%)**
Global Infrastructure Services			
Revenue prior to foreign currency impact	**683,018**	816,663	**(16.4%)**
Foreign currency impact	**1,852**		
Global Infrastructure Services revenue	**684,870**	816,663	**(16.1%)**
Europe			
Revenue prior to foreign currency impact	**224,080**	224,221	**(0.1%)**
Foreign currency impact	**(8,098)**		
Europe revenue	**215,982**	224,221	**(3.7%)**
Logica			
Revenue prior to foreign currency impact	**567,875**	—	**N/A**
Foreign currency impact	**N/A**		
Logica revenue	**567,875**	—	**N/A**

We ended fiscal 2012 with revenue of $4,772.5 million, an increase of $548.5 million or 13.0% over fiscal 2011. On a constant currency basis, revenue increased by 12.1%, while foreign currency rate fluctuations favourably impacted our revenue by $39.8 million or 0.9%. On a constant currency basis, our MRD vertical grew the most at 32.3%, followed by our healthcare vertical at 24.2% and telecommunications & utilities at 21.5%.

Our U.S. segment posted the strongest growth year-over-year, representing 7.9% on a constant currency basis, coming primarily from the health and government vertical markets. This strong U.S. performance was partly offset by the expiry of an outsourcing contract in the financial services vertical within GIS, the non-renewal of a low margin contract in the government vertical market within the Canadian segment, and the sale of Conseillers en informatique d'affaires CIA Inc. ("CIA"), also within Canada. Excluding these items, our revenue would have grown by 18.2% or 17.2% on a constant currency basis.

Fiscal 2012 was notably marked by the acquisition of Logica completed on August 20, 2012. Separated into a standalone segment for reporting purposes, Logica's results subsequent to the acquisition date represented $567.9 million, representing 13.4% to the total Company growth.

U.S.

Revenue in our U.S. segment was $2,091.1 million in fiscal 2012, an increase of $195.1 million or 10.3% from $1,896.0 million in fiscal 2011. When removing the favourable foreign exchange impact of $46.2 million, revenue grew $148.9 million or 7.9% year-over-year. The increase in revenue was primarily due to additional work from new contracts as well as due to the extended scope of existing engagements in the government and health vertical markets.

Canada

Revenue in our Canada segment for fiscal 2012 was $1,212.6 million, a decrease of $74.4 million or 5.8% compared to fiscal 2011. The decrease was mainly due to the run off of client projects as they were delivered, primarily in the health and government vertical markets. We also encountered delays in contract awards and the ramping up of new projects. In addition, the actions taken effective the third quarter of last year with the expiration of a government contract not meeting our profitability standards and the disposal of our interest in Conseillers en informatique d'affaires CIA Inc. ("CIA"), as previously disclosed, also contributed to the year-over-year revenue decline. These last two items alone had a year-over-year impact of $44.4 million. Excluding these two items, the revenue would have decreased by 2.4% on a constant currency basis.

Global Infrastructure Services

Revenue in our Global Infrastructure Services segment was $684.9 million, a decrease of $131.8 million or 16.1% compared to fiscal 2011. Foreign currency fluctuations had an insignificant impact for the year. As disclosed earlier in fiscal 2012, the expiry of a large outsourcing contract in the financial services vertical market,

representing $140.9 million of the year-over-year variation, was the primary cause of the decrease. When excluding this impact, revenue would have increased by 1.1% on a constant currency basis.

Europe

Revenue in the Europe segment was $216.0 million for fiscal 2012. On a constant currency basis, revenue remained stable. Taking into account the effect of foreign currency, revenue decreased $8.2 million or 3.7% from the $224.2 million reported in prior year. Lower consulting and project work in the telecommunications and utilities vertical, primarily resulting from cautious investing behaviours in the European market, was offset by the ramp-up of work volumes with new and existing clients across all other vertical markets.

Logica

The acquisition of Logica occurred during the peak vacation period in Europe where a significant number of the members as well as their clients were on leave. As a significant portion of Logica's revenue is recognized on a time and material basis, the resulting revenue for this period was not reflective of business-as-usual.

Revenue generated by Logica operations for the six-week period subsequent to the acquisition date represented $567.9 million or 11.9% of total Company revenue for the year. During this period, Logica's revenue consisted of 14.1% from financial services, 29.4% from government, 2.8% from healthcare, 29.9% from MRD, and 23.8% from telecommunications & utilities.

OPERATING EXPENSES

For the years ended September 30, (in thousands of dollars except for percentage)	2012	% of Revenue	2011	% of Revenue	Change $	%
Costs of services, selling and administrative	4,226,859	88.6%	3,690,960	87.4%	535,899	14.5%
Foreign exchange gain	(1,134)	(0.0%)	(3,365)	(0.1%)	2,231	(66.3%)

Costs of Services, Selling and Administrative

When compared to fiscal 2011, costs of services, selling and administrative expenses increased by $535.9 million. The translation of the results of our foreign operations from their local currencies to the Canadian dollar unfavourably impacted costs by $35.6 million, partially offsetting the favourable translation impact of $39.8 million on revenue. The increase in cost of services is caused by the inclusion of Logica's results for the six-week period. Without considering the Logica results, cost of services as a percentage of revenue would have decreased year-over-year from 87.4% to 86.5%. This improvement mainly stemmed from the benefits of the Performance Improvement Plan kicked off in the fourth quarter of 2011.

As a percentage of revenue, costs of services, selling and administrative increased from 87.4% in 2011 to 88.6% in 2012. The increase in costs as a percentage of revenue was due to the inclusion of Logica's results for the six-week period. Our integration plan will implement CGI's business model into Logica which will help increase Logica's margins in the future periods.

Foreign Exchange Loss (Gain)

This line item includes the realized and unrealized foreign exchange impact on our earnings. The Company, in addition to its natural hedges, has a strategy in place to manage its exposure, to the extent possible, to exchange rate fluctuations through the effective use of derivatives.

ADJUSTED EBIT BY SEGMENT

For the years ended September 30
(in thousands of dollars except for percentage)

	2012	2011	**Change**
U.S.	**242,965**	167,734	**44.9%**
As a percentage of U.S. revenue	**11.6%**	*8.8%*	
Canada	**257,011**	249,103	**3.2%**
As a percentage of Canada revenue	**21.2%**	*19.4%*	
Global Infrastructure Services	**53,265**	110,880	**(52.0%)**
As a percentage of GIS revenue	**7.8%**	*13.6%*	
Europe	**12,333**	8,630	**42.9%**
As a percentage of Europe revenue	**5.7%**	*3.8%*	
Logica	**(18,845)**	—	**N/A**
As a percentage of Logica revenue	**(3.3%)**	*N/A*	
Adjusted EBIT	**546,729**	536,347	**1.9%**
Adjusted EBIT margin	**11.5%**	*12.7%*	

Adjusted EBIT for the year was $546.7 million, an increase of $10.4 million or 1.9% from the previous year. The margin decreased from 12.7% to 11.5%. Excluding the impact of the acquisition of Logica, the legacy operations of CGI would have generated an adjusted EBIT of $565.6 million, an increase of $29.2 million or 5.4% over the $536.3 million from fiscal 2011. The legacy CGI operations would have had a margin of 13.5% which improved over the previous year's adjusted EBIT margin of 12.7%.

U.S.
Adjusted EBIT in the U.S. segment was $243.0 million for the year ended September 30, 2012, an increase of $75.2 million or 44.9% year-over-year, while the margin also increased from 8.8% to 11.6%. These improved results came primarily from the revenue growth in the government and health vertical markets as outlined above, and to a lower extent, the benefit related to the expiry of a low margin contract acquired through the Stanley, Inc. ("Stanley") acquisition in Q4 2010. In addition, the benefits of our Performance Improvement Plan initiated in the fourth quarter of fiscal 2011 generated healthier margins over the past year. During fiscal 2011, approximately $16.9 million was incurred primarily for severance costs, impairments, leasehold improvements write-off and excess real estate whereas in fiscal 2012, $5.8 million was incurred for severances and cost alignment activities.

Canada
Adjusted EBIT in the Canada segment was $257.0 million for the fiscal year ended September 30, 2012, an increase of $7.9 million year-over-year, while the margin improved from 19.4% to 21.2%. The improved margin benefited from the cost reductions from our Performance Improvement Plan initiated in the fourth quarter of 2011 as well as the positive margin impacts related to the aforementioned expiration of a government contract and the disposal of our interest in CIA. Offsetting these improvements was the lower than average utilization level of our members in Canada as an above average

number of members were on the bench between assignments. This was due to the delays noted above in contract awards and the ramping up of new projects. Despite these pressures, the Canadian segment has continued to generate significant margins over the recent past with 21.2% in 2012, 19.4% in 2011, and 19.3% in 2010 clearly demonstrating the success of our strategy to target IP-based revenue streams, global delivery and managed services. Initiatives to further improve our margins in this segment continue as we incurred costs related to severances and real estate optimization in the amount of $12.2 million this year, down by $22.4 million when compared with last year.

Global Infrastructure Services
Adjusted EBIT in the GIS segment was $53.3 million for the year ended September 30, 2012, a decrease of $57.6 million year-over-year, while the margin also decreased from 13.6% to 7.8% over the same period. As previously disclosed, the expiration of an outsourcing contract in the third quarter of 2011 was the primary cause of the decrease in profitability for this segment. The loss of this contract created excess capacity within our infrastructure segment, causing the fixed cost structure to be absorbed by a smaller base of business. Actions were taken in the last half of fiscal 2011 to address the variable cost components related to the expiry of this contract. We continue to rationalize the business structure and have introduced some productivity initiatives within this segment to better align our costs. These initiatives started to generate savings in the fourth quarter but still had a net $1.9 million impact to the margin for the year. In addition, we incurred charges related to provisions for excess real estate, severance costs and leasehold improvements write-offs in the amount of $9.3 million for fiscal 2011, while charges related to severances and cost alignment activities in fiscal 2012 amounted to $9.0 million.

With our investment in cloud-based services and being awarded a place on the five-year blanket purchase agreement for infrastructure-as-a-service with the U.S. General Services Administration, GIS

has been building a significant backlog of cloud related work in partnership with our U.S. segment. At this point of time, much of the awarded work is focused on the development and readiness of the client's business applications and processes to migrate the services onto the cloud. Consequently, most of the revenue to date has been recognized by the U.S. segment while the GIS segment realized the cost of maintaining an infrastructure that is running under capacity. The negative impact on margin for this past year was $4.7 million or 0.7% of GIS revenue. As the clients' applications are ported to the new infrastructure this next year, the load will increase and the investment will contribute to the margin of the segment.

Europe

For the year ended September 30, 2012, our Europe segment adjusted EBIT was $12.3 million, an increase of $3.7 million year-over-year with the margin increasing from 3.8% to 5.7%. The increase was mainly due the Performance Improvement Plan initiated in the fourth quarter of 2011, where the related charges totalled approximately $3.7 million compared to $0.7 million incurred this year in relation to severances and cost alignment activities. Higher volumes of work across the financial services and government vertical markets also helped increase profitability, partly offset by less consulting project work in the telecommunications sector causing excess capacity in certain offices.

Logica

As noted above in the revenue section, the impact on revenue caused by the vacation period was also reflected in a reduction in the adjusted EBIT for Logica. In addition, redundancy costs and other synergies, as expected, could not be optimized quickly as we needed to work through the various work councils. The result was a lower level of revenue in the period with no accompanying reductions in the cost base. While a number of initiatives had been launched, including the initial discussions with various work councils, the shortness of the period, the vacation impact and the intangible amortization of $10.6 million resulted in an adjusted loss before interest and taxes for the six weeks of $18.8 million or a negative margin of 3.3%. Subsequent to the end of the year we started to make adjustments to the cost structure.

EARNINGS BEFORE INCOME TAXES

The following table provides, for the periods indicated, a reconciliation between our adjusted EBIT and earnings before income taxes, which is reported in accordance with IFRS.

For the years ended September 30, *(in thousands of dollars except for percentage)*	2012	% of Revenue	2011	% of Revenue
Adjusted EBIT	546,729	11.5%	536,347	12.7%
Minus the following items:				
Acquisition-related and integration costs	254,973	5.3%	3,675	0.1%
Finance costs	42,099	0.9%	19,395	0.5%
Finance income	(5,318)	(0.1%)	(3,552)	(0.1%)
Other income	(3,955)	(0.1%)	(7,647)	(0.2%)
Share of profit on joint venture	(3,996)	(0.1%)	(13,359)	(0.3%)
Earnings before income taxes	**262,926**	**5.5%**	537,835	12.7%

Excluding the acquisition of Logica, the earnings before income taxes would have been $555.2 million or 13.2% of revenue. This is comprised of the adjusted EBIT before Logica less financing costs in addition to the finance income, other income and share of profit on joint venture noted in the above table.

Acquisition-Related and Integration Costs

The $255.0 million incurred in the year pertains to various professional fees and costs associated with the acquisition of Logica on August 20, 2012. Included in the fiscal 2012 amount are acquisition-related costs of $36.4 million, integration costs of $109.7 million, make whole costs on Logica's debt and other financing costs of $108.9 million. The acquisition-related costs consist mainly of professional fees incurred for the acquisition and foreign exchange call options for an amount of $7.1 million in order to comply with the funds certain requirement under the UK City Code on Takeovers and Mergers. Integration costs driven by the restructuring of Logica's operations mainly include the costs related to the termination of certain employees identified as redundant. The $3.7 million incurred in fiscal 2011 were costs incurred at the beginning of the year to realize the integration and synergies of the Stanley acquisition concluded in August 2010.

Finance Costs

The year-over-year increase in finance costs was mainly related to the incremental interest expense from the debt used to finance the Logica acquisition.

Finance Income

Finance income includes interest and other investment income related to cash balances, investments, and tax assessments.

Other Income

During the year ended September 30, 2012, the Company sold its 49% interest in Innovapost Inc. to Canada Post Corporation ("CPC") for consideration of $26.0 million. A gain of $3.0 million was recognized in the first quarter of fiscal 2012.

NET EARNINGS AND EARNINGS PER SHARE

The following table sets out the information supporting the earnings per share calculations:

For the years ended September 30, *(in thousands of dollars unless otherwise indicated)*	**2012**	2011	Change
Earnings before income taxes	**262,926**	537,835	**(51.1%)**
Income tax expense	**131,397**	99,696	**31.8%**
Effective tax rate [1]	***50.0%***	*18.5%*	
Net earnings	**131,529**	438,139	**(70.0%)**
Margin	**2.8%**	*10.4%*	
Weighted average number of shares			
Class A subordinate shares and Class B shares *(basic)*	**263,431,660**	265,333,074	**(0.7%)**
Class A subordinate shares and Class B shares *(diluted)*	**273,644,002**	275,820,247	**(0.8%)**
Earnings per share *(in dollars)*			
Basic EPS	**0.50**	1.65	**(69.7%)**
Diluted EPS	**0.48**	1.59	**(69.8%)**

[1] Tax rate reflects the impact of certain acquisition-related and integration costs not being deductible for tax purposes.

Income Tax Expense

For fiscal 2012, income tax expense was $131.4 million, an increase of $31.7 million compared to $99.7 million in the prior year, while our effective income tax rate increased from 18.5% to 50.0%. The increase in income tax expense was due mainly to favourable tax adjustments recorded in fiscal 2011 that reduced our income taxes in the amount of $41.4 million, the impact of non-deductible transaction costs incurred and integration expenses on which no tax benefit was recognized with regards to the Logica acquisition in the amount of $52.7 million, and unrecognized tax benefits on losses from Logica's operations in the amount of $3.8 million.

Based on enacted rates and our current business mix, we expect our effective tax rate before integration costs and any significant adjustments to be in the range of 24% to 27% in subsequent periods.

Weighted Average Number of Shares

CGI's basic and diluted weighted average number of shares for fiscal 2012 decreased compared to the the prior year due to the repurchase of shares on the open market as part of the NCIB, partly offset by the issuance of Class A subordinate shares upon the exercise of stock options. During the year, 5.4 million shares were repurchased and 5.4 million options were exercised, while 46.7 million Class A subordinate shares were issued for the acquisition of Logica.

Net Earnings and Earnings per Share Excluding Certain Items

Below is a table showing the year-over-year comparison excluding the items related to the acquisition of Logica, as well as the 2011 favourable tax adjustments:

For the years ended September 30, (in thousands of dollars unless otherwise indicated)	2012	2011	Change
Earnings before income taxes	262,926	537,835	(51.1%)
Add back:			
Acquisition-related and integration costs[1]	254,973	—	
Logica loss[2]	18,314	—	
Interest rate impact[3]	19,010	—	
Earnings before income taxes prior to adjustments	**555,223**	537,835	3.2%
Margin	*13.2%*	*12.7%*	
Income tax expense	131,397	99,696	31.8%
Add back:			
Income tax recovery on the Logica loss	1,098	—	
Tax adjustments	—	41,415	
Tax deduction on acquisition-related and integration costs, and interest rate impact	21,396	—	
Income tax expense prior to adjustments	**153,891**	141,111	9.1%
Effective tax rate prior to adjustments	*27.7%*	*26.2%*	
Net earnings prior to adjustments	**401,332**	396,724	1.2%
Margin	*9.5%*	*9.4%*	
Weighted average number of shares[4]			
Class A subordinate shares and Class B shares *(basic)*	258,199,439	265,333,074	(2.7%)
Class A subordinate shares and Class B shares *(diluted)*	268,411,780	275,820,247	(2.7%)
Earnings per share *(in dollars)*[5]			
Basic EPS	1.55	1.50	3.3%
Diluted EPS	1.50	1.44	4.2%

[1] Fiscal 2012 costs relate to the acquisition and integration of Logica.

[2] Logica's results for the six-week period ended September 30, 2012, excluding acquisition-related and integration costs.

[3] The interest rate impact removes the incremental interest expense related to the debt drawn for the acquisition of Logica and the difference in the interest rate between our variable rate credit facility and the fixed interest rate on the long-term notes.

[4] The weighted average number of shares was re-calculated without the issuance of the 46.7 million Class A shares to the CDPQ.

[5] EPS amounts are prior to Logica results, fiscal 2011 favourable tax adjustments, interest rate impact, acquisition-related and integration costs, severances, excess real estate provisions, leasehold improvement write-offs and impairment charges.

Liquidity
CONSOLIDATED STATEMENTS OF CASH FLOWS

CGI's growth is financed through a combination of our cash flow from operations, borrowing under our existing credit facilities, the issuance of long-term debt, and the issuance of equity. One of our primary financial goals is to maintain an optimal level of liquidity through the active management of our assets and liabilities as well as our cash flows.

As at September 30, 2012, cash and cash equivalents were $113.1 million. The following table provides a summary of the generation and utilization of cash for the fiscal year ended September 30, 2012 and 2011.

For the years ended September 30, (in thousands of dollars)	2012	2011	Change
Cash provided by operating activities	613,262	570,002	43,260
Cash used in investing activities	(2,849,034)	(131,014)	(2,718,020)
Cash provided by (used in) financing activities	2,285,480	(491,608)	2,777,088
Effect of foreign exchange rate changes on cash and cash equivalents	2,722	4,764	(2,042)
Net increase (decrease) in cash and cash equivalents and bank overdraft	**52,430**	(47,856)	100,286

Cash Provided by Operating Activities

Cash provided by operating activities was $613.3 million in fiscal 2012, representing 12.9% of revenue. This is compared to $570.0 million or 13.5% of revenue in the prior year. The timing of our working capital inflows and outflows will always have an impact on the cash flow from operations. Excluding the payments in respect to the acquisition-related and integration costs, the cash provided by operating activities would have been $654.0 million, representing 13.7% of revenue. This increase was mainly due to the improvements in the DSO, lower tax payments, and cash coming from the other working capital items.

Cash Used in Investing Activities

Cash used in investing activities was $2,849.0 million in fiscal 2012, an increase of $2,718.0 million, compared to the $131.0 million used in fiscal 2011. The year-over-year increase was mainly due to the acquisition of Logica which accounted for $2,734.8 million of the increase.

Proceeds from the sale of investment in joint venture and businesses increased by $26.5 million year-over year due to the sale of our 49% interest in Innovapost Inc.

Short-term investments, comprised of term deposits, have original maturities over three months, but not more than one year, at the date of purchase. During the year ended September 30, 2012, the Company invested a net of $5.2 million compared to proceeds received of $2.0 million net in the same period last year on the redemption and purchase of short-term investments.

Cash used for the purchase of property, plant and equipment ("PP&E") amounted to $64.6 million during the year, a decrease of $0.4 million over the $65.0 million invested last year. During the year, our investment for the purchase of a data centre facility in the Greater Toronto Area was offset by lower investments in leasehold improvements, furniture and office equipment, and computer equipment.

Investments in intangible assets amounted to $43.7 million, representing an increase of $16.8 million from last year. The increase was due to the adding and updating of functionality in our business solutions. We also invested in new solutions during the year.

Investments in contract costs amounted to $25.3 million in fiscal 2012, compared to $27.9 million in fiscal 2011 reflecting a $2.6 million

decrease. The decrease was due to less contract costs capitalized as contracts migrated out of their transition phase.

The Company purchased $1.0 million of long-term investments in the current year, whereas $14.2 million was invested in the prior year.

Cash Provided by (Used in) Financing Activities

During fiscal 2012, $2,285.5 million was provided by the Company's financing activities, representing an increase of $2,777.1 million when compared to the $491.6 million consumed in fiscal 2011. The increase is due to the term loan and shares issued for the acquisition of Logica.

In fiscal 2012, we made net repayments of $158.6 million on our credit facilities and another $954.2 million on our outstanding long-term debt, of which $891.4 million was related to the debt assumed from the Logica acquisition. In fiscal 2011, we made net repayments totalling $104.3 million on our credit facilities and $129.7 million on our long-term debt.

During the year, we also used $102.8 million to repurchase 5.4 million CGI shares on the open market under the previous and current NCIB, while in fiscal 2011 the Company spent $305.0 million to purchase 16.4 million CGI shares under the NCIB then in effect. The Company's cash management strategy is to maintain the flexibility to pay down debt and/or repurchase shares depending on economic conditions. In addition, we received $1,047.2 million in proceeds from the issuance of shares to fund the acquisition and the exercise of stock options in the year, compared to $52.1 million in the previous year.

At the beginning of fiscal 2011, $2.6 million was used to purchase CGI shares under the Performance Share Unit ("PSU") Plan which is part of the compensation package of various executive officers. At the beginning of fiscal 2012, we sold the shares that were not paid out in the compensation packages and received $1.2 million. We also used $14.3 million to purchase the CGI shares for the fiscal 2012 PSU Plan.

Effect of Foreign Exchange Rate Changes on Cash and Cash Equivalents

For 2012 and 2011, the foreign exchange effect was negligible. These amounts had no effect on net earnings as they were recorded in other comprehensive income.

CAPITAL RESOURCES

(in thousands of dollars)	Total commitment	Available at September 30, 2012	Outstanding at September 30, 2012
	$	$	$
Cash and cash equivalents	—	113,103	—
Short-term investments	—	14,459	—
Long-term marketable investments	—	15,533	—
Unsecured committed revolving facilities[1]	1,500,000	786,089	713,911
Total	**1,500,000**	929,184	713,911

[1]   Consists of drawn portion of $692.0 million and Letters of Credit for $22.0 million outstanding on September 30, 2012.

Our cash position and bank lines are sufficient to support our growth strategy. At September 30, 2012, cash and cash equivalents, short-term and long-term marketable investments were $143.1 million.

Cash equivalents typically include money market funds and term deposits as well as bankers' acceptances and bearer deposit notes issued by major banks, all with initial maturities of 90 days or less.

Short-term investments include fixed deposits, term deposits, municipal, provincial and government bills with initial maturities ranging from 91 days to 1 year.

Long-term marketable investments include corporate and government bonds with maturities ranging from one to five years, rated AA or higher.

The amount available under our credit facilities was $786.1 million. The long-term debt agreements contain covenants which require us to maintain certain financial ratios. At September 30, 2012, CGI was in compliance with these covenants.

Total debt increased by $2,242.7 million to $3,248.4 million at September 30, 2012, compared to $1,005.7 million at September 30, 2011. The variation was mainly due to the term loan for $1,933.9 million for the Logica acquisition, proceeds of US$475.0 million, and the net reimbursement of $158.6 million under the credit facility. Also, during the year, we reimbursed the last tranche of US$20.0 million of the 2004 private debt placement financing.

Additional funding for the acquisition came from the issuance of 46.7 million Class A shares in CGI for C$1.0 billion from the CDPQ.

The Company expects that cash generated from the combined operations will permit a significant deleveraging over the next three years and that funds generated will be adequate to meet our liquidity needs in the foreseeable future while maintaining adequate liquidity.

CONTRACTUAL OBLIGATIONS

We are committed under the terms of contractual obligations with various expiration dates, primarily for the rental of premises, computer equipment used in outsourcing contracts and long-term service agreements. For the year ended September 30, 2012, the Company increased its commitments by $3,311.4 million year-over year due mainly to the debt used to fund the Logica acquisition. Commitments also increased due to the inclusion of Logica's commitments.

Commitment type (in thousands of dollars)	Total	Less than 1 year	2nd and 3rd years	4th and 5th years	After 5 years
Long-term debt	3,178,276	18,942	1,008,869	1,766,404	384,061
Capital lease obligations	85,124	33,405	42,666	8,767	286
Operating leases					
Rental of office space[1]	1,703,857	305,679	521,565	403,610	473,003
Computer equipment	114,584	60,735	47,673	6,176	—
Automobiles	113,895	69,284	41,530	3,066	15
Long-term service agreements and other	35,457	17,597	13,120	4,740	—
Total contractual obligations	5,231,193	505,642	1,675,423	2,192,763	857,365

[1]   Included in these obligations are $81.5 million of office space leases from past acquisitions.

FINANCIAL INSTRUMENTS AND HEDGING TRANSACTIONS

We use various financial instruments to manage its exposure to fluctuations of foreign currency exchange rates. We do not hold or use any derivative instruments for trading purposes. Foreign exchange translation gains or losses on the net investments and the effective portions of gains or losses on instruments hedging the net investments are recorded in the consolidated statement of comprehensive income. Any realized or unrealized gains or losses on instruments covering the U.S. denominated debt are also recognized in the consolidated statement of comprehensive income.

We have the following outstanding hedging instruments:

Hedges on net investments in foreign operations

— US$ 818.0 million debt designated as the hedging instrument of our net investment in U.S. operations;

— €45.0 million debt designated as the hedging instrument of our net investment in European operations;

— $1,153.7 million cross-currency swaps to hedge our net investment in European operations.

Cash flow hedges on future revenue

— US$32.1 million foreign currency forward contracts to hedge the variability in the expected foreign currency exchange rate between the U.S. dollar and the Canadian dollar;

— US$51.9 million foreign currency forward contracts to hedge the variability in the expected foreign currency exchange rate between the U.S. dollar and the Indian rupee;

— $53.1 million foreign currency forward contracts to hedge the variability in the expected foreign currency exchange rate between the Canadian dollar and the Indian rupee.

Cash flow hedges on unsecured committed term loan credit facility

— $1,234.4 million interest rate swaps floating-to-fixed.

Fair value hedges on Senior U.S. unsecured notes

— US$125.0 million interest rate swaps fixed-to-floating.

Derivatives not designated as hedges

— £37.3 million foreign currency forward contracts to hedge the net exposure of some assets and liabilities not denominated in the functional currencies.

The effective portion of the change in the fair value of the derivative instruments is recognized in other comprehensive income and the ineffective portion, if any, in net earnings. During the year ended September 30, 2012, our hedging instruments were effective.

We expect that approximately $2.1 million of the accumulated net unrealized losses on all derivative financial instruments designated as cash flow hedges at September 30, 2012 will be reclassified in net earnings in the next 12 months.

SELECTED MEASURES OF LIQUIDITY AND CAPITAL RESOURCES

As at September 30,	2012	2011
Net debt to capitalization ratio	46.6%	27.4%
Net debt (in thousands of dollars)	3,105,313	918,968
Return on equity	5.0%	19.6%
Return on invested capital	11.4%	13.7%
Days sales outstanding	70	53

We use the net debt to capitalization ratio as an indication of our financial leverage in order to pursue any large outsourcing contracts, expand global delivery centres, or make acquisitions. On August 20, 2012, we acquired Logica using a combination of debt and stock, causing our net debt to capitalization ratio to increase.

Return on equity is a measure of the return we are generating for our shareholders. ROE decreased from 19.6% at the end of fiscal 2011 to 5.0% at the end of fiscal 2012. The decrease is mainly due to the impact of the acquisition-related and integration costs. The decrease in the ratio is also attributable to the higher amount of equity which resulted from the issuance of $1.0 billion worth of Class A shares, as well as a higher amount of favourable tax adjustments recorded in the prior year.

ROIC is a measure of the Company's efficiency in allocating the capital under our control to profitable investments. The return on invested capital was 11.4% as at September 30, 2012, a decrease compared to 13.7% a year ago. The decrease in this ratio was mainly a result of the issuance of 46.7 million of Class A shares for proceeds of $1.0 billion and the term loan of $1,933.9 million.

DSO increased to 70 days from 53 days last year. In calculating the DSO, we subtract the deferred revenue balance from trade accounts receivable and work in progress; for that reason, the timing of payments received from outsourcing clients in advance of the work to be performed and the timing of payments related to project milestones can affect the DSO fluctuations. The increase in the number of days is due to the inclusion of the full value of Logica's trade receivables, work in progress, and deferred revenue in the calculation while only the six weeks of revenue from the acquisition is included. Without considering the impact of Logica, DSO would have improved to 47 days at the end of September 30, 2012. We remain committed to manage our DSO within our 45-day target.

OFF-BALANCE SHEET FINANCING AND GUARANTEES

We do not engage in the practice of off-balance sheet financing, except for the use of certain operating leases for office space,

computer equipment and vehicles. In accordance with IFRS, neither the lease liability nor the underlying asset is carried on the balance sheet as the terms of the leases do not meet the criteria for capitalization. From time to time, we also enter into agreements to provide financial or performance assurances to third parties on the sale of assets, business divestitures, guarantees and U.S. Government contracts.

In connection with sales of assets and business divestitures, we may be required to pay counterparties for costs and losses incurred as the result of breaches in representations and warranties, intellectual property right infringement and litigation against counterparties. While some of the agreements specify a maximum potential exposure totalling approximately $6.5 million, others do not specify a maximum amount or limited period. It is impossible to reasonably estimate the maximum amount that may have to be paid under such guarantees. The amounts are dependent upon the outcome of future contingent events, the nature and likelihood of which cannot be determined at this time. The Company does not expect to incur any potential payment in connection with these guarantees that could have a materially adverse effect on its consolidated financial statements.

We are also engaged to provide services under contracts with the U.S. Government. The contracts are subject to extensive legal and regulatory requirements and, from time to time, agencies of the U.S. Government investigate whether our operations are being conducted in accordance with these requirements. Generally, the Government has the right to change the scope of, or terminate, these projects at its convenience. The termination or a reduction in the scope of a major government project could have a material adverse effect on our results of operations and financial condition.

In the normal course of business, we may provide certain clients, principally governmental entities, with bid and performance bonds. In general, we would only be liable for the amount of the bid bonds if we refuse to perform the project once the bid is awarded. We would also be liable for the performance bonds in the event of default in the performance of our obligations. As at September 30, 2012, we had committed for a total of $49.0 million for these bonds. To the best of our knowledge, we complied with our performance obligations

under all service contracts for which there was a performance or bid bond, and the ultimate liability, if any, incurred in connection with these guarantees would not have a material adverse effect on our consolidated results of operations or financial condition.

In addition, we provided a guarantee of $5.9 million on the residual value of leased equipment, accounted for as an operating lease, at the expiration of the lease term.

CAPABILITY TO DELIVER RESULTS

Sufficient capital resources and liquidity are required for supporting ongoing business operations and to execute our build and buy growth strategy. The Company has sufficient capital resources coming from the cash generated from operations, credit facilities, long-term debt agreements and invested capital from shareholders. Our principal uses of cash are for procuring new large outsourcing and managed services contracts; investing in our business solutions; pursuing accretive acquisitions; buying back CGI shares and paying down debt. Funds were also used to expand our global delivery network as more and more of our clients demand lower cost alternatives. In terms of financing, we are well positioned to continue executing our four-pillar growth strategy in fiscal 2013.

Strong and experienced leadership is essential to successfully implement our corporate strategy. CGI has a strong leadership team with members who are highly knowledgeable and have gained a significant amount of experience within the IT industry via various career paths and leadership roles. CGI fosters leadership development to ensure a continuous flow of knowledge and strength is maintained throughout the organization. As part of our succession planning in key positions, we established the Leadership Institute,

our own corporate university, to develop leadership, technical and managerial skills inspired by CGI's roots and traditions.

As a company built on human capital, our professionals and their knowledge are critical to delivering quality service to our clients. Our human resources program provides competitive compensation and benefits, a favourable working environment, and our training and career development programs combine to allow us to attract and retain the best talent. Employee satisfaction is monitored regularly through a company-wide survey and issues are addressed immediately. Prior to the Logica acquisition, approximately 85% of our employees, whom we refer to as members, are also owners of CGI through our Share Purchase Plan. This, along with the Profit Participation Program, allows members to share in the success of the Company and aligns member objectives with our strategic goals.

In addition to our capital resources and the talent of our human capital, CGI has established a Management Foundation encompassing governance policies, sophisticated management frameworks and an organizational model for its business unit and corporate processes. This foundation, along with our appropriate internal systems, helps in providing for a consistent high standard of quality service to our clients. CGI's operations maintain appropriate certifications in accordance with service requirements such as the ISO and Capability Maturity Model Integration quality programs.

Fourth Quarter Results

In the fourth quarter of fiscal 2012, our priority was to successfully close the acquisition of Logica and begin executing the integration plan. In addition, the Company remained focused on its business development activities to increase our sales funnel and backlog.

Average foreign exchange rates

For the three months ended September 30,	2012	2011	Change
U.S. dollar	0.9948	0.9802	1.5%
Euro	1.2452	1.3836	(10.0%)
Indian rupee	0.0181	0.0214	(15.4%)
British pound	1.5727	1.5773	(0.3%)
Australian dollar	1.0337	1.0279	0.6%
Swedish krona	0.1476	0.1513	(2.4%)

REVENUE VARIATION AND REVENUE BY SEGMENT

The following table provides a summary of our revenue growth, in total and by segment, separately showing the impacts of foreign currency variations between the fourth quarter of 2012 and the fourth quarter of 2011. The Q4 2011 revenue by segment is recorded reflecting the actual foreign exchange rates for that year. The foreign exchange impact is the difference between the current period's actual results and the current period's results converted with prior year's foreign exchange rates.

For the three months ended September 30, *(in thousands of dollars except for percentage)*	**2012**	2011	**Change**
Total CGI revenue	**1,609,661**	1,005,667	**60.1%**
Variation prior to foreign currency impact	**59.6%**		
Foreign currency impact	**0.5%**		
Variation over previous period	**60.1%**		
U.S.			
Revenue prior to foreign currency impact	**537,087**	476,650	**12.7%**
Foreign currency impact	**9,508**		
U.S. revenue	**546,595**	476,650	**14.7%**
Canada			
Revenue prior to foreign currency impact	**279,748**	300,810	**(7.0%)**
Foreign currency impact	**(525)**		
Canada revenue	**279,223**	300,810	**(7.2%)**
Global Infrastructure Services			
Revenue prior to foreign currency impact	**164,492**	173,245	**(5.1%)**
Foreign currency impact	**255**		
Global Infrastructure Services revenue	**164,747**	173,245	**(4.9%)**
Europe			
Revenue prior to foreign currency impact	**54,932**	54,962	**(0.1%)**
Foreign currency impact	**(3,711)**		
Europe revenue	**51,221**	54,962	**(6.8%)**
Logica			
Revenue prior to foreign currency impact	**567,875**	—	**N/A**
Foreign currency impact	**N/A**		
Logica revenue	**567,875**	—	**N/A**

Revenue for the fourth quarter of fiscal 2012 was $1,609.7 million, an increase of $604.0 million or 60.1% year over year. Foreign currency rate fluctuations favourably impacted revenue in the amount of $5.5 million, resulting in a constant currency growth rate of 59.6% year-over-year. This significant increase was attributable to the acquisition of Logica concluded on August 20, 2012, contributing $567.9 million

in revenue. As well, our U.S. segment posted the strongest revenue performance, growing 12.7% on a constant currency basis.

Excluding the revenue from Logica, the legacy CGI operations recognized revenue of $1,041.8 million, an increase of $36.1 million or 3.6% from the fourth quarter of fiscal 2011. Overall, this growth came primarily from the government and health vertical markets.

U.S.

Revenue in our U.S. segment for the three months ended September 30, 2012 was $546.6 million, an increase of $69.9 million or 14.7%. On a constant currency basis, revenue increased by $60.4 million or 12.7% year-over-year. The slight strengthening of the U.S. dollar caused a favourable foreign exchange impact of $9.5 million. The increase came primarily from strong performance across the healthcare and financial services vertical markets, each posting constant currency growth of 37.9% and 18.3%, respectively, while the government vertical followed with a growth of 8.7%, as existing project work with various government agencies continued to expand.

Canada

Revenue in our Canada segment was $279.2 million in the fourth quarter of 2012, a decrease of $21.6 million or 7.2% year-over-year. This decrease was mainly a result of engagements being delivered in the healthcare, government and telecommunications and utilities vertical markets while there were some delays in contract awards and the ramping up of new projects. This decrease was partially offset by new project start-ups with our existing financial services clients.

Global Infrastructure Services

Revenue in our GIS segment was $164.7 million in the fourth quarter of 2012, a decrease of $8.5 million or 4.9% year-over-year. The revenue change was primarily the result of the expiration of a document management services contract in the financial services vertical. This was partially offset by new contracts and expanded scope on existing projects in the manufacturing, retail & distribution vertical market.

Europe

For the three months ended September 30, 2012, revenue in our Europe segment was flat year-over-year on a constant currency basis, while unfavourable foreign exchange variation impacted the segment by $3.7 million. While the slowdown of project work in the telecommunications and utilities vertical market put downward pressure on our revenue in this segment, growth in the financial services and MRD verticals offset this impact.

Logica

The acquisition of Logica occurred during the peak vacation period in Europe where a significant number of the members as well as their clients were on leave. As a significant portion of Logica's revenue is recognized on a time and material basis, the resulting revenue for this period was not reflective of business-as-usual.

Revenue generated by Logica operations for the six-week period subsequent to the acquisition date represented $567.9 million or 35.3% of total Company revenue for the quarter. During this period, Logica's revenue consisted of 14.1% from financial services, 29.4% from government, 2.8% from healthcare, 29.9% from MRD, and 23.8% from telecommunications & utilities.

ADJUSTED EBIT BY SEGMENT

For the three months ended September 30, *(in thousands of dollars except for percentage)*	**2012**	2011	**Change**
U.S.	**67,244**	31,705	**112.1%**
As a percentage of U.S. revenue	***12.3%***	*6.7%*	
Canada	**52,011**	42,857	**21.4%**
As a percentage of Canada revenue	***18.6%***	*14.2%*	
Global Infrastructure Services	**11,197**	10,973	**2.0%**
As a percentage of GIS revenue	***6.8%***	*6.3%*	
Europe	**2,533**	3,062	**(17.3%)**
As a percentage of Europe revenue	***4.9%***	*5.6%*	
Logica	**(18,845)**	—	**N/A**
As a percentage of Logica revenue	***(3.3%)***	N/A	
Adjusted EBIT	**114,140**	88,597	**28.8%**
Adjusted EBIT margin	***7.1%***	*8.8%*	

Adjusted EBIT for the fourth quarter of fiscal 2012 was $114.1 million, an increase of $25.5 million or 28.8% from the same quarter in the previous year. The margin decreased from 8.8% to 7.1%. Excluding the impact of the acquisition of Logica, the legacy operations of CGI would have generated an adjusted EBIT of $133.0 million, an increase of $44.4 million or 50.1% over the $88.6 million from Q4 2011. The legacy CGI operations would have had a margin of 12.8% which improved over Q4 2011's adjusted EBIT margin of 8.8%.

U.S.

U.S. adjusted EBIT was $67.2 million for the three months ended September 30, 2012, an increase of $35.5 million or 112.1% over the prior year, while margins have almost doubled, increasing from 6.7% to 12.3%. The improvement in profitability was due to the growth from our healthcare and government vertical markets as described in the revenue section, and more license sales compared to Q4 2011. Finally, charges taken in Q4 2011 as part of our Performance Improvement Plan helped address the cost structure of our U.S. business units.

Canada

Canada adjusted EBIT was $52.0 million in the fourth quarter of 2012, an increase of $9.2 million or 21.4%. As a percentage of revenue, the margin increased from 14.2% to 18.6%. The increase was mainly due to the Performance Improvement Plan in Q4 2011. Offsetting these improvements was the lower than average utilization level of our members in Canada as an above average number of members were on the bench between assignments. This was due to the delays from contract awards and the ramping up of new projects noted above in the revenue section.

Global Infrastructure Services

Adjusted EBIT in GIS was $11.2 million for the three months ended September 30, 2012, a slight increase of $0.2 million from the same period in the prior year. As a percentage of revenue, the margin increased from 6.3% to 6.8%. The overall profitability of this segment remained stable year-over-year as both periods were impacted by the expiration of a document management services contract in the financial services vertical market, creating excess in capacity.

Europe

Europe adjusted EBIT was $2.5 million for the fourth quarter of 2012, a slight decrease of $0.5 million compared to the fourth quarter in the prior year, while as a percentage of revenue, the margin decreased from 5.6% to 4.9%. The segment adjusted EBIT grew from the revenue growth in the financial services and MRD verticals. This was offset by a non-recurring bad debt expense of $1.4 million from an insolvent client, as well as the resulting excess in capacity as members were placed on the bench.

Logica

As noted above in the revenue section, the impact on revenue caused by the vacation period was also reflected in a reduction in the adjusted EBIT for Logica. In addition, redundancy costs and other synergies, as expected, could not be optimized quickly as we needed to work through the various work councils. The result was a lower level of revenue in the period with no accompanying reductions in the cost base. While a number of initiatives had been launched, including the initial discussions with various work councils, the shortness of the period, the vacation impact and the intangible amortization of $10.6 million resulted in an adjusted loss before interest and taxes for the six weeks of $18.8 million or a negative margin of 3.3%. Subsequent to the end of the year we started to make adjustments to the cost structure.

NET EARNINGS AND EARNINGS PER SHARE

The following table sets out the information supporting the earnings per share calculations

For the three months ended September 30, (in thousands of dollars unless otherwise indicated)	2012	2011	Change
Adjusted EBIT	114,140	88,597	28.8%
Acquisition-related and integration costs	248,320	—	N/A
Finance costs	17,901	4,132	333.2%
Finance income	(3,710)	(626)	492.7%
Other expenses (income)	1,691	(1,602)	(205.6%)
Share of profit on joint venture	—	(4,187)	(100.0%)
(Loss) Earnings before income taxes	(150,062)	90,880	(265.1%)
Income tax expense	17,906	21,344	(16.1%)
Effective tax rate[1]	*(11.9%)*	*23.5%*	
Net (loss) earnings	(167,968)	69,536	(341.6%)
Margin	*(10.4%)*	*6.9%*	
Weighted average number of shares			
Class A subordinate shares and Class B shares *(basic)*	279,284,376	261,897,680	6.6%
Class A subordinate shares and Class B shares (diluted)	289,815,528	271,838,839	6.6%
Earnings per share *(in dollars)*			
Basic EPS	(0.60)	0.27	(322.2%)
Diluted EPS	(0.58)	0.26	(323.1%)

[1] Tax rate reflects the impact of certain acquisition-related and integration costs not being deductible for tax purposes.

The net loss was $168.0 million for the quarter ended September 30, 2012 compared to net earnings of $69.5 million in the same period of the prior year. The loss is due to the acquisition-related and integration costs.

The increase in weighted average number of shares is due to the issuance of 46.7 million Class A shares. During the current quarter, no shares were repurchased and 2.0 million options were exercised.

Below is a table showing the year-over-year comparison excluding the items related to the acquisition of Logica as well as the provisions on excess real estate, the related leasehold improvements write-off, the severance costs and the impairment charges:

For the three months ended September 30 *(in thousands of dollars unless otherwise indicated)*	2012	2011	Change
(Loss) Earnings before income taxes	(150,062)	90,880	(265.1%)
Add back:			
Acquisition-related and integration costs[1]	248,320	—	
Logica loss[2]	18,314	—	
Interest rate impact[3]	10,996	—	
Severances, excess real estate provisions, leasehold improvement write-offs and impairment charge[4]	13,421	50,753	
Earnings before income taxes prior to adjustments	**140,989**	141,633	(0.5%)
Margin	*13.5%*	*14.1%*	
Income tax expense	17,906	21,344	(16.1%)
Add back:			
Income tax recovery on the Logica loss	1,098	—	
Tax deduction on acquisition-related and integration costs, interest rate impact, severances, excess real estate provisions, leasehold improvement write-offs and impairment charget	22,023	15,328	
Income tax expense prior to adjustments	**41,027**	36,672	11.9%
Effective tax rate prior to adjustments[5]	*29.1%*	*25.9%*	
Net earnings prior to adjustments	**99,962**	104,961	(4.8%)
Margin	*9.6%*	*10.4%*	
Weighted average number of shares[6]			
Class A subordinate shares and Class B shares *(basic)*	258,469,235	261,897,680	(1.3%)
Class A subordinate shares and Class B shares *(diluted)*	269,000,386	271,838,839	(1.0%)
Earnings per share *(in dollars)*[7]			
Basic EPS	0.39	0.40	(2.5%)
Diluted EPS	0.37	0.39	(5.1%)

[1] Costs related to the acquisition and integration of Logica.

[2] Logica's results for the six-week period ended September 30, 2012, excluding acquisition-related and integration costs.

[3] The interest rate impact removes the incremental interest expense related to the debt drawn for the acquisition of Logica and the difference in the interest rate between our variable rate credit facility and the fixed interest rate on the long-term notes.

[4] In Q4 2011, $50.8 million ($45.4 million under Canadian GAAP) of provisions on excess real estate, related leasehold improvements write-off, severance costs, and impairment charges were added back to earnings in order to calculate a more meaningful net earnings and margin number for the operations. Similar types of charges were added back to the fourth quarter of fiscal 2012 for comparative purposes.

[5] Effective tax rate for the quarter is higher than the previous year due to higher profitability in jurisdictions with higher statutory tax rates.

[6] The weighted average number of shares were re-calculated without the issuance of the 46.7 million Class A shares to the CDPQ.

[7] EPS amounts are attributable to shareholders of CGI and prior to acquisition-related and integration costs, severances, excess real estate provisions, leasehold improvement write-offs and impairment charges.

Eight Quarter Summary

As at and for the three months ended (in thousands of dollars unless otherwise noted)	Sept. 30, 2012	June 30, 2012	Mar. 31, 2012	Dec. 31, 2011	Sept. 30, 2011	June 30, 2011	Mar. 31, 2011	Dec. 31, 2010
Growth								
Backlog (in millions of dollars)	**17,647**	13,610	13,118	13,558	13,398	12,587	12,459	12,980
Bookings (in millions of dollars)	**1,523**	1,478	787	1,392	1,472	1,442	771	1,191
Book-to-bill ratio	**95%**	139%	74%	135%	146%	142%	69%	109%
Revenue	**1,609,661**	1,064,863	1,065,791	1,032,139	1,005,667	1,012,845	1,111,715	1,093,715
Year-over-year growth[1]	**60.1%**	5.1%	(4.1%)	(5.6%)	2.4%	15.1%	24.5%	22.7%
Constant currency growth[1]	**59.6%**	3.0%	(4.8%)	(6.1%)	5.3%	18.0%	27.9%	25.9%
Profitability								
Adjusted EBIT	**114,140**	136,253	156,390	139,946	88,597	139,189	153,745	154,815
Adjusted EBIT margin	***7.1%***	*12.8%*	*14.7%*	*13.6%*	*8.8%*	*13.7%*	*13.8%*	*14.2%*
Net earnings	**(167,968)**	87,228	105,726	106,543	69,536	123,203	118,743	126,657
Net earnings margin	***(10.4%)***	*8.2%*	*9.9%*	*10.3%*	*6.9%*	*12.2%*	*10.7%*	*11.6%*
Basic EPS (in dollars)	**(0.60)**	0.34	0.41	0.41	0.27	0.47	0.45	0.47
Diluted EPS (in dollars)	**(0.58)**	0.33	0.40	0.40	0.26	0.45	0.43	0.45
Liquidity								
Cash provided by operating activities	**109,346**	250,985	104,217	148,714	186,611	93,152	192,390	97,849
As a percentage of revenue	***6.8%***	*23.6%*	*9.8%*	*14.4%*	*18.6%*	*9.2%*	*17.3%*	*8.9%*
Days sales outstanding	**70**	49	53	51	53	52	43	42
Capital structure								
Net debt to capitalization ratio	**46.6%**	19.4%	24.0%	26.6%	27.4%	28.7%	29.2%	31.1%
Net debt	**3,105,313**	633,354	795,339	879,523	918,968	928,979	940,567	1,017,666
Return on equity	**5.0%**	15.4%	17.4%	18.4%	19.6%	20.5%	19.0%	17.2%
Return on invested capital	**11.4%**	11.8%	12.5%	12.8%	13.7%	15.7%	15.9%	15.7%
Balance sheet								
Cash & cash equivalents and short-term investments	**127,562**	77,418	70,213	63,908	70,839	12,578	66,428	75,278
Total assets	**10,453,442**	4,550,384	4,550,394	4,578,816	4,657,354	4,408,387	4,538,875	4,511,600
Long-term financial liabilities	**4,124,342**	854,933	969,761	1,066,333	238,151	1,032,092	1,101,737	1,088,837

[1] Reflects the acquisition of Logica on August 20, 2012.

There are factors causing quarterly variances which may not be reflective of the Company's future performance. First, there is seasonality in SI&C work, and the quarterly performance of these operations is impacted by occurrences such as vacations and the number of statutory holidays in any given quarter. Outsourcing contracts including BPS contracts are affected to a lesser extent by seasonality. Second, the workflow from some clients may fluctuate from quarter to quarter based on their business cycle and the seasonality of their own operations. Third, the savings that we generate for a client on a given outsourcing contract may temporarily reduce our revenue stream from this client, as these savings may not be immediately offset by additional work performed for this client.

In general, cash flow from operating activities could vary significantly from quarter to quarter depending on the timing of monthly payments received from large clients, cash requirements associated with large acquisitions, outsourcing contracts and projects, the timing of the reimbursements for various tax credits as well as profit sharing payments to members and the timing of restructuring cost payments.

Foreign exchange fluctuations can also contribute to quarterly variances as our percentage of operations in foreign countries evolves. The effect from these variances is primarily on our revenue and to a much less extent, on our net margin as we benefit from natural hedges.

Changes in Accounting Policies

The audited consolidated financial statements for the years ended September 30, 2012 and 2011 include all adjustments that CGI's management considers necessary for the fair presentation of its financial position, results of operations, and cash flows.

ADOPTION OF IFRS

In February 2008, the Canadian Accounting Standards Board confirmed that the use of IFRS would be required for Canadian publicly accountable enterprises for fiscal years beginning on or after January 1, 2011. Accordingly, the audited consolidated financial statements for the year ended September 30, 2011 have been adjusted as per the guidance provided in IFRS 1, "First-Time Adoption of International Financial Reporting Standards" ("IFRS 1"). The reconciliations from Canadian GAAP to IFRS, a discussion of the adjustments, and other initial elections upon IFRS adoption can be found in Note 33 of the audited consolidated financial statements for the year ended September 30, 2012.

FUTURE ACCOUNTING STANDARD CHANGES

The following standards have been issued but are not yet effective:

— IFRS 9, "Financial Instruments", covers the classification and measurement of financial assets and financial liabilities.

— IFRS 10, "Consolidated Financial Statements", builds on existing principles by identifying the concept of control as the determining factor in whether an entity should be included in a company's consolidated financial statements.

— IFRS 12, "Disclosure of Interests in Other Entities", provides guidance on disclosure requirements for all forms of interests in other entities, including joint arrangements, associates, special purpose vehicles and other off-balance sheet vehicles.

— IFRS 13, "Fair Value Measurements", provides guidance on fair value measurements by providing a definition of fair value and a single source of fair value measurement and disclosure requirements.

— IAS 1, "Presentation of Financial Statements", was amended to require grouping together items within the statement of comprehensive income that may be reclassified to the statement of income.

— IAS 19, "Employee Benefits", was amended to adjust the calculation of the financing cost component of defined benefit plans and to enhance disclosure requirements.

Other than IFRS 9, the above standards are effective October 1, 2013, with earlier application permitted. IFRS 9 is effective October 1, 2015, also with earlier application permitted. The Company is currently evaluating the impact of these standards on its consolidated financial statements.

Critical Accounting Estimates

The Company's significant accounting policies are described in Note 3 of the audited consolidated financial statements for the year ended September 30, 2012. The preparation of the consolidated financial statements requires management to make estimates and judgements that affect the reported amounts of assets and liabilities and equity and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenue and expenses during the reporting period. Because of the use of estimates and judgements inherent in the financial reporting process, actual results could differ.

An accounting estimate is considered critical if the estimate requires management to make assumptions about matters that were highly uncertain at the time the estimate was made, if different estimates could reasonably have been used in the period, or changes in the accounting estimates that are reasonably likely to occur, could have a material impact on the presentation of our financial condition, changes in financial condition or results of operations.

Areas impacted by estimates	Consolidated balance sheets	Revenue	Cost of services, selling and administrative	Income taxes
Business combinations	■		■	
Income taxes	■			■
Contingencies and provisions	■		■	
Revenue recognition[1]	■	■	■	
Share-based payments	■		■	
Investment tax credits and other government programs	■		■	
Impairment of PP&E, intangible assets and goodwill	■		■	
Employee benefits	■		■	

[1] Affects the balance sheet through accounts receivable, work in progress and deferred revenue.

BUSINESS COMBINATIONS

The Company accounts for its business combinations using the acquisition method. Under this method, estimates we make to determine the fair values of asset and liabilities acquired include judgements in our determinations of acquired intangible assets and assessment of the fair value of existing PP&E. Acquired liabilities can include litigation and other contingency reserves existing at the time of the acquisition. Goodwill is recognized as of the acquisition date as the excess of the cost of the acquisition over the net identifiable assets acquired and liabilities assumed at their acquisition-date fair values.

When establishing fair values, management will make significant estimates and assumptions, especially with respect to intangible assets. Intangible assets acquired and recorded by the Company may include client relationships and contracts, software licenses,

trademarks and business solutions. Estimates include but are not limited to the forecasting of future cash flows and discount rates. From time to time, the Company may engage third-party firms to assist us in determining the fair value of assets and liabilities assumed. Management's estimates of fair values are based upon assumptions believed to be reasonable, but which are inherently uncertain and unpredictable. As a result, actual results may differ from estimates impacting our earnings.

INCOME TAXES

Current income taxes are recognized with respect to the amounts expected to be paid or recovered under the tax rates and laws that have been enacted or substantively enacted at the balance sheet date. Deferred income tax assets and liabilities are determined using enacted or substantively enacted tax rates that will be in effect for the year in which the differences are expected to be recovered or settled.

In the course of the Company's operations, uncertainties exist with respect to interpretation of complex tax regulations, the amount and timing of future taxable income. When a tax position is uncertain, the Company recognizes an income tax benefit or reduces an income tax liability only when it is probable that the tax benefit will be realized in the future or that the income tax liability is no longer probable.

The ultimate amount of future income taxes and income tax provision could be materially different from those recorded, as it is influenced by future operating results of the Company and its tax interpretations.

CONTINGENCIES AND PROVISIONS

The Company accrues for costs and provisions requiring significant judgment.

Contingencies for pending or threatened litigation, guarantees and other possible liabilities involve uncertainty relating to possible gain or loss to the Company that will ultimately be resolved when one or more future events occur or fail to occur. Resolution of the uncertainty may confirm the reduction of a liability or the occurrence of a liability. The accrued legal claim provisions are based on historical experience, current trends and other assumptions that are believed to be reasonable under the circumstances.

Furthermore, there are various claims and pending actions against the Company arising in the ordinary course of its business as well as inherited from business acquisitions. Certain of these actions seek damages in significant amounts. Among other things, the Company considers the period in which the underlying cause of the claim occurred, the degree of probability of an unfavourable outcome and the ability to make a reasonable estimate of the loss to determine whether a loss accrual or disclosure in the condensed consolidated financial statements is required.

The Company accrues lease provisions which consist of estimated costs associated with vacated premises. The provisions reflect the present value of lease payments in excess of the expected sublease proceeds on the remaining term of the lease. Key assumptions include the discount rate and the estimate of potential revenues from the subleasing of vacated premises.

REVENUE RECOGNITION

CGI provides services and products containing pricing mechanisms such as fixed-price arrangements under percentage-of-completion which requires estimates of revenue and costs over the entire arrangement, including estimates of resources and costs necessary to complete performance.

Another assessment, related to a contract which involves the provision of multiple services and products, is to determine how the estimated contract revenue is allocated to each separately identifiable component based on their fair value. Revenue is then recognized for each separately identifiable component as services and products are delivered.

Revenue from benefits-funded arrangements is recognized only to the extent that it is probable that the benefit stream associated with the transaction will generate amounts sufficient to fund the value on which revenue recognition is based.

Management regularly reviews arrangement profitability and the underlying estimates. Estimates of total revenue at the start of the contract may differ materially from actual revenue generated due to volume variations, changes in technology and other factors which may not be foreseen at inception. Provisions for estimated contract losses are recognized in the period when it is determined that a loss is probable and is presented in other long-term liabilities. Contract losses are measured at the amount by which the estimated total costs exceed the estimated total revenue from the contract.

SHARE-BASED PAYMENTS

The Company operates equity-settled stock option and PSU plans under which the Company receives services from employees and others as consideration for equity instruments. The fair value of the stock options is established on the grant date using the Black-Scholes pricing model. The variables in the model include, but are not limited to: the expected stock price volatility over the term of the awards, expected forfeitures, the expected life of the options and the risk-free interest rate. Different assumptions and changes in circumstances could create material differences in our results of operations.

INVESTMENT TAX CREDITS AND OTHER GOVERNMENT PROGRAMS

The Company receives refundable tax credits on salaries and tax credits on research and software development costs, which meet the criteria of investment tax credits and government programs. The Company is subject to annual audits to verify the amount for which it is entitled and whether it operates eligible activities under the terms of various government tax credit programs. Assessments of the proportion of eligible expenses and of the acceptability rate by these different governments are performed periodically.

IMPAIRMENT OF PP&E, INTANGIBLE ASSETS AND GOODWILL

The Company tests the recoverability of PP&E, intangible assets and goodwill when events or changes in circumstances indicate that their carrying amounts may not be recoverable. The Company assesses at each reporting date whether any such events or changes in circumstances exist. The carrying amount of PP&E and intangible assets not available for use and goodwill are tested for impairment annually.

If there is any indication that impairment exists or when annual impairment for an asset is required, the Company estimates the recoverable amount of the asset or cash-generating unit ("CGU") to which the asset relates to determine the extent of any impairment loss. The CGU for which goodwill is assessed for potential impairment is the operating segment level.

The Company uses the discounted cash flow method to estimate the recoverable amount which relies on the use of estimates such

as the amount and timing of cash flows that are projected over the expected remaining life of the asset and the time value of money. Any change in the estimates used could have a material impact on the calculation of fair value and the resulting impairment charge.

An impairment loss is recognized as the amount by which the carrying amount of the asset exceeds its recoverable amount.

Additionally, an assessment is made at each reporting date for PP&E and intangible assets as to whether there is any indication that previously recorded impairment losses may no longer exist or may have decreased and therefore must be reversed. If such an indication exists, the Company estimates the asset's recoverable amount using the discounted cash flow method.

EMPLOYEE BENEFITS

The present value of the retirement benefits obligations depends on a number of factors that are determined on an actuarial basis using a number of assumptions. The assumptions used in determining the expense for pension include the discount rate, expected long-term rate of return on plan assets, compensation and benefits increases, inflation rates as well as mortality rates.

The Company determines the appropriate discount rate at the end of each year. This is the interest rate that should be used to determine the present value of the expected future benefit payments and represent the market rates for high quality corporate fixed income investments consistent with the currency and the estimated term of the retirement benefits obligations. A lower discount rate increases the benefit obligation and generally increases the expense. Other key assumptions for pension benefits are based in part on current market conditions. Additional information is disclosed in Note 29 to the audited consolidated financial statements.

Integrity of Disclosure

Our management assumes the responsibility for the existence of appropriate information systems, procedures and controls to ensure that information used internally and disclosed externally is complete and reliable. The Board of Directors' duties include the assessment of the integrity of the Company's internal control and information systems.

CGI has a formal Corporate Disclosure Policy as a part of its Fundamental Texts whose goal is to raise awareness of the Company's approach to disclosure among the Board of Directors, senior management and employees. The Board of Directors has established a Disclosure Policy Committee responsible for all regulatory disclosure requirements and overseeing the Company's disclosure practices.

The Audit and Risk Management Committee of CGI is composed entirely of independent directors who meet the independence and experience requirements of the New York Stock Exchange as well as those that apply under Canadian securities regulation. The responsibilities of our Audit and Risk Management Committee include: a) the review of all our public disclosure documents containing audited or unaudited financial information; b) identifying and examining the financial and operating risks to which we are exposed and reviewing the various policies and practices that are intended to manage those risks; c) the review and assessment of the

effectiveness of our accounting policies and practices concerning financial reporting; d) the review and monitoring of our internal control procedures, programs and policies and assessment of the adequacy and effectiveness thereof; e) reviewing the adequacy of our internal audit resources including the mandate and objectives of the internal auditor; f) recommendation to the Board of Directors of CGI on the appointment of external auditors, the assertion of the external auditors' independence, the review of the terms of their engagement as well as pursuing ongoing discussions with them; g) the review of the audit procedures; h) the review of related party transactions; and i) such other responsibilities usually attributed to audit and risk committees or as directed by our Board of Directors.

The Company evaluated the effectiveness of its disclosure controls and procedures and internal controls over financial reporting, supervised by and with the participation of the Chief Executive Officer and the Chief Financial Officer as of September 30, 2012. The CEO and CFO concluded that, based on this evaluation, the Company's disclosure controls and procedures and internal controls over financial reporting were adequate and effective, at a reasonable level of assurance, to ensure that material information related to the Company and its consolidated subsidiaries would be made known to them by others within those entities.

Management's assessment and conclusion on the effectiveness of disclosure controls and procedures and internal controls over financial reporting excludes the controls, policies and procedures of Logica which was acquired six weeks prior to CGI's fiscal year-end. Logica's results since the acquisition date are included in the September 30, 2012, consolidated financial statements of CGI and constituted approximately 58% of total assets as of September 30, 2012, and approximately 12% of revenue for the year then ended. Please refer to Note 24 to the consolidated financial statements for further details of the acquisition.

Risk Environment
RISKS AND UNCERTAINTIES

While we are confident about our long-term prospects, the following risks and uncertainties could affect our ability to achieve our strategic vision and objectives for growth and should be considered when evaluating our potential as an investment.

Risks Related to the Market

Economic risk— The level of business activity of our clients, which is affected by economic conditions, has a bearing upon the results of our operations. We can neither predict the impact that current economic conditions will have on our future revenue, nor predict when economic conditions will show meaningful improvement. During an economic downturn, our clients and potential clients may cancel, reduce or defer existing contracts and delay entering into new engagements. In general, companies also decide to undertake fewer IT systems projects during difficult economic times, resulting in limited implementation of new technology and smaller engagements. Since there are fewer engagements in a downturn, competition usually increases and pricing for services may decline as competitors, particularly companies with significant financial resources, decrease rates

to maintain or increase their market share in our industry and this may trigger pricing adjustments related to the benchmarking obligations within our contracts. Our pricing, revenue and profitability could be negatively impacted as a result of these factors.

Risks Related to our Industry

The competition for contracts — CGI operates in a global marketplace in which competition among providers of IT services is vigorous. Some of our competitors possess greater financial, marketing, sales resources, and larger geographic scope in certain parts of the world than we do, which, in turn, provides them with additional leverage in the competition for contracts. In certain niche, regional or metropolitan markets, we face smaller competitors with specialized capabilities who may be able to provide competing services with greater economic efficiency. Some of our competitors have more significant operations than we do in lower cost countries that can serve as a platform from which to provide services worldwide on terms that may be more favourable. Increased competition among IT services firms often results in corresponding pressure on prices. There can be no assurance that we will succeed in providing competitively priced services at levels of service and quality that will enable us to maintain and grow our market share.

The availability and retention of qualified IT professionals — There is strong demand for qualified individuals in the IT industry. Hiring and retaining a sufficient amount of individuals with the desired knowledge and skill set may be difficult. Therefore, it is important that we remain able to successfully attract and retain highly qualified professionals and establish an effective succession plan. If our comprehensive programs aimed at attracting and retaining qualified and dedicated professionals do not ensure that we have staff in sufficient numbers and with the appropriate training, expertise and suitable government security clearances required to serve the needs of our clients, we may have to rely on subcontractors or transfers of staff to fill resulting gaps. If our succession plan fails to identify those with potential or to develop these key individuals, we may lose key members and be required to recruit and train these new resources. This might result in lost revenue or increased costs, thereby putting pressure on our earnings.

The ability to continue developing and expanding service offerings to address emerging business demands and technology trends — The rapid pace of change in all aspects of information technology and the continually declining costs of acquiring and maintaining information technology infrastructure mean that we must anticipate changes in our clients' needs. To do so, we must adapt our services and our solutions so that we maintain and improve our competitive advantage and remain able to provide cost effective services. The market for the services and solutions we offer is extremely competitive and there can be no assurance that we will succeed in developing and adapting our business in a timely manner. If we do not keep pace, our ability to retain existing clients and gain new business may be adversely affected. This may result in pressure on our revenue, profit margin and resulting cash flows from operations.

Infringing on the intellectual property rights of others — Despite our efforts, the steps we take to ensure that our services and offerings do not infringe on the intellectual property rights of third parties may not be adequate to prevent infringement and, as a result, claims may be asserted against us or our clients. We enter into licensing agreements for the right to use intellectual property and may otherwise offer indemnities against liability and damages arising from third-party claims of patent, copyright, trademark or trade secret infringement in respect of our own intellectual property or software or other solutions developed for our clients. In some instances, the amount of these indemnity claims could be greater than the revenue we receive from the client. Intellectual property claims or litigation could be time-consuming and costly, harm our reputation, require us to enter into additional royalty or licensing arrangements, or prevent us from providing some solutions or services. Any limitation on our ability to sell or use solutions or services that incorporate software or technologies that are the subject of a claim could cause us to lose revenue-generating opportunities or require us to incur additional expenses to modify solutions for future projects.

Benchmarking provisions within certain contracts — Some of our outsourcing contracts contain clauses allowing our clients to externally benchmark the pricing of agreed upon services against those offered by other providers in an appropriate peer comparison group. The uniqueness of the client environment is factored in and, if results indicate a difference outside the agreed upon tolerance, we may be required to work with clients to reset the pricing for their services.

Protecting our intellectual property rights — Our success depends, in part, on our ability to protect our proprietary methodologies, processes, know-how, tools, techniques and other intellectual property that we use to provide our services. CGI's business solutions will generally benefit from available copyright protection and, in some cases, patent protection. Although CGI takes reasonable steps to protect and enforce its intellectual property rights, there is no assurance that such measures will be enforceable or adequate. The cost of enforcing our rights can be substantial and, in certain cases, may prove to be uneconomic. In addition, the laws of some countries in which we conduct business may offer only limited intellectual property rights protection. Despite our efforts, the steps taken to protect our intellectual property may not be adequate to prevent or deter infringement or other misappropriation of intellectual property, and we may not be able to detect unauthorized use of our intellectual property, or take appropriate steps to enforce our intellectual property rights.

Risks Related to our Business

Risks associated with our growth strategy — CGI's Build and Buy strategy is founded on four pillars of growth: first, organic growth through contract wins, renewals and extensions in the areas of outsourcing and system integration; second, the pursuit of new large outsourcing contracts; third, acquisitions of smaller firms or niche players; and fourth, transformational acquisitions.

Our ability to grow through organic growth and new large outsourcing transactions is affected by a number of factors outside of our control, including a lengthening of our sales cycle for major outsourcing contracts.

Our ability to grow through niche and transformational acquisitions requires that we identify suitable acquisition targets and that we correctly evaluate their potential as transactions that will meet our

financial and operational objectives. There can be no assurance that we will be able to identify suitable acquisition candidates and consummate additional acquisitions that meet our economic thresholds, or that future acquisitions will be successfully integrated into our operations and yield the tangible accretive value that had been expected.

If we are unable to implement our Build and Buy strategy, we will likely be unable to maintain our historic or expected growth rates.

The variability of financial results — Our ability to maintain and increase our revenues is affected not only by our success in implementing our Build and Buy strategy, but also by a number of other factors, including: our ability to introduce and deliver new services and products; a lengthened sales cycle; the cyclicality of purchases of technology services and products; the nature of a customer's business; and the structure of agreements with customers. These, and other factors, make it difficult to predict financial results for any given period.

Business mix variations — The proportion of revenue that we generate from shorter-term systems integration and consulting ("SI&C") projects, versus revenue from long-term outsourcing contracts, will fluctuate at times, affected by acquisitions or other transactions. An increased exposure to revenue from SI&C projects may result in greater quarterly revenue variations.

The financial and operational risks inherent in worldwide operations — We manage operations in numerous countries around the world. The scope of our operations subjects us to various issues that can negatively impact our operations: the fluctuations of currency (see foreign exchange risk); the burden of complying with a wide variety of national and local laws (see regulatory risk); the differences in and uncertainties arising from local business culture and practices; political, social and economic instability including the threats of terrorism, civil unrest, war, natural disasters and pandemic illnesses. Any or all of these risks could impact our global business operations and cause our profitability to decline.

Organizational challenges associated with our size — With the acquisition of Logica, our organization has doubled in size with expanded operations in both Europe and Asia. Our culture, standards, core values, and our policies need to be instilled across the newly acquired businesses as well as maintained within our existing operations. To effectively communicate and manage these standards throughout a large global organization is both challenging and time consuming. Newly acquired businesses may be resistant to change and may remain attached to past methods, standards and practices which may compromise our business agility in pursuing opportunities. Cultural differences in various countries may also present barriers to introducing new ideas or aligning our vision and strategy with the rest of the organization. If we cannot overcome these obstacles in maintaining a strategic bond throughout the company worldwide, we may not be able to achieve our growth and profitability objectives.

Taxes — In estimating our income tax payable, management uses accounting principles to determine income tax positions that are likely to be sustained by applicable tax authorities. However, there is no assurance that our tax benefits or tax liability will not materially differ from our estimates or expectations. The tax legislation, regulation and interpretation that apply to our operations are continually changing.

In addition, future tax benefits and liabilities are dependent on factors that are inherently uncertain and subject to change, including future earnings, future tax rates, and anticipated business mix in the various jurisdictions in which we operate. Moreover, our tax returns are continually subject to review by applicable tax authorities; it is these tax authorities that will make the final determination of the actual amounts of taxes payable or receivable, of any future tax benefits or liabilities and of income tax expense that we may ultimately recognize. Any of the above factors could have a material adverse effect on our net income or cash flows by affecting our operations and profitability, the availability of tax credits, the cost of the services we provide, and the availability of deductions for operating losses as we develop our international service delivery capabilities.

Credit risk with respect to accounts receivable — In order to sustain our cash flows and net earnings from operations, we must collect the amounts owed to us in an efficient and timely manner. Although we maintain provisions to account for anticipated shortfalls in amounts collected, the provisions we take are based on management estimates and on our assessment of our clients' creditworthiness which may prove to be inadequate in the light of actual results. To the extent that we fail to perform our services in accordance with our contracts and our clients' reasonable expectations, and to the extent that we fail to invoice clients for our services correctly in a timely manner, our collections could suffer resulting in a direct and adverse impact to our revenue, net earnings and cash flows. In addition, a prolonged economic downturn may cause clients to curtail or defer projects, impair their ability to pay for services already provided, and ultimately cause them to default on existing contracts, in each case, causing a shortfall in revenue and impairing our future prospects.

Material developments regarding major commercial clients resulting from such causes as changes in financial condition, mergers or business acquisitions — Consolidation among our clients resulting from mergers and acquisitions may result in loss or reduction of business when the successor business' information technology needs are served by another service provider or are provided by the successor company's own personnel. Growth in a client's information technology needs resulting from acquisitions or operations may mean that we no longer have a sufficient geographic scope or the critical mass to serve the client's needs efficiently, resulting in the loss of the client's business and impairing our future prospects. There can be no assurance that we will be able to achieve the objectives of our growth strategy in order to maintain and increase our geographic scope and critical mass in our targeted markets.

Early termination risk — If we should fail to deliver our services according to contractual agreements, some of our clients could elect to terminate contracts before their agreed expiry date, which would result in a reduction of our earnings and cash flow and may impact the value of our backlog. In addition, a number of our outsourcing contractual agreements have termination for convenience and change of control clauses according to which a change in the client's intentions or a change in control of CGI could lead to a termination of the said agreements. Early contract termination can also result from the exercise of a legal right or when circumstances that are beyond our control or beyond the control of our client prevent the contract from continuing. In cases of early termination, we may not be able to recover capitalized contract costs and we may not be able to eliminate ongoing costs incurred to support the contract.

Cost estimation risks—In order to generate acceptable margins, our pricing for services is dependent on our ability to accurately estimate the costs and timing for completing projects or long-term outsourcing contracts. In addition, a significant portion of our project-oriented contracts are performed on a fixed-price basis. Billing for fixed-price engagements is carried out in accordance with the contract terms agreed upon with our client, and revenue is recognized based on the percentage of effort incurred to date in relation to the total estimated costs to be incurred over the duration of the respective contract. These estimates reflect our best judgment regarding the efficiencies of our methodologies and professionals as we plan to apply them to the contracts in accordance with the CGI Client Partnership Management Framework ("CPMF"), a process framework which helps ensure that all contracts are managed according to the same high standards throughout the organization. If we fail to apply the CPMF correctly or if we are unsuccessful in accurately estimating the time or resources required to fulfil our obligations under a contract, or if unexpected factors, including those outside of our control, arise, there may be an impact on costs or the delivery schedule which could have an adverse impact on our expected profit margins.

Risks related to teaming agreements and subcontracts—We derive substantial revenues from contracts where we enter into teaming agreements with other providers. In some teaming agreements we are the prime contractor whereas in others we act as a subcontractor. In both cases, we rely on our relationships with other providers to generate business and we expect to do so in the foreseeable future. Where we act as prime contractor, if we fail to maintain our relationships with other providers, we may have difficulty attracting suitable participants in our teaming agreements. Similarly, where we act as subcontractor, if our relationships are impaired, other providers might reduce the work they award to us, award that work to our competitors, or choose to offer the services directly to the client in order to compete with our business. In either case, our business, prospects, financial condition and operating results could be harmed.

Our partners' ability to deliver on their commitments—Increasingly large and complex contracts may require that we rely on third party subcontractors including software and hardware vendors to help us fulfil our commitments. Under such circumstances, our success depends on the ability of the third parties to perform their obligations within agreed upon budgets and timeframes. If our partners fail to deliver, our ability to complete the contract may be adversely affected, which may have an unfavourable impact on our profitability.

Guarantees risk—In the normal course of business, we enter into agreements that may provide for indemnification and guarantees to counterparties in transactions such as consulting and outsourcing services, business divestitures, lease agreements and financial obligations. These indemnification undertakings and guarantees may require us to compensate counterparties for costs and losses incurred as a result of various events, including breaches of representations and warranties, intellectual property right infringement, claims that may arise while providing services or as a result of litigation that may be suffered by counterparties.

Risk related to human resources utilization rates—In order to maintain our profit margin, it is important that we maintain the appropriate availability of professional resources in each of our geographies by having a high utilization rate while still being able to assign additional resources to new work. Maintaining an efficient utilization rate requires us to forecast our need for professional resources accurately and to manage recruitment activities, professional training programs, attrition rates and restructuring programs appropriately. To the extent that we fail to do so, or to the extent that laws and regulations, particularly those in Europe, restrict our ability to do so, our utilization rates may be reduced; thereby having an impact on our revenue and profitability. Conversely, we may find that we do not have sufficient resources to deploy against new business opportunities in which case our ability to grow our revenue would suffer.

Client concentration risk—We derive a significant portion of our revenue from the services we provide to the U.S. federal government and its agencies, and we expect that this will continue for the foreseeable future. In the event that a major U.S. federal government agency were to limit, reduce, or eliminate the business it awards to us, we might be unable to recover the lost revenue with work from other agencies or other clients, and our business, prospects, financial condition and operating results could be materially and adversely affected. Although IFRS considers a national government and its agencies as a single client, our client base in the U.S. government economic sector is in fact diversified with contracts from many different departments and agencies.

Government business risk—Changes in government spending policies or budget priorities could directly affect our financial performance. Among the factors that could harm our government contracting business are the curtailment of governments' use of consulting and IT services firms; a significant decline in spending by governments in general, or by specific departments or agencies in particular; the adoption of new legislation and/or actions affecting companies that provide services to governments; delays in the payment of our invoices by government payment offices; and general economic and political conditions. These or other factors could cause government agencies and departments to reduce their purchases under contracts, to exercise their right to terminate contracts, to issue temporary stop work orders, or not to exercise options to renew contracts, any of which would cause us to lose future revenue. Government spending reductions or budget cutbacks at these departments or agencies could materially harm our continued performance under these contracts, or limit the awarding of additional contracts from these agencies.

Regulatory risk—Our global operations require us to be compliant with laws in many jurisdictions on matters such as: anticorruption, trade restrictions, immigration, taxation, securities regulation, anti-competition, data privacy and labour relations, amongst others. Complying with these diverse requirements worldwide is a challenge and consumes significant resources. Some of these laws may impose conflicting requirements; we may face the absence in some jurisdictions of effective laws to protect our intellectual property rights; there may be restrictions on the movement of cash and other assets; or restrictions on the import and export of certain technologies; or restrictions on the repatriation of earnings and reduce our earnings, all of which may expose us to penalties for non-compliance and harm our reputation.

Our business with the US federal government and its agencies requires that we comply with complex laws and regulations relating to government contracts. These laws relate to the integrity of the procurement process, impose disclosure requirements, and address national security concerns, among others matters. For instance, we are routinely subject to audits by U.S. government agencies with respect to compliance with these rules. If we fail to comply with these requirements we may incur penalties and sanctions, including contract termination, suspension of payments, suspension or debarment from doing business with the federal government, and fines.

Legal claims made against our work—We create, implement and maintain IT solutions that are often critical to the operations of our clients' business. Our ability to complete large projects as expected could be adversely affected by unanticipated delays, renegotiations, and changing client requirements or project delays. Also, our solutions may suffer from defects that adversely affect their performance; they may not meet our clients' requirements or may fail to perform in accordance with applicable service levels. Such problems could subject us to legal liability, which could adversely impact our business, operating results and financial condition, and may negatively affect our professional reputation. We typically include provisions in our contracts which are designed to limit our exposure to legal claims relating to our services and the applications we develop. These provisions may not protect us adequately or may not be enforceable under some circumstances or under the laws of some jurisdictions.

Information and infrastructure risks—Our business often requires that our clients' applications and information, which may include their proprietary information, be processed and stored on our networks and systems, and in data centres that we manage. Digital information and equipment is subject to loss, theft or destruction, and services that we provide may become temporarily unavailable as a result thereof or upon an equipment or system malfunction. Failures can arise from human error in the course of normal operations, maintenance and upgrading activities, or from hacking, vandalism (including denial of service attacks and computer viruses), theft and unauthorized access by third parties, as well as from power outages or surges, floods, fires, natural disasters or from any other causes. The measures that we take to protect information and software, including both physical and logical controls on access to premises and information and backup systems may prove in some circumstances to be inadequate to prevent the loss, theft or destruction of client information or service interruptions. Such events may expose the Company to financial loss or damages.

Risk of harm to our reputation—CGI's reputation as a capable and trustworthy service provider and ong term business partner is key to our ability to compete effectively in the market for information technology services. The nature of our operations exposes us to the potential loss, unauthorized access to, or destruction of our clients' information, as well as temporary service interruptions. Depending on the nature of the information or services, such events may have a negative impact on how the Company is perceived in the marketplace. Under such circumstances, our ability to obtain new clients and retain existing clients could suffer with a resulting impact on our revenue and profit.

Risks associated with the integration of new operations—The successful integration of new operations arising from our acquisition strategy or from large outsourcing contracts requires that a substantial amount of management time and attention be focused on integration tasks. Management time that is devoted to integration activities may detract from management's normal operations focus with resulting pressure on the revenues and earnings from our existing operations. In addition, we may face complex and potentially time-consuming challenges in implementing the uniform standards, controls, procedures and policies across new operations to harmonize their activities with those of our existing business units. Integration activities can result in unanticipated operational problems, expenses and liabilities. If we are not successful in executing our integration strategies in a timely and cost-effective manner, we will have difficulty achieving our growth and profitability objectives.

Liquidity and funding risks—The Company's future growth is contingent on the execution of its business strategy, which, in turn, is dependent on its ability to grow the business organically as well as conclude business acquisitions. By its nature, our growth strategy requires us to fund the investments required to be made using a mix of cash generated from our existing operations, money borrowed under our existing or future credit agreements, and equity funding generated by the issuance of shares of our capital stock to counterparties in transactions, or to the general public. Our ability to raise the required funding depends on the capacity of the capital markets to meet our financing needs in a timely fashion and on the basis of interest rates and share prices that are reasonable in the context of profitability objectives. Increasing interest rates, volatility in our share price, and the capacity of our current lenders to meet our liquidity requirements are all factors that may have an adverse impact on our access to the funding we require. If we are unable to obtain the necessary funding, we may be unable to achieve our growth objectives.

Foreign exchange risk—The majority of our revenue and costs are denominated in currencies other than the Canadian dollar. Foreign exchange fluctuations impact the results of our operations as they are reported in Canadian dollars. This risk is partially mitigated by a natural hedge in matching our costs with revenue denominated in the same currency and through the use of derivatives in our worldwide hedging strategy. However, as we continue our global expansion, natural hedges may begin to diminish. Other than the use of financial products to deliver on our hedging strategy, we do not trade derivative financial instruments.

With our expanded presence in Europe, uncertainty regarding the ability of certain European countries to continue servicing their sovereign debt and related austerity measures may destabilize the euro. Similarly, given the scope of our U.S. operations, if the U.S. dollar continues to weaken against the Canadian dollar, our worldwide financial results may not reach expectations.

LEGAL PROCEEDINGS

The Company is involved in legal proceedings, audits, claims and litigation arising in the ordinary course of its business. Certain of these matters seek damages in significant amounts. Although, the outcome of such matters is not predictable with assurance, the Company has no reason to believe that the disposition of any such current matter could reasonably be expected to have a materially adverse impact on the Company's financial position, results of operations or the ability to carry on any of its business activities.

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Management's and Auditors' reports

MANAGEMENT'S STATEMENT OF RESPONSIBILITY FOR FINANCIAL REPORTING

The management of CGI Group Inc. ("the Company") is responsible for the preparation and integrity of the consolidated financial statements and the Management's Discussion and Analysis ("MD&A"). The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards and necessarily include some amounts that are based on management's best estimates and judgment. Financial and operating data elsewhere in the MD&A are consistent with that contained in the accompanying consolidated financial statements.

To fulfill its responsibility, management has developed, and continues to maintain, systems of internal controls reinforced by the Company's standards of conduct and ethics, as set out in written policies to ensure the reliability of the financial information and to safeguard its assets. The Company's internal control over financial reporting and consolidated financial statements are subject to audit by the independent auditors, Ernst & Young LLP, whose report follows. They were appointed as independent auditors, by a vote of the Company's shareholders, to conduct an integrated audit of the Company's consolidated financial statements and of the Company's internal control over financial reporting. In addition, the Management Committee of the Company reviews the disclosure of corporate information and oversees the functioning of the Company's disclosure controls and procedures.

Members of the Audit and Risk Management Committee of the Board of Directors, all of whom are independent of the Company, meet regularly with the independent auditors and with management to discuss internal controls in the financial reporting process, auditing matters and financial reporting issues and formulates the appropriate recommendations to the Board of Directors. The independent auditors have unrestricted access to the Audit and Risk Management Committee. The consolidated financial statements and MD&A have been reviewed and approved by the Board of Directors.

[signed]

Michael E. Roach
President and Chief Executive Officer
November 27, 2012

[signed]

R. David Anderson
Executive Vice-President and Chief Financial Officer

MANAGEMENT REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

The management of the Company is responsible for establishing and maintaining adequate internal control over financial reporting. The Company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the Company's consolidated financial statements for external reporting purposes in accordance with accounting principles generally accepted in Canada.

The Company's internal control over financial reporting includes policies and procedures that:

— Pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect transactions and dispositions of the assets of the Company;

— Provide reasonable assurance that transactions are recorded as necessary to permit preparation of consolidated financial statements in accordance with accounting principles generally accepted in Canada, and that receipts and expenditures are being made only in accordance with authorizations of management and the directors of the Company; and,

— Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the Company's consolidated financial statements.

All internal control systems have inherent limitations; therefore, even where internal control over financial reporting is determined to be effective, it can provide only reasonable assurance. Projections of any evaluation of effectiveness to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

We acquired Logica plc ("Logica") on August 20, 2012. We excluded from our assessment the internal control over financial reporting of Logica. Logica's results since the acquisition date are included in the September 30, 2012, consolidated financial statements of CGI and constituted approximately 58% of total assets as of September 30, 2012 (including intangible assets and goodwill), approximately 12% of revenue and a net loss of $259,981,000 for the year then ended. See Note 24 to the consolidated financial statements for a discussion of this acquisition.

As of the end of the Company's 2012 fiscal year, management conducted an assessment of the effectiveness of the Company's internal control over financial reporting based on the framework established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this assessment, management has determined the Company's internal control over financial reporting as at September 30, 2012, was effective.

The effectiveness of the Company's internal control over financial reporting as at September 30, 2012, has been audited by the Company's independent auditors, as stated in their report appearing on page 36.

[signed]

Michael E. Roach
President and Chief Executive Officer
November 27, 2012

[signed]

R. David Anderson
Executive Vice-President and Chief Financial Officer

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM ON INTERNAL CONTROL OVER FINANCIAL REPORTING

To the Board of Directors and Shareholders of CGI Group Inc.

We have audited CGI Group Inc.'s (the "Company") internal control over financial reporting as of September 30, 2012, based on criteria established *in Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission ("the COSO criteria"). The Company's management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records, that in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

As indicated in the accompanying Management's Report on Internal Control Over Financial Reporting, management's assessment of and conclusion on the effectiveness of internal control over financial reporting did not include the internal controls of Logica plc, which is included in the 2012 consolidated financial statements of the Company, and constituted approximately 58% of total assets as of September 30, 2012 (including intangible assets and goodwill), approximately 12% of revenue, and a net loss of $259,981,000 for the year then ended. Our audit of internal control over financial reporting of CGI Group Inc. also did not include an evaluation of the internal control over financial reporting of Logica plc.

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of September 30, 2012 based on the COSO criteria.

We also have audited, in accordance with Canadian generally accepted auditing standards and the standards of the Public Company Accounting Oversight Board (United States), the consolidated financial statements of the Company as at and for the year ended September 30, 2012, and our report dated November 27, 2012 expressed an unqualified opinion thereon.

[signed]

Ernst & Young LLP
Montréal, Canada
November 27, 2012

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1. CPA auditor, CA, public accountancy permit No. 112431

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM ON FINANCIAL STATEMENTS

To the Board of Directors and Shareholders of CGI Group Inc.

We have audited the accompanying consolidated financial statements of CGI Group Inc. (the "Company"), which comprise the consolidated balance sheets as of September 30, 2012 and 2011, and October 1, 2010 and the consolidated statements of earnings, comprehensive income, changes in equity and cash flows for the years ended September 30, 2012 and 2011, and a summary of significant accounting policies and other explanatory information.

Management's responsibility for the consolidated financial statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with Canadian generally accepted auditing standards and the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditors consider internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements, evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained in our audits is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as at September 30, 2012 and 2011, and October 1, 2010 and its financial performance and its cash flows for the years ended September 30, 2012 and 2011 in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board.

Other matter

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), CGI Group Inc.'s internal control over financial reporting as of September 30, 2012, based on the criteria established in *Internal Control — Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated November 27, 2012 expressed an unqualified opinion on the Company's internal control over financial reporting.

[signed]

Ernst & Young LLP
Montréal, Canada
November 27, 2012

1. CPA auditor, CA, public accountancy permit No. 112431

Consolidated Statements of Earnings

For the years ended September 30 *(in thousands of Canadian dollars, except share data)*	2012	2011
	$	$
Revenue	**4,772,454**	4,223,942
Operating expenses		
Costs of services, selling and administrative *(Note 19)*	**4,226,859**	3,690,960
Acquisition-related and integration costs *(Note 24)*	**254,973**	3,675
Finance costs *(Note 21)*	**42,099**	19,395
Finance income	**(5,318)**	(3,552)
Other income	**(3,955)**	(7,647)
Foreign exchange gain	**(1,134)**	(3,365)
Share of profit on joint venture	**(3,996)**	(13,359)
	4,509,528	3,686,107
Earnings before income taxes	**262,926**	537,835
Income tax expense *(Note 23)*	**131,397**	99,696
Net earnings	**131,529**	438,139
Earnings per share *(Note 17)*		
Basic earnings per share	**0.50**	1.65
Diluted earnings per share	**0.48**	1.59

See Notes to the consolidated financial statements.

Consolidated Statements of Comprehensive Income

For the years ended September 30 *(in thousands of Canadian dollars)*	2012	2011
	$	$
Net earnings	**131,529**	438,139
Net unrealized (losses) gains on translating financial statements of foreign operations (net of income taxes)	**(20,195)**	12,275
Net unrealized gains (losses) on translating financial instruments designated as hedges of net investments in foreign operations (net of income taxes)	**10,766**	(4,695)
Net unrealized losses on cash flow hedges (net of income taxes)	**(11,615)**	(9,197)
Net unrealized actuarial gains (losses) (net of income taxes)	**5,210**	(632)
Net unrealized gains on investments available for sale (net of income taxes)	**987**	2,352
Other comprehensive (losses) gains	**(14,847)**	103
Comprehensive income	**116,682**	438,242

See Notes to the consolidated financial statements.

Consolidated Balance Sheets

(in thousands of Canadian dollars)	As at September 30, 2012	As at September 30, 2011	As at October 1, 2010
	$	$	$
Assets			
Current assets			
Cash and cash equivalents *(Note 4)*	113,103	136,211	108,529
Short-term investments	14,459	10,166	13,196
Accounts receivable *(Note 5)*	1,446,149	490,484	426,241
Work in progress	744,482	391,066	357,666
Prepaid expenses and other current assets	244,805	100,407	69,198
Income taxes	24,650	4,252	7,169
Total current assets before funds held for clients	2,587,648	1,132,586	981,999
Funds held for clients *(Note 6)*	202,407	247,622	248,695
Total current assets	2,790,055	1,380,208	1,230,694
Property, plant and equipment *(Note 7)*	500,995	249,901	236,632
Contract costs *(Note 8)*	167,742	107,242	133,109
Intangible assets *(Note 9)*	858,892	292,133	369,036
Other long-term assets *(Note 10)*	96,351	55,593	41,623
Deferred tax assets *(Note 23)*	219,590	9,882	22,888
Investment in joint venture	—	26,373	22,814
Goodwill *(Note 11)*	5,819,817	2,536,022	2,525,413
	10,453,442	4,657,354	4,582,209
Liabilities			
Current liabilities			
Bank overdraft *(Note 4)*	—	75,538	—
Accounts payable and accrued liabilities	1,156,737	303,641	297,801
Accrued compensation	539,779	183,842	185,651
Deferred revenue	443,596	152,938	143,302
Income taxes	177,030	51,822	85,534
Provisions *(Note 12)*	160,625	12,125	10,998
Current portion of long-term debt *(Note 14)*	52,347	896,012	114,577
Total current liabilities before clients' funds obligations	2,530,114	1,675,918	837,863
Clients' funds obligations	197,986	244,660	248,695
Total current liabilities	2,728,100	1,920,578	1,086,558
Deferred tax liabilities *(Note 23)*	171,130	149,394	188,860
Long-term provisions *(Note 12)*	216,507	27,672	9,265
Long-term debt *(Note 14)*	3,196,061	109,669	1,039,299
Retirement benefits obligations *(Note 29)*	118,078	7,035	6,228
Other long-term liabilities *(Note 13)*	601,232	93,775	102,764
	7,031,108	2,308,123	2,432,974
Equity			
Retained earnings	1,113,225	1,057,599	845,290
Accumulated other comprehensive (loss) income *(Note 22)*	(275)	14,572	14,469
Capital stock *(Note 15)*	2,201,694	1,178,559	1,195,069
Contributed surplus	107,690	98,501	94,407
	3,422,334	2,349,231	2,149,235
	10,453,442	4,657,354	4,582,209

See Notes to the consolidated financial statements

Approved by the Board

[signed]   [signed]
Michael E. Roach   **Serge Godin**
Director   Director

Consolidated Statements of Changes in Equity

For the years ended September 30
(in thousands of Canadian dollars)

	Retained earnings	Accumulated other comprehensive (loss) income	Capital stock	Contributed surplus	Total equity
	$	$	$	$	$
Balance as at September 30, 2011	1,057,599	14,572	1,178,559	98,501	2,349,231
Net earnings for the year	131,529	—	—	—	131,529
Other comprehensive loss for the year	—	(14,847)	—	—	(14,847)
	1,189,128	(275)	1,178,559	98,501	2,465,913
Share-based payment costs *(Note 16c))*	—	—	—	12,520	12,520
Income tax impact associated with stock options	—	—	—	12,626	12,626
Issuance of Class A subordinate shares, net of transaction costs *(Note 15)*	—	—	999,178	—	999,178
Exercise of stock options *(Note 15)*	—	—	64,033	(16,010)	48,023
Repurchase of Class A subordinate shares *(Note 15)*	(75,903)	—	(26,942)	—	(102,845)
Purchase of Class A subordinate shares held in trust *(Note 15)*	—	—	(14,252)	—	(14,252)
Sale of Class A subordinate shares held in trust *(Note 15)*	—	—	1,118	53	1,171
Balance as at September 30, 2012	**1,113,225**	**(275)**	**2,201,694**	**107,690**	**3,422,334**

	Retained earnings	Accumulated other comprehensive (loss)income	Capital stock	Contributed surplus	Total equity
	$	$	$	$	$
Balance as at October 1, 2010	845,290	14,469	1,195,069	94,407	2,149,235
Net earnings for the year	438,139	—	—	—	438,139
Other comprehensive income for the year	—	103	—	—	103
	1,283,429	14,572	1,195,069	94,407	2,587,477
Share-based payment costs *(Note 16c))*	—	—	—	16,645	16,645
Income tax impact associated with stock options	—	—	—	1,790	1,790
Exercise of stock options *(Note 15)*	—	—	66,065	(14,341)	51,724
Repurchase of Class A subordinate shares *(Note 15)*	(225,019)	—	(80,009)	—	(305,028)
Purchase of Class A subordinate shares held in trust *(Note 15)*	—	—	(2,566)	—	(2,566)
Change in subsidiary investment	(811)	—	—	—	(811)
Balance as at September 30, 2011	1,057,599	14,572	1,178,559	98,501	2,349,231

See Notes to the consolidated financial statements.

Consolidated Statements of Cash Flows

For the years ended September 30
(tabular amounts only are in thousands of Canadian dollars)

	2012	2011
	$	$
Operating activities		
Net earnings	131,529	438,139
Adjustments for:		
Amortization and depreciation *(Note 20)*	231,398	223,354
Deferred income taxes *(Note 23)*	(22,306)	(22,423)
Foreign exchange loss	158	(1,201)
Share-based payment costs *(Note 16c))*	12,520	16,645
Gain on sale of business *(Note 24)*	—	(3,655)
Gain on sale of investment in joint venture *(Note 25)*	(2,981)	—
Share of profit on joint venture	(3,996)	(13,359)
Loss on repayment of debt assumed in business acquisition *(Note 24)*	83,632	—
Dividend received from joint venture	7,350	9,800
Net change in non-cash working capital items *(Note 26)*	175,958	(77,298)
Cash provided by operating activities	613,262	570,002
Investing activities		
Net change in short-term investments	(5,203)	1,984
Business acquisition (including bank overdraft assumed) *(Note 24)*	(2,734,795)	(618)
Purchase of call options related to proposed acquisition *(Note 24)*	(7,146)	—
Proceeds from sale of investment in joint venture *(Note 25)*	26,000	—
Proceeds from sale of business *(Note 24)*	4,583	4,104
Purchase of property, plant and equipment	(64,555)	(64,980)
Additions to contract costs	(25,325)	(27,897)
Additions to intangible assets	(43,658)	(26,893)
Additions to other long-term assets	(2,208)	(2,510)
Purchase of long-term investments	(976)	(14,204)
Payment received from long-term receivable	4,249	—
Cash used in investing activities	(2,849,034)	(131,014)
Financing activities		
Net change in credit facilities	(158,618)	(104,278)
Increase of long-term debt	2,416,781	—
Repayment of long-term debt	(62,817)	(129,741)
Repayment of debt assumed in business acquisition *(Note 24)*	(891,354)	—
Settlement of forward contracts	50,171	(1,275)
Purchase of Class A subordinate shares held in trust *(Note 15)*	(14,252)	(2,566)
Sale of Class A subordinate shares held in a trust *(Note 15)*	1,171	—
Repurchase of Class A subordinate shares *(Note 15)*	(102,845)	(305,028)
Issuance of Class A subordinate shares, net of transaction costs	1,047,243	52,091
Change in subsidiary investment	—	(811)
Cash provided by (used in) financing activities	2,285,480	(491,608)
Effect of foreign exchange rate changes on cash and cash equivalents	2,722	4,764
Net increase (decrease) in cash and cash equivalents net of bank overdraft	52,430	(47,856)
Cash and cash equivalents net of bank overdraft, beginning of period	60,673	108,529
Cash and cash equivalents net of bank overdraft, end of period *(Note 4)*	113,103	60,673

Supplementary cash flow information *(Note 26)*

See Notes to the consolidated financial statements.

Notes to the Consolidated Financial Statements

Years ended September 30, 2012, 2011 and 2010
(tabular amounts only are in thousands of Canadian dollars,
except share data)

NOTE 1
Description of business

CGI Group Inc. (the "Company"), directly or through its subsidiaries, manages information technology services ("IT services") as well as business process services ("BPS") to help clients effectively realize their strategies and create added value. The Company's services include the management of IT and business processes ("outsourcing"), systems integration and consulting including the sale of software licenses. The Company was incorporated under Part IA of the Companies Act (Québec) predecessor to the Business Corporations Act (Québec) which came into force on February 14, 2011 and its shares are publicly traded. The executive and registered office of the Company is situated at 1350, René-Lévesque Blvd. West, Montréal, Québec, Canada, H3G 1T4.

NOTE 2
Basis of preparation

These consolidated financial statements represent the Company's first annual financial statements prepared in accordance with International Financial Reporting Standards ("IFRS") and IFRS 1, "First-time Adoption of International Financial Reporting Standards", as issued by the International Accounting Standards Board ("IASB"). In addition, the consolidated financial statements have been prepared in accordance with the accounting policies set out in Note 3, "Summary of significant accounting policies", which are based on IFRS and International Financial Reporting Interpretations Committee ("IFRIC") interpretations. The accounting policies were consistently applied to all periods presented.

The first date at which IFRS was applied was October 1, 2010. The consolidated financial statements were previously prepared in accordance with Canadian generally accepted accounting principles ("Canadian GAAP"). However, Canadian GAAP differs in some areas from IFRS. The comparative figures presented were adjusted to reflect these adjustments. Reconciliations and descriptions of the effect of the transition from Canadian GAAP to IFRS on consolidated equity, earnings, comprehensive income, cash flows and balance sheets are provided in Note 33, "Transition to IFRS".

The Company's consolidated financial statements for the years ended September 30, 2012 and 2011 were authorized for issue by the Board of Directors on November 27, 2012.

NOTE 3
Summary of significant accounting policies
BASIS OF CONSOLIDATION

The consolidated financial statements include the accounts of the Company and its subsidiaries. All intercompany transactions and balances have been eliminated. The Company accounts for its jointly-controlled investments using the equity method.

BASIS OF MEASUREMENT

The consolidated financial statements have been prepared on a historical cost basis, except for certain financial assets and liabilities, which have been measured at fair value as described below.

USE OF ESTIMATES AND JUDGEMENTS

The preparation of the consolidated financial statements requires management to make estimates and judgements that affect the reported amounts of assets, liabilities and equity and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenue and expenses during the reporting period. Because of the use of estimates and judgements inherent in the financial reporting process, actual results could differ. Significant estimates and judgements include purchase price allocation of business combinations, income taxes, contingencies and provisions, revenue recognition (including provisions for estimated contract losses), share-based payments, investment tax credits and other government programs, defined benefits plan obligations and retirement benefits assets, impairment of property, plant and equipment, intangible assets and goodwill. A description of the significant estimates and judgements is included in the respective sections within the notes to the consolidated financial statements.

REVENUE RECOGNITION, WORK IN PROGRESS AND DEFERRED REVENUE

The Company generates revenue principally through the provision of IT services and BPS as described in Note 1.

The Company provides services and products under arrangements that contain various pricing mechanisms. The Company recognizes revenue when the following criteria are met: there is clear evidence that an arrangement exists, the amount of revenue and related costs can be measured reliably, it is probable that future economic benefits will flow to the Company, the stage of completion can be measured reliably where services are delivered and the significant risks and rewards of ownership, including effective control, are transferred to clients where products are sold. Revenue is measured at the fair value of the consideration received or receivable net of discounts, volume rebates and sales related taxes.

Some of the Company's arrangements may include client acceptance clauses. Each clause is analyzed to determine whether the earnings process is complete when the service is performed. Formal client sign-off is not always necessary to recognize revenue provided that the Company objectively demonstrates that the criteria specified in the acceptance provisions are satisfied. Some of the criteria reviewed include historical experience with similar types of arrangements, whether the acceptance provisions are specific to the client or are included in all arrangements, the length of the acceptance term and historical experience with the specific client.

Revenue from benefits-funded arrangements is recognized only to the extent that it is probable that the benefit stream associated with the transaction will generate amounts sufficient to fund the value on which revenue recognition is based.

Revenue from sales of third party vendor products, such as software licenses and hardware, or services is recorded gross when the Company is a principal to the transaction and is recorded net of costs when the Company is acting as an agent between the client and vendor. Factors generally considered to determine whether the Company is a principal or an agent are if the Company is the primary obligor to the client, if it adds meaningful value to the vendor's product or service or if it assumes delivery and credit risks.

Estimated losses on revenue-generating contracts are recognized in the period when it is determined that a loss is probable. They are presented in accounts payable and accrued liabilities and in other long-term liabilities. Contract losses are measured at the amount by which the estimated total costs exceed the estimated total revenue from the contract.

Multiple component arrangements

The Company's arrangements often include a mix of the services and products listed below. If an arrangement involves the provision of multiple components, the total arrangement value is allocated to each separately identifiable component based on its relative selling price. A component is considered to be separately identifiable if it has value to the client on a stand-alone basis. Assessing whether an arrangement involving the provision of multiple components has separately identifiable components requires judgement by management. When estimating selling price, the Company maximizes the use of observable prices which are established using the Company's prices for same or similar components. When observable prices are not available, the Company estimates selling prices based on its best estimate of selling price. The best estimate of selling price is the price at which the Company would normally expect to offer the services or products and is established by considering a number of internal and external factors including, but not limited to, geographies, the Company's pricing policies, internal costs and margins. The appropriate revenue recognition method is applied for each separately identifiable component as described below.

Outsourcing

Revenue from outsourcing and BPS arrangements is generally recognized as the services are provided at the contractually stated price, unless there is a better measure of performance or delivery.

Systems integration and consulting services

Revenue from systems integration and consulting services under time and material arrangements is recognized as the services are rendered, and revenue under cost-based arrangements is recognized as reimbursable costs are incurred.

Revenue from systems integration and consulting services under fixed-fee arrangements where the outcome of the arrangements can be estimated reliably is recognized using the percentage-of-completion method over the service periods. The Company uses the labour costs or labour hours to measure the progress towards completion. This method relies on estimates of total expected labour costs or total expected labour hours to complete the service, which are compared to labour costs or labour hours incurred to date, to arrive at an estimate of the percentage of revenue earned to date. Management regularly reviews underlying estimates of total expected labour costs or hours. Revisions to estimates due to volume variations, changes in technology and other factors which may not be foreseen at inception are reflected in the consolidated statements of earnings in the period in which the facts that gave rise to the revision become known. If the outcome of an arrangement cannot be estimated reliably, revenue is recognized to the extent of arrangement costs incurred that are likely to be recoverable.

Software licenses

Most of the Company's software license arrangements include other services such as implementation, customization and maintenance. For these types of arrangements, revenue from a software license is recognized upon delivery if it has been identified as a separately identifiable component. Otherwise, it is combined with the implementation and customization services and is accounted for as described in "Systems integration and consulting services" above. Revenue from maintenance services for software licenses sold and implemented is recognized ratably over the term of the maintenance period.

Work in progress and deferred revenue

Amounts recognized as revenue in excess of billings are classified as work in progress. Amounts received in advance of the delivery of products or performance of services are classified as deferred revenue.

CASH AND CASH EQUIVALENTS

Cash and cash equivalents consist of unrestricted cash and short-term investments having an initial maturity of three months or less.

SHORT-TERM INVESTMENTS

Short-term investments, comprised generally of term deposits, have remaining maturities over three months, but not more than one year, at the date of purchase.

FUNDS HELD FOR CLIENTS AND CLIENTS' FUNDS OBLIGATIONS

In connection with the Company's payroll, tax filing and claims services, the Company collects funds for payment of payroll, taxes and claims, temporarily holds such funds until payment is due, remits the funds to the clients' employees, appropriate tax authorities or claim holders, files federal and local tax returns and handles related regulatory correspondence and amendments. The funds held for clients include short-term and long-term bonds and cash. The Company presents the funds held for clients and related obligations separately. Funds held for clients are classified as current assets since, based upon management's intentions, these funds are held solely for the purpose of satisfying the clients' funds obligations, which will be repaid within one year of the consolidated balance sheet date.

Interest income earned and realized gains and losses on the disposal of bonds are recorded in revenue in the period that the income is earned, since the collecting, holding and remitting of these funds are critical components of providing these services.

PROPERTY, PLANT AND EQUIPMENT ("PP&E")

PP&E, including those items under finance leases, are recorded at cost and are depreciated over their estimated useful lives using the straight-line method.

Land and buildings	10 to 40 years
Leasehold improvements	Lesser of the useful life or lease term
Furniture, fixtures and equipment	3 to 20 years
Computer equipment	3 to 5 years

BORROWING COSTS

Borrowing costs directly attributable to the acquisition, construction or development of a qualifying asset are capitalized as part of the cost of the respective asset. A qualifying asset is an asset that necessarily takes a substantial period of time to get ready for its intended use or sale. All other borrowing costs are expensed in the period they occur.

CONTRACT COSTS

Contract costs are mainly incurred when acquiring or implementing long-term outsourcing contracts. Contract costs are comprised primarily of incentives and transition costs and are recorded at cost.

Incentives

Occasionally, incentives are granted to clients upon the signing of outsourcing contracts. These incentives are primarily granted either in the form of cash payments (including the excess of the amount paid over the fair value of PP&E or intangible assets acquired from client in connection with the outsourcing contract) or as an issuance of equity instruments. In the case of equity instruments, cost is measured at the estimated fair value at the time they are issued.

Transition costs

Transition costs consist of costs associated with the installation of systems and processes incurred after the award of outsourcing contracts, relocation of transitioned employees and exit from client facilities. Under BPS contracts, the costs consist primarily of costs related to activities such as the conversion of the client's applications to the Company's platforms. These costs are comprised essentially of labour costs, including compensation and related fringe benefits, as well as subcontractor costs.

Pre-contract costs

Pre-contract costs associated with acquiring or implementing long-term outsourcing contracts are expensed as incurred except where it is virtually certain that the contracts will be awarded and the costs are directly related to the acquisition of the contract.

Amortization of contract costs

Contract costs are amortized as services are provided. Amortization of transition costs and pre-contract costs is included in costs of services, selling and administrative and amortization of incentives is recorded as a reduction of revenue.

Impairment of contract costs

When a contract is not expected to be profitable, the expected loss is first applied to impair the related contract costs, with the excess recorded as a provision and presented in other long-term liabilities. At a future date if the contract returns to profitability, the previously recognized impairment loss must be reversed. The reversal of the impairment loss is limited so that the carrying amount does not exceed its recoverable amount, nor exceed the carrying amount that would have been determined, net of amortization, had no impairment loss been recognized for the contract costs in prior years.

INTANGIBLE ASSETS

Intangible assets consist mainly of internal-use software, business solutions, software licenses and client relationships. Internal-use software, business solutions and software licenses are recorded at cost. Business solutions developed internally and marketed are capitalized when they meet specific capitalization criteria related to technical, market and financial feasibility. Business solutions, software licenses and client relationships acquired through business combinations are initially recorded at their fair value based on the present value of expected future cash flows, which involve making estimates about the future cash flows, as well as discount rates.

Amortization of intangible assets

The Company amortizes its intangible assets using the straight-line method over the following estimated useful lives:

Internal-use software	2 to 7 years
Business solutions	2 to 10 years
Software licenses	3 to 8 years
Client relationships and other	2 to 10 years

IMPAIRMENT OF PP&E, INTANGIBLE ASSETS AND GOODWILL

Timing of impairment testing

The carrying values of PP&E, intangible assets and goodwill are reviewed for impairment when events or changes in circumstances indicate that the carrying value may be impaired. The Company assesses at each reporting date whether any such events or changes in circumstances exist. The carrying values of PP&E and intangible assets not available for use and goodwill are tested for impairment annually as at September 30.

Impairment testing

If any indication of impairment exists or when annual impairment testing for an asset is required, the Company estimates the recoverable amount of the asset or cash-generating unit ("CGU") to which the asset relates to determine the extent of any impairment loss. The recoverable amount is the higher of an asset's or CGU's fair value less costs to sell and its value in use ("VIU") to the Company. The Company generally uses the VIU. In assessing VIU, estimated future cash flows are discounted to their present value using a discount rate that reflects current market assessments of the time value of money and the risks specific to the asset or CGU. In determining fair value less costs to sell, recent market transactions are taken into account, if available. If the recoverable amount of an asset or a CGU is estimated to be less than its carrying amount, the carrying amount is reduced to its recoverable amount. An impairment loss is recognized immediately in the consolidated statements of earnings.

For goodwill impairment testing purposes, the CGU that represents the lowest level within the Company at which management monitors goodwill is the operating segment level (Note 27). Goodwill acquired through business combinations is allocated to the CGU that is expected to benefit from synergies of the related business combination.

The VIU calculation for the recoverable amount of the CGUs to which goodwill has been allocated includes estimates about their future financial performance over a period of five years. Key assumptions used in the VIU calculations are the discount rate applied and the long-term growth rate of net operating cash flows. In determining these assumptions, management has taken into consideration the current economic climate and its resulting impact on expected growth and discount rates. In determining the discount rate applied to a CGU, management uses the Company's weighted average cost of capital as a starting point and applies adjustments to take into account specific tax rates, geographical risk and any additional risks specific to the CGU. The cash flow projections reflect management's expectations of the operating performance of the CGU and growth prospects in the CGU's market.

For impaired assets, excluding goodwill, an assessment is made at each reporting date as to whether there is any indication that previously recognized impairment losses may no longer exist or may have decreased. If such indication exists, the Company estimates the asset's recoverable amount. A previously recognized impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognized. The reversal is limited so that the carrying amount of the asset does not exceed its recoverable amount, nor exceed the carrying amount that would have been determined, net of amortization, had no impairment loss been recognized for the asset in prior years. Such reversal is recognized in the consolidated statements of earnings. Impairment losses relating to goodwill cannot be reversed in future periods.

OTHER LONG-TERM ASSETS

Other long-term assets consist mainly of insurance contracts held to fund defined benefit pension and life assurance arrangements, deferred compensation plan assets, long-term investments, retirement benefits assets, long-term receivables, deferred financing fees, long-term maintenance agreements and forward contracts. Long-term investments, comprised of bonds, are classified as long-term based on management's intentions.

BUSINESS COMBINATIONS

The Company accounts for its business combinations using the acquisition method. Under this method the consideration transferred is measured at fair value. Acquisition-related and integration costs associated with the business combination are expensed as incurred. The Company recognizes goodwill as of the acquisition date as the excess of the cost of the acquisition over the net identifiable assets acquired and liabilities assumed at their acquisition-date fair values. The determination of fair value involves making estimates relating to acquired intangible assets, PP&E, litigation and other contingency reserves. Subsequent changes in fair values are adjusted against the cost of acquisition if they qualify as measurement period adjustments. The measurement period is the period between the date of acquisition and the date where all significant information necessary to determine the fair values are available, not to exceed 12 months. All other subsequent changes are recognized in the consolidated statements of earnings. For all business acquisitions, the Company records the results of operations of the acquired entities as of their respective effective acquisition dates.

EARNINGS PER SHARE

Basic earnings per share is based on the weighted average number of shares outstanding during the period. Diluted earnings per share is determined using the treasury stock method to evaluate the dilutive effect of stock options and performance share units ("PSUs").

RESEARCH AND SOFTWARE DEVELOPMENT COSTS

Research costs are charged to earnings in the period in which they are incurred, net of related tax credits. Software development costs are charged to earnings in the year they are incurred, net of related tax credits, unless they meet specific capitalization criteria related to technical, market and financial feasibility.

TAX CREDITS

The Company follows the income approach to account for tax credits, whereby investment tax credits are recorded when there is a reasonable assurance that the assistance will be received and that the Company will comply with all relevant conditions. Under this method, tax credits related to operating expenditures are recorded as a reduction of the related expense and recognized in the period in which the related expenditures are charged to operations. Tax credits related to capital expenditures are recorded as a reduction of the cost of the related asset. The tax credits recorded are based on management's best estimates of amounts expected to be received and are subject to audit by the taxation authorities.

INCOME TAXES

Income taxes are accounted for using the liability method of accounting.

Current income taxes are recognized with respect to the amounts expected to be paid or recovered under the tax rates and laws that have been enacted or substantively enacted at the balance sheet date.

Deferred income tax assets and liabilities are determined based on deductible or taxable temporary differences between the amounts reported for financial statements purposes and tax values of the assets and liabilities using enacted or substantively enacted tax rates that will be in effect for the year in which the differences are expected to be recovered or settled. Deferred tax assets are generally recognized for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilized.

Deferred income tax assets and liabilities are recognized directly in earnings, other comprehensive income or in equity based on the classification of the item to which they relate.

In the course of the Company's operations, uncertainties exist with respect to interpretation of complex tax regulations and the amount and timing of future taxable income. When a tax position is uncertain, the Company recognizes an income tax benefit or reduces an income tax liability only when it is probable that the tax benefit will be realized in the future or that the income tax liability is no longer probable.

PROVISIONS

Provisions are recognized when the Company has a present legal or constructive obligation as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. The Company's provisions consist of liabilities for leases of premises that the Company has vacated, litigation and claim provisions arising in the ordinary course of business and decommissioning liabilities for operating leases of office buildings where certain arrangements require premises to be returned to their original state at the end of the lease term. The Company also records restructuring provisions related to business acquisition.

The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation. Provisions are discounted using a current pre-tax rate when the impact of the time value of money is material. The increase in the provision due to the passage of time is recognized as finance cost.

TRANSLATION OF FOREIGN CURRENCIES

The Company's consolidated financial statements are presented in Canadian dollars, which is also the parent company's functional currency. Each entity in the Company determines its own functional currency and items included in the financial statements of each entity are measured using that functional currency. Functional currency is the currency of the primary economic environment in which the entity operates.

Note 3 — Summary of significant accounting policies (continued)

Foreign currency transactions and balances

Revenue, expenses and non-monetary assets and liabilities denominated in foreign currencies are recorded at the rate of exchange prevailing at the transaction date. Monetary assets and liabilities denominated in foreign currencies are translated at exchange rates prevailing at the balance sheet date. Realized and unrealized translation gains and losses are reflected in the consolidated statements of earnings.

Foreign operations

For foreign operations that have functional currencies different from the Company, assets and liabilities denominated in a foreign currency are translated into Canadian dollars at exchange rates in effect at the balance sheet date. Revenue and expenses are translated at average exchange rates prevailing during the period. Resulting unrealized gains or losses are reported as net unrealized gains or losses on translating financial statements of foreign operations in other comprehensive income.

For the accounts of foreign operations with the same functional currency as the Company, monetary assets and liabilities are translated at the exchange rates in effect at the balance sheet date and non-monetary assets and liabilities are translated at historical exchange rates. Revenue and expenses are translated at average rates for the period. Translation exchange gains or losses of such operations are reflected in the consolidated statements of earnings.

SHARE-BASED PAYMENTS

The Company operates equity-settled stock option and PSU plans under which the Company receives services from employees and others as consideration for equity instruments.

The fair value of those share-based payments is established on the grant date using the Black-Scholes option pricing model for the stock options and the closing price of Class A subordinate shares of the Company on the Toronto Stock Exchange ("TSX") for the PSUs. The number of stock options and PSUs expected to vest are estimated on the grant date and subsequently revised on a periodic basis. The fair values, adjusted for expectations related to performance conditions, are recognized as share-based payment costs in earnings with a corresponding credit to contributed surplus on a graded-vesting basis over the vesting period.

When stock options are exercised, any consideration paid by employees and members of the Board of Directors is credited to capital stock and the recorded fair value of the stock option is removed from contributed surplus and credited to capital stock. When PSUs are exercised, the recorded fair value of PSUs is removed from contributed surplus and credited to capital stock.

FINANCIAL INSTRUMENTS

All financial assets designated as held-to-maturity and loans and receivables, as well as financial liabilities designated as other liabilities, are initially measured at their fair values and subsequently at their amortized cost using the effective interest rate method. All financial assets and liabilities designated as fair value through earnings ("FVTE") are measured at their fair values and gains and losses related to periodic revaluations are recorded in the consolidated statements of earnings. Financial instruments may be designated on initial recognition as FVTE if any of the following criteria are met: i) the financial instrument contains one or more embedded derivatives that otherwise would have to be accounted for separately; ii) the designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise from measuring the financial asset or liability or recognizing the gains and losses on them on a different basis; or iii) the financial asset and financial liability are part of a group of financial assets or liabilities that is managed and its performance evaluated on a fair value basis, in accordance with a documented risk management or investment strategy. All financial assets designated as available for sale are measured at their fair value and any unrealized gains and losses, net of applicable income taxes, are reported in other comprehensive income. Interest income earned and realized gains and losses on the sale of available for sale assets are recorded in the consolidated statements of earnings.

Transaction costs are comprised primarily of legal, accounting and other costs directly attributable to the issuance of the respective financial assets and liabilities. Transaction costs are capitalized to the cost of financial assets and liabilities classified as other than FVTE.

Financial assets are derecognized if the contractual rights to the cash flows from the financial asset expire or the asset is transferred and the transfer qualifies for derecognition. The transfer qualifies for derecognition if substantially all the risks and rewards of ownership of the financial asset are transferred.

The Company has made the following classifications:

FVTE

Cash and cash equivalents, short-term investments (other than those included in funds held for clients), derivatives (unless they qualify for hedge accounting, refer to "Derivative Financial Instruments and Hedging Transactions") and bank overdraft. In addition, deferred compensation plan assets were designated by management as FVTE upon initial recognition as this reflected management's investment strategy.

<u>Loan and receivables</u>

Trade accounts receivable and cash included in funds held for clients.

<u>Available for sale</u>

Short-term and long-term bonds included in funds held for clients and long-term investments.

<u>Other liabilities</u>

Accounts payable and accrued liabilities, accrued compensation, long-term debt, excluding obligations under finance leases, and clients' funds obligations.

Fair value hierarchy

Fair value measurements recognized in the balance sheet are categorized in accordance with the following levels:

Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities;

Level 2: inputs other than quoted prices included in Level 1, but that are observable for the asset or liability, either directly or indirectly; and

Level 3: inputs for the asset or liability that are not based on observable market data.

All financial assets and liabilities measured at fair value are categorized in Level 1, except for derivatives, investments included in funds held for clients and long-term investments, which are categorized in Level 2.

DERIVATIVE FINANCIAL INSTRUMENTS AND HEDGING TRANSACTIONS

The Company enters into a variety of derivative financial instruments to manage its exposure to interest rate and foreign currency exchange risks.

Derivative financial instruments are initially recognized at fair value at the date the derivative contracts are entered into and are subsequently remeasured to their fair value at the end of each reporting period. The resulting gain or loss is recognized in the consolidated statements of earnings unless the derivative is designated and effective as a hedging instrument, in which event the timing of the recognition in the consolidated statements of earnings depends on the nature of the hedge relationship.

At the inception of a hedge relationship, the Company formally designates and documents the hedge relationship to which the Company wishes to apply hedge accounting and the risk management objective and strategy for undertaking the hedge. The documentation includes identification of the hedging instrument, the hedged item or transaction, the nature of the risk being hedged and how the Company will assess the effectiveness of changes in the hedging instrument's fair value in offsetting the exposure to changes in the hedged item's fair value or cash flows attributable to the hedged risk. Such hedges are expected to be highly effective in achieving offsetting changes in fair value or cash flows and are assessed on an ongoing basis to determine that they actually have been highly effective throughout the financial reporting periods for which they were designated.

The cash flows of the hedging transactions are classified in the same manner as the cash flows of the position being hedged.

Hedges on net investments in foreign operations

The Company uses cross-currency swaps and foreign currency denominated long-term debt to hedge portions of the Company's net investments in its U.S and European operations. Foreign exchange translation gains or losses on the net investments and the effective portions of gains or losses on instruments hedging the net investments are recorded in other comprehensive income. To the extent that the hedge is ineffective, such differences are recognized in consolidated statements of earnings. When the hedged net investment is disposed of, the relevant amount in the other comprehensive income is transferred to earnings as part of the gain or loss on disposal.

Cash flow hedges on future revenue

The Company has also entered into various foreign currency forward contracts to hedge the variability in the foreign currency exchange rates. These hedges were documented as cash flow hedges and no component of the derivative instruments' fair value is excluded from the assessment and measurement of hedge effectiveness.

The effective portion of the change in fair value of the derivative instruments is recognized in other comprehensive income and the ineffective portion, if any, in the consolidated statements of earnings. The effective portion of the change in fair value of the derivatives is reclassified out of other comprehensive income into the consolidated statements of earnings as an adjustment to revenue when the hedged revenue is recognized.

Note 3 — Summary of significant accounting policies (continued)

Cash flow hedges on unsecured committed term loan credit facility

The Company has entered into interest rate swaps to hedge the cash flow exposure of the issued variable rate unsecured committed term loan credit facility. Under the interest rate swaps, the Company receives a variable rate of interest and pays interest at a fixed rate on the notional amount.

The hedges were documented as cash flow hedges and no component of the derivative instruments' fair value are excluded from the assessment and measurement of hedge effectiveness.

Fair value hedges on Senior U.S. unsecured notes

The Company entered into interest rate swap to hedge the fair value exposure of the issued fixed rate Senior U.S. unsecured notes.

The changes in the fair value of the interest rate swaps are recognized in the consolidated statements of earnings as finance costs. The changes in the fair value of the hedged items attributable to the risk hedged is recorded as part of the carrying value of the Senior U.S. unsecured notes and are also recognized in the consolidated statements of earnings as finance costs. If the hedged items are derecognized, the unamortized fair value is recognized immediately in the consolidated statements of earnings.

The forward contracts, the cross-currency swaps and the interest rate swaps used as a cash flow hedging item are derivative instruments and, therefore, are recorded at fair value in the consolidated balance sheets under other current assets, other long-term assets, accrued liabilities or other long-term liabilities. Valuation models, such as discounted cash flow analysis using observable market inputs, are utilized to determine the fair values of the derivative instruments.

EMPLOYEE BENEFITS

The Company operates retirement benefit plans of both a defined contribution and defined benefit nature. Retirement benefit plans that are funded by the payment of insurance premiums are treated as defined contribution plans unless the Company has an obligation either to pay the benefits directly when they fall due or to pay further amounts if assets accumulated with the insurer do not cover all future employee benefits. In such circumstances, the plan is treated as a defined benefit plan. The cost of defined contribution plans is charged to the consolidated statements of earnings on the basis of contributions payable by the Company during the year. For defined benefits plans, the defined benefit obligations are calculated annually by independent actuaries using the projected unit credit method. The retirement benefit obligations in the consolidated balance sheets represent the present value of the defined benefit obligation as reduced by the fair value of plan assets. The retirement benefits assets are recognized to the extent that the Company can benefit from refunds or a reduction in future contributions.

Insurance policies are treated as plan assets of a defined benefit plan if the proceeds of the policy:
  — Can only be used to fund employee benefits;
  — Are not available to the Company's creditors; and
  — Either cannot be paid to the Company unless the proceeds represent surplus assets not needed to meet all the benefit obligations or are a reimbursement for benefits already paid by the Company.

Insurance policies that do not meet the above criteria are treated as non-current investments and are held at fair value as a non-current financial asset in the consolidated balance sheets.

The current service cost is recognized in the consolidated statements of earnings as an employee benefit expense. The interest cost resulting from the increase in the present value of the defined benefit obligations over time and the expected return on plan assets, is recognized as net interest expense or income. Actuarial gains and losses arising from experience adjustments or changes in actuarial assumptions are charged or credited to the other comprehensive income in the period in which they arise.

FUTURE ACCOUNTING STANDARD CHANGES

The following standards have been issued but are not yet effective:
  — IFRS 9, "Financial Instruments", covers the classification and measurement of financial assets and financial liabilities.
  — IFRS 10, "Consolidated Financial Statements", builds on existing principles by identifying the concept of control as the determining factor in whether an entity should be included in a company's consolidated financial statements.
  — IFRS 12, "Disclosure of Interests in Other Entities", provides guidance on disclosure requirements for all forms of interests in other entities, including joint arrangements, associates, special purpose vehicles and other off-balance sheet vehicles.
  — IFRS 13, "Fair Value Measurement", provides guidance on fair value measurements by providing a definition of fair value and a single source of fair value measurement and disclosure requirements.

— IAS 1, "Presentation of Financial Statements", was amended to require grouping together items within the statement of comprehensive income that may be reclassified to the statement of income.

— IAS 19, "Employee Benefits", was amended to adjust the calculation of the financing cost component of defined benefit plans and to enhance disclosure requirements.

Other than IFRS 9, the above standards are effective October 1, 2013, with earlier application permitted. IFRS 9 is effective October 1, 2015, also with earlier application permitted. The Company is currently evaluating the impact of these standards on its consolidated financial statements.

NOTE 4
Cash and cash equivalents and bank overdraft

	As at September 30, 2012	As at September 30, 2011	As at October 1, 2010
	$	$	$
Cash	86,060	95,643	22,061
Cash equivalents	27,043	40,568	86,468
Cash and cash equivalents	113,103	136,211	108,529
Bank overdraft	—	(75,538)	—
	113,103	60,673	108,529

NOTE 5
Accounts receivable

	As at September 30, 2012	As at September 30, 2011	As at October 1, 2010
	$	$	$
Trade	1,272,325	387,229	340,957
Other[1]	173,824	103,255	85,284
	1,446,149	490,484	426,241

[1] Other accounts receivable include refundable tax credits on salaries related to the Québec Development of E-Business program, Research and Development tax credits in North America and Europe, and other Job and Economic Growth Creation programs available. The tax credits represent approximately $106,491,000, $75,896,000 and $54,624,000 of other accounts receivable in 2012, 2011 and 2010, respectively.

The fiscal measures under the Québec Development of E-Business program enable corporations with an establishment in the province of Québec that carry out eligible activities in the technology sector to obtain a refundable tax credit equal to 30% of eligible salaries, up to a maximum of $20,000 per year per eligible employee until December 31, 2015.

NOTE 6
Funds held for clients

	As at September 30, 2012	As at September 30, 2011	As at October 1, 2010
	$	$	$
Cash	11,670	67,140	248,695
Short-term bonds	—	10,070	—
Long-term bonds	190,737	170,412	—
	202,407	247,622	248,695

NOTE 7
Property, plant and equipment

	Land and buildings	Leasehold improvements	Furniture, fixtures and equipment	Computer equipment	Total
	$	$	$	$	$
Cost					
As at September 30, 2011	14,773	125,808	84,046	293,944	518,571
Additions/transfers	23,993	5,021	8,980	58,891	96,885
Additions – business acquisition (Note 24)	20,456	84,952	106,974	38,426	250,808
Disposals/transfers[1]	—	(9,344)	(2,305)	(46,537)	(58,186)
Foreign currency translation adjustment	308	427	1,723	(4,146)	(1,688)
As at September 30, 2012	59,530	206,864	199,418	340,578	806,390
Accumulated amortization					
As at September 30, 2011	4,047	65,678	31,767	167,178	268,670
Amortization expense (Note 20)	1,236	18,655	16,717	56,445	93,053
Disposals/transfers[1]	—	(7,052)	(2,274)	(44,580)	(53,906)
Foreign currency translation adjustment	15	(384)	668	(2,721)	(2,422)
As at September 30, 2012	5,298	76,897	46,878	176,322	305,395
Net carrying amount as at September 30, 2012	**54,232**	**129,967**	**152,540**	**164,256**	**500,995**

	Land and buildings	Leasehold improvements	Furniture, fixtures and equipment	Computer equipment	Total
	$	$	$	$	$
Cost					
As at October 1, 2010	17,309	139,522	75,334	255,182	487,347
Additions/transfers	154	15,479	16,602	72,443	104,678
Disposals/transfers[1]	(2,735)	(29,011)	(7,432)	(34,064)	(73,242)
Foreign currency translation adjustment	45	(182)	(458)	383	(212)
As at September 30, 2011	14,773	125,808	84,046	293,944	518,571
Accumulated amortization					
As at October 1, 2010	4,461	74,419	30,065	141,770	250,715
Amortization expense (Note 20)	199	17,260	8,482	53,083	79,024
Disposals/transfers[1]	(628)	(25,975)	(6,641)	(28,003)	(61,247)
Foreign currency translation adjustment	15	(26)	(139)	328	178
As at September 30, 2011	4,047	65,678	31,767	167,178	268,670
Net carrying amount as at September 30, 2011	10,726	60,130	52,279	126,766	249,901

[1] Includes derecognition of fully depreciated assets of $32,738,000 ($38,914,000 in 2011).

Property, plant and equipment include the following assets acquired under finance leases:

	As at September 30, 2012			As at September 30, 2011			As at October 1, 2010		
	Cost	Accumulated amortization	Net carrying amount	Cost	Accumulated amortization	Net carrying amount	Cost	Accumulated amortization	Net carrying amount
	$	$	$	$	$	$	$	$	$
Furniture, fixtures and equipment	16,909	5,198	11,711	12,521	2,812	9,709	9,258	1,551	7,707
Computer equipment	103,759	52,201	51,558	87,688	40,550	47,138	79,058	33,645	45,413
	120,668	57,399	63,269	100,209	43,362	56,847	88,316	35,196	53,120

NOTE 8
Contract costs

	As at September 30, 2012			As at September 30, 2011			As at October 1, 2010		
	Cost	Accumulated amortization	Net carrying amount	Cost	Accumulated amortization	Net carrying amount	Cost	Accumulated amortization	Net carrying amount
	$	$	$	$	$	$	$	$	$
Incentives	102,061	81,425	20,636	101,599	72,622	28,977	142,696	107,766	34,930
Transition costs	258,778	111,672	147,106	181,559	103,294	78,265	201,413	103,234	98,179
	360,839	193,097	167,742	283,158	175,916	107,242	344,109	211,000	133,109

NOTE 9
Intangible assets

	Internal-use software	Business solutions	Software licenses	Client relationships and other	Total
	$	$	$	$	$
Cost					
As at September 30, 2011	90,775	299,788	162,699	390,374	943,636
Additions/transfers	4,158	—	19,499	—	23,657
Additions – internally developed	—	35,360	—	—	35,360
Additions – business acquisition (Note 24)	33,812	36,392	—	533,479	603,683
Disposals/transfers[1]	(4,012)	(8,099)	(5,115)	(29,999)	(47,225)
Foreign currency translation adjustment	(260)	(8,049)	(1,151)	(1,136)	(10,596)
As at September 30, 2012	124,473	355,392	175,932	892,718	1,548,515
Accumulated amortization					
As at September 30, 2011	71,510	213,780	119,051	247,162	651,503
Amortization expense (Note 20)	9,133	21,770	18,472	50,299	99,674
Disposals/transfers[1]	(2,062)	(8,917)	(4,302)	(31,811)	(47,092)
Foreign currency translation adjustment	(364)	(6,316)	(592)	(7,190)	(14,462)
As at September 30, 2012	78,217	220,317	132,629	258,460	689,623
Net carrying amount as at September 30, 2012	46,256	135,075	43,303	634,258	858,892

	Internal-use software	Business solutions	Software licenses	Client relationships and other	Total
	$	$	$	$	$
Cost					
As at October 1, 2010	88,153	284,475	172,736	414,199	959,563
Additions/transfers	6,503	—	21,354	—	27,857
Additions – internally developed	—	14,975	—	—	14,975
Modifications to purchase price allocation	—	—	—	(1,743)	(1,743)
Disposals/transfers[1]	(4,075)	(1,849)	(31,699)	(23,182)	(60,805)
Foreign currency translation adjustment	194	2,187	308	1,100	3,789
As at September 30, 2011	90,775	299,788	162,699	390,374	943,636
Accumulated amortization					
As at October 1, 2010	64,749	178,400	123,036	224,342	590,527
Amortization expense	10,506	23,766	18,921	42,979	96,172
Disposals/transfers[1]	(3,818)	(1,849)	(23,062)	(21,675)	(50,404)
Impairment	—	11,719	—	—	11,719
Foreign currency translation adjustment	73	1,744	156	1,516	3,489
As at September 30, 2011	71,510	213,780	119,051	247,162	651,503
Net carrying amount as at September 30, 2011	19,265	86,008	43,648	143,212	292,133

[1] Includes derecognition of fully depreciated assets of $45,857,000 ($32,183,000 in 2011).

All intangible assets are subject to amortization.

NOTE 10
Other long-term assets

	As at September 30, 2012	As at September 30, 2011	As at October 1, 2010
	$	$	$
Insurance contracts held to fund defined benefit pension and life assurance arrangements (Note 29)	19,122	—	—
Deferred compensation plan assets (Note 29)	18,878	16,452	16,318
Long-term investments	15,533	15,309	—
Retirement benefits assets (Note 29)	9,165	—	—
Long-term receivables	8,502	4,610	—
Deferred financing fees	5,042	1,077	2,360
Long-term maintenance agreements	4,891	5,017	4,904
Forward contracts (Note 31)	2,098	6,179	13,317
Deposits and other	13,120	6,949	4,724
	96,351	55,593	41,623

NOTE 11
Goodwill

Due to the change in operating segments during the year (Note 27), the Company reallocated goodwill to the revised CGUs using relative fair value and conducted a goodwill impairment test using the revised CGUs, which are the same as the operating segments. Based on the results of this test, no impairment charge was required. In addition, the Company completed the annual impairment test as at September 30, 2012 and did not identify any impairment. On August 20, 2012, CGI acquired 100% of the shares of Logica plc ("Logica") and reported Logica as an operating segment (Note 27).

The variations in goodwill were as follows:

	U.S.	Canada	GIS	Europe & Asia Pacific	Logica	Total
	$	$	$	$	$	$
Balance as at October 1, 2010	1,282,773	964,085	202,715	75,840	—	2,525,413
Business acquisition	—	—	—	656	—	656
Purchase price adjustments (Note 24)	4,376	—	—	—	—	4,376
Disposal of business	—	(5,050)	—	—	—	(5,050)
Foreign currency translation adjustment	10,682	—	120	(175)	—	10,627
Balance as at September 30, 2011, as previously reported	1,297,831	959,035	202,835	76,321	—	2,536,022
Goodwill reallocation	(22,243)	21,613	—	630	—	—
Balance as at September 30, 2011, after goodwill reallocation	1,275,588	980,648	202,835	76,951	—	2,536,022
Business acquisition (Note 24)	—	—	—	—	3,276,172	3,276,172
Foreign currency translation adjustment	(70,849)	—	(880)	(7,011)	86,363	7,623
Balance as at September 30, 2012	1,204,739	980,648	201,955	69,940	3,362,535	5,819,817

Key assumptions in goodwill impairment testing

The assumptions for the most significant CGUs are disclosed in the following table:

As at September 30, 2012	U.S.	Canada	GIS
	%	%	%
Assumptions			
Pre-tax discount rate	8.7	5.5	7.2
Long-term growth rate of net operating cash flows	2.0	2.0	2.0

As at October 1, 2011	U.S.	Canada	GIS
	%	%	%
Assumptions			
Pre-tax discount rate	8.9	7.2	8.7
Long-term growth rate of net operating cash flows	2.0	2.0	2.0

As at October 1, 2010	U.S. & India	Canada	GIS
	%	%	%
Assumptions			
Pre-tax discount rate	10.4	8.1	9.8
Long-term growth rate of net operating cash flows	2.0	2.0	2.0

As Logica was acquired on August 20, 2012, the consideration paid is the best indicator of fair value for this CGU as at September 30, 2012.

NOTE 12
Provisions

	Onerous leases[1]	Litigations and claims[2]	Decommissioning liabilities[3]	Restructuring[4]	Total
	$	$	$	$	$
As at September 30, 2011	29,703	2,535	7,559	—	39,797
Additional provisions	4,515	1,719	1,672	101,475	109,381
Provisions assumed in business acquisition	59,138	106,408	31,446	47,652	244,644
Utilized amounts	(10,445)	(2,217)	—	(5,384)	(18,046)
Reversals of unused amounts	(1,135)	—	(2,908)	—	(4,043)
Discount rate adjustment and imputed interest	148	—	205	—	353
Effect of foreign currency translation adjustment	601	3,108	(22)	1,359	5,046
As at September 30, 2012	82,525	111,553	37,952	145,102	377,132
Current portion	35,011	3,273	3,420	118,921	160,625
Non-current portion	47,514	108,280	34,532	26,181	216,507

	Onerous leases[1]	Litigations and claims[2]	Decommissioning liabilities[3]	Restructuring[4]	Total
	$	$	$	$	$
As at October 1, 2010	13,078	3,478	3,707	—	20,263
Additional provisions	23,192	930	3,659	—	27,781
Utilized amounts	(5,309)	(58)	—	—	(5,367)
Reversals of unused amounts	(1,879)	(1,850)	—	—	(3,729)
Discount rate adjustment and imputed interest	328	—	190	—	518
Effect of foreign currency translation adjustment	293	35	3	—	331
As at September 30, 2011	29,703	2,535	7,559	—	39,797
Current portion	9,590	2,535	—	—	12,125
Non-current portion	20,113	—	7,559	—	27,672

[1] Onerous leases consist of estimated costs associated with vacated premises. The timing of cash outflows relating to these provisions ranges between one and thirteen years (one and eight years and one and ten years in 2011 and 2010, respectively) and was discounted at a weighted average rate of 0.98% (1.48% and 2.75% in 2011 and 2010, respectively).

[2] Litigation and claim provisions represent certain legal claims brought against the Company.

[3] Decommissioning liabilities pertain to operating leases of office buildings where certain arrangements require premises to be returned to their original state at the end of the lease term. The decommissioning liability was based on the expected cash flows of $43,421,000 ($8,790,000 and $4,370,000 in 2011 and 2010, respectively) and was discounted at a weighted average rate of 1.24% (2.19% and 2.74% in 2011 and 2010, respectively). The timing of the settlement of these obligations ranges between one and fourteen years (one and twelve years and one and thirteen years in 2011 and 2010, respectively).

[4] Restructuring costs include Logica's restructuring program announced on December 14, 2011. It is comprised of property rationalization, a reduction in headcount and other measures to reduce the cost base which amounted to $47,652,000 as at August 20, 2012. In addition, in connection with the acquisition of Logica made during the year, the Company recorded costs related to the termination of certain employees identified as redundant.

NOTE 13
Other long-term liabilities

	As at September 30, 2012	As at September 30, 2011	As at October 1, 2010
	$	$	$
Deferred revenue	349,507	29,887	40,702
Estimated losses on revenue-generating contracts	139,744	—	—
Deferred compensation plan liabilities (Note 29)	19,724	18,227	18,694
Deferred rent	55,850	40,767	39,346
Forward contracts (Note 31)	32,848	3,090	3,396
Other	3,559	1,804	626
	601,232	93,775	102,764

NOTE 14
Long-term debt

	As at **September 30, 2012**	As at September 30, 2011	As at October 1, 2010
	$	$	$
Senior U.S. unsecured notes, bearing a weighted average interest rate of 4.57% and repayable by a payment of $83,615 (US$85,000) in 2016, $137,718 (US$140,000) in 2018 and $245,925 (US$250,000) in 2021[1]	**467,610**	20,647	109,899
Unsecured committed revolving facility[2]	**691,960**	859,277	964,223
Unsecured committed term loan credit facility[3]	**1,933,948**	—	—
Obligations bearing a weighted average interest rate of 3.34% and repayable in blended monthly installments maturing at various dates until 2018	**60,812**	58,575	22,049
Obligations under finance leases, bearing a weighted average interest rate of 3.85% and repayable in blended monthly installments maturing at various dates until 2019	**85,124**	67,182	57,705
Other long-term debt	**8,954**	—	—
	3,248,408	1,005,681	1,153,876
Current portion	**52,347**	896,012	114,577
	3,196,061	109,669	1,039,299

[1] On December 15, 2011, the Company drew down an amount of $491,008,000 (US$475,000,000) on a private placement financing with U.S. institutional investors. The private placement is comprised of three tranches of Senior U.S. unsecured notes, with a weighted average maturity as at September 30, 2012 of 7.4 years and a weighted average fixed coupon of 4.57%. With the proceeds of this private placement, the Company reimbursed an amount of $491,008,000 of the unsecured revolving facility. The Senior U.S. unsecured notes contain covenants that require the Company to maintain certain financial ratios (Note 32). As at September 30, 2012, the Company was in compliance with these covenants.

On August 17, 2012, the Company repaid the last outstanding tranche in the amount of $19,770,000 (US$20,000,000) of the 2004 private placement financing with U.S. institutional investors and settled the related forward contracts taken to manage the Company's exposure to fluctuations in foreign exchange rate resulting in a cash outflow of $333,000.

[2] On December 7, 2011, the Company renewed its unsecured revolving facility for an amount of $1,500,000,000 for an additional five years, expiring in December 2016. This facility is bearing interest at Bankers' acceptance, LIBOR or to a lesser extent, Canadian prime; plus a variable margin that is determined based on the Company's leverage ratios. As at September 30, 2012, an amount of $691,960,000 had been drawn upon this facility at a margin of 1.75% for LIBOR and Banker's acceptance and 0.75% for the Canadian prime portion. Also, an amount of $21,951,000 has been committed against this facility to cover various letters of credit issued for clients and other parties. The revolving credit facility contains covenants that require the Company to maintain certain financial ratios (Note 32). As at September 30, 2012, the Company was in compliance with these covenants.

[3] On May 31, 2012, contingent on closing of Logica acquisition, the Company signed a new term loan credit facility agreement of £1,245,000,000. As at September 30, 2012, an amount of $1,948,940,000 was drawn, less financing costs of $14,992,000. The term loan credit facility expires in tranches on May 2014 ($484,955,000), 2015 ($484,955,000) and 2016 ($979,030,000). The term loan credit facility is bearing interest at Bankers' acceptance, LIBOR or to a lesser extent, Canadian prime; plus a variable margin that is determined based on the Company's leverage ratios. As at September 30, 2012, the margin paid was 2.25% for LIBOR and Banker's acceptance and 1.25% for the Canadian prime portion. The term loan credit facility contains covenants that require the Company to maintain certain financial ratios (Note 32). As at September 30, 2012, the Company was in compliance with these covenants.

Principal repayments on long-term debt over the forthcoming years are as follows:

	$
Less than one year	18,942
Between one and two years	510,029
Between two and five years	2,265,244
Beyond five years	384,061
Total principal payments on long-term debt	3,178,276

Minimum finance lease payments are as follows:

	Principal	Interest	Payment
	$	$	$
Less than one year	33,405	3,143	36,548
Between one and two years	24,586	1,517	26,103
Between two and five years	26,847	830	27,677
Beyond five years	286	5	291
Total minimum finance lease payments	85,124	5,495	90,619

NOTE 15
Capital stock

Authorized, an unlimited number without par value:

First preferred shares, carrying one vote per share, ranking prior to second preferred shares, Class A subordinate shares and Class B shares with respect to the payment of dividends;

Second preferred shares, non-voting, ranking prior to Class A subordinate shares and Class B shares with respect to the payment of dividends;

Class A subordinate shares, carrying one vote per share, participating equally with Class B shares with respect to the payment of dividends and convertible into Class B shares under certain conditions in the event of certain takeover bids on Class B shares;

Class B shares, carrying ten votes per share, participating equally with Class A subordinate shares with respect to the payment of dividends, convertible at any time at the option of the holder into Class A subordinate shares.

For 2012 and 2011, the Class A subordinate and the Class B shares varied as follows:

	Class A subordinate shares		Class B shares		Total	
	Number	Carrying value	Number	Carrying value	Number	Carrying value
		$		$		$
Balance as at October 1, 2010	237,684,791	1,148,182	33,608,159	46,887	271,292,950	1,195,069
Repurchased and cancelled[1]	(16,373,400)	(80,009)	—	—	(16,373,400)	(80,009)
Issued upon exercise of stock options[2]	5,743,649	66,065	—	—	5,743,649	66,065
Purchased and held in trust[3]	—	(2,566)	—	—	—	(2,566)
Balance as at September 30, 2011	227,055,040	1,131,672	33,608,159	46,887	260,663,199	1,178,559
Repurchased and cancelled[1]	(5,368,000)	(26,942)	—	—	(5,368,000)	(26,942)
Issued upon financing of business acquisition, net of transaction costs	46,707,146	999,178	—	—	46,707,146	999,178
Issued upon exercise of stock options[2]	5,376,920	64,033	—	—	5,376,920	64,033
Purchased and held in trust[3]	—	(14,252)	—	—	—	(14,252)
Sale of shares held in trust[3]	—	1,118	—	—	—	1,118
Balance as at September 30, 2012	**273,771,106**	**2,154,807**	**33,608,159**	**46,887**	**307,379,265**	**2,201,694**

[1] On February 1, 2012, the Company's Board of Directors authorized the renewal of a Normal Course Issuer Bid ("NCIB") for the purchase of up to 22,064,163 Class A subordinate shares during the next year (23,006,547 in 2011 and 25,151,058 in 2010) for cancellation on the open market through the Toronto Stock Exchange. The Class A subordinate shares were available for purchase commencing February 9, 2012, until no later than February 8, 2013, or on such earlier date when the Company completes its purchases or elects to terminate the bid. During fiscal year 2012, the Company repurchased 5,368,000 Class A subordinate shares (16,373,400 in 2011 and 35,602,085 in 2010) for cash consideration of $102,845,000 ($305,028,000 in 2011 and $516,699,000 in 2010). The excess of the purchase price over the carrying value, in the amount of $75,903,000 ($225,019,000 in 2011 and $347,940,000 in 2010), was charged to retained earnings.

[2] The carrying value of Class A subordinate shares includes $16,010,000 ($14,341,000 in 2011 and $13,332,000 in 2010), which corresponds to a reduction in contributed surplus representing the value of accumulated compensation costs associated with the stock options exercised during the year.

[3] The trustee, in accordance with the terms of the PSU plan and a Trust Agreement, purchased 761,358 Class A subordinate shares of the Company on the open market for $14,252,000 during the year ended September 30, 2012 (164,012 Class A subordinate shares for $2,566,000 during the year ended September 30, 2011). In addition, the trustee sold 61,504 Class A subordinate shares that were held in trust on the open market in accordance with the terms of the PSU plan (nil during the year ended September 30, 2011). The excess of the proceeds over the carrying value of the Class A subordinate shares, in the amount of $53,000, resulted in an increase of contributed surplus. As at September 30, 2012, 863,866 Class A subordinate shares were held in trust under the PSU plan (164,012 as at September 30, 2011) (Note 16b)).

NOTE 16
Share-based payments

a) Stock options

Under the Company's stock option plan, the Board of Directors may grant, at its discretion, stock options to purchase Class A subordinate shares to certain employees, officers, directors and consultants of the Company and its subsidiaries. The exercise price is established by the Board of Directors and is equal to the closing price of the Class A subordinate shares on the TSX on the day preceding the date of the grant. Stock options generally vest over four years from the date of grant conditionally upon achievement of objectives and must be exercised within a ten-year period, except in the event of retirement, termination of employment or death. As at September 30, 2012, 40,881,609 Class A subordinate shares have been reserved for issuance under the stock option plan.

The following table presents information concerning all outstanding stock options granted by the Company:

	2012		2011	
	Number of options	Weighted average exercise price per share	Number of options	Weighted average exercise price per share
		$		$
Outstanding, beginning of year	24,163,317	11.42	26,555,483	10.03
Granted	2,551,547	19.74	6,634,974	15.53
Exercised	(5,376,920)	8.93	(5,743,649)	9.01
Forfeited	(2,720,714)	15.47	(3,255,072)	12.68
Expired	—	—	(28,419)	9.19
Outstanding, end of year	18,617,230	12.69	24,163,317	11.42
Exercisable, end of year	12,079,231	10.69	13,108,369	9.39

The weighted average share price at the date of exercise for share options exercised in 2012 was $22.46 ($19.03 in 2011).

The following table summarizes information about outstanding stock options granted by the Company as at September 30, 2012:

		Options outstanding			Options exercisable	
Range of exercise price	Number of options	Weighted average remaining contractual life (years)	Weighted average exercise price	Number of options	Weighted average exercise price
$			$		$
5.20 to 6.98	181,166	3.47	6.66	181,166	6.66
7.00 to 7.87	1,594,412	3.22	7.74	1,594,412	7.74
8.00 to 8.91	1,392,887	2.56	8.52	1,392,887	8.52
9.05 to 9.43	2,844,597	6.00	9.31	2,844,597	9.31
10.05 to 11.80	2,353,759	5.03	11.37	2,353,759	11.37
12.54 to 13.26	3,997,509	6.99	12.55	2,563,564	12.55
14.48 to 15.96	3,765,173	8.00	15.48	1,045,450	15.47
19.28 to 23.99	2,487,727	9.01	19.76	103,396	20.58
	18,617,230	6.38	12.69	12,079,231	10.69

The fair value of stock options granted in the period and the assumptions used in the calculation of their fair value on the date of grant using the Black-Scholes option pricing model were as follows:

	Year ended September 30	
	2012	2011
Weighted average assumptions		
Grant date fair value ($)	4.67	4.31
Dividend yield (%)	0.00	0.00
Expected volatility (%)[1]	27.63	27.11
Risk-free interest rate (%)	1.20	1.99
Expected life (years)	4.00	5.00
Exercise price ($)	19.74	15.53
Share price ($)	19.74	15.53

[1] Expected volatility was determined using statistical formulas and based on the weekly historical average of closing daily share prices over the period of the expected life of stock option.

Note 16 — Share-based payments (continued)

b) Performance share units

Under the PSU plan, the Board of Directors may grant PSUs to senior executives and other key employees ("participants") which entitle them to receive one Class A subordinate share for each PSU. The vesting performance conditions are determined by the Board of Directors at the time of each grant. PSUs expire on December 31 of the third calendar year following the end of the fiscal year during which the PSU award is made, except in the event of retirement, termination of employment or death. Granted PSUs vest annually over a period of four years from the date of grant conditionally upon achievement of objectives.

Class A subordinate shares purchased in connection with the PSU plan are held in trust for the benefit of the participants. The trust, considered as a special purpose entity, is consolidated in the Company's consolidated financial statements with the cost of the purchased shares recorded as a reduction of capital stock (Note 15).

The following table presents information concerning the number of outstanding PSUs granted by the Company:

Outstanding as at October 1, 2010	—
Granted[1]	164,012
Outstanding as at September 30, 2011	164,012
Granted[1]	761,358
Forfeited	(61,504)
Outstanding as at September 30, 2012	**863,866**

[1] The PSUs granted in the period had a grant date fair value of $19.71 per unit in 2012 ($15.51 in 2011).

c) Share-based payment costs

The share-based payment expense recorded in cost of services, selling and administrative expenses is as follows:

	Year ended September 30	
	2012	2011
	$	$
Stock options	**9,310**	16,246
PSUs	**3,210**	399
	12,520	16,645

NOTE 17
Earnings per share

The following table sets forth the computation of basic and diluted earnings per share for the year ended September 30:

			2012			2011
	Net earnings	Weighted average number of shares outstanding[1]	Earnings per share	Net earnings	Weighted average number of shares outstanding[1]	Earnings per share
	$		$	$		$
Basic	131,529	263,431,660	0.50	438,139	265,333,074	1.65
Dilutive stock options and PSUs[2]		10,212,342			10,487,173	
	131,529	273,644,002	0.48	438,139	275,820,247	1.59

[1] The 5,368,000 Class A subordinate shares repurchased and 863,866 Class A subordinate shares held in trust during the year ended September 30, 2012 (16,373,400 and 164,012, respectively, during year ended September 30, 2011), were excluded from the calculation of weighted average number of shares outstanding as of the date of transaction.

[2] The calculation of the diluted earnings per share excluded 2,400,489 stock options for the year ended September 30, 2012 (58,542 for the year ended September 30, 2011), as they were anti-dilutive.

NOTE 18
Construction contracts in progress

Revenue from systems integration and consulting services under fixed-fee arrangements where the outcome of the arrangements can be estimated reliably is recognized using the percentage-of-completion method over the service periods. The Company uses the labour costs or labour hours to measure the progress towards completion. If the outcome of an arrangement cannot be estimated reliably, revenue is recognized to the extent of arrangement costs incurred that are likely to be recoverable.

Amounts recognized as revenue in excess of billings are classified as work in progress. Amounts received in advance of the delivery of products or performance of services are classified as deferred revenue.

The status of the Company's construction contracts in progress at the end of the reporting period was as follows:

	As at September 30, 2012	As at September 30, 2011	As at October 1, 2010
	$	$	$
Recognized as:			
Revenue in the respective year	**637,764**	443,183	445,294
Recognized as:			
Amounts due from customers under construction contracts[1]	**366,398**	104,327	100,616
Amounts prepaid by customers under construction contracts[2]	**(206,235)**	(34,861)	(27,908)

[1] As at September 30, 2012, retentions held by customers for contract work amounted to $21,402,000 ($17,186,000 as at September 30, 2011 and $14,788,000 as at October 1, 2010).

[2] As at September 30, 2012, advances received from customers for contract work amounted to $11,740,000 ($14,196,000 as at September 30, 2011 and $5,489,000 as at October 1, 2010).

NOTE 19
Costs of services, selling and administrative

	Year ended September 30	
	2012	2011
	$	$
Salaries and other member costs[1]	**2,771,802**	2,343,015
Hardware, software and data center related costs	**400,015**	457,248
Professional fees and other contracted labour	**592,374**	494,292
Property costs	**204,944**	170,859
Amortization and depreciation (Note 20)	**220,054**	210,450
Other operating expenses	**37,670**	15,096
	4,226,859	3,690,960

[1] Net of tax credits of $98,750,000 in 2012 ($111,832,000 in 2011).

NOTE 20
Amortization and depreciation

	Year ended September 30	
	2012	2011
	$	$
Depreciation of PP&E[1]	**93,053**	79,024
Amortization of intangible assets	**99,674**	107,891
Amortization of contract costs related to transition costs	**27,327**	23,535
Included in costs of services, selling and administrative (Note 19)	**220,054**	210,450
Amortization of contract costs related to incentives (presented as a reduction of revenue)	**8,723**	10,364
Amortization of deferred financing fees (presented in finance costs)	**1,211**	1,283
Amortization of premiums and discounts on investments related to funds held for clients (presented net as a reduction of revenue)	**1,371**	1,257
Amortization of premiums and discounts on long-term investments (presented net in finance costs)	**39**	—
	231,398	223,354

[1] Depreciation of property, plant and equipment acquired under finance leases was $20,799,000 in 2012 ($18,526,000 in 2011).

NOTE 21
Finance costs

	Year ended September 30	
	2012	2011
	$	$
Interest on long-term debt	**41,698**	18,224
Other finance costs	**401**	1,171
	42,099	19,395

NOTE 22
Accumulated other comprehensive (loss) income

	As at September 30, 2012	As at September 30, 2011	As at October 1, 2010
	$	$	$
Net unrealized (losses) gains on translating financial statements of foreign operations (net of accumulated income tax expense of $330 as at September 30, 2012 and $1,281 as at September 30, 2011)	**(7,920)**	12,275	—
Net unrealized gains (losses) on translating long-term debt designated as hedges of net investments in foreign operations (net of accumulated income tax expense of $959 as at September 30, 2012 and net of accumulated income tax recovery of $1,086 as at September 30, 2011)	**6,071**	(4,695)	—
Net unrealized (losses) gains on cash flow hedges (net of accumulated income tax recovery of $3,302 as at September 30, 2012 and net of income tax expense of $1,457 as at September 30, 2011 and $5,336 as at October 1, 2010)	**(6,343)**	5,272	14,469
Net unrealized actuarial gains (losses) (net of income tax expense of $1,961 as at September 30, 2012 and net of income tax recovery of $217 as at September 30, 2011)	**4,578**	(632)	—
Net unrealized gains on investments available for sale (net of accumulated income tax expense of $1,276 as at September 30, 2012 and $854 as at September 30, 2011)	**3,339**	2,352	—
	(275)	14,572	14,469

For the year ended September 30, 2012, $794,000 of the net unrealized gains previously recognized in other comprehensive income (net of income taxes of $277,000) were reclassified to net earnings for derivatives designated as cash flow hedges ($7,476,000 net of income taxes of $3,314,000 for the year ended September 30, 2011).

NOTE 23
Income taxes

	Year ended September 30	
	2012	2011
	$	$
Current income tax expense		
Current income tax expense in respect of the current year	**151,736**	154,349
Adjustments recognized in the current year in relation to the current income tax expense of prior years	**1,967**	(32,230)
Total current income tax expense	**153,703**	122,119
Deferred income tax expense		
Deferred income tax expense relating to the origination and reversal of temporary differences	**(19,680)**	(17,568)
Recognition of previously unrecognized temporary differences	**(2,626)**	(4,855)
Total deferred income tax recovery	**(22,306)**	(22,423)
Total income tax expense	**131,397**	99,696

The Company's effective income tax rate on income from continuing operations differs from the combined Federal and Provincial Canadian statutory tax rate as follows:

	Year ended September 30	
	2012	2011
	%	%
Company's statutory tax rate	**27.3**	28.8
Effect of foreign tax rate differences	**2.9**	(2.4)
Final determination from agreements with tax authorities and expirations of statutes of limitations	**(0.2)**	(6.8)
Non-deductible and tax exempt items	**1.5**	(1.2)
Effect of unrecognized tax benefit and non-deductible acquisition-related and integration costs	**18.5**	—
Impact on future tax assets and liabilities resulting from tax rate changes	**—**	0.1
Effective income tax rate	**50.0**	18.5

The decrease in Company's statutory tax rate is explained by the reduction in the federal statutory tax rate from 16.9% to 15.4%.

The continuity of deferred income tax balances is as follows:

	As at September 30, 2011	Additions from business acquisition	Recognized in earnings	Recognized in other comprehensive income	Recognized in equity	Foreign currency translation adjustment and other	**As at September 30, 2012**
	$	$	$	$	$	$	**$**
Accounts payable, accrued liabilities and other long-term liabilities	24,884	11,957	(7,473)	—	—	(64)	**29,304**
Tax benefits on losses carried forward	7,459	164,960	8,271	—	—	1,710	**182,400**
Accrued compensation	28,354	3,030	787	—	6,805	—	**38,976**
Retirement benefits	—	19,664	—	(2,178)	—	—	**17,486**
Allowance for doubtful accounts	3,255	—	(1,209)	—	—	—	**2,046**
PP&E, contract costs, intangible assets and other long-term assets	(122,374)	(46,428)	13,769	—	—	2,326	**(152,707)**
Work in progress	(28,090)	—	2,921	—	—	1	**(25,168)**
Goodwill	(33,490)	—	(1,754)	—	—	—	**(35,244)**
Refundable tax credits on salaries	(14,756)	—	(3,027)	—	—	—	**(17,783)**
Unrealized gains on cash flow hedges	(1,457)	—	3,236	2,695	—	(95)	**4,379**
Other liabilities	(3,297)	411	6,785	548	—	324	**4,771**
Deferred income taxes, net	(139,512)	153,594	22,306	1,065	6,805	4,202	**48,460**

Note 23 — Income taxes (continued)

	As at October 1, 2010	Recognized in earnings	Recognized in other comprehensive loss	Recognized in equity	Foreign currency translation adjustment and other	As at September 30, 2011
	$	$	$	$	$	$
Accounts payable, accrued liabilities and other long-term liabilities	13,720	10,944	217	—	3	24,884
Tax benefits on losses carried forward	10,321	(2,934)	—	—	72	7,459
Accrued compensation	33,550	(7,659)	—	1,790	673	28,354
Allowance for doubtful accounts	1,793	1,462	—	—	—	3,255
PP&E, contract costs, intangible assets and other long-term assets	(143,654)	23,310	—	—	(2,030)	(122,374)
Work in progress	(25,165)	(2,927)	—	—	2	(28,090)
Goodwill	(27,774)	(6,116)	—	—	400	(33,490)
Refundable tax credits on salaries	(20,985)	6,229	—	—	—	(14,756)
Unrealized gains on cash flow hedges	(5,323)	226	3,640	—	—	(1,457)
Other liabilities	(2,455)	(112)	(813)	—	83	(3,297)
Deferred income taxes, net	(165,972)	22,423	3,044	1,790	(797)	(139,512)

The deferred income taxes are presented as follows in the consolidated balance sheets:

	As at September 30, 2012	As at September 30, 2011	As at October 1, 2010
	$	$	$
Deferred tax assets	219,590	9,882	22,888
Deferred tax liabilities	(171,130)	(149,394)	(188,860)
Deferred income taxes, net	48,460	(139,512)	(165,972)

At September 30, 2012, the Company had $1,465,577,000 in non-capital losses carried forward and other temporary differences, of which $254,410,000 expire at various dates up to 2029 and $1,211,167,000 have no expiry dates. The Company recognized a deferred tax asset of $364,028,000 on the losses carried forward and other temporary differences and recognized a valuation allowance of $181,628,000. The increase in the valuation allowance mainly results from the Logica acquisition. The resulting net deferred tax asset of $182,400,000 is the amount that is more likely than not to be realized, based on deferred tax liabilities reversal and future taxable profits.

The temporary differences associated with investments in subsidiaries and the interest in joint venture for which a deferred tax liability has not been recognized amount to $683,282,000 ($638,285,000 in 2011).

Undistributed earnings of the Company's foreign subsidiaries are considered to be indefinitely reinvested. Upon distribution of these earnings in the form of dividends or otherwise, the Company may be subject to withholding taxes. It is not practicable for the Company to estimate the amount of withholding taxes related to these undistributed earnings.

NOTE 24
Investments in subsidiaries

2012 TRANSACTIONS

a) Acquisition

On August 20, 2012, the Company acquired 100% of the outstanding ordinary shares of Logica, a business and technology services company, for a total cash consideration of $2,682,380,000 (£1,715,738,000) and the assumption of Logica's net debt of $866,658,000. The acquisition and the repayment of Logica's debt assumed were funded through a combination of sources; the Company issued 46,707,146 new Class A subordinate voting shares of the Company at a price of $21.41 to Caisse de dépôt et placement du Québec for a total consideration of $1,000,000,000, excluding transaction costs. In addition, the Company drew under a term loan agreement $1,933,858,000. The remaining funding came from the Company's existing credit facility and cash. The acquisition of Logica will increase the ability of the Company to offer a mix of business and technology expertise to clients across the world through a combination of local and global delivery options.

The purchase price allocation shown below is preliminary and based on management's best estimates. The final purchase price allocation is expected to be completed as soon as management has gathered all of the significant information available and considered necessary in order to finalize this allocation.

	Logica
Assets	**$**
Current assets[1]	1,374,838
Property, plant and equipment	250,808
Contract costs	71,697
Intangible assets	603,683
Other long-term assets	87,789
Deferred tax assets	197,210
Goodwill[2]	3,276,172
	5,862,197
Liabilities	
Current liabilities	(1,546,273)
Debt[3]	(808,775)
Deferred tax liabilities	(43,616)
Long-term provisions	(182,880)
Retirement benefits obligations	(113,526)
Other long-term liabilities	(426,864)
	(3,121,934)
Bank overdraft assumed, net	(57,883)
Net assets acquired	2,682,380
Cash consideration	2,676,912
Consideration payable[4]	5,468

[1] The current assets include accounts receivable with a fair value of $899,089,000 which approximates the gross amount due under the contracts.

[2] The preliminary goodwill arising from the acquisition mainly represents the future economic value associated to acquired work force and synergies with the Company's operations. All of the goodwill is included in the Logica segment. None of the goodwill recognized is expected to be deductible for income tax purposes.

[3] During the year, the Company made a repayment of $891,354,000 of Logica's debt assumed in business acquisition, resulting in a loss of $83,632,000 which was recorded in acquisition-related and integration costs.

[4] Payable within one year.

[5] The purchase price allocation was translated using the exchange rate as at August 20, 2012.

Note 24 — Investments in subsidiaries (continued)

In connection with the acquisition of Logica, the Company expensed $254,973,000 during the year ended September 30, 2012. Included in that amount are acquisition-related costs of $36,403,000, integration costs of $109,714,000, make whole on Logica's debt and other financing costs of $108,856,000. The acquisition-related costs consist mainly of professional fees incurred for the acquisition and foreign exchange call options for an amount of $7,146,000 in order to comply with the funds certain requirement under the UK City Code on Takeovers and Mergers.

Integration costs driven by the restructuring of Logica's operations, estimated at approximately $400,000,000, mainly include the costs related to the termination of certain employees identified as redundant. The acquisition-related and integration costs are separately disclosed in the Company's consolidated statements of earnings.

Logica's revenue for the year ended September 30, 2012 represents approximately 12% of the total consolidated revenue of the Company. From the date of acquisition, included in the Company's results are $567,875,000 of revenues and $259,981,000 of net loss from Logica, which includes acquisition-related and integration costs. On a pro forma basis, the revenue, the earnings before income taxes and the net loss of the combined Company for the year ended September 30, 2012 would have been approximately $10,231,555,000, $81,733,000 and $5,399,000, respectively, had the Logica acquisition occurred as of October 1, 2011. The pro forma financial information was constructed using the Company's 2012 annual results and Logica's results from July 1, 2011 to June 30, 2012 due to the differences in reporting periods and includes business combination adjustments such as amortization of acquired intangible assets, interest expense on borrowings, elimination of acquisition-related costs, integration costs, make whole and other financing costs as well as related tax effects. The changes to historical transactions and the benefits from integration initiatives, severances of redundant resources and savings related to the retirement of excess facilities have not been reflected in these pro forma amounts. The pro forma amounts are not necessarily indicative of the results of operations of the Company that would have resulted had the acquisition actually occurred on October 1, 2011, or the results that may be obtained in the future.

b) Disposal

There were no significant disposals during fiscal 2012.

2011 TRANSACTIONS

a) Acquisition

There were no significant acquisitions during fiscal 2011.

b) Disposal

On April 4, 2011, the Company concluded a transaction for a net consideration of $10,500,000 whereby Conseiller en informatique d'affaires CIA inc. ("CIA") repurchased its shares held by the Company, which represented a 68% interest, excluding its Paris operations, and the Company simultaneously purchased 32% of the operations carried out in CIA's Paris office not previously owned.

The Company received $5,917,000 during the year ended September 30, 2011 and the remaining balance of $4,583,000 in fiscal 2012. The sale resulted in a gain of $3,655,000 recognized within other income in the consolidated statements of earnings.

c) Modifications to purchase price allocation

During the year ended September 30, 2011, the Company finalized the purchase price allocation and made adjustments relating to the acquisition of Stanley, Inc. ("Stanley"). The resulting impact for the year ended September 30, 2011 was a decrease in intangible assets of $1,743,000, deferred tax assets of $299,000 and deferred tax liabilities of $682,000 and an increase of accrued compensation of $1,491,000, accounts payable and accrued liabilities of $50,000 and income taxes payable of $1,475,000, whereas goodwill increased by $4,376,000. The prior period figures have not been adjusted given that the effect of restatement was not significant.

d) Acquisition-related and integration costs

In connection with the acquisition of Stanley in fiscal year 2010, the Company expensed $3,675,000 during the year ended September 30, 2011. The expenses included costs to integrate the operations and to realize synergies.

NOTE 25
Joint venture: supplementary information

During the year ended September 30, 2012, the Company sold its 49% interest in Innovapost Inc. ("Innovapost") and received consideration of $26,000,000. The Company recorded a gain of $2,981,000 relating to the disposal within other income.

NOTE 26
Supplementary cash flow information

a) Net change in non-cash working capital items is as follows for the years ended September 30:

	2012	2011
	$	$
Accounts receivable	(61,373)	(87,828)
Work in progress	(15,815)	(31,971)
Prepaid expenses and other assets	(10,020)	44,485
Accounts payable, accrued liabilities and other long-term liabilities	62,161	22,183
Accrued compensation	89,836	(1,595)
Provisions	85,715	15,620
Deferred revenue	46,727	(2,956)
Income taxes	(21,273)	(35,236)
	175,958	(77,298)

b) Non-cash operating, investing and financing activities related to operations are as follows for the years ended September 30:

	2012	2011
	$	$
Operating activities		
Accounts receivable	(284)	(326)
Prepaid expenses and other assets	(11,105)	(26,400)
	(11,389)	(26,726)
Investing activities		
Purchase of property, plant and equipment	(32,207)	(36,083)
Additions of intangible assets	(15,359)	(15,939)
Additions of other long-term assets	(7,426)	(3,646)
	(54,992)	(55,668)
Financing activities		
Increase in obligations under finance leases	29,753	28,822
Increase in obligations	36,344	53,246
Issuance of shares	284	326
	66,381	82,394

c) Interest paid and income taxes paid are classified within operating activities and are as follows for the years ended September 30:

	2012	2011
	$	$
Interest paid	34,573	17,807
Interest received	3,415	2,017
Income taxes paid	144,010	135,433

NOTE 27
Segmented information

In the prior year, management regularly reviewed the Company's operating results through four operating segments, namely: U.S. & India, Canada, Global Infrastructure Services ("GIS") and Europe & Asia Pacific. As a result of changes to the management reporting structure in the current year, the Company is managed through the following four operating segments: U.S., Canada, GIS, Europe & Asia Pacific.

The GIS operating segment incorporates all services provided to clients globally for the management of their technology infrastructure. The other operating segments are based on the Company's geographic delivery model: U.S., Canada and Europe & Asia Pacific, which include their respective utilization of India's delivery centers.

As at September 30, 2012, the operations of Logica were managed and reviewed as one component and is therefore being presented as its own operating segment. As a result of changes in the management reporting structure effective October 1, 2012, the Company will change its operating segments beginning in the first quarter of 2013 as follows:

Canada;
United States of America;
Nordics, Southern Europe and South America;
Central and Eastern Europe (including Netherlands, Germany and Belgium);
United Kingdom;
Asia Pacific (including Australia, India, Philippines and the Middle East);
France (including Luxembourg and Morocco).

The following presents information on the Company's operations based on its current management structure. The Company has retrospectively revised the segmented information for the comparative periods to conform to the segmented information structure in effect as of September 30, 2012.

						Year ended September 30, 2012
	U.S.	Canada	GIS	Europe & Asia Pacific	Logica	Total
	$	$	$	$	$	$
Segment revenue	2,091,112	1,212,615	684,870	215,982	567,875	4,772,454
Earnings (loss) before acquisition-related and integration costs, finance costs, finance income, other income, share of profit on joint venture and income tax expense[1]	242,965	257,011	53,265	12,333	(18,845)	546,729
Acquisition-related and integration costs						254,973
Finance costs						42,099
Finance income						(5,318)
Other income						(3,955)
Share of profit on joint venture						(3,996)
Earnings before income taxes						262,926

[1] Amortization and depreciation included in the U.S., Canada, GIS, Europe & Asia Pacific and Logica operating segments is $82,258,000, $42,370,000, $76,674,000 $4,269,000 and $24,577,000 respectively, for the year ended September 30, 2012.

Year ended September 30, 2011	U.S.	Canada	GIS	Europe & Asia Pacific	Total
	$	$	$	$	$
Segment revenue	1,896,002	1,287,056	816,663	224,221	4,223,942
Earnings (loss) before acquisition-related and integration costs, finance costs, finance income, other income, share of profit on joint venture and income tax expense[1]	167,734	249,103	110,880	8,630	536,347
Acquisition-related and integration costs					3,675
Finance costs					19,395
Finance income					(3,552)
Other income					(7,647)
Share of profit on joint venture					(13,359)
Earnings before income taxes					537,835

[1] Amortization and depreciation included in the U.S., Canada, GIS, and Europe & Asia Pacific operating segments is $85,655,000, $53,451,000 $78,781,000 and $4,184,000 respectively, for the year ended September 30, 2011.

The accounting policies of each operating segment are the same as those described in the summary of significant accounting policies (Note 3). Intersegment revenue is priced as if the revenue was from third parties.

GEOGRAPHIC INFORMATION

The following table provides information for property, plant and equipment, contract costs and intangible assets based on their location[1]:

	As at September 30, 2012	As at September 30, 2011	As at October 1, 2010
	$	$	$
U.S.	291,690	313,860	361,702
Canada	292,990	305,046	348,936
U.K.[2]	283,921	—	—
France[2]	204,538	—	—
Sweden[2]	93,231	—	—
Other	361,259	30,370	28,139
	1,527,629	649,276	738,777

[1] Excludes goodwill which has been allocated to operating segments (Note 11).

[2] Balances as of September 30, 2011 and October 1, 2010 are not significant.

The following table provides revenue information based on the client's location:

	2012	2011
	$	$
Revenue		
U.S.	2,240,668	2,041,609
Canada	1,721,490	1,911,447
U.K.[1]	205,247	—
France[1]	153,879	—
Sweden[1]	59,822	—
Other	391,348	270,886
	4,772,454	4,223,942

[1] Amounts for the year ended September 30, 2011 are not significant.

INFORMATION ABOUT SERVICES

The following table provides revenue information based on services provided by the Company:

	2012	2011
	$	$
Outsourcing		
IT Services	2,216,942	2,096,049
BPS	838,879	749,728
Systems integration and consulting	1,716,633	1,378,165
	4,772,454	4,223,942

MAJOR CLIENT INFORMATION

Contracts with the U.S. federal government and its various agencies accounted for $1,336,941,000 of revenues included within the U.S. segment for the year ended September 30, 2012 ($1,233,784,000 for the year ending September 30, 2011).

NOTE 28
Related party transactions

A) TRANSACTIONS WITH JOINT VENTURE

Prior to its disposal, in the normal course of business, the Company was party to contracts with Innovapost, a joint venture, pursuant to which the Company was its preferred IT supplier.

Transactions and resulting balances, which were measured at commercial rates (exchange amount), are presented below. The amounts outstanding were unsecured and settled in cash. No guarantees were given or received and no expense was recognized in the current or prior periods for bad or doubtful debts in respect of the amounts owed.

Revenue was $20,014,000 and $80,075,000 for the years ended September 30, 2012 and 2011, respectively.

	2012	2011
	$	$
Accounts receivable	—	4,570
Work in progress	—	1,158
Contract costs	—	3,713
Deferred revenue	—	2,985

B) TRANSACTIONS WITH SUBSIDIARIES

Balances and transactions between the Company and its subsidiaries, which are related parties of the Company, have been eliminated on consolidation. The Company owns 100% of the equity interests of its subsidiaries.

The Company's principal subsidiaries are as follows:

Name of subsidiary	Country of incorporation
Conseillers en Gestion et Informatique CGI Inc.	Canada
CGI Information Systems and Management Consultants Inc.	Canada
CGI Technologies and Solutions Inc.	United States
Stanley Associates, Inc.	United States
CGI Federal Inc.	United States
Oberon Associates, Inc.	United States
CGI Information Systems and Management Consultants Private Limited	India
CGI Information Systems and Management Consultants (UK) Limited	United Kingdom
Logica France SAS	France
Logica Business Consulting France SAS	France
Logica Nederland BV	Netherlands
Logica Deutschland GmbH & Co KG	Germany
LogicaTI Portugal SA	Portugal
Logica Danmark A/S	Denmark
Logica Norge AS	Norway
Logica Australia Pty Limited	Australia
Logica Private Limited	India
Logica North America Inc.	United States
Logica Suomi Oy	Finland
Logica Sverige AB	Sweden
Logica UK Limited	United Kingdom

C) COMPENSATION PAID TO KEY MANAGEMENT PERSONNEL

Compensation paid to key management personnel, defined as the Board of Directors (the "Board") and the Executive Vice-President and Chief Financial Officer, is as follows:

	2012	2011
	$	$
Short-term employee benefits	**3,909**	6,915
Share-based payments	**5,732**	4,702

NOTE 29
Employee benefits

The Company operates various post-employment plans, including defined benefit and defined contribution pension plans as well as other benefits plans to its employees:

DEFINED BENEFIT PLANS

The following table presents amounts for post-retirement benefits plans and post-employment benefits plan other than pensions included in the consolidated balance sheets:

As at September 30, 2012	U.K.	Netherlands	Other	Total
	$	$	$	$
Defined benefit obligations	(437,585)	(326,620)	(150,827)	(915,032)
Fair value of plan assets	433,727	326,793	45,599	806,119
	(3,858)	173	(105,228)	(108,913)
Fair value of reimbursement rights	—	—	19,122	19,122
Net asset/(liability) recognized in the balance sheets	(3,858)	173	(86,106)	(89,791)
Presented as:				
Other long-term assets *(Note 10)*				
Insurance contracts held to fund defined benefit pension and life assurance arrangements	—	—	19,122	19,122
Retirement benefits assets	8,790	375	—	9,165
Retirement benefits obligations	(12,648)	(202)	(105,228)	(118,078)
	(3,858)	173	(86,106)	(89,791)

a) Defined benefit plans of Logica

During the year the Company acquired Logica. Logica operates among others defined benefit retirement plans primarily for the benefit of employees in the U.K. and the Netherlands, with smaller plans in other countries.

The largest plans are funded plans, where contributions are made by the Company, and also in some cases by the employee, to build up a separate fund of assets which is used to pay the employee benefits. The plans' assets are held in funds separate from those of the Company. Contribution rates are assessed by the actuary or insurer of each plan in regular funding reviews. Plan benefits typically provide for a pension on retirement based on years of qualifying service and final pensionable salary.

The Company also operates unfunded plans where the Company will be required to pay the future employee benefits from its future earnings.

The two largest plans are in the U.K. and the Netherlands and make up around 80% of the overall obligations. Some further details on these plans are provided below.

STICHTING PENSIOENFONDS CMG (NETHERLANDS) – LAST FULL ACTUARIAL VALUATION AT DECEMBER 31, 2011

The plan is closed to accrual and is currently in the process of being liquidated. At September 30, 2012, the plan held an insurance policy which matched the majority of the benefits due to members. Once the liquidation of the plan is completed, the Company will no longer be exposed to risks in respect of this plan.

Note 29 — Employee benefits (continued)

LOGICACMG UK PENSION AND LIFE ASSURANCE PLAN (U.K.) – LAST FULL ACTUARIAL VALUATION AT DECEMBER 31, 2009

In 2011, a funding valuation which reported a deficit of $1,422,000 (£900,000) was concluded. A recovery plan has been agreed to fund the deficit over a five year period from January 1, 2011 to December 31, 2015 by making annual payments of $317,000 (£200,000).

CMG UK PENSION PLAN (U.K.) – LAST FULL ACTUARIAL VALUATION AT JUNE 30, 2010

The plan is closed to accrual and the last funding valuation reported a deficit of $76,479,000 (£47,300,000). A revised recovery plan was agreed with the Trustees and it was agreed to pay $11,426,000 (£7,200,000) annually for a period of 5 years and 9 months from July 1, 2011 to March 31, 2017.

Insurance policies taken out to fund retirement benefit plans that do not qualify as plan assets are presented as reimbursement rights within other long-term assets. Such policies fund pension plans in Germany and a life assurance plan in the U.S.

The following table presents a reconciliation of the movements in the defined benefit obligations between the beginning and end of the year, and an analysis of the defined benefit obligations between unfunded plans and those plans that are wholly funded:

Defined benefit obligations	U.K.	Netherlands	Other	Total
	$	$	$	$
As at October 1, 2011	—	—	—	—
Liabilities assumed in a business acquisition	436,695	304,686	134,780	876,161
Current service cost	140	—	643	783
Interest cost	2,267	1,289	493	4,049
Actuarial (gains) losses due to change in assumptions	(10,788)	10,214	3,850	3,276
Actuarial losses (gains) due to experience adjustments	173	—	(190)	(17)
Termination benefits	95	—	—	95
Plan participant contributions	38	—	32	70
Benefits paid from the plan	(421)	(687)	(410)	(1,518)
Benefits paid directly by employer	—	—	(160)	(160)
Foreign currency translation adjustment	9,386	11,118	4,367	24,871
As at September 30, 2012	**437,585**	**326,620**	**143,405**	**907,610**
Defined benefit obligation of unfunded plans	—	—	39,548	39,548
Defined benefit obligation of funded plans	437,585	326,620	103,857	868,062
As at September 30, 2012	**437,585**	**326,620**	**143,405**	**907,610**

The following table presents a reconciliation of the movements in plan assets and reimbursement rights between the beginning and end of the year:

Plan assets and reimbursement rights	U.K.	Netherlands	Other	Total
	$	$	$	$
As at October 1, 2011	—	—	—	—
Assets acquired in a business acquisition	423,111	304,944	61,263	789,318
Expected return on assets	2,196	1,291	246	3,733
Employer contributions	233	—	649	882
Experience (losses) gains on assets	(594)	10,119	1,122	10,647
Plan participants contributions	38	—	32	70
Benefits paid from the plan	(421)	(687)	(482)	(1,590)
Benefits paid directly by employer	—	—	(160)	(160)
Foreign currency translation adjustment	9,164	11,126	2,051	22,341
As at September 30, 2012	**433,727**	**326,793**	**64,721**	**825,241**
Plan assets	433,727	326,793	45,599	806,119
Reimbursement rights	—	—	19,122	19,122
As at September 30, 2012	**433,727**	**326,793**	**64,721**	**825,241**

The plan assets at the end of the year consist of:

As at September 30, 2012	U.K.	Netherlands	Other	Total
	$	$	$	$
Equities	141,402	—	2,465	143,867
Bonds	262,845	—	20,065	282,910
Property	21,398	—	4,930	26,328
Cash	8,082	2,733	2,263	13,078
Other	—	324,060	15,876	339,936
	433,727	326,793	45,599	806,119

The defined benefit pension plan in Netherlands is in the process of being liquidated and has been reinsured. As the plan is not fully settled yet, the Company will continue to disclose the gross position of the plan. Once the liquidation of the plan is completed, the Company will no longer be exposed to risks in respect of this plan.

Plan assets do not include any ordinary shares of the Company or property occupied by the Company or any other assets used by the Company.

The following table summarizes the actual return on assets:

As at September 30, 2012	U.K.	Netherlands	Other	Total
	$	$	$	$
Actual return on plan assets and reimbursement rights	1,602	11,410	1,368	14,380

The following table summarizes the expense recognized in the consolidated statements of earnings:

				Year ended September 30, 2012
	U.K.	Netherlands	Other	Total
	$	$	$	$
Current service cost	140	—	643	783
Termination benefits	95	—	—	95
Interest cost	2,267	1,289	493	4,049
Expected return on plan assets and reimbursement rights	(2,196)	(1,291)	(246)	(3,733)
	306	(2)	890	1,194
Presented as:				
Costs of services, selling and administrative	235	—	643	878
Finance costs	71	(2)	247	316
	306	(2)	890	1,194

The following table summarizes the amounts recognized in other comprehensive income:

As at September 30, 2012	U.K.	Netherlands	Other	Total
	$	$	$	$
Experience (gains) losses on assets and reimbursement rights	594	(10,119)	(1,122)	(10,647)
Actuarial (gains) losses on liabilities due to experience and change of assumptions	(10,615)	10,214	3,660	3,259
	(10,021)	95	2,538	(7,388)

Note 29 — Employee benefits (continued)

ACTUARIAL ASSUMPTIONS

The following are the principal actuarial assumptions at the reporting date (expressed as weighted averages). The assumed discount rate, rate of inflation, salary increases and mortality all have a significant effect on the accounting valuation.

Year ended September 30, 2012	U.K.	Netherlands	Other	Total
	%	%	%	%
Discount rate	4.55	3.55	3.35	4.00
Expected return on plan assets	4.55	3.55	3.26	4.07
Future salary increases	2.60	—	—	—
Future pension increases	2.57	—	—	—
Inflation	2.60	2.00	2.10	2.31

Assumptions regarding future mortality experience are set based on actuarial advice in accordance with published statistics and experience in each territory. Mortality assumptions for the most important countries are based on the following post-retirement mortality tables: (1) UK: 110% PNXA00 (year of birth) plus CMI_2011 projections with 1% p.a. minimum long term improvement rate; and (2) Netherlands: AG Generation 2010-2060 with an age setback of 1 year.

The overall expected rate of return on plan assets is calculated as a weighted average of the expected rates of return of individual asset classes. The weighted average is calculated by reference to the amount in each class of plan assets at the end of the reporting period. The expected rates of return on bonds is determined by reference to market yields at the end of the reporting period for bonds of similar term to those held as plan assets. The expected rate of return on equities is determined by reference to real historical equity market returns.

The following table shows the sensitivity of the defined benefit obligations to changes in these assumptions:

Year ended September 30, 2012	U.K.	Netherlands	Other	Total
	$	$	$	$
Increase of 0.25% in the discount rate	(18,043)	(14,154)	(5,200)	(37,397)
Decrease of 0.25% in the discount rate	19,424	13,599	5,195	38,218
Increase of 0.25% in inflation	13,698	—	778	14,476
Decrease of 0.25% in inflation	(11,902)	—	(830)	(12,732)
Increase of one year in life expectancy	8,901	6,855	2,222	17,978
Decrease of one year in life expectancy	(9,004)	(7,018)	(2,184)	(18,206)

The Company expects to contribute $18,200,000 to defined benefit plans during the next year, of which $14,620,000 relates to UK plans, and $3,580,000 relating to other plans.

b) Post-employment benefits plan other than pensions

The Company maintains a post-employment benefits plan other than pensions to cover certain former retired employees associated with the divested Canadian claims adjusting and risk management services business. The benefits other than pensions include a health and dental care coverage as well as life insurance coverage.

The post-employment benefits liability totaled $7,422,000 as at September 30, 2012 ($7,035,000 and $6,228,000 at September 30, 2011 and October 1, 2010, respectively). The Company measures its benefits liability as at September 30 of each year. An actuarial valuation was performed at September 30, 2011, and the next actuarial valuation will be as at September 30, 2014. The accrued benefit obligation was determined based on an annual discount rate of 4.50%.

DEFINED CONTRIBUTION PLANS

The Company also operates defined contribution retirement plans in U.K. and overseas, under which contributions are paid by the Company undertakings. In some countries, contributions are made into state pension plans. The pension cost expense for defined contribution plans amounted to $29,000,000.

In Sweden, the Company contributes to the Alecta SE pension plan which is a defined benefit pension plan. This pension plan is classified as a defined contribution plan as it is a multi-employer plan. Any surplus or deficit in the plan will affect the amount of future contributions payable. Alecta use a collective funding ratio to determine the surplus or deficit in the pension plan.

The collective funding is the difference between Alecta's assets and the commitments to the policyholders and insured individuals. The collective solvency is normally allowed to vary between 125% and 155%, with the target being 140%. At September 30, 2012, Alecta's collective funding ratio was 137%. The plan expense was $3,450,000 (SEK 23,000,000).

The Company also paid contributions to defined contribution plans for CGI's employees of $16,194,000 in 2012 and $14,623,000 in 2011.

OTHER BENEFIT PLANS

The Company maintains two non-qualified deferred compensation plans covering some of its U.S. management.

One of these plans is an unfunded plan and the non-qualified deferred compensation liability totaled $846,000 as at September 30, 2012 ($1,775,000 and $2,376,000 at September 30, 2011 and October 1, 2010, respectively).

The other plan is a funded plan for which a trust was established so that the plan assets could be segregated; however, the assets are subject to the Company's general creditors in the case of bankruptcy. The assets, included in other long-term assets, composed of investments, vary with employees' contributions and changes in the value of the investments. The change in liability associated with the plan is equal to the change of the assets. The assets in the trust and the associated liabilities totaled $18,878,000 as at September 30, 2012 ($16,452,000 and $16,318,000 as at September 30, 2011 and October 1, 2010, respectively).

The deferred compensation plans assets and liabilities are presented in other long-term assets and other long-term liabilities, respectively.

NOTE 30
Commitments, contingencies and guarantees

A) COMMITMENTS

At September 30, 2012, the Company is committed under the terms of operating leases with various expiration dates up to 2027, primarily for the rental of premises and computer equipment used in outsourcing contracts, in the aggregate amount of approximately $1,932,336,000. The future minimum lease payments under non-cancellable operating leases are due as follows:

	$
Less than one year	435,698
Between one and two years	328,358
Between two and five years	695,262
Beyond five years	473,018

The majority of the lease agreements are renewable at the end of the lease period at market rates. The lease expenditure charged to the earnings during the year was $136,938,000 ($136,142,000 in 2011), net of sub-lease income of $8,014,000 ($8,401,000 in 2011). As at September 30, 2012, the total future minimum sub-lease payments expected to be received under non-cancellable sub-lease were $114,458,000 ($61,651,000 as at September 30, 2011).

The Company entered into long-term service and other agreements representing a total commitment of $35,457,000. Minimum payments under these agreements are due as follows:

	$
Less than one year	17,597
Between one and two years	7,094
Between two and five years	10,766
Beyond five years	—

B) CONTINGENCIES

From time to time, the Company is involved in legal proceedings, audits, claims and litigation arising in the ordinary course of its business. Certain of these matters seek damages in significant amounts and will ultimately be resolved when one or more future events occur or fail to occur. Although the outcome of such matters is not predictable with assurance, the Company has no reason to believe that the disposition of any such current matter could reasonably be expected to have a materially adverse impact on the Company's financial position, results of operations or the ability to carry on any of its business activities.

Note 30 — Commitments, contingencies and guarantees (continued)

In addition, the Company is engaged to provide services under contracts with the U.S. Government. The contracts are subject to extensive legal and regulatory requirements and, from time to time, agencies of the U.S. Government investigate whether the Company's operations are being conducted in accordance with these requirements. Generally, the Government has the right to change the scope of, or terminate, these projects at its convenience. The termination or reduction in the scope, of a major government project could have a materially adverse effect on the results of operations and financial condition of the Company.

C) GUARANTEES

Sale of assets and business divestitures

In connection with the sale of assets and business divestitures, the Company may be required to pay counterparties for costs and losses incurred as the result of breaches in representations and warranties, intellectual property right infringement and litigation against counterparties. While some of the agreements specify a maximum potential exposure of approximately $6,527,000 in total, others do not specify a maximum amount or limited period. It is not possible to reasonably estimate the maximum amount that may have to be paid under such guarantees. The amounts are dependent upon the outcome of future contingent events, the nature and likelihood of which cannot be determined at this time. No amount has been accrued in the consolidated balance sheets relating to this type of indemnification as at September 30, 2012. The Company does not expect to incur any potential payment in connection with these guarantees that could have a materially adverse effect on its consolidated financial statements.

Other transactions

In the normal course of business, the Company may provide certain clients, principally governmental entities, with bid and performance bonds. In general, the Company would only be liable for the amount of the bid bonds if the Company refuses to perform the project once the bid is awarded. The Company would also be liable for the performance bonds in the event of default in the performance of its obligations. As at September 30, 2012, the Company provided for a total of $48,988,000 of these bonds. To the best of its knowledge, the Company is in compliance with its performance obligations under all service contracts for which there is a performance or bid bond, and the ultimate liability, if any, incurred in connection with these guarantees would not have a materially adverse effect on the Company's consolidated results of operations or financial condition.

In addition, the Company provides a guarantee of $5,900,000 of the residual value of a leased property accounted for as an operating lease at the expiration of the lease term. The Company also has letters of credit for a total of $54,140,000. These guarantees are required in some of the Company's contracts with customers.

NOTE 31
Financial instruments

FAIR VALUE

At September 30, 2012 and 2011, the estimated fair values of trade accounts receivable, cash included in funds held for clients, accounts payable and accrued liabilities, accrued compensation, long-term debt obligation and clients' funds obligations approximate their respective carrying values.

The fair values of Senior U.S. unsecured notes and the unsecured committed revolving facility and the unsecured committed term loan credit facility, estimated by discounting expected cash flows at rates currently offered to the Company for debts of the same remaining maturities and conditions, are $521,971,000 and $685,951,000 and $1,951,279,000 as at September 30, 2012, respectively ($22,236,000, $855,307,000 and nil as at September 30, 2011, respectively and $112,937,000, $941,396,000 and nil as at October 1, 2010, respectively), as compared to their carrying value $467,610,000, $691,960,000 and $1,933,948,000, respectively ($20,647,000, $859,277,000 and nil as at September 30, 2011, respectively and $109,899,000, $964,223,000 and nil as at October 1, 2010, respectively) (Note 14).

The following table summarizes the fair value of outstanding hedging instruments:

	Recorded in	As at September 30, 2012 $	As at September 30, 2011 $	As at October 1, 2010 $
Hedges on net investments in foreign operations				
US$818,000 debt designated as the hedging instrument of the Company's net investment in U.S. operations (US$815,000 as at September 30, 2011 and US$920,000 as at October 1, 2010)	Long-term debt	**804,667**	846,703	947,416
€45,000 debt designated as a hedging instrument of the Company's net investment in European operations (€9,000 as at September 30, 2011 and €12,000 as at October 1, 2010)	Long-term debt	**56,907**	12,574	16,807
$1,153,700 cross-currency swaps in euro designated as a hedging instrument of the Company's net investment in European operations (nil as at September 30, 2011 and as at October 1, 2010)	Other long-term liabilities	**23,876**	—	—
Cash flow hedges on future revenue				
US$32,100 foreign currency forward contracts to hedge the variability in the expected foreign currency exchange rate between the U.S. dollar and the Canadian dollar (US$76,740 as at September 30, 2011 and US$130,380 as at October 1, 2010)	Other current assets Other long-term assets	**6,514** **1,024**	6,497 5,613	8,918 11,433
US$51,944 foreign currency forward contracts to hedge the variability in the expected foreign currency exchange rate between the U.S. dollar and the Indian rupee (US$45,000 as at September 30, 2011 and US$44,820 as at October 1, 2010)	Other current assets Other long-term assets Accrued liabilities Other long-term liabilities	**—** **—** **1,678** **2,697**	156 1 — 536	2,378 1,121 — —
$53,145 foreign currency forward contracts to hedge the variability in the expected foreign currency exchange rate between the Canadian dollar and the Indian rupee ($62,220 as at September 30, 2011 and $89,040 as at October 1, 2010)	Accrued liabilities Other long-term liabilities	**6,533** **2,073**	2,560 2,554	1,570 3,396
Cash flow hedges on Senior U.S. unsecured notes				
US$nil foreign currency forward contracts (US$20,000 as at September 30, 2011 and US$107,000 as at October 1, 2010)	Other current assets Other long-term assets	**—** **—**	— 565	1,277 763
Cash flow hedges on unsecured committed term loan credit facility				
$1,234,400 interest rate swaps floating-to-fixed (nil as at September 30, 2011 and as at October 1, 2010)	Other long-term liabilities	**4,202**	—	—
Fair value hedges on Senior U.S. unsecured notes				
US$125,000 interest rate swaps fixed-to-floating (nil as at September 30, 2011 and as at October 1, 2010)	Other long-term assets	**1,074**	—	—
Derivatives not designated as hedges				
£37,288 foreign currency forward contracts to hedge the net exposure of some assets and liabilities not denominated in the functional currencies (nil as at September 30, 2011 and as at October 1, 2010)	Accrued liabilities	**2,182**	—	—

Valuation techniques used to value financial instruments are as follows:

— The fair value of forward foreign exchange contracts is determined using forward exchange rates at the end of the reporting period;

— The fair value of interest rate swaps is determined from market quotes of the instruments; and

— The fair value of cross-currency swaps is determined based on market data (primarily yield curves and exchange rates) to calculate the present value of all estimated flows.

The Company expects that approximately $2,063,000 of the accumulated net unrealized loss on all derivative financial instruments designated as cash flow hedges as at September 30, 2012 will be reclassified in the consolidated statements of earnings in the next 12 months.

During the year ended September 30, 2012, the Company's hedging relationships were effective.

Note 31 — Commitments, contingencies and guarantees (continued)

MARKET RISK (INTEREST RATE RISK AND CURRENCY RISK)

Market risk incorporates a range of risks. Movements in risk factors, such as interest rate risk and currency risk, affect the fair values of financial assets and liabilities.

Interest rate risk

The Company is exposed to interest rate risk on a portion of its long-term debt (Note 14) and holds interest rate swaps that mitigate this risk. In 2012, the Company entered into an interest rate swaps agreement whereby the Company receives a fixed rate of interest and pays interest at a variable rate on the notional amount. The swaps are being used to hedge the exposure to changes in the fair value of its Senior U.S. unsecured notes.

The Company analyzes its interest rate risk exposure on an ongoing basis using various scenarios to simulate refinancing or the renewal of existing positions. Based on these scenarios, a change in the interest rate of 1% would not have had a significant impact on net earnings and comprehensive income.

Currency risk

The Company operates internationally and is exposed to risk from changes in foreign currency rates. The Company mitigates this risk principally through foreign debt and use of derivatives. The Company enters into foreign exchange forward contracts to hedge forecasted cash flows or contractual cash flows in currencies other than the functional currency of its subsidiaries. The Company has entered into the foreign currency forward contracts to hedge the variability in the foreign currency exchange rate between the U.S. dollar and the Indian rupee on future U.S. revenue, to hedge the variability in the foreign currency exchange rate between the U.S. dollar and the Canadian dollar on future U.S. revenue and to hedge the variability in foreign currency exchange rate between the Indian rupee and the Canadian dollar on future Canadian revenue.

The Company has also entered into foreign currency forward contracts to hedge the contractual principal repayments of certain Senior U.S. unsecured notes and into interest rate swaps to hedge the cash flow exposure of the issued variable rate unsecured committed term loan credit facility.

The Company also hedges a portion of the translation of the Company's net investments in its U.S. and European operations. into Canadian dollar with unsecured committed revolving facility and Senior U.S. unsecured notes as well as cross-currency swaps. Hedging relationships are designated and documented at inception and quarterly effectiveness assessments are performed during the year. In 2012, the Company entered into fixed-to-fixed and floating-to-floating cross-currency swaps as the hedging instrument of the Company's net investment in its European and Asia Pacific operations. These swaps convert Canadian dollar based fixed and variable interest payments to Euro based fixed and variable interest payments associated with the notional amount.

In addition, to mitigate foreign exchange risk arising from transactions denominated in currencies other than entity's functional currency, assets and liabilities not denominated in the functional currencies are hedged economically by means of forward contracts. The Company has not applied hedge accounting to these contracts. These exposures are then aggregated and netted and the overall position is hedged externally.

The Company is mainly exposed to fluctuations in the U.S. dollar, the euro and the British pound. The following table details the Company's sensitivity to a 10% strengthening of the U.S. dollar, the euro and the British pound foreign currency rates on net earnings and comprehensive income against the Canadian dollar. The sensitivity analysis presents the impact of foreign currency denominated financial instruments and adjusts their translation at period end for a 10% strengthening in foreign currency rates.

	2012					2011
	U.S. dollar impact	Euro impact	British pound impact	U.S. dollar impact	Euro impact	British pound impact[1]
Increase in net earnings	5,067	5,362	5,241	565	191	—
(Decrease) increase in other comprehensive income	(44,603)	(100,593)	(3,985)	(62,887)	2,383	—

[1] The exposure in prior year was not significant.

LIQUIDITY RISK

Liquidity risk is the risk that the Company is not able to meet its financial obligations as they fall due or can do so only at excessive cost. The Company's activities are financed through a combination of the cash flows from operations, borrowing under existing credit facilities, the issuance of debt and the issuance of equity. One of management's primary goals is to maintain an optimal level of liquidity through the active management of the assets and liabilities as well as the cash flows.

The following table summarizes the carrying amount and the contractual maturities of both the interest and principal portion of significant financial liabilities. All amounts contractually denominated in foreign currency are presented in Canadian dollar equivalent amounts using the period-end spot rate.

As at September 30, 2012	Carrying amount	Contractual cash flows	Less than one year	Between one and two years	Between two and five years	Beyond five years
	$	$	$	$	$	$
Non-derivative financial liabilities						
Accounts payable and accrued liabilities	1,156,737	1,156,737	1,156,737	—	—	—
Accrued compensation	539,779	539,779	539,779	—	—	—
Senior U.S. unsecured notes	467,610	635,519	21,299	21,299	145,980	446,941
Unsecured committed revolving facility	691,960	762,215	16,783	16,783	728,649	—
Unsecured committed term loan credit facility	1,933,948	2,146,967	67,870	547,177	1,531,920	—
Obligations repayable in blended monthly installments	60,812	64,330	20,166	17,653	26,444	67
Other long-term debt	8,954	8,954	476	8,478	—	—
Clients' funds obligations	197,986	197,986	197,986	—	—	—
Derivative financial liabilities						
Cash flow hedges on future revenue	5,443					
Outflow		14,265	8,620	2,915	2,730	—
(Inflow)		(7,603)	(6,556)	(1,047)	—	—
Cross-currency swaps	23,876					
Outflow		1,254,517	22,612	22,612	1,209,293	—
(Inflow)		(1,288,939)	(38,519)	(38,519)	(1,211,901)	—
Interest rate swaps	3,128					
Outflow		1,445,111	20,665	469,874	812,132	142,440
(Inflow)		(1,457,023)	(21,489)	(469,624)	(815,336)	(150,574)
Forward contracts	2,182					
Outflow		406,881	406,881	—	—	—
(Inflow)		(404,741)	(404,741)	—	—	—
	5,092,415	5,474,955	2,008,569	597,601	2,429,911	438,874

As at September 30, 2012	Carrying amount	Contractual cash flows	Less than one year	Between one and two years	Between two and five years	Beyond five years
	$	$	$	$	$	$
Non-derivative financial liabilities						
Bank overdraft	75,538	75,538	75,538	—	—	—
Accounts payable and accrued liabilities	303,641	303,641	303,641	—	—	—
Accrued compensation	183,842	183,842	183,842	—	—	—
Senior U.S. unsecured notes	20,647	23,895	1,247	1,247	21,401	—
Unsecured committed revolving facility	859,277	866,560	866,560	—	—	—
Obligations repayable in blended monthly installments	58,575	62,987	15,553	15,898	30,242	1,294
Clients' funds obligations	244,660	244,660	244,660	—	—	—
Derivative financial liabilities						
Cash flow hedges on future revenue	(6,617)					
Outflow		6,237	2,675	2,423	1,139	—
(Inflow)		(12,535)	(6,772)	(4,972)	(791)	—
	1,739,563	1,754,825	1,686,944	14,596	51,991	1,294

Note 31 — Commitments, contingencies and guarantees (continued)

As at October 1, 2010	Carrying amount	Contractual cash flows	Less than one year	Between one and two years	Between two and five years	Beyond five years
	$	$	$	$	$	$
Non-derivative financial liabilities						
Accounts payable and accrued liabilities	297,801	297,801	297,801	—	—	—
Accrued compensation	185,651	185,651	185,651	—	—	—
Senior U.S. unsecured notes	109,899	116,799	93,113	1,236	22,450	—
Unsecured committed revolving facility	964,223	977,861	9,092	968,769	—	—
Obligations repayable in blended monthly installments	22,049	23,961	6,292	5,052	11,211	1,406
Clients' funds obligations	248,695	248,695	248,695	—	—	—
Derivative financial liabilities						
Cash flow hedges on future revenue	(18,884)					
Outflow		5,562	1,637	1,740	2,185	—
(Inflow)		(24,658)	(11,447)	(7,323)	(5,888)	—
	1,809,434	1,831,672	830,834	969,474	29,958	1,406

As at September 30, 2012, the Company holds cash and cash equivalents and short-term and long-term investments of $143,095,000 ($161,686,000 and $121,725,000 as at September 30, 2011 and October 1, 2010, respectively). The Company also has available $786,089,000 in unsecured committed revolving facility (Note 14) ($622,406,000 and $519,931,000 as at September 30, 2011 and October 1, 2010, respectively). The funds held for clients of $202,407,000 ($247,622,000 and $ 248,695,000 as at September 30, 2011 and October 1, 2010, respectively) fully cover the clients' funds obligations. Given the Company's available liquid resources as compared to the timing of the payments of liabilities, management assesses the Company's liquidity risk to be low.

CREDIT RISK

The Company takes on exposure to credit risk, which is the risk that a client will be unable to pay amounts in full when due. Financial instruments that potentially subject the Company to concentrations of credit risk consist of cash and cash equivalents, short-term investments, work in progress, accounts receivable and long-term investments. The maximum exposure of credit risk is generally represented by the carrying amounts of these items reported on the consolidated balance sheets.

Cash equivalents consist mainly of highly liquid investments, such as money market funds and term deposits, as well as bankers' acceptances and bearer deposit notes issued by major banks (Note 4). The Company has deposited the cash equivalents with reputable financial institutions, from which management believes the risk of loss to be remote.

The Company is exposed to credit risk in connection with short-term and long-term investments through the possible inability of borrowers to meet the terms of their bonds. The Company mitigates this risk by investing primarily in high credit quality corporate and government bonds with a credit rating of A or higher.

The Company has accounts receivable and work in progress derived from clients engaged in various industries including governmental agencies, finance, telecommunications, manufacturing and utilities that are not concentrated in any specific geographic area. These specific industries may be affected by economic factors that may impact accounts receivable. However, management does not believe that the Company is subject to any significant credit risk in view of the Company's large and diversified client base.

The following table sets forth details of the age of accounts receivable that are past due:

	2012	2011
	$	$
Not past due	996,404	301,972
Past due 1-30 days	161,872	42,653
Past due 31-60 days	43,636	25,993
Past due 61-90 days	26,091	7,437
Past due more than 90 days	47,868	14,371
	1,275,871	392,426
Allowance for doubtful accounts	(3,546)	(5,197)
	1,272,325	387,229

The carrying amount of accounts receivable is reduced by an allowance account and the amount of the loss is recognized in the consolidated statements of earnings within costs of services, selling and administrative. When a receivable balance is considered uncollectible, it is written off against the allowance for doubtful accounts. Subsequent recoveries of amounts previously written off are credited against costs of services, selling and administrative in the consolidated statements of earnings. Overall, management does not believe that any single industry or geographic region represents a significant credit risk to the Company.

NOTE 32
Capital risk management

The Company is exposed to risks of varying degrees of significance which could affect its ability to achieve its strategic objectives for growth. The main objectives of the Company's risk management process are to ensure that risks are properly identified and that the capital base is adequate in relation to these risks.

The Company manages its capital to ensure that there are adequate capital resources while maximizing the return to shareholders through the optimization of the debt and equity balance. At September 30, 2012, total managed capital was $6,813,837,000 ($3,441,060,000 and $3,424,836,000 as at September 30, 2011 and October 1, 2010, respectively). Managed capital consists of long-term debt, including the current portion (Note 14), cash and cash equivalents net of bank overdraft (Note 4), short-term investments, long-term investments and shareholders' equity. The basis for the Company's capital structure is dependent on the Company's expected business growth and changes in the business environment. When capital needs have been specified, the Company's management proposes capital transactions for the approval of the Company's Audit and Risk Management Committee and Board of Directors. The capital risk policy remains unchanged from prior periods.

The Company monitors its capital by reviewing various financial metrics, including the following:

— Debt/Capitalization

— Net Debt/Capitalization

— Debt/EBITDA

Debt represents long-term debt, including the current portion. Net debt, capitalization and EBITDA are non-GAAP measures. Net debt represents debt (including the impact of the fair value of forward contracts) less cash and cash equivalents net of bank overdraft, short-term investments and long-term investments. Capitalization is shareholders' equity plus debt. EBITDA is calculated as earnings from continuing operations before income taxes, interest expense on long-term debt, depreciation, amortization and acquisition-related and integration costs. The Company believes that the results of the current internal ratios are consistent with its capital management objectives.

The Company is subject to external covenants on its Senior U.S. unsecured notes, its unsecured committed revolving facility and unsecured committed term loan credit facility. The ratios are as follows:

— A leverage ratio, which is the ratio of total debt to EBITDA for the four most recent quarters[1].

— An interest and rent coverage ratio, which is the ratio of the EBITDAR for the four most recent quarters to the total interest expense and the operating rentals in the same periods. EBITDAR, a non-GAAP measure, is calculated as EBITDA before rent expense[1].

— In the case of the Senior U.S. unsecured notes, a minimum net worth is required, whereby shareholders' equity, excluding foreign exchange translation adjustments included in accumulated other comprehensive income, cannot be less than a specified threshold.

These ratios are calculated on a consolidated basis.

The Company is in compliance with these covenants and monitors them on an ongoing basis. The ratios are also reviewed quarterly by the Company's Audit and Risk Management Committee. The Company is not subject to any other externally imposed capital requirements.

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[1] In the event of an acquisition, the available historical financial information of the acquired company will be used in the computation of the ratios.

NOTE 33
Transition to IFRS

As discussed in Note 2, these consolidated financial statements represent the first annual financial statements prepared in accordance with IFRS. IFRS 1 requires that comparative financial information be provided. The first date at which IFRS was applied was October 1, 2010 ("Transition Date") and, as a result, reconciliations for the respective periods noted are included below.

RECONCILIATIONS OF CANADIAN GAAP TO IFRS

As required by IFRS 1, the following represents reconciliations from Canadian GAAP to IFRS for the respective periods noted for consolidated equity, net earnings, comprehensive income and cash flows from the perspective of each adjustment. A discussion of the adjustments, other initial elections upon IFRS adoption, as well as selected consolidated financial statements for comparative periods are presented further below.

Reconciliation of consolidated equity

	As at September 30, 2011	As at October 1, 2010
	$	$
Total equity previously reported under Canadian GAAP	2,346,356	2,159,083
Differences increasing (decreasing) reported equity:		
C Employee benefits	(1,845)	(1,213)
D Decommissioning liabilities included in the cost of PP&E	(899)	(903)
H Reversal of intangible asset impairment	452	539
I Reversal of contract cost impairment	—	1,265
K Income taxes	8,445	827
L Commitment to purchase outstanding shares of non-controlling interest	—	(10,363)
N Onerous leases	(3,278)	—
Total adjustments	2,875	(9,848)
Total equity under IFRS	2,349,231	2,149,235

Reconciliation of consolidated net earnings

	Year ended September 30, 2011
	$
Net earnings previously reported under Canadian GAAP	435,065
Differences increasing (decreasing) reported net earnings:	
H Reversal of intangible asset impairment	(87)
I Reversal of contract cost impairment	(1,208)
J Share-based payments	(1,224)
K Income taxes	5,103
L Commitment to purchase outstanding shares of non-controlling interest	3,655
N Onerous leases	(3,165)
Total adjustments	3,074
Total equity under IFRS	438,139

Reconciliation of consolidated comprehensive income

	Year ended September 30, 2011
	$
Comprehensive income reported under Canadian GAAP	435,241
Total differences increasing net earnings	3,074
Differences increasing (decreasing) reported other comprehensive income:	
C Employee benefits	(632)
D, I, K, N Foreign currency translation adjustments	559
	(73)
Comprehensive income under IFRS	438,242

Reconciliation of consolidated cash flows

There were no significant changes in the consolidated statements of cash flows on adoption of IFRS other than as a result of accounting for the investment in the joint venture under the equity method as described in adjustment M below.

DISCUSSION OF ADJUSTMENTS

Initial elections upon IFRS adoption

Set forth below are the IFRS 1 optional exemptions applied in the conversion from Canadian GAAP to IFRS. Exemptions that were not elected, not applicable or not considered material to the Company are not included in the discussion.

A. Business combinations

IFRS 1 provides the option to apply IFRS 3, "Business Combinations" (as revised in 2008), retrospectively or prospectively from the Transition Date. The retrospective basis would require restatement of all business combinations that occurred prior to the Transition Date. The Company elected not to retrospectively apply IFRS 3. As a result, there is no adjustment as at October 1, 2010 related to business combinations entered into prior to the Transition Date. IFRS 3 will be applied to business combinations entered into subsequently. Additionally, due to the Company's election to apply IFRS 3 prospectively, IAS 27, "Consolidated and Separate Financial Statements", will also be applied prospectively. With the early adoption of Section 1582, "Business Combinations", under Canadian GAAP as at October 1, 2009, there was no adjustment required for the year ended September 30, 2011 as it is similar to the corresponding provisions of IFRS 3.

B. Currency translation differences

Retrospective application of IFRS would require the Company to determine cumulative foreign currency translation differences in accordance with IAS 21, "The Effects of Changes in Foreign Exchange Rates", from the date a subsidiary was formed or acquired to the Transition Date. IFRS 1 permits cumulative foreign translation gains and losses to be reset to zero at the Transition Date. The Company elected to apply this exemption. As a result, as at October 1, 2010, the Company reversed the balance of $413,021,000 within "net unrealized losses on translating financial statements of self-sustaining foreign operations" and $76,806,000 within "net unrealized gains on translating long-term debt designated as a hedge of net investments in self-sustaining foreign operations" included in accumulated other comprehensive loss. The net loss of $336,215,000 was recognized as a decrease to accumulated other comprehensive loss with a corresponding decrease to retained earnings. This adjustment did not have any further impact on the consolidated financial statements.

C. Employee benefits

IFRS 1 provides the option to recognize all cumulative actuarial gains and losses deferred as a result of applying the corridor approach in accounting for defined benefit plans in retained earnings at the Transition Date. The Company elected to apply this exemption. As a result, as at October 1, 2010, retirement benefits obligations decreased by $780,000 and after a related increase to deferred income tax liabilities of $209,000, retained earnings increased by $571,000. Additionally, the Company's joint venture applied the same exemption and as a result, the investment in the joint venture decreased by $1,784,000 with a corresponding decrease to retained earnings.For the year ended September 30, 2011, the impact of this adjustment on the consolidated financial statements was not significant.

As a result of an actuarial valuation as at September 30, 2011, retirement benefits obligations increased by $849,000 and after a related decrease to deferred income tax liabilities of $217,000, accumulated other comprehensive loss increased by $632,000.

D. Decommissioning liabilities included in the cost of PP&E

Upon adoption of IFRS, the Company's decommissioning liability was revalued according to the discount rate specified in IAS 37, "Provisions, Contingent Liabilities and Contingent Assets". IFRIC 1, "Changes in Existing Decommissioning, Restoration and Similar Liabilities", requires specified changes in a decommissioning liability to be added to or deducted from the cost of the asset to which it relates; the adjusted depreciable amount of the asset is then depreciated prospectively over its remaining useful life. IFRS 1 allows a first-time adopter a simplified treatment of historic changes when estimating the decommissioning liability between initial inception of the liability and the Transition Date. The Company elected to apply the method specified within IFRS 1 for valuing the decommissioning liability. As a result, as at October 1, 2010, PP&E decreased by $723,000 and long-term provisions increased by $562,000. After a related decrease to deferred income tax liabilities of $184,000 and an increase to deferred income tax assets of $198,000, retained earnings decreased by $903,00.

Note 33 — Transition to IFRS (continued)

As a result of a new decommissioning liability as at September 30, 2011, PP&E and long-term provisions increased by $319,000 when discounted in accordance with IFRS. For the year ended September 30, 2011, the impact of this adjustment on the consolidated statements of earnings was not significant.

Additionally, as at and for the year ended September 30, 2011, there was an insignificant adjustment to other comprehensive loss due to a foreign currency translation adjustment on the Transition Date adjustment.

E. Borrowing costs

IFRS 1 allows the Company to choose the effective date of IAS 23, "Borrowing Costs". As such, the Company elected to capitalize borrowing costs for qualifying assets for which acquisition, construction or development commenced on or after the Transition Date. For the year ended September 30, 2011, no borrowing costs were eligible for capitalization.

Mandatory exceptions upon IFRS adoption

Set forth below are the applicable mandatory exceptions in IFRS 1 applied in the conversion from Canadian GAAP to IFRS.

F. Hedge accounting

Hedge accounting can only be applied prospectively from the Transition Date to transactions that satisfy the hedge accounting criteria in IAS 39, "Financial Instruments: Recognition and Measurement", at that date. Hedging relationships cannot be designated retrospectively and the supporting documentation cannot be created retrospectively. As a result, only hedging relationships that satisfy the hedge accounting criteria as of the Transition Date are reflected as hedges in the Company's results under IFRS. The application of this mandatory exception did not result in any adjustments in the consolidated financial statements.

G. Estimates

Hindsight is not used to create or revise estimates. The estimates previously made by the Company under Canadian GAAP were not revised for application of IFRS except where necessary to reflect any difference in accounting policies.

Other explanatory notes

H. Reversal of intangible asset impairment

Under Canadian GAAP, the reversal of impairment losses was prohibited. Under IFRS, the reversal of impairment losses is recognized for assets other than goodwill if certain criteria are met. Upon adoption of IFRS, the Company reversed an impairment within the Canada operating segment recognized under Canadian GAAP as a result of changes in the expected cash flows relating to a business solution. As a result, as at October 1, 2010, intangible assets increased by $779,000 and after a related increase to deferred income tax liabilities of $240,000, retained earnings increased by $539,000.

The impairment reversal resulted in additional amortization expense during the fiscal 2011 year. As a result, as at and for the year ended September 30, 2011, intangible assets decreased and amortization within costs of services, selling and administrative increased by $126,000, while deferred tax liabilities and income tax expense decreased by $39,000.

I. Reversal of contract cost impairment

Under Canadian GAAP, contract costs consisting of transition costs and incentives were classified as intangible assets. Under IFRS, contract costs are recognized in accordance with IAS 11, "Construction Contracts" and no longer qualify as intangible assets. Upon adoption of IFRS, the Company reversed an impairment loss on a contract cost that was recognized under Canadian GAAP due to the fact that at the Transition Date the contract was profitable. As a result, as at October 1, 2010, contract costs increased by $2,095,000 and after a related increase to deferred income tax liabilities of $830,000, retained earnings increased by $1,265,000.

The contract associated with the reversal was terminated in the last quarter of fiscal 2011. As a result, as at September 30, 2011, the reversal of the remaining net carrying amount resulted in a decrease to contract costs and deferred tax liabilities of $2,100,000 and $835,000, respectively. For the year ended September 30, 2011, revenue and income tax expense decreased by $806,000 and $793,000, respectively, and costs of services, selling and administrative increased by $1,195,000.

Additionally, as at and for the year ended September 30, 2011, there was an insignificant adjustment to other comprehensive loss due to a foreign currency translation adjustment on the Transition Date adjustment.

J. Share-based payments

Under Canadian GAAP, for grants of share-based awards with graded vesting, the total fair value of the award was recognized on a straight-line basis over the employment period necessary to vest the award. Under IFRS, each tranche in an award with graded vesting is considered a separate grant with a different vesting date and fair value, and each grant is accounted for on that basis. As a result of

the difference of accounting for each grant of graded share-based awards, as at October 1, 2010, contributed surplus increased by $8,100,000 with a corresponding decrease to retained earnings.

As at and for the year ended September 30, 2011, the adjustment resulted in an increase of contributed surplus and costs of services, selling and administrative of $1,224,000.

K. Income Taxes

<u>Assets or liabilities acquired other than in a business combination</u>

Under Canadian GAAP, the carrying amount of an asset or liability acquired other than in a business combination was adjusted for by the amount of the related recognized deferred tax asset or liability. Under IFRS, a deferred tax asset or liability cannot be recognized if it arises from the initial recognition of an asset or liability in a transaction that is not a business combination and if at the time of the transaction neither accounting profit nor taxable profit is affected. As a result, as at October 1, 2010, the Company decreased deferred tax liabilities by $3,423,000, intangible assets by $3,414,000, contract costs by $542,000 and deferred tax assets by $5,049,000 with a corresponding decrease to other long-term liabilities of $895,000 and retained earnings of $4,687,000.

The adjustment resulted in less amortization expense during the fiscal 2011 year. As a result, as at and for the year ended September 30, 2011, intangible assets increased and amortization within costs of services, selling and administrative decreased by $1,235,000, contract costs increased and revenue increased by $89,000 and deferred tax liabilities and income tax expense increased by $381,000.

Additionally, as at and for the year ended September 30, 2011, there was an insignificant adjustment to other comprehensive loss due to a foreign currency translation adjustment on the Transition Date adjustment.

<u>Share-based payments</u>

Under Canadian GAAP, a deferred tax asset was recognized on the difference between the accounting expense and the tax deduction relating to share-based payments. Under IFRS, the deferred tax asset recognized in relation to the share-based payments is adjusted each period to reflect the amount of the tax deduction the Company would receive if the award was tax deductible in the current period based on the current market price of the shares. If the estimated future tax deduction exceeds the related cumulative share-based payment costs, the excess deferred tax is recognized in contributed surplus. As a result, as at October 1, 2010, deferred tax liabilities decreased by $5,514,000 and retained earnings increased by $2,129,000 while contributed surplus increased by $3,385,000.

As at and for the year ended September 30, 2011, deferred tax liabilities decreased by $6,641,000, contributed surplus increased by $1,790,000 and income tax expense decreased by $4,160,000.

Additionally, as at and for the year ended September 30, 2011, there was an insignificant adjustment to other comprehensive loss due to a foreign currency translation adjustment on the Transition Date adjustment.

L. Commitment to purchase outstanding shares of non-controlling interest

Under Canadian GAAP, the value of the put and call option to purchase the remaining shares of Conseillers en informatique d'Affaires ("CIA") was disclosed as a commitment, but not recorded as a liability. Under IFRS, it must be recorded as a liability. As a result, as at October 1, 2010, accounts payable and accrued liabilities increased by $10,363,000, the equity attributable to non-controlling interest of $6,452,000 was eliminated and retained earnings decreased by the remaining balance of $3,911,000.

As at and for the year ended September 30, 2011, additional equity attributable to non-controlling interest of $256,000 was reversed through retained earnings. Additionally, CIA repurchased the Company's shares in CIA and the Company simultaneously purchased the portion of the operations carried out in CIA's Paris office. As a result, under IFRS the liability relating to the put and call option to purchase the remaining shares of CIA of $10,363,000 was reversed and a gain of $3,655,000 was recognized within other income in the consolidated statements of earnings.

Note 33 — Transition to IFRS (continued)

M. Accounting for joint venture

Under Canadian GAAP, the Company accounted for its investment in its joint venture under the proportionate consolidation method. Under IFRS, IAS 31, "Interests in Joint Ventures", allows a company to account for any joint venture interest under either the proportionate consolidation or equity method. As of the Transition Date, the Company elected to account for its investment in its joint venture under the equity method. As a result, the consolidated balance sheets have been adjusted to remove the effect of proportionate consolidation and to account for its joint venture as an investment as follows:

	Adjustment as at October 1, 2010	Adjustment as at September 30, 2011
	$	$
Current assets		
Cash and cash equivalents	(19,295)	(21,550)
Accounts receivable	(9,527)	(9,456)
Work in progress	(1,318)	(9,137)
Prepaid expenses and other current assets	(7,646)	(3,763)
Total current assets	(37,786)	(43,906)
Property, plant and equipment	(669)	(645)
Contract costs	(478)	(479)
Intangible assets	(1,207)	(864)
Other long-term assets	(638)	(321)
Deferred tax assets	(362)	(381)
Investment in joint venture	24,598	28,157
Total assets	(16,542)	(18,439)
Current liabilities		
Accounts payable and accrued liabilities	(5,940)	(7,424)
Accrued compensation	(5,835)	(6,127)
Deferred revenue	(2,491)	(1,875)
Income taxes	(1,343)	(2,019)
Total current liabilities	(15,609)	(17,445)
Deferred tax liabilities	(404)	(661)
Other long-term liabilities	(529)	(333)
Total liabilities	(16,542)	(18,439)

Under Canadian GAAP, the amounts below were included in the consolidated statements of earnings. Under IFRS, as a result of the application of the equity method, the amounts were removed from their respective lines and accounted for in a single line to reflect the share of profit on joint venture in the consolidated statements of earnings.

	Year ended September 30, 2011
	$
Revenues	98,578
Operating expenses	
Costs of services, selling and administrative	80,080
Finance income	(207)
Foreign exchange loss	86
	79,959
Earnings before income taxes	18,619
Income tax expense	5,260
Share of profit on joint venture	13,359

N. Onerous leases

Under IFRS, the criteria for recognizing provisions for onerous leases result in provisions being recognized earlier than under Canadian GAAP. As at September 30, 2011, additional provisions for onerous leases were required. As a result, short-term provisions increased by $1,532,000, long-term provisions increased by $3,700,000 and deferred tax liabilities decreased by $1,987,000. Related leasehold improvements of $722,000 were deducted from PP&E. Additionally accounts payable and accrued liabilities and other long-term liabilities decreased due to related rent credits by $87,000 and $602,000, respectively. This resulted in an increase of $5,091,000 in cost of services, selling and administration and a decrease in income tax expense of $1,926,000 for the year ended September 30, 2011.

Additionally, there was an insignificant adjustment to other comprehensive loss due to a foreign currency translation adjustment on these adjustments.

Presentation reclassifications

O. Provisions

Under Canadian GAAP, provisions for onerous leases and other were presented within accounts payable and accrued liabilities or other long-term liabilities. Under IFRS, these provisions require separate line disclosure on the face of the balance sheet according to their short-term or long-term classification. As a result, as at October 1, 2010, $10,998,000 was reclassified from accounts payable and accrued liabilities into short-term provisions and $8,703,000 was reclassified from other long-term liabilities to long-term provisions. As at September 30, 2011, $10,593,000 was reclassified from accounts payable and accrued liabilities into short-term provisions and $23,091,000 was reclassified from other long-term liabilities to long-term provisions.

P. Tax reclassification

Under Canadian GAAP, deferred taxes were split between current and non-current components on the basis of either the underlying asset or liability or the expected reversal of items not related to an asset or liability. Under IFRS, all deferred tax assets and liabilities are classified as non-current. As a result, as at October 1, 2010, the short-term portion of future income tax assets of $16,509,000 was reclassified to deferred income tax assets and the short-term portion of future income tax liabilities of $26,423,000 was reclassified to deferred income tax liabilities and as at September 30, 2011, the short-term portion of future income tax assets of $3,522,000 was reclassified to deferred income tax assets and the short-term portion of future income tax liabilities of $20,389,000 was reclassified to deferred income tax liabilities.

Q. Contract costs

Under Canadian GAAP, contract costs consisting of transition costs and incentives were classified as intangible assets. Under IFRS, transition costs and incentives provided in the form of cash or equity instruments are presented separately as contract costs and incentives provided in the form of discounts are presented within accounts receivable. As a result, as at October 1, 2010, $97,420,000 of transition costs and $34,614,000 of incentives in the form of cash or equity instruments were reclassified from intangible assets to contract costs and $11,842,000 was reclassified from intangible assets to accounts receivable. As at September 30, 2011, $78,747,000 of transition costs and $29,432,000 of incentives in the form of cash or equity instruments were reclassified from intangible assets to contract costs and $5,185,000 was reclassified from intangible assets to accounts receivable.

R. Classification of long-term debt

Under Canadian GAAP, an amount due under an existing unsecured revolving facility maturing within the next 12 months was classified as long-term as at September 30, 2011 due to the fact that the Company entered into a private placement financing that was to be drawn down no later than December 15, 2011 with management's intention of reimbursing part of the unsecured revolving facility with the proceeds of the private placement. Under IFRS, since the intention to reimburse with the proceeds of the private placement cannot be considered, the amount due under the unsecured revolving facility is classified as short-term as at September 30, 2011. As a result, an amount of $493,478,000 was classified from long-term debt to the current portion of long-term debt as at September 30, 2011.

S. Costs of services, selling and administrative

Under Canadian GAAP, amortization and other income were presented as separate lines within the consolidated statements of income. Under IFRS, the Company chooses to present expenses according to their function. As a result, for the year ended September 30, 2011, amortization of $211,372,000 and a portion of other income of $75,000 were reclassified into costs of services, selling and administrative.

Comparative financial statements

The following reconciliations illustrate the impact of adjustments and reclassifications from Canadian GAAP to IFRS for the consolidated balance sheet as at the Transition Date and as at September 30, 2011 and for the consolidated statements of earnings for the year ended September 30, 2011.

Note 33 — Transition to IFRS (continued)

Reconciliation of consolidated balance sheet

As at October 1, 2012	Canadian GAAP		Adjustments	IFRS
	$		$	$
Assets				
Current assets				
Cash and cash equivalents	127,824	M	(19,295)	108,529
Short-term investments	13,196		—	13,196
Accounts receivable	423,926	M, Q	2,315	426,241
Work in progress	358,984	M	(1,318)	357,666
Prepaid expenses and other current assets	76,844	M	(7,646)	69,198
Income taxes	7,169		—	7,169
Future income taxes	16,509	P	(16,509)	—
Total current assets before funds held for clients	1,024,452		(42,453)	981,999
Funds held for clients	248,695		—	248,695
Total current assets	1,273,147		(42,453)	1,230,694
Property, plant and equipment	238,024	D, M	(1,392)	236,632
Contract costs	—	I, K, M, Q	133,109	133,109
Intangible assets	516,754	H, K, M, Q	(147,718)	369,036
Other long-term assets	42,261	M	(638)	41,623
Deferred tax assets	11,592	D, K, M, P	11,296	22,888
Investment in joint venture	—	C, M	22,814	22,814
Goodwill	2,525,413		—	2,525,413
	4,607,191		(24,982)	4,582,209
Liabilities				
Current liabilities				
Accounts payable and accrued liabilities	304,376	L, M, O	(6,575)	297,801
Accrued compensation	191,486	M	(5,835)	185,651
Deferred revenue	145,793	M	(2,491)	143,302
Income taxes	86,877	M	(1,343)	85,534
Provisions	—	O	10,998	10,998
Future income taxes	26,423	P	(26,423)	—
Current portion of long-term debt	114,577		—	114,577
Total current liabilities before clients' funds obligations	869,532		(31,669)	837,863
Clients' funds obligations	248,695		—	248,695
Total current liabilities	1,118,227		(31,669)	1,086,558
Deferred tax liabilities	170,683	C, D, H, I, K, M, P	18,177	188,860
Long-term provisions	—	D, O	9,265	9,265
Long-term debt	1,039,299		—	1,039,299
Retirement benefits obligations	7,008	C	(780)	6,228
Other long-term liabilities	112,891	K, M, O	(10,127)	102,764
	2,448,108		(15,134)	2,432,974
Equity				
Attributable to shareholders of CGI Group Inc.				
Retained earnings	1,196,386	B, C, D, H, I, J, K, L	(351,096)	845,290
Accumulated other comprehensive (loss) income	(321,746)	B	336,215	14,469
Capital stock	1,195,069		—	1,195,069
Contributed surplus	82,922	J, K	11,485	94,407
Attributable to shareholders of CGI Group Inc.	2,152,631		(3,396)	2,149,235
Attributable to non-controlling interest	6,452	L	(6,452)	—
	2,159,083		(9,848)	2,149,235
	4,607,191		(24,982)	4,582,209

Reconciliation of consolidated balance sheet

As at September 30, 2011	Canadian GAAP		Adjustments	IFRS
	$		$	$
Assets				
Current assets				
Cash and cash equivalents	157,761	M	(21,550)	136,211
Short-term investments	10,166		—	10,166
Accounts receivable	494,755	M, Q	(4,271)	490,484
Work in progress	400,203	M	(9,137)	391,066
Prepaid expenses and other current assets	104,170	M	(3,763)	100,407
Income taxes	4,252		—	4,252
Future income taxes	3,522	P	(3,522)	—
Total current assets before funds held for clients	1,174,829		(42,243)	1,132,586
Funds held for clients	247,622		—	247,622
Total current assets	1,422,451		(42,243)	1,380,208
Property, plant and equipment	251,668	D, M, N	(1,767)	249,901
Contract costs	—	I, K, M, Q	107,242	107,242
Intangible assets	407,887	H, K, M, Q	(115,754)	292,133
Other long-term assets	55,914	M	(321)	55,593
Deferred tax assets	11,601	D, K, M, P	(1,719)	9,882
Investment in joint venture	—	C, M	26,373	26,373
Goodwill	2,536,022		—	2,536,022
	4,685,543		(28,189)	4,657,354
Liabilities				
Current liabilities				
Bank overdraft	75,538		—	75,538
Accounts payable and accrued liabilities	321,745	L, M, N, O	(18,104)	303,641
Accrued compensation	189,969	M	(6,127)	183,842
Deferred revenue	154,813	M	(1,875)	152,938
Income taxes	53,841	M	(2,019)	51,822
Provisions	—	N, O	12,125	12,125
Future income taxes	20,389	P	(20,389)	—
Current portion of long-term debt	402,534	R	493,478	896,012
Total current liabilities before clients' funds obligations	1,218,829		457,089	1,675,918
Clients' funds obligations	244,660		—	244,660
Total current liabilities	1,463,489		457,089	1,920,578
Deferred tax liabilities	146,889	C, D, H, I, K, M, N, P	2,505	149,394
Long-term provisions	—	D, N, O	27,672	27,672
Long-term debt	603,147	R	(493,478)	109,669
Retirement benefits obligations	6,966	C	69	7,035
Other long-term liabilities	118,696	K, M, N, O	(24,921)	93,775
	2,339,187		(31,064)	2,308,123
Equity				
Retained earnings	1,405,365	B, C, D, H, I, J, K, L, N	(347,766)	1,057,599
Accumulated other comprehensive (loss) income	(321,570)	B, C, D, I, K, N	336,142	14,572
Capital stock	1,178,559		—	1,178,559
Contributed surplus	84,002	J, K	14,499	98,501
	2,346,356		2,875	2,349,231
	4,685,543		(28,189)	4,657,354

Note 33 — Transition to IFRS (continued)

Reconciliation of consolidated statements of earnings

Year ended September 30, 2011	Canadian GAAP		Adjustments	IFRS
	$		$	$
Revenues	4,323,237	I, K, M	(99,295)	4,223,942
Operating expenses				
Costs of services, selling and administrative	3,553,192	H, I, J, K, M, N, S	137,768	3,690,960
Amortization and depreciation	211,372	S	(211,372)	—
Acquisition-related and integration costs	3,675		—	3,675
Finance costs	19,395		—	19,395
Finance income	(3,759)	M	207	(3,552)
Other income	(3,917)	L, S	(3,730)	(7,647)
Foreign exchange gain	(3,279)	M	(86)	(3,365)
Share of profit in joint venture	—	M	(13,359)	(13,359)
	3,776,679		(90,572)	3,686,107
Earnings before income taxes	546,558		(8,723)	537,835
Income tax expense	111,493	H, I, K, M, N	(11,797)	99,696
Net earnings	435,065		3,074	438,139
Earnings per share				
Basic earnings per share	1.64			1.65
Diluted earnings per share	1.58			1.59

Shareholder information

Shareholder information listing

IPO: 1986
Toronto Stock Exchange, April 1992: GIB.A
New York Stock Exchange, October 1998: GIB

Number of shares outstanding as of September 30, 2012:
273,771,106 Class A subordinate shares
33,608,159 Class B shares

High/low of share price from October 1, 2011
to September 30, 2012:

	TSX (CDN$)	NYSE (U.S.$)
High:	27.00	27.71
Low:	17.88	17.01

The certifications by CGI's Chief Executive Officer and Chief Financial Officer concerning the quality of the Company's public disclosure pursuant to Canadian regulatory requirements are filed in Canada on SEDAR (sedar.com). Similar certifications pursuant to Rule 13a-14 of the U.S. Securities Exchange Act of 1934 and Section 302 of the Sarbanes-Oxley Act of 2002 are exhibits to our Form 40-F filed on EDGAR (sec.gov). The Company has also filed with the New York Stock Exchange the certification required by Section 303A.12 of the exchange's Listed Company Manual.

CGI's corporate governance practices do not differ in any significant way from those required of domestic companies under New York Stock Exchange listing standards and they are set out in the CGI Management Proxy Circular, which is filed with Canadian and U.S. securities authorities and is therefore available on SEDAR and EDGAR, respectively, as well as on CGI's website (cgi.com).

Auditors

Ernst & Young LLP

Transfer agent

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100 University Avenue, 9th Floor
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Investor relations

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Montréal, Québec H3G 1T4
Canada
Tel.: (514) 841-3200

Annual general meeting of shareholders

Wednesday, January 30, 2013 at 11:00 a.m.
Omni Mont-Royal Hotel
Saisons A & B
1050 Sherbrooke West
Montréal, Québec H3A 2R6

A live webcast of the Annual General Meeting will be available via cgi.com/investors. Complete instructions for viewing the webcast will be available on CGI's website. To vote by phone or by using the Internet, please refer to the instructions provided in the CGI Management Proxy Circular.

The online version of CGI's annual report is available at cgi.com/2012-ar

Le rapport annuel 2012 de CGI est aussi publié en français et disponible sur cgi.com/2012-ra.

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Our aspiration:
To be the best

At CGI, we are connected through a common culture, a disciplined management approach and a network of vast capabilities and expertise. These connections deliver results.

For our clients

A track record of 95% on-time, on-budget delivery fuels high client satisfaction, which has measured consistently greater than 9 out of 10 for the past 10 years.

For our members

With a majority of our members as owners, we foster a performance-based culture that allows members to benefit from their company's success.

For our shareholders

CGI has a track record of industry-leading margins that demonstrates our ability to run a sound and stable business for the long term, and an average annual return of more than 30% over the last 15 years.

As a global leader, CGI will continue to strive to be the best to satisfy the needs of our clients, offer rewarding careers for our members and provide a superior return over time for our shareholders.

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CGI

Experience the commitment®

New Jersey Department of Community Affairs

Sandy Integrated Recovery Operations and Management System ("SIROMS")

Volume II – Price Proposal

May 14, 2013

RFQ No: RFQ776799S

Submitted To:

State of New Jersey
Department of the Treasury
Division of Purchase and Property
Trenton, New Jersey 08625-0230

Submitted By:

CGI Federal Inc.
12601 Fair Lakes Circle
Fairfax, VA 22033
703.267.6000

CGI

www.cgi.com

The information in this proposal is submitted on May14, 2013 on behalf of CGI by the following authorized representative:

Vanessa Downes
Director, Contracts
CGI Federal Inc

CGI Federal Inc
12601 Fair Lakes Circle
Fairfax, VA, 22033
Tel: 703-227-6000

Table of Contents

1. Introduction

CGI Technologies and Solutions Inc. (CGI T&S), through its wholly owned subsidiary CGI Federal Inc (CGI), is pleased to submit our pricing response for the Request for Quotation (RFQ) # 776799S issued on behalf of the New Jersey Department of Community Affairs (NJDCA) for a disaster recovery solution, which will allow the State to rapidly operate and manage the Sandy Integrated Recovery Operations and Management System (SIROMS). Our price quote is in accordance with CGI's GSA Information Technology (IT) Schedule, Contract Number GS-35F-4797H, the GSA's Cooperative Purchasing Program, and the requirements set forth in the RFQ.

Section 2 describes the Pricing Schedules provided in Exhibit 1 of our response to the RFQ (as revised 5/7/13) in **Appendix A**.

The remaining sections provide other important details of our Price Proposal.

2. Exhibit 1 Pricing Schedules

CGI's Exhibit 1 in **Appendix A** Pricing Schedules were developed in accordance with our GSA Information Technology (IT) Schedule, Contract Number GS-35F-4797H, as well as our Team Members' GSA Schedules and the requirements set forth in the RFQ.

CGI's GSA IT Schedule Pricelist (Pricelist) provides pricing for all Special Item Number (SINs) that we offer as well as full descriptions, including required skills and experience, of our labor categories and descriptions of our software licenses, maintenance, and hosting services. A copy of our most current Pricelist, as well as the GSA schedules from our Team Members and may be found in **Appendix B.**

2.1 Rate Schedule

The Exhibit 1 - Rate Schedule section provides Team CGI's firm-fixed hourly rates for the IT Labor Categories requested by the State, along with the hours by category provided in the RFQ and the resulting Total Estimated Costs by IT Labor Category.

Team Lead CGI is proposing the Year 16 Hourly Rates from our GSA schedule for the full 2-year base contract term. Since our GSA provides for annual 2.3% rate escalations, the rates we are proposing for the initial contact term provide an effective 2.3% discount from the allowable Year 17 rates for all services performed in those labor categories under CGI's GSA between 1/23/2014 and 1/22/2015 and an effective discount of 4.55% from the allowable Year 18 rates for the work performed in those same labor categories between 1/23/2015 and the completion of the initial contract term.

We have also indicated the IT Labor Categories that are covered under our Team Member Horne, LLP's GSA Contract Number GS-23F-0037W. Finally, as requested in the Exhibit 1 instructions, we have included comments detailing the level of participation from our subcontractors for IT Labor Categories where they will be performing services.

Team CGI understands that the Total Labor Cost provided in this Rate Schedule will be the amount used for Cost Proposal scoring.

The first page of our Exhibit 1 in response **Appendix A** also includes summary totals for the Other Direct Costs, which are presented in detail on the other Exhibit 1 schedules, as well as an estimate for billable Travel Costs. CGI understands that the travel amount provided here is a not-to-exceed (NTE) total and that actual travel costs will be billed in accordance with the guidelines provided in Section 3.5.1 of the RFQ, up to the NTE amount.

2.2 Other Direct Costs

CGI understands that the amounts provided in the Other Direct Costs schedules are for NJDCA informational use only and will not be used in the scoring of the Cost Proposals.

2.2.1 IT Hardware

This schedule provides the IT Hardware items that support our SIROMS solution.

Exhibit Comments for All Line Items:

- All items in this list are included in CGI's GSA IT-70 Schedule, GS-35F-4797H.
- The Unit Prices shown are the monthly charges and 24 months are required for the initial contract term. Therefore the Total Cost = Quantity X Unit Price X 24

2.2.2 Software

This schedule provides the third party software requirements for our SIROMS solution, including the Disaster Recovery requirements of the RFQ. The amounts shown include the initial license fee plus two years of maintenance, which provides coverage through the scheduled completion of the initial contract term. We have shown the breakout between the initial license fees and the maintenance amounts in the comments section of this schedule.

Software is provided by multiple Team Members their GSA schedules:

- Open Text: GSA GS-35F-0480J
- Carahsoft Technology Corporation: GSA GS-35F-0131R
- A&T Networks: GSA GS-35F-0519J

We have also included the respective Team Members' GSA contract details in the line item comments of this schedule.

2.2.3 Office Supplies

There are no billable office supplies required for our proposed SIROMS solution.

2.2.4 Training Expenses

There are no training expenses required for our proposed SIROMS solution. The training requirements stated in the RFQ will be delivered as part of the services task orders identified and executed under our proposed Rate Schedule.

2.2.5 Miscellaneous

This schedule includes items not falling under any of the other categories in Exhibit 1.

In accordance with the Exhibit 1 revision issued by the State on 5/7/13, we have included 3 one-year options to maintain and operate the system after the initial contract term. The annual amount provided in this pricing schedule is based on the costs for the first Option Year, as follows:

Annual Operations Component	Basis	Qty	Unit Price	Total Price	Comment
Support Services	Sr Business Systems Consultant	30,240	$140.57	$4,250,836.80	Approximates 15 FTEs at the average project services rate during the initial contract term
IT Hardware (Cloud Hosting costs)	TechnologyPak-SVR-3	1	$3,096	37,152.00	
IT Hardware (Cloud Hosting costs)	TechnologyPak-SVR-5	1	$12,456	149,472.00	
IT Hardware (Cloud Hosting costs)	TechnologyPak - Svr-1	50	$792	475,200.00	
IT Hardware (Cloud Hosting costs)	TechnologyPak - Svr-2	2	$1,692	40,608.00	
IT Hardware (Cloud Hosting costs)	TechnologyPak - Svr-4	3	$6,876	247,536.00	▪ Unit Prices shown for IT Hardware items are monthly amounts:
IT Hardware (Cloud Hosting costs)	TechnologyPak-DC-2	2	$1,080	25,920.00	
IT Hardware (Cloud Hosting costs)	TechnologyPak-DC-4	8	$5,688	546,048.00	
IT Hardware (Cloud Hosting costs)	TechnologyPak-SEC-1	1	$576	6,912.00	▪ Total Annual Costs = Qty X Unit Price X 12
IT Hardware (Cloud Hosting costs)	TechnologyPak-SEC-2	1	$1,152	13,824.00	
IT Hardware (Cloud Hosting costs)	TechnologyPak-SEC-3	5	$5,760	345,600.00	
IT Hardware (Cloud Hosting costs)	TechnologyPak-DB-1	1	$5,598	67,176.00	
IT Hardware (Cloud Hosting costs)	TechnologyPak-DR-4	2	$6,631	159,144.00	
Software	OpenText Metastorm	1	$91,909	91,909.00	Annual maintenance fee
Software	OpenText Scanning	1	$12,110.21	12,110.21	Annual maintenance fee
Software	Business Objects	1	$136,917	136,917.00	Annual maintenance fee
Travel	Travel		$500,000	500,000.00	Estimated annual travel for Support Services team
Annual Total Cost for Each Optional Year				**$7,257,025.01**	

Figure 2.2.5-1. Annual Operations Cost Basis

Annual Operations Notes:

▪ The annual pool of support services is based 15 FTEs, which equates to 30,240 hours per year. For estimation purposes, we used the Year 16 rate from CGI's GSA for a Senior Business Systems Consultant. The rate for this position approximates the overall weighted average rate for the services mix requested by the State for the initial contract term. This pool amount will be redeployed to provide the support requirements that are mutually identified and agreed-to by CGI and NJDCA during system design, development and implementation, utilizing then-current rates from CGI's GSA Schedule for the IT Labor Categories utilized.

▪ Our Cloud Hosting approach realizes operational efficiencies over time. As a result, the annual costs for Option Years 2 and 3 are less than the amount shown in the table above, which are based on the costs for Option Year 1. Due to the constraints of Exhibit 1 format, the Year 2 and 3 efficiency savings are not reflected in the extended total provided by CGI in Exhibit 1 for the 3 Option Years:

  – Option Year 2 Cloud Hosting costs = $2,064,804 (savings of $13,824 from the Option Year 1 amount used in the Exhibit 1 extended costs for the 3-year total of the Cloud Hosting cost line items).

  – Option Year 3 Cloud Hosting costs = $1,995,684 (savings of $82,944 from the Option Year 1 amount used in the Exhibit 1 extended costs for the 3-year total of the Cloud Hosting cost line items).

▪ Travel will be billed at the actual expense incurred in accordance with the guidelines provided in Section 3.5.1 of the RFQ, up to this NTE amount.

3. Corporate Information

The GSA Schedule is held by CGI Federal Inc (CGI). Should Team CGI be awarded the work, the award document would need to be issued using the corporate information below:

1. GSA IT Schedule, Contract Number: GS-35F-4797H
2. Tax Identification Number: ████████
3. Invoices will be submitted directly from CGI Technologies and Solutions Inc. (CGI T&S), their remittance addresses are:

EFT Remittance Address:

> CGI Technologies and Solutions Inc.
> Bank of America
> Account number: ████████
> SWIFT: BOFAUS3N
> Domestic Wires ABA: ████████
> ACH Payment ABA: ████████

Remit Lockbox address:

> CGI Technologies and Solutions Inc.
> 12907 Collections Center Drive
> Chicago, IL 60693

3.1 Payment/Invoicing

A. Services invoices under the Exhibit 1 Rate Schedule will be invoiced monthly based on hours worked.
B. Software invoices will be issued for the license fee portion upon installation of the software. Maintenance invoices will be issued at the beginning of each maintenance year.
C. Hosting cost invoices will be issued monthly.
D. Travel invoices will be issued monthly
E. In accordance with Section 5.15 of the RFQ, the State will retain ten percent (10%) of each task order invoice for a period of thirty (30) days after payment of such invoice. Assuming there are no issues after the thirty (30) day retention period the State Contract Manager will release the retention amount.
F. Payment shall be due within thirty (30) days of receipt of a proper invoice.
G. Team CGI is pleased to offer the State a two percent (2%) prompt payment discount for all Labor Services invoices issued under the Exhibit 1 Rate Schedule that are paid by NJDCA in less than 30 days from the invoice date.

3.2 Assumptions and Clarifications

In addition to assumptions listed in the *Volume 1 – Technical Quote*, Team CGI's price quote is predicated on the following assumptions and clarifications. These items are not intended as exceptions to the RFQ or the GSA IT Schedule terms and conditions.

Although these assumptions and clarifications frame our response, it is Team CGI's practice to resolve issues in a prompt manner that is beneficial to both parties. We welcome the opportunity to work with NJDCA to address any questions or concerns that may arise.

1. This quote is valid for 90 days from the date of submission.

2. The technical proposal and price quote will be incorporated by reference in any contract award.

3. Team CGI will not be responsible for providing support in excess of the hours listed by labor category unless requested by the State through a change request.

4. Team CGI's delay or failure to perform its responsibilities under the awarded contract, including the failure to meet a critical milestone or to meet a Service Level, shall be excused if and to the extent Team CGI's delay or non-performance is caused by the State's, or the State's third-party contractor's, act, omission, breach, or failure to perform any of its obligations or responsibilities under this contract, including by the date required in the awarded contract or the applicable Project Management Plan or similar instrument, but only if; (i) Team CGI promptly notifies the State of such delay or failure to perform and its inability to perform under such circumstances; (ii) Team CGI identifies and pursues commercially reasonable means to avoid or mitigate the impact of such delay or failure to perform; and (iii) Team CGI uses commercially reasonable efforts to perform notwithstanding such delay or failure to perform. In such event; (a) the State will reimburse Team CGI on a "Time and Materials (T&M)" basis for incremental effort or expense Team CGI incurs as a result; (b) Team CGI will be entitled to temporary relief, and will be excused for its obligations under the contract, including being excused from any missed Service Levels or critical milestones; and (c) Team CGI's schedule for performance will be equitably adjusted for any delay caused.

5. Except as expressly state in Team CGI's proposal and the final contract, there are no express warranties made by Team CGI and any implied warranties are expressly disclaimed. Team CGI makes no warranties that the operation or use of the services or any deliverables will be uninterrupted or free of errors. Team CGI disclaims all other warranties, express or implied, including without limitation the implied warranties of merchantability and fitness for a particular purpose, and any implied warranties arising from statute, course of dealing, course of performance, or usage of trade.

6. CGI appreciates the State agreeing to the proposed 2x contract value for actual direct damages; however the change provided in Q&A Part 2 Item 6 creates ambiguity with respect to the provision. Accordingly, we wish to clarify that our understanding is that only the indemnities listed in 5.17.1(1, 2 and 3) are excluded from the liability cap and the remainder of the NJ Standard Terms and Conditions Section 4.1 indemnity claims are subject to the cap.

7. To the extent Team CGI has the legal right to do so, Team CGI agrees to assign or pass through to the State or otherwise make available for the benefit of the State, any manufacturer's or supplier's warranty applicable to any third-party software, hardware or equipment provided by Team CGI. Team CGI does not itself give or make any warranty of any kind with respect to third-party software, hardware or equipment.

8. At the time of the proposal submission, The State of New Jersey is exempt from State sales or use taxes and Federal excise taxes. There are no such taxes included in our proposed pricing.

9. Software Licenses : CGI has estimated software products and license prices needed for the SIROMS project based on our understanding of RFQ requirements. If RFQ requirements change, software pricing may change.

10. If any additional software products are needed to support the evolving requirements of the SIROMS initiative, CGI assumes that we will be able to work with the State to estimate, price and arrange for such software licenses to be procured or made available to CGI.

11. Quantity of Software Licenses: Based on the requirements stated in the RFQ, CGI has made assumptions regarding quantity of software licenses needed for the SIROMS project. These quantities have been stated in Exhibit-1. Our license prices are predicated on these assumptions

12. Transferability of Software Licenses: The RFQ states that software licenses, if procured by CGI on behalf of the State, for the SIROMS contract, shall be transferable to the State upon contract termination or expiration. The following software licenses included in this proposal, if procured by CGI as part of the SIROMS contract, will be transferred to the State upon contract termination or expiration:

    a. Metastorm BPM product licenses
    b. OpenText Content Server licenses
    c. SAP Business Objects licenses
    d. Microsoft SharePoint Licenses
    e. Microsoft Visual Team Foundation Licenses

13. All other software and hardware components proposed to be used on the SIROMS contract are being provided as a managed service with CGI's Cloud Computing Infrastructure which is not transferable to the State.

14. ESRI licenses are not available for procurement by state customers via GSA Schedule. CGI assumes that the state will be able to provide CGI with ESRI licenses as needed for SIROMS.

4. Appendix A – Exhibit 1

Instructions

Exhibit 1 - Rate Schedule

1. Enter **Proposer's Name** on each page.

2. For each proposed group of employees or subcontractors, select the **IT Labor Group** that closely matches the job titles represented.

3. Enter an **Hourly Rate** for each Labor Group. Rates must be equal to or less than the current GSA rate.

4. If any functions within a **Labor Group** will be performed by subcontractors, click the checkbox in the **Subcontractors** field and enter the quantity and specific job title(s) in the **Comments** fields.

5. Enter any optional comments or explanatory notes in in the **Comments** fields.

6. Enter the total **Travel Expenses** your organization proposes to incur. Reference section 3.6.1 - Travel Expenses and Reimbursements for requirements and guidelines.

Exhibit 1 - Other Direct Costs ("ODCs")

1. Enter a **Description** for each item.

2. Enter a **Quantity** for each item.

3. Enter the **Unit Cost** for each item.

4. Calculate the **Total Cost** for each item and enter it in the field.

5. Enter **Comments** to allow the reviewer to better understand each item listed. Examples may be the number of users, length of time covered, terms of a lease, monthly estimate, etc. Also note the specifications for any software, hardware, and/or licenses. (Attache additional sheets as needed.)

6. Do not leave any category blank. If cost is zero, enter the numeral "0" and explain in the **Comments** field.

7. Total all ODCs and verify that all calculations are correct.

Request for Quotation
Sandy Integrated Recovery Operations and Management System ("SIROMS")

Proposer					
CGI Federal Inc		**Exhibit 1 - Rate Schedule**			
IT Labor Categories	**Hourly Rate**	**Personnel Hours**	**Total Estimated Costs**	**Subcontractor Yes/No**	**Proposer Notes**
Senior Project Director II	$254.25	3506	$ 891,400.50	No	
Senior Project Director I	$234.15	8765	$ 2,052,324.75	Yes	1,000 hours scheduled for our Team Member Horne
Senior Technologist	$196.07	8765	$ 1,718,553.55	No	
Infrastructure Architect	$191.01	8765	$ 1,674,202.65	No	
Project Manager	$177.26	14024	$ 2,485,894.24	No	
Team Lead	$165.89	14024	$ 2,326,441.36	Yes	2,080 hours scheduled for our subcontractor Blue Streak
Security Specialist	$116.78	14024	$ 1,637,722.72	No	
Senior Business Consultant	$140.57	25610	$ 3,599,997.70	No	
Senior Systems Programmer	$160.10	5610	$ 898,161.00	Yes	1,400 hours scheduled for our subcontractor Blue Streak
Network Engineer	$123.04	5610	$ 690,254.40	No	
Database Administrator	$130.36	5610	$ 731,319.60	No	
System Administrator	$120.46	5610	$ 675,780.60	No	
Systems Programmer	$123.07	6661	$ 819,769.27	Yes	1,400 hours scheduled for our subcontractor Blue Streak
Analyst/Programmer	$100.19	6661	$ 667,365.59	Yes	1,360 hours scheduled for our subcontractor Blue Streak
Storage Engineer	$117.87	6661	$ 785,132.07	No	
Help Desk Manager	$106.74	6661	$ 710,995.14	No	
Application Developer II	$65.30	6661	$ 434,963.30	No	
Documentation Specialist	$48.82	3506	$ 171,162.92	No	
Operation Support Technician III	$48.82	3506	$ 171,162.92	No	
Application Operator II	$64.33	3506	$ 225,540.98	No	
Help Desk II	$65.58	3506	$ 229,923.48	No	
Project Administrator	$46.49	7012	$ 325,987.88	No	
Operation Support Technician II	$43.36	7012	$ 304,040.32	No	
Help Desk I	$59.93	7012	$ 420,229.16	No	
CDBG Regulatory Specialist	$200.43	9506	$ 1,905,287.58	Yes	All hours for this Labor Categoy are scheduled for our Team Member Horne; rates are from Horne's GSA GS-23F-0037W
Accountant	$179.52	15506	$ 2,783,637.12	Yes	All hours for this Labor Categoy are scheduled for our Team Member Horne; rates are from Horne's GSA GS-23F-0037W
		Total Labor Cost	$ 29,337,250.80	<== Amount used in scoring Cost Proposal	

DCA Informational Use Only. This is not used in the scoring of the Cost Proposal	
Other Direct Costs	**Total Estimated Costs**
IT Hardware	$ 4,759,896.00
Software	$ 1,715,119.92
Licenses	$ -
Office Supplies	$ -
Expenses for Training DCA staff, Subrecipients, and other Prime Contr	$ -
Miscellaneous	$ 21,771,075.03
Total Other Direct Costs	$ 28,246,090.95
Travel	$ 3,000,000.00

I do hereby certify that the information provided herein is correct and accurate to the best of my knowledge, information, and belief. I understand that I will be subject to State and/or Federal prosecution if any of the information provided by me and/or the bidder is incorrect, false, and/or misleading.

SIGN HERE _VM Downs_
_____
Signature

VANESSA M. DOWNS
_____
Name

Director, Contracts
_____
Title

Request for Quotation
Sandy Integrated Recovery Operations and Management System ("SIROMS")

Proposer
CGI Federal Inc

Exhibit 1 - Other Direct Costs

IT Hardware	Note: Proposals are to be based on a Cloud based system

Description	Quantity	Unit Price	Total Cost	Comments
				See Section 2.2.1 of our Price Proposal narrative for comments that apply to all line items on this schedule
Cloud Infrastructure Components per GSA specifications				
TechnologyPak-SVR-5	1	$ 12,456.00	$ 298,944.00	Total Cost = Quantity*Unit Price* 24 Months
TechnologyPak-SVR-3	1	$ 3,096.00	$ 74,304.00	Total Cost = Quantity*Unit Price* 24 Months
Technology Pak - Svr-1	50	$ 792.00	$ 950,400.00	Total Cost = Quantity*Unit Price* 24 Months
Technology Pak - Svr-2	2	$ 1,692.00	$ 81,216.00	Total Cost = Quantity*Unit Price* 24 Months
Technology Pak - Svr-4	3	$ 6,876.00	$ 495,072.00	Total Cost = Quantity*Unit Price* 24 Months
Technology Pak-DC-2	3	$ 1,080.00	$ 77,760.00	Total Cost = Quantity*Unit Price* 24 Months
Technology Pak-DC-4	8	$ 5,688.00	$ 1,092,096.00	Total Cost = Quantity*Unit Price* 24 Months
Technology Pak-SEC-1	2	$ 576.00	$ 27,648.00	Total Cost = Quantity*Unit Price* 24 Months
Technology Pak-SEC-2	3	$ 1,152.00	$ 82,944.00	Total Cost = Quantity*Unit Price* 24 Months
Technology Pak-SEC-3	5	$ 5,760.00	$ 691,200.00	Total Cost = Quantity*Unit Price* 24 Months
Technology Pak-DB-2	1	$ 11,196.00	$ 268,704.00	Total Cost = Quantity*Unit Price* 24 Months
Technology Pak-DR-4	2	$ 6,631.00	$ 318,288.00	Total Cost = Quantity*Unit Price* 24 Months
Backup Storage Capacity per GB stored	13950	$ 0.90	$ 301,320.00	Total Cost = Quantity*Unit Price* 24 Months
Total Cost for IT Hardware			$ 4,759,896.00	

Software				

Description	Quantity	Unit Price	Total Cost	Comments
OpenText Metastorm: BPM and Content Server 400 users for BPM, 100 users for Content includes DR	1	$ 651,044.00	$ 651,044.00	Initial software license price = $467,226 Year 1 & Year 2 maintenance price = $91,909 each year GSA GS-35F-0480J - Open Text
OpenText Scanning - Capture Center 300,000 pages/yr limit (includes DR)	1	$ 84,767.92	$ 84,767.92	Initial software license price = $60,547.50 Year 1 & Year 2 maintenance price = $12,110.21 each year GSA GS-35F-0480J - Open Text
Business Objects (25 users) 2 environments (one for prod, one for DR)	1	$ 896,184.00	$ 896,184.00	Initial software license price = $622,350 Year 1 & Year 2 maintenance price = $136,917 each year GSA GS-35F-0131R - Carahsoft Technology Corporation
Microsoft SharePoint Server (includes DR)	3	$ 5,640.00	$ 16,920.00	Initial software license price = $16,920 No maintenance for MS products GSA GS-35F-0519J 70/132-7 - A&T Networks
Microsoft SharePoint Server - user cals (includes DR)	500	$ 94.00	$ 47,000.00	Initial software license price = $47,000 No maintenance for MS products GSA GS-35F-0519J 70/132-8 - A&T Networks
Microsoft Visual Team Foundation Server (includes DR)	3	$ 318.00	$ 954.00	Initial software license price = $954 No maintenance for MS products GSA GS-35F-0519J 70/132-9 - A&T Networks
Microsoft Visual Team Foundation Server, user cals (includes DR)	50	$ 365.00	$ 18,250.00	Initial software license price = $18,250 No maintenance for MS products GSA GS-35F-0519J 70/132-10 - A&T Networks
LA Road Home	1	-	-	Re-usable public domain software components developed for the LA ROAD HOME project including but not limited to GIOS, A133, TRS, data warehouse universes, BI reports, and SharePoint applications
Total Cost for Software			$ 1,715,119.92	

Request for Quotation
Sandy Integrated Recovery Operations and Management System ("SIROMS")

Proposer
CGI Federal Inc

Exhibit 1 - Other Direct Costs

Licenses	Note: Proposals are to be based on a Cloud based system

Description	Quantity	Unit Price	Total Cost	Comments
	0	$ -	$ -	
Total Cost for Licenses			$ -	

Office Supplies				
Description	Quantity	Unit Price	Total Cost	Comments
	0	$ -	$ -	
Total Cost for Office Supplies			$ -	

Proposer
CGI Federal Inc

Exhibit 1 - Other Direct Costs

Training Expenses	Note: Proposals are to be based on a Cloud based system			
Description	**Quantity**	**Unit Price**	**Total Cost**	**Comments**
	0	$ -	$ -	Any training requirements will be provided as part of the agreed-to services tasks
Total Cost for Training Expenses			$ -	

Miscellaneous				
Description	**Quantity**	**Unit Price**	**Total Cost**	**Comments**
Price to the State for each of three (3) one-year options to maintain and operate the system in the cloud after completion of the initial contract term of two (2) years.	3	$ 7,257,025.01	$ 21,771,075.03	See Section 2.2.6, Figure 2.1 of our Price Proposal narrative for a description of the option years and mapping of the components to the applicable GSA schedules
Total Cost for Miscellaneous Expenses			$ 21,771,075.03	
Total Other Direct Costs			$ 28,246,090.95	

5.   Appendix B - Team CGI GSA IT-70 Schedule Pricelists

5.1   Appendix B.1 - CGI Federal: GSA GS-35F-4797H

Please see Volume II - SIROMS Price Proposal - Appendix B 1 CGI Federal - GS-35F-4797H.pdf

5.2   Appendix B.2 - Horne, LLP: GS-23F-0037W

Please see Volume II - SIROMS Price Proposal - Appendix B 2 HORNE - GS-23F-0037W.pdf

5.3   Appendix B.3 - Open Text: GSA GS-35F-0480J

Please see Volume II - SIROMS Price Proposal - Appendix B 3 Open Text - GS-35F-0480J.PDF

5.4   Appendix B.4 - Carahsoft Technology Corporation: GSA GS-35F-0131R

Please see Volume II - SIROMS Price Proposal - Appendix B 4 Carahsoft - GS-35F-0131R.pdf

5.5   Appendix B.5 - A&T Networks: GSA GS-35F-0519J

Please see Volume II - SIROMS Price Proposal - Appendix B 5 A&T Marketing - GS-35F-0519J.pdf

Authorized Information Technology Schedule Pricelist
General Purpose Commercial Information Technology Equipment, Software and Services

Special Item No. 132-32 - Term Software Licenses

FSC Class 7030 – Information Technology Software - Large Scale Computers and Microcomputers

Operating System Software	Application Software	Electronic Commerce (EC) Software
Utility Software	Communications Software	Core Financial Management Software
Ancillary Financial Systems Software	Special Physical, Visual, Speech, and Hearing Aid Software	

Special Item No. 132-34 - Maintenance of Software

Special Item No. 132-51 - Information Technology (IT) Professional Services

FPDS Code

IT Facility Operation and Maintenance	D301
IT Systems Development Services	D302
IT Systems Analysis Services	D306
Automated Information Systems Design and Integration Services	D307
Programming Services	D308
IT Backup and Security Services	D310
IT Data Conversion Services	D311
Computer Aided Design/Computer Aided Manufacturing (CAD/CAM) Services	D313
IT Network Management Services	D316
Creation/Retrieval of IT Related Automated News Services, Data Services, or Other Information Services	D317
Other Information Technology Services, Not Elsewhere Classified	D399

Special Item No. 132-52 – Electronic Commerce (EC) Services

FPDS Code

Value Added Network Services (VANs)	D304
E-Mail Services	D304
Internet Access Services	D304
Navigation Services	D304
Other Data Transmission Services, Not Elsewhere Classified – Except "Voice" and Pager Services	D399

CGI Federal Inc.
12601 Fair Lakes Circle
Attn: GWAC Solutions Center
Fairfax, VA 22033-4902
(703) 227.6000 (Voice)
(Facsimile)
gwacsc@cgifederal.com (E-Mail)
http:/www.cgifederal.com (Internet)

Contract Number:	GS-35F-4797H
Modification No. 58 Option to Extend the Term	Effective January 23, 2013
Period Covered by Contract:	January 23, 1998 – January 22, 2018

General Services Administration
Federal Acquisition Service

Products and ordering information in this Authorized Information Technology Schedule Pricelist are also available on the GSA Advantage! System (http://www.gsaadvantage.gov).

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TABLE OF CONTENTS

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INFORMATION FOR ORDERING ACTIVITIES
APPLICABLE TO ALL SPECIAL ITEM NUMBERS

Special Notice to Agencies

Small Business Participation

SBA strongly supports the participation of small business concerns in the Federal Acquisition Service. To enhance Small Business Participation SBA policy allows agencies to include in their procurement base and goals, the dollar value of orders expected to be placed against the Federal Acquisition Service Schedules, and to report accomplishments against these goals.

For orders exceeding the micro-purchase threshold, FAR 8.404 requires agencies to consider the catalogs/pricelists of at least three schedule contractors or consider reasonably available information by using the GSA Advantage!™ on-line shopping service (www.gsaadvantage.gov). The catalogs/pricelists, GSA Advantage!™ and the Federal Acquisition Service Home Page (www.gsa.gov/fas) contain information on a broad array of products and services offered by small business concerns.

This information should be used as a tool to assist ordering activities in meeting or exceeding established small business goals. It should also be used as a tool to assist in including small, small disadvantaged, and women-owned small businesses among those considered when selecting pricelists for a best value determination.

For orders exceeding the micro-purchase threshold, customers are to give preference to small business concerns when two or more items at the same delivered price will satisfy their requirement.

1.   GEOGRAPHIC SCOPE OF CONTRACT

Domestic delivery is delivery within the 48 contiguous states, Alaska, Hawaii, Puerto Rico, Washington, DC, and U.S. Territories. Domestic delivery also includes a port or consolidation point, within the aforementioned areas, for orders received from overseas activities.

Overseas delivery is delivery to points outside of the 48 contiguous states, Washington, DC, Alaska, Hawaii, Puerto Rico, and U.S. Territories.

     [x]   The Geographic Scope of Contract will be domestic delivery only.

Please note that the services and products offered herein are also available at overseas locations outside the scope of this contract. Overseas service rates will be negotiated between the Contractor and the ordering activity.

2.   CONTRACTOR'S ORDERING ADDRESS AND PAYMENT ADDRESS

For computer to computer EDI orders: None

For orders by facsimile transmission:

For Orders by Facsimile Transmission	For Mailed Orders	Internet Address
CGI Federal Inc. (703) 227.7477 To verify transmission: (703) 227.6000	CGI Federal Inc. Attn: GWAC Solutions Center 12601 Fair Lakes Circle Fairfax, VA 22033-4902	gwacsc@cgifederal.com http://www.cgifederal.com (Internet)

Payment Addresses:

Via Mail	Via Federal Express	Via Wire/ACH
CGI Federal Inc. P.O. Box 404922 Atlanta, GA 30384-4922	Bank of America Lockbox Service Lockbox 404922 6000 Feldwood Road College Park, GA 30349	Bank of America Dallas, TX ABA # CGI Federal Inc. Account No.

Contractors must accept the credit card for payments equal to or less than the micro-purchase threshold for oral or written orders under this contract. The contractor and the ordering agency may agree to use the credit card for dollar amounts over the micro-purchase threshold (See GSAR 552.232-79 Payment by Credit Card). In addition, bank account information for wire transfer payments will be shown on the invoice.

The following telephone number can be used by ordering agencies to obtain technical and/or ordering assistance:

(703) 227.6000 (ask for the GSA/*GWAC Solutions Center*) or by email at gwacsc@cgifederal.com

3. LIABILITY FOR INJURY OR DAMAGE

The Contractor shall not be liable for any injury to ordering activity personnel or damage to ordering activity property arising from the use of equipment maintained by the Contractor, unless such injury or damage is due to the fault or negligence of the Contractor.

4. STATISTICAL DATA FOR GOVERNMENT ORDERING OFFICE COMPLETION OF STANDARD FORM 279

Block 9: G. Order/Modification Under Federal Schedule
Block 16: Data Universal Numbering System (DUNS) Number:
Block 30: Type of Contractor - **C. Large Business**
Block 31: Woman-Owned Small Business – **No**
Block 36: Contractor's Taxpayer Identification Number (TIN) –
Block 40: Veteran Owned Small Business (VOSB) – **No**

a. CAGE Code: **3YVK7**

b. CGI Federal Inc. has registered with the Central Contractor Registration (CCR) Database.

5. FOB DESTINATION

6. DELIVERY SCHEDULE

a. **TIME OF DELIVERY:** The contractor shall deliver to destination within the number of calendar days after receipt of order (ARO), as set forth below:

SPECIAL ITEM NUMBER	DELIVERY TIME (DAYS ARO)
SIN 132-32	30 days (or as awarded in the order)
SIN 132-34	As awarded in the order
SIN 132-51	Date of award to completion
SIN 132-52	As awarded in the order

b. **URGENT REQUIREMENTS:** When the Federal Acquisition Service Schedule contract delivery period does not meet the bona fide urgent delivery requirements of an ordering activity, ordering activities are encouraged, if time permits, to contact the Contractor for the purpose of obtaining accelerated delivery. The Contractor shall reply to the inquiry within 3 workdays after receipt. (Telephonic replies shall be confirmed by the Contractor in writing.) If the Contractor offers an accelerated delivery time acceptable to the ordering activity, any order(s) placed pursuant to the agreed upon accelerated delivery time frame shall be delivered within this shorter delivery time and in accordance with all other terms and conditions of the contract.

7. **DISCOUNTS:** Prices shown are NET prices; basic discounts have been deducted.

a.	Prompt Payment:	None
b.	Quantity:	None
c.	Dollar Volume:	None
d.	Government Educational Institutions:	Same as other Government customers
e.	Other:	None

CGI reserves the right to offer net discounts in special cases, where deemed appropriate. The net discount may be expressed as a single percent per individual SIN and/or as a percent to be applied to the total requirement pricing. The offer of the net discount will be made directly to the ordering activity making the selection and will not result in a modification to the Schedule Contract. The net discount and dollar amount must be shown on monthly invoices. The offer and/or acceptance of the net discount to an ordering activity will not constitute a price reduction under the clause entitled "Price Reductions".

Cross-servicing fees for the Momentum® Suite of software products will be negotiated on a case-by-case basis with the ordering activity.

8. TRADE AGREEMENTS ACT OF 1979, AS AMENDED

All items are U.S. made end products, designated country end products, Caribbean Basin country end products, Canadian end products, or Mexican end products as defined in the Trade Agreements Act of 1979, as amended.

9. STATEMENT CONCERNING AVAILABILITY OF EXPORT PACKING

Outside the scope of this Contract.

10. SMALL REQUIREMENTS

The minimum dollar value of orders to be issued is $50.00.

11. MAXIMUM ORDER: (All dollar amounts are exclusive of any discount for prompt payment.)

a.   The maximum order value for the following Special Item Numbers (SINs) is $500,000:

Special Item Number 132-32 - Term Software Licenses
Special Item Number 132-34 – Maintenance of Software
Special Item Number 132-51 - Information Technology (IT) Professional Services
Special Item Number 132-52 – Electronic Commerce (EC) Services

12. ORDERING PROCEDURES FOR FEDERAL ACQUISITION SERVICE SCHEDULE CONTRACTS

Ordering activities shall use the ordering procedures of Federal Acquisition Regulation (FAR) 8.405 when placing an order or establishing a BPA for supplies or services. These procedures apply to all schedules.

a.   FAR 8.405-1 Ordering procedures for supplies, and services not requiring a statement of work.
b.   FAR 8.405-2 Ordering procedures for services requiring a statement of work.

13. FEDERAL INFORMATION TECHNOLOGY/TELECOMMUNICATION STANDARDS REQUIREMENTS

Ordering activities acquiring products from this Schedule must comply with the provisions of Federal Standards Program, as appropriate (reference: NIST Federal Standards Index). Inquiries to determine whether or not specific products listed herein comply with Federal Information Processing Standards (FIPS) or Federal Telecommunication Standards (FED-STDS), which are cited by ordering activities, shall be responded to promptly by the Contractor.

13.1 FEDERAL INFORMATION PROCESSING STANDARDS PUBLICATIONS (FIPS PUBS)

Information Technology products under this Schedule that do not conform to Federal Information Processing Standards (FIPS) should not be acquired unless a waiver has been granted in accordance with the applicable "FIPS Publication." Federal Information Processing Standards Publications (FIPS PUBS) are issued by the U.S. Department of Commerce, National Institute of Standards and Technology (NIST), pursuant to National Security Act. Information concerning their availability and applicability should be obtained from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia 22161. FIPS PUBS include voluntary standards when these are adopted for Federal use. Individual orders for FIPS PUBS should be referred to the

NTIS Sales Office, and orders for subscription service should be referred to the NTIS Subscription Officer, both at the above address, or telephone number (703) 487-4650.

13.2 FEDERAL TELECOMMUNICATION STANDARDS (FED-STDS)

Telecommunication products under this Schedule that do not conform to Federal Telecommunication Standards (FED-STDS) should not be acquired unless a waiver has been granted in accordance with the applicable "FED-STD." Federal Telecommunication Standards are issued by the U.S. Department of Commerce, National Institute of Standards and Technology (NIST), pursuant to National Security Act. Ordering information and information concerning the availability of FED-STDS should be obtained from the GSA, Federal Acquisition Service, Specification Section, 470 East L'Enfant Plaza, Suite 8100, SW, Washington, DC 20407, telephone number (202) 619-8925. Please include a self-addressed mailing label when requesting information by mail. Information concerning their applicability can be obtained by writing or calling the U.S. Department of Commerce, National Institute of Standards and Technology, Gaithersburg, MD 20899, telephone number (301) 975-2833.

14. CONTRACTOR TASKS / SPECIAL REQUIREMENTS (C-FSS-370) (NOV 2003)

a. Security Clearances: The Contractor may be required to obtain/possess varying levels of security clearances in the performance of orders issued under this contract. All costs associated with obtaining/possessing such security clearances should be factored into the price offered under the Multiple Award Schedule.

b. Travel: The Contractor may be required to travel in performance of orders issued under this contract. Allowable travel and per diem charges are governed by Pub .L. 99-234 and FAR Part 31, and are reimbursable by the ordering agency or can be priced as a fixed price item on orders placed under the Multiple Award Schedule. Travel in performance of a task order will only be reimbursable to the extent authorized by the ordering agency. The Industrial Funding Fee does NOT apply to travel and per diem charges.

c. Certifications, Licenses and Accreditations: As a commercial practice, the Contractor may be required to obtain/possess any variety of certifications, licenses and accreditations for specific FSC/service code classifications offered. All costs associated with obtaining/ possessing such certifications, licenses and accreditations should be factored into the price offered under the Multiple Award Schedule program.

d. Insurance: As a commercial practice, the Contractor may be required to obtain/possess insurance coverage for specific FSC/service code classifications offered. All costs associated with obtaining/possessing such insurance should be factored into the price offered under the Multiple Award Schedule program.

e. Personnel: The Contractor may be required to provide key personnel, resumes or skill category descriptions in the performance of orders issued under this contract. Ordering activities may require agency approval of additions or replacements to key personnel.

f. Organizational Conflicts of Interest: Where there may be an organizational conflict of interest as determined by the ordering agency, the Contractor's participation in such order may be restricted in accordance with FAR Part 9.5.

g. Documentation/Standards: The Contractor may be requested to provide products or services in accordance with rules, regulations, OMB orders, standards and documentation as specified by the agency's order.

h. Data/Deliverable Requirements: Any required data/deliverables at the ordering level will be as specified or negotiated in the agency's order.

i. Government-Furnished Property: As specified by the agency's order, the Government may provide property, equipment, materials or resources as necessary.

j. Availability of Funds: Many Government agencies' operating funds are appropriated for a specific fiscal year. Funds may not be presently available for any orders placed under the contract or any option year. The Government's obligation on orders placed under this contract is contingent upon the availability of appropriated

funds from which payment for ordering purposes can be made. No legal liability on the part of the Government for any payment may arise until funds are available to the ordering Contracting Officer.

k.   Overtime: For professional services, the labor rates in the Schedule should not vary by virtue of the Contractor having worked overtime. For services applicable to the Service Contract Act (as identified in the Schedule), the labor rates in the Schedule will vary as governed by labor laws (usually assessed at time and a half of the labor rate).

15.   CONTRACT ADMINISTRATION FOR ORDERING ACTIVITIES

Any ordering activity, with respect to any one or more delivery orders placed by it under this contract, may exercise the same rights of termination as might the GSA Contracting Officer under provisions of FAR 52.212-4, paragraphs (l) Termination for the ordering activity's convenience, and (m) Termination for Cause (See C.1.).

16.   GSA ADVANTAGE!

GSA Advantage! is an on-line, interactive electronic information and ordering system that provides on-line access to vendors' schedule prices with ordering information. GSA Advantage! will allow the user to perform various searches across all contracts including, but not limited to:

    (1)   Manufacturer;

    (2)   Manufacturer's Part Number; and

    (3)   Product categories.

Agencies can browse GSA Advantage! by accessing the Internet World Wide Web utilizing a browser (ex.: NetScape). The Internet address is http://www.gsaadvantage.gov/.

17.   PURCHASE OF OPEN MARKET ITEMS

NOTE: Open Market Items are also known as incidental items, non-contract items, non-Schedule items, and items not on a Federal Acquisition Service Schedule contract. ODCs (Other Direct Costs) are not part of this contract and should be treated at open market purchases. Ordering Activities procuring open market items must follow FAR 8.402(f).

For administrative convenience, an ordering activity contracting officer may add items not on the Federal Acquisition Service Multiple Award Schedule (MAS) –referred to as open market items – to a Federal Acquisition Service Schedule Blanket Purchase Agreement (BPA) or an individual order, **only if-**

    (1)   All applicable acquisition regulations pertaining to the purchase of the items not on the Federal Acquisition Service Schedule have been followed (e.g., publicizing (Part 5), competition requirements (Part 6), acquisition of commercial items (Part 12), contracting methods (Parts 13, 14, and 15), and small business programs (Part 19));

    (2)   The ordering activity contracting officer has determined the price for the items not on the Federal Acquisition Service Schedule is fair and reasonable;

    (3)   The items are clearly labeled on the order as items not on the Federal Acquisition Service Schedule; and

    (4)   All clauses applicable to items not on the Federal Acquisition Service Schedule are included in the order.

18.   CONTRACTOR COMMITMENTS, WARRANTIES AND REPRESENTATIONS

a.   For the purpose of this contract, commitments, warranties and representations include, in addition to those agreed to for the entire schedule contract:

    (1)   Time of delivery/installation quotations for individual orders;

    (2)   Technical representations and/or warranties of products concerning performance, total system performance and/or configuration, physical, design and/or functional characteristics and capabilities of a product/ equipment/service/software package submitted in response to requirements which result in orders under this schedule contract.

     (3) Any representations and/or warranties concerning the products made in any literature, description, drawings and/or specifications furnished by the Contractor.

b.   The above is not intended to encompass items not currently covered by the GSA Schedule contract.

19.   OVERSEAS ACTIVITIES

The terms and conditions of this contract shall apply to all orders for installation, maintenance and repair of equipment in areas listed in the pricelist outside the 48 contiguous states and the District of Columbia, except as indicated below:

Upon request of the Contractor, the ordering activity may provide the Contractor with logistics support, as available, in accordance with all applicable ordering activity regulations. Such ordering activity support will be provided on a reimbursable basis, and will only be provided to the Contractor's technical personnel whose services are exclusively required for the fulfillment of the terms and conditions of this contract.

20.   BLANKET PURCHASE AGREEMENTS (BPAs)

The use of BPAs under any schedule contract to fill repetitive needs for supplies or services is allowable. BPAs may be established with one or more schedule contractors. The number of BPAs to be established is within the discretion of the ordering activity establishing the BPA and should be based on a strategy that is expected to maximize the effectiveness of the BPA(s). Ordering activities shall follow FAR 8.405-3 when creating and implementing BPA(s).

21.   CONTRACTOR TEAM ARRANGEMENTS

Contractors participating in contractor team arrangements must abide by all terms and conditions of their respective contracts. This includes compliance with Clauses 552.238-74, Industrial Funding Fee and Sales Reporting, i.e., each contractor (team member) must report sales and remit the IFF for all products and services provided under its individual contract.

22.   INSTALLATION, DEINSTALLATION, REINSTALLATION

The Davis-Bacon Act (40 U.S.C. 276a-276a-7) provides that contracts in excess of $2,000 to which the United States or the District of Columbia is a party for construction, alteration, or repair (including painting and decorating) of public buildings or public works with the United States, shall contain a clause that no laborer or mechanic employed directly upon the site of the work shall receive less than the prevailing wage rates as determined by the Secretary of Labor. The requirements of the Davis-Bacon Act do not apply if the construction work is incidental to the furnishing of supplies, equipment, or services. For example the requirements do not apply to simple installation or alteration of a public building or public work that is incidental to furnishing supplies or equipment under a supply contract. However, if the construction, alteration or repair is segregable and exceeds $2,000, then the requirements of the Davis-Bacon Act apply.

The ordering activity issuing the task order against this contract will be responsible for proper administration and enforcement of the Federal labor standards covered by the Davis-Bacon Act. The proper Davis-Bacon wage determination will be issued by the ordering activity at the time a request for quotation is made for applicable construction classified installation, deinstallation, and reinstallation services under SIN 132-8 or 132-9.

23.   SECTION 508 COMPLIANCE

If applicable, Section 508 compliance information on the supplies and services in this contract are available in Electronic and Information Technology (EIT) at the following:

<div align="center">gwacsc@cgifederal.com</div>

The EIT standard can be found at www.Section508.gov/.

24. PRIME CONTRACTOR ORDERING FROM FEDERAL ACQUISITION SERVICE SCHEDULES

Prime Contractors (on cost reimbursement contracts) placing orders under Federal Acquisition Service Schedules, on behalf of an ordering activity, shall follow the terms of the applicable schedule and authorization and include with each order –

a.   A copy of the authorization from the ordering activity with whom the contractor has the prime contract (unless a copy was previously furnished to the Federal Acquisition Service Schedule contractor): and

b.   The following statement:

This order is placed under written authorization from _____ dated _____. In the event of any inconsistency between the terms and conditions of this order and those of your Federal Acquisition Service Schedule contract, the latter will govern.

25. INSURANCE—WORK ON A GOVERNMENT INSTALLATION (JAN 1997)(FAR 52.228-5)

a.   The Contractor shall, at its own expense, provide and maintain during the entire performance of this contract, at least the kinds and minimum amounts of insurance required in the Schedule or elsewhere in the contract.

b.   Before commencing work under this contract, the Contractor shall notify the Contracting Officer in writing that the required insurance has been obtained. The policies evidencing required insurance shall contain an endorsement to the effect that any cancellation or any material change adversely affecting the Government's interest shall not be effective—

(1) For such period as the laws of the State in which this contract is to be performed prescribe; or

(2) Until 30 days after the insurer or the Contractor gives written notice to the Contracting Officer, whichever period is longer.

c.   The Contractor shall insert the substance of this clause, including this paragraph (c), in subcontracts under this contract that require work on a Government installation and shall require subcontractors to provide and maintain the insurance required in the Schedule or elsewhere in the contract. The Contractor shall maintain a copy of all subcontractors' proofs of required insurance, and shall make copies available to the Contracting Officer upon request.

26. SOFTWARE INTEROPERABILITY

Offerors are encouraged to identify within their software items any component interfaces that support open standard interoperability. An item's interface may be identified as interoperable on the basis of participation in a Government agency-sponsored program or in an independent organization program. Interfaces may be identified by reference to an interface registered in the component registry located at **http://www.core.gov**.

27. ADVANCE PAYMENTS

A payment under this contract to provide a service or deliver an article for the United States Government may not be more than the value of the service already provided or the article already delivered. Advance or pre-payment is not authorized or allowed under this contract. (31 U.S.C. 3324)

TERMS AND CONDITIONS
APPLICABLE TO TERM SOFTWARE LICENSES (SPECIAL ITEM NUMBER 132-32)
AND MAINTENANCE OF SOFTWARE (SPECIAL ITEM NUMBER 132-34)
FOR GENERAL PURPOSE COMMERCIAL INFORMATION TECHNOLOGY
SOFTWARE

1.   INSPECTION/ACCEPTANCE

The Contractor shall only tender for acceptance those items that conform to the requirements of this contract. The ordering activity reserves the right to inspect or test any software that has been tendered for acceptance. The ordering activity may require repair or replacement of nonconforming software at no increase in contract price. *Software shall be deemed accepted 30 days after the ordering activity receives the order, unless written notice is given to the contrary within the 30 day period.* The ordering activity must exercise its post acceptance rights (1) within a reasonable time after the defect was discovered or should have been discovered; and (2) before any substantial change occurs in the condition of the software *(including but not limited to customization)*, unless the change is due to the defect in the software.

2.   GUARANTEE/WARRANTY

a.   Unless specified otherwise in this contract, the Contractor's standard commercial guarantee/warranty as stated in the contract's commercial pricelist will apply to this contract.

See guarantee/warranty and embedded third-party product information in the product sales guides.

b.   The contractor warrants and implies that the items delivered hereunder are merchantable and fit for use for the particular purpose described in the contract.

c.   Limitation of Liability. Except as otherwise provided by an express or implied warranty, the Contractor will not be liable to the ordering activity for consequential damages resulting from any defect or deficiencies in accepted terms.

3.   TECHNICAL SERVICES

The Contractor, without additional charge to the ordering activity, provides a hot line technical support number for the purpose of providing user assistance and guidance in the implementation of the software for the following software products:

The technical support number, 1-800-841-6713, is available from 9:00 to 5:00 eastern time.

Momentum – MAXIMO Asset Management

The technical support number, (800) 243-7734, is available 24 hours a day, 7 days a week.

4.   SOFTWARE MAINTENANCE

a.   Software maintenance as it is defined *(see software maintenance in the product sales guide)*: *CGI offers both Software Maintenance as a Service and Software Maintenance as a Product, depending on the ordering activity's requirements.*

1.   Software Maintenance as a Product (SIN 132-32)

Software maintenance as a product includes the publishing of bug/defect fixes via patches and updates/upgrades in function and technology to maintain the operability and usability of the software product. It may also include other no charge support that are included in the purchase price of the product in the commercial marketplace. No charge support includes items such as user blogs, discussion forums, on-line help libraries and FAQs (Frequently Asked Questions), hosted chat rooms, and limited telephone, email and/or web-based general technical support for user's self diagnostics.

Software maintenance as a product does <u>NOT</u> include the creation, design, implementation, integration, etc. of a software package. These examples are considered software maintenance as a service.

Software Maintenance as a product is billed at the time of purchase.

2.   Software Maintenance as a Service (SIN 132-34)

Software maintenance as a service creates, designs, implements, and/or integrates customized changes to software that solve one or more problems and is not included with the price of the software. Software maintenance as a service includes person-to-person communications regardless of the medium used to communicate: telephone support, on-line technical support, customized support, and/or technical expertise which are charged commercially. Software maintenance as a service is billed arrears in accordance with 31 U.S.C. 3324.

Software maintenance as a service is billed in arrears in accordance with 31 U.S.C. 3324.

b.   Invoices for maintenance service shall be submitted by the Contractor on a quarterly or monthly basis, after the completion of such period. Maintenance charges must be paid in arrears (31 U.S.C. 3324). PROMPT PAYMENT DISCOUNT, IF APPLICABLE, SHALL BE SHOWN ON THE INVOICE.

5.   PERIODS OF TERM LICENSES (132-32) AND MAINTENANCE (132-34)

a.   The Contractor shall honor orders for periods for the duration of the contract period or a lesser period of time.

b.   Term licenses and/or maintenance may be discontinued by the ordering activity on thirty (30) calendar day's written notice to the Contractor.

c.   Annual Funding. When annually appropriated funds are cited on an order for term licenses and/or maintenance, the period of the term licenses and/or maintenance shall automatically expire on September 30 of the contract period, or at the end of the contract period, whichever occurs first. Renewal of the term licenses and/or maintenance orders citing the new appropriation shall be required, if the term licenses and/or maintenance is to be continued during any remainder of the contract period.

d.   Cross-Year Funding Within Contract Period. Where an ordering activity's specific appropriation authority provides for funds in excess of a 12 month (fiscal year) period, the ordering activity may place an order under this schedule contract for a period up to the expiration of the contract period, notwithstanding the intervening fiscal years.

e.   Ordering activities should notify the Contractor in writing thirty (30) calendar days prior to the expiration of an order, if the term licenses and/or maintenance is to be terminated at that time. Orders for the continuation of term licenses and/or maintenance will be required if the term licenses and/or maintenance is to be continued during the subsequent period.

6.   CONVERSION FROM TERM LICENSE TO PERPETUAL LICENSE

CGI does not offer conversion from a term license to a perpetual license for its software.

7.   TERM LICENSE CESSATION

CGI does not offer conversion from a term license to a perpetual license for its software.

8.   UTILIZATION LIMITATIONS - (132-32 AND 132-34)

a.   Software acquisition is limited to Commercial Computer Software defined in FAR Part 2.101.

b.   When acquired by the ordering activity, commercial computer software and related documentation so legend shall be subject to the following:

(1) Title to and ownership of the software and documentation shall remain with the Contractor, unless otherwise specified.

Source code will not be delivered for products on this schedule unless otherwise negotiated. The ordering activity shall not extract ideas, algorithms, procedures, object definitions, methods, class definitions, templates, or hierarchies from the software or related documentation for the purpose of creating any works that are intended to be used as a substitute for the software or documentation or any material part thereof.

(2) Software licenses are by site and by ordering activity. An ordering activity is defined as a cabinet level or independent ordering activity. The software may be used by any subdivision of the ordering activity (service, bureau, division, command, etc.) that has access to the site the software is placed at, even if the subdivision did not participate in the acquisition of the software. Further, the software may be used on a sharing basis where multiple agencies have joint projects that can be satisfied by the use of the software placed at one ordering activity's site. This would allow other agencies access to one ordering activity's database. For ordering activity public domain databases, user agencies and third parties may use the computer program to enter, retrieve, analyze and present data. The user ordering activity will take appropriate action by instruction, agreement, or otherwise, to protect the Contractor's proprietary property with any third parties that are permitted access to the computer programs and documentation in connection with the user ordering activity's permitted use of the computer programs and documentation. For purposes of this section, all such permitted third parties shall be deemed agents of the user ordering activity.

For product-specific software license utilization limitations see the product sales guides.

Except where noted otherwise, CGI licenses software by site and by ordering activity. An ordering activity is defined as the entity named on the order which employs the users who are intended to operate the software at a particular named site. The software may be used by any subdivision of the activity (service, bureau, division, command, etc.) that has access to the site the software is placed at, even if the subdivision did not participate in the acquisition of the software provided that such subdivision is identified on the order as being part of the ordering activity. Further, the software may be used on a sharing basis where multiple agencies have joint projects that can be satisfied by the use of the software placed at one activity's site and provided that joint use was intended at the time of license purchase. This would allow other activities access to one activity's database. For ordering activity public domain databases, user activities and third parties may use the computer program to enter, retrieve, analyze, and present data solely for the ordering activity's information. The ordering activity will take appropriate action by instruction, agreement, or otherwise, to protect CGI's proprietary property with any third parties that are permitted access to the computer programs and documentation in connection with the ordering activity's permitted use of the computer programs and documentation. For purposes of this section, all such permitted third parties shall be deemed agents of the ordering activity.

<u>Limitation of Liability</u>. If the ordering activity should become entitled to claim damages from CGI for any reason (including without limitation, for breach of contract, breach of warranty, negligence or other tort claim), CGI will be liable only for the amount of ordering activity's actual direct damages up to the amount that ordering activity paid CGI for the items or services that are the subject of the claim. In no event, however, will CGI be liable to ordering activity (in the aggregate for all claims made with respect to an order) for more than the amount paid by ordering activity to CGI under the applicable order. In addition, in no event will CGI's aggregate liability for all claims arising under or relating to the order exceed the total amount paid to CGI by ordering activity under the order. These limits also apply to CGI's subcontractors. They are the maximum liability for which CGI and its subcontractors are collectively responsible.

In no event will CGI or any person or entity involved in the creation, manufacture or distribution of any software, services or other materials provided by CGI under the order be liable for: (i) any damages arising out of or related to the failure of ordering activity or its Affiliates or suppliers to perform their responsibilities; (ii) any claims or demands of third parties; or (iii) any lost profits,

loss of business, loss of data, loss of use, lost savings or other consequential, special, incidental, indirect, exemplary or punitive damages, even if CGI has been advised of the possibility of such damages. CGI will not be held responsible, or to have failed to meet its obligations under the order, if it either delays performance or fails to perform as a result of any cause beyond its reasonable control.

Indemnification. If, as a result of CGI's negligence, ordering activity or ordering activity's employees suffer personal injury or property damage, CGI will reimburse ordering activity for that portion of any claims ordering activity actually pays for which CGI is legally liable. Without limiting CGI's liability to ordering activity for non-performance under this Agreement, each of the parties acknowledges and agrees that by entering into and performing its obligations under this Schedule, CGI will not assume and should not be exposed to the business and operational risks associated with ordering activity's business. Therefore, except for claims covered by the warranty section or as stated above, ordering activityt will, at its own expense, settle or defend CGI in all claims or actions by third parties arising out of or relating to the conduct of ordering activity's business, including without limitation, the acquisition or use by ordering activity of the Software or Documentation to be provided by CGI under this Schedule and ordering activity will pay all settlements, costs, damages and legal fees and expenses finally awarded provided that CGI promptly notifies ordering activity in writing of the proceeding, provides ordering activity a copy of all information received by CGI with respect to the proceeding, cooperates with ordering activity in defending or settling the proceeding, and allows ordering activity to control the defense and settlement of the proceeding, including the selection of attorneys. CGI may, at its option, participate in the proceeding at its own expense. If, as a result of ordering activity's negligence, CGI or CGI's employees suffer personal injury or property damage, ordering activity will reimburse CGI for that portion of any claims CGI actually pays for which ordering activity is legally liable.

A party's indemnification obligations specified in this Schedule are conditioned upon the indemnified party promptly notifying the indemnifying party in writing of the proceeding, providing the Indemnifying party a copy of all notices received by the indemnified party with respect to the proceeding, cooperating with the indemnifying party in defending or settling the proceeding, and allowing the indemnifying party to control the defense and settlement of the proceeding, including the selection of attorneys. The indemnified party may observe the proceeding and confer with the indemnifying party at its own expense.

Compliance. During the term of the software license, CGI has the right to audit the ordering activity's use of the software, modifications, and/or customizations for the purposes of verifying the ordering activity's compliance with the terms and conditions in this Pricelist. If the ordering activity breaches any material term of the licensing provisions identified in this Pricelist, then CGI may terminate the license with no refund for license fees, and all copies of the software and associated documentation must be returned immediately.

(3) Except as is provided in paragraph 8.b(2) above, the ordering activity shall not provide or otherwise make available the software or documentation, or any portion thereof, in any form, to any third party without the prior written approval of the Contractor. Third parties do not include prime Contractors, subcontractors and agents of the ordering activity who have the ordering activity's permission to use the licensed software and documentation at the facility, and who have agreed to use the licensed software and documentation only in accordance with these restrictions. This provision does not limit the right of the ordering activity to use software, documentation, or information therein, which the ordering activity may already have or obtains without restrictions.

The agreement to use the licensed software will be in writing and will be in accordance with the restrictions of the contract and order, and only after the ordering activity first confirms with the Contractor that the party is not deemed by the Contractor to be a competitor. The Contractor will have

no warranty, support, or other obligation to such third party. The ordering activity shall notify Contractor and assist Contractor in mitigating any such breach and in pursuit of such legal actions as Contractor deems appropriate in connection therewith. Ordering activity will indemnify, defend, and hold Contractor harmless from and against any and all claims, damages, costs, liabilities, expenses (including reasonable attorney fees) or losses suffered or incurred by Contractor or Third Party Software licensors in connection with the breach by ordering activity of this provision, or the breach by any such third party of the terms herein.

The ordering activity agrees to reproduce and include the Contractor's copyright, trademark, and other proprietary rights notices on any copies of the Software and Documentation, including partial copies and copied materials in derivative works.

(4) The ordering activity shall have the right to use the computer software and documentation with the computer for which it is acquired at any other facility to which that computer may be transferred, or in cases of disaster recovery, the ordering activity has the right to transfer the software to another site if the ordering activity site for which it is acquired is deemed to be unsafe for ordering activity personnel; to use the computer software and documentation with a backup computer when the primary computer is inoperative; to copy computer programs for safekeeping (archives) or backup purposes; to transfer a copy of the software to another site for purposes of benchmarking new hardware and/or software; and to modify the software and documentation or combine it with other software, provided that the unmodified portions shall remain subject to these restrictions.

Any copies that the ordering activity makes of the ProSteward™ software or documentation, in whole or in part, are CGI's and/or Shell's property.

Any copies that the ordering activity makes of the TEMPO™ or TEMPO™ Timesheet software or documentation, in whole or in part, are CGI's and/or the State of New Jersey Department of Environment Protection's ("NJDEP") property.

(5) "Commercial Computer Software" may be marked with the Contractor's standard commercial restricted rights legend, but the schedule contract and schedule pricelist, including this clause, "Utilization Limitations" are the only governing terms and conditions, and shall take precedence and supersede any different or additional terms and conditions included in the standard commercial legend.

9. SOFTWARE CONVERSIONS - (SIN 132-32)

Full monetary credit will be allowed to the ordering activity when conversion from one version of the software to another is made as the result of a change in operating system, or from one computer system to another. Under a perpetual license (132-33), the purchase price of the new software shall be reduced by the amount that was paid to purchase the earlier version. Under a term license (132-32), conversion credits which accrued while the earlier version was under a term license shall carry forward and remain available as conversion credits which may be applied towards the perpetual license price of the new version.

10. DESCRIPTIONS AND EQUIPMENT COMPATIBILITY

The Contractor shall include, in the schedule pricelist, a complete description of each software product and a list of equipment on which the software can be used. Also, included shall be a brief, introductory explanation of the modules and documentation which are offered.

11. RIGHT-TO-COPY PRICING

CGI does not offer right-to-copy licenses.

SOFTWARE DESCRIPTION AND PRICE LIST
FOR
TERM SOFTWARE LICENSES AND MAINTENANCE OF SOFTWARE
(SPECIAL ITEM NUMBERS 132-32 AND 132-34)

Federal Financial System® (FFS®)

CGI no longer accepts orders for FFS. The following Product Direction Statement provides additional information for existing FFS customers.

Federal Financial System (FFS) Product Direction Statement

This statement defines CGI's strategy to continue providing product solutions for federal financial management.

- Federal Financial System (FFS) Release 5.6.2 was the last major baseline release under the current architecture. Beyond this release, sub-releases may be issued to resolve material issues. CGI will be solely responsible for classifying an issue as "material". In addition, selective enhancements will be made on a "one-time basis" to meet new regulatory-based requirements.

- FFS customers have the option to task CGI to design, develop, test, and maintain any additional desired enhancements to FFS (not covered above) through a task order under SIN 132-51 IT Professional Services.

- Momentum Financials, also offered as Momentum Financial Plus, is the next major release beyond FFS 5.6.2

  ‣ Maintenance-paying customers on baseline versions of FFS have the option of transferring those licenses to Momentum Financials licenses.

  ‣ The license provided in this circumstance is an "equivalent license" based on the subsystem(s) in use and the number of FFS users per subsystem. In addition, current users of CGI's FFS are entitled to significant discounts on additional user license fees and other Momentum subsystems. Contact CGI for details on the definition of "equivalent license", prices, and ordering procedures for the transition from FFS to Momentum.

  ‣ Required third-party software for Momentum Financials Plus will require an incremental license migration fee. FFS customers can contact CGI to determine the migration fee for their organization.

  ‣ Additional required hardware is not included in the software license.

  ‣ Conversion, training, and other CGI implementation services will be available through a task order under SIN 132-51 IT Professional Services.

  ‣ Automated data conversion tools from FFS to Momentum Financials will be included with the license transfer.

  ‣ Clients who choose to migrate from FFS to Momentum Financials will not receive an additional warranty (i.e., the warranty is not re-earned).

  ‣ Clients who migrate to Momentum Financials will begin paying the new maintenance fees beginning in the month following the order to migrate to Momentum Financials.

- Any client paying maintenance on FFS will be entitled to standard support, access to FFS 5.6.2.1 sub-releases, and the upgrade path to Momentum Financials described above.

Federal Financial System® (FFS®)	SIN 132-32 30 – Year Restricted Rights License	SIN 132-34 Monthly Maintenance
Modules performing functions supporting "core" federal financial requirements defined by the *JFMIP*		
FFS Basic System-VSAM/CICS	See Notes 1 and 2	$ 6,005.66
FFS Basic System - ADABAS/CICS	See Notes 1 and 2	$ 5,978.77
FFS Basic System - DB2/CICS	See Notes 1 and 2	$ 7,044.71
FFS Basic System – UNIX	See Notes 1 and 2	$ 5,309.51
FFS Purchasing	See Notes 1 and 2	$ 1,558.56
FFS Cost Allocation	See Notes 1 and 2	$ 623.43
FFS Project Cost Accounting	See Notes 1 and 2	$ 831.23
PC Interface	See Notes 1 and 2	$ 519.52
Additional, related financial/administrative software modules:		
FFS Inventory	See Notes 1 and 2	$1,246.85
FFS Fixed Assets	See Notes 1 and 2	$ 831.23
FFS Travel	See Notes 1 and 2	$ 623.43
FFS Budget Preparation	See Notes 1 and 2	$ 623.43

Notes:

1. Effective March 1, /2003, CGI is discontinuing the sales of FFS. See the Product Direction Statement above for information regarding current customers.

2. CGI's Migration Policy for existing FFS software holders is that Momentum financials is the next release of FFS. The FFS Upgrade to Momentum financials software products is as follows: Current users of CGI's FFS may acquire a 30 year Restricted Rights license for this item at no cost under the following circumstances: (1) the agency currently pays maintenance on the equivalent FFS subsystem, and (2) the agency provides CGI with the number of users with access to the respective FFS subsystem. The license provided in this circumstance is an 'equivalent license' based on the subsystems in use and the number of FFS users per subsystem. In addition, current users of CGI's FFS are entitled to significant discounts on additional user licenses fees and other Momentum subsystems. Contact CGI for details on the definition of 'equivalent license', prices and ordering procedures for the transition from FFS to Momentum. For example, if an agency uses FFS Project Cost Accounting and 120 users have access to the subsystem, the equivalent Momentum license is Momentum Project Cost Accounting User License 101-200 users. This is the 'trade-in' value of the agency's FFS PCAS license. If an agency wants to acquire more than the indicated number of User licenses, CGI will negotiate these on a client-by-client basis.

3. Under CGI's migration policy, existing FFS software holders who select Momentum Financials Plus will be charged the price differential between Momentum Financial and Momentum Financials Plus licenses for "equivalent license".

Computer Aided Collections System for Government (CACS-G)

CACS-G improves collection effectiveness, collector productivity, and management control by providing automated support of collection activities. The system maintains complete, up-to-date case collection information on its database and communicates directly with the host accounting system without any flow of paper.

Computer Aided Collections System for Government (CACS-G)	SIN 132-32 30 – Year Restricted Rights License	Notes
Accounts Receivables Managed (all funds)		
< $100 Million	$508,715.31	1,2,3
$101M to < $250M	$661,329.90	1,2,3
$251M to < $500M	$898,730.38	1,2,3
$501M to < $1B	$1,170,045.21	1,2,3
$1.1B < $2B	$1,509,188.75	1,2,3
$2.1B to < $3B	$1,695,717.70	1,2,3
$3.1B to < $5B	$2,289,218.90	1,2,3
$5.1B to < $7.5B	$2,543,576.55	1,2,3
$7.51B to <$10B	$3,052,291.86	1,2,3
> $10B		1,2,3,4

Notes:

1. Additional 3rd party software products are required and will be identified in CGI's proposal.

2. Maintenance is offered on a labor-hour basis under SIN 132-51 IT Professional Services.

3. License pricing is based on the dollar volume of accounts receivables managed by the software. If the amount of the customer's receivables increases above the level at which the customer purchased the license, then the Customer must pay CGI the incremental license price difference between the new level and current level. In order to monitor this requirement, the Customer must provide an annual report to CGI that identifies the amount of receivables being processed by the software.

4. License fees will be negotiated on a case-by-case basis.

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Momentum® Suite of Products

The Momentum suite provides solutions for effective management of federal organizations, ranging from programmatic offices to large agencies. The suite includes solutions for financial management, acquisitions management, asset management, and travel management capabilities. While severable, these solutions are fully integrated with each other and fully support integration into the agency's enterprise.

Delivery, Installation, and Training/Technical Services for the Momentum Suite

The following installation, training, technical services, and manuals are provided with the purchase of each licensed Momentum Financials or Momentum Financials Plus software product:

CGI will deliver the software and will perform system installation on one (1) server and on one (1) user/client machine. For any web-based component, CGI will establish access to the software through one (1) web server. In addition, CGI will provide instructions for the installation of all other user/client machines and server(s).

   a. CGI does not offer bundled services with the purchase of these software products.

   b. The Customer receives twelve (12) months of maintenance following the software installation as part of the initial software license fee. Maintenance services are available for subsequent periods at prevailing Schedule Price List rates, terms and conditions.

   c. CGI will provide relevant user and operational documentation that CGI produces as an electronic file on the CD with the Momentum software. This does not include any documentation for third party software products.

   d. Additional terms and conditions are may exist for the third party products embedded within the Momentum solutions. Specific information is provided in the product sales guide for each solution.

   e. Refer to the product sales guide for additional terms and conditions related to this software.

Momentum® Financials and Momentum Financials Plus Software

The Momentum Financials and Momentum Financials Plus products provide comprehensive federal financial management capabilities, including support for the core federal financial requirements as defined by the FSIO/OMB.

The distinction between Momentum Financials and Momentum Financials Plus is that Momentum Financials Plus includes many of the infrastructure components required to operate the application..

The following modules are included in Momentum Financials and Momentum Financials Plus:

- *Momentum Budget Execution*—monitors and controls all accounting related to the execution of an agency's budget.
- *Momentum Purchasing*—supports the full chain of spending transactions from pre-commitment through receipt.
- *Momentum Credit Card*—gives an agency the ability to manage and reconcile its credit card accounts and associated transactions.
- *Momentum Accounts Payable*—records payable amounts resulting from liquidated obligations, scheduling payments according to the Prompt Pay Act.
- *Momentum Automated Disbursements*—supports the disbursing function for both Treasury disbursing agencies and agencies with delegated disbursing authority.
- *Momentum Accounts Receivable*—accounts for receivables and collections by an agency, and includes federal-specific functions such as write-off processing and SF-1081 processing.

- ***Momentum General Ledger***—provides an SGL-compliant account code structure with additional user-defined codes.
- ***Momentum External Reports***—balances in reports are defined in a flexible, user-controlled facility that enables long term maintenance as reporting requirements evolve.
- ***Momentum GPRA/Work Counts***—provides the ability to measure work performed by an agency.
- ***Momentum Planning***—supports flexible, multi-level user-defined operating plans with plan versus actual tracking by month, quarter and year.
- ***Momentum Workflow***—provides workflow capabilities including comprehensive rules-based routing, approvals, and event handling.

The following optional feature is available and provides related, supplemental functions required by some agencies. This feature requires a license for Momentum Financials or Momentum Financials Plus.

- ***Momentum Business Portal -*** provides a single report distribution and management portal to streamline reporting for Momentum users while enforcing stringent security permissions based on report content. Reports can be automatically published and displayed in an easy to use tree structure. Users can subscribe to reports of interest and can be notified via email when reports are available.

The following additional modules are available and provide related, supplemental financial and/or administrative functions required by some agencies. Licensed users of these additional modules must also have a license for Momentum Financials or Momentum Financials Plus. Additionally, a license for these additional modules is required for any use of the module including but not limited to actions such as view, create, modify, process, add, change, and delete.

- ***Momentum Contract Management***—provides the ability to effectively manage the Federal procurement cycle, especially large contract buys.
- ***Momentum Fixed Assets***—provides the ability to account for fixed assets and other controlled property.
- ***Momentum Project Cost Accounting***—accumulates the costs and revenue associated with projects.
- ***Momentum Travel Accounting***—supports the tracking of and accounting for travel orders, advances, and vouchers related to local travel, TDY assignments, and permanent change of station.

The following module provides agencies with enterprise application integration capabilities to tie Momentum into an agency's applications and operate an effective e-Government enterprise:

- ***Momentum Enterprise Integration Frameworks***—effectively integrates Momentum into the enterprise and creates an effective e-Government solution.

A number of integrations are provided within the base Momentum suite solutions. These include integrations within the Momentum solutions as well as with critical Federal applications. For these integrations, a separate license for Momentum Enterprise Integration Frameworks is not needed.

Momentum Acquisitions and Momentum Acquisitions Plus

Momentum Acquisitions is a web-based, multi-user application that supports the procurement professional through all phases of the acquisition process, from planning through requisition, solicitation, award, contract management and close-out. Momentum Acquisitions can be implemented as an integrated module of Momentum Financials and Momentum Financials Plus.

The distinction between Momentum Acquisitions and Momentum Acquisitions Plus is that Momentum Acquisitions Plus includes many of the infrastructure components required to operate the application. Momentum Acquisitions Plus provides integrated reporting capabilities through the incorporation of embedded reporting tools.

The following acquisition management system capabilities are included in Momentum Acquisitions and Momentum Acquisitions Plus

- *Momentum Contract Management*—provides the ability to effectively manage the Federal procurement cycle, especially large contract buys.
- *Momentum Planning*—supports flexible, multi-level user-defined operating plans with plan versus actual tracking by month, quarter and year. Separate from the Budget Execution module.
- *Momentum Purchasing*—supports the full chain of spending transactions from pre-commitment through receipt.
- *Momentum Accounts Payable*—records payable amounts resulting from liquidated obligations, scheduling payments according to the Prompt Pay Act.
- *Momentum Workflow*—provides workflow capabilities including comprehensive rules-based routing, approvals, and event handling.

The following optional feature is available and provides related, supplemental functions required by some agencies. This feature requires a license for Momentum Acquisitions or Momentum Acquisitions Plus.

- *Momentum Business Portal* - provides a single report distribution and management portal to streamline reporting for Momentum users while enforcing stringent security permissions based on report content. Reports can be automatically published and displayed in an easy to use tree structure. Users can subscribe to reports of interest and can be notified via email when reports are available.

Momentum Enterprise Business Intelligence Solutions

The Momentum Enterprise Business Intelligence software provides comprehensive business intelligence and enterprise performance management capabilities. The set of solutions provides reporting, query and analysis, performance management, and data integration capabilities. These solutions are configured for use with Momentum Financials, Momentum Acquisitions, and Momentum Performance Budgeting products to provide true out of the box, integrated capabilities.

The following Momentum Enterprise Business Intelligence modules are available:

Momentum Business Analytics (powered by Business Objects)—provides comprehensive ad-hoc reporting and data analysis capabilities.

Momentum Business Analytics Lite (powered by Business Objects)—provides reporting and data analysis capabilities similar to that provided by Momentum Business Analytics.

Momentum Business Dashboard (powered by Business Objects)—provides visibility into and monitoring of your business activities across your organization via business metrics, alerting and dashboard management capabilities.

Momentum Business Monitor (powered by Business Objects)—provides performance scorecarding and powerful analytics.

Momentum Business Data Warehouse (powered by Business Objects)—provides a data warehouse designed to leverage the information maintained within the Momentum business applications.

Momentum Performance Budgeting and Momentum Performance Budgeting Plus

Momentum Performance Budgeting and Momentum Performance Budgeting Plus products operate in web-based environments and perform the functions that support the budget preparation and management for the agency. The Performance Budgeting module provides the building blocks for agency preparation of all phases of the budget. Actual results from current and prior years can be used as the basis for out-year estimates, and

final budgets can be used to establish initial values for the Budget Execution module of Momentum Financials.

The distinction between Momentum Performance Budgeting and Momentum Performance Budgeting Plus is that Momentum Performance Budgeting Plus includes many of the infrastructure components required to operate the application.

The following budget preparation and management capabilities are included in Momentum Performance Budgeting and Momentum Performance Budgeting Plus:

- Enables annual operating, working-capital, and multi-year capital budget preparation
- Provides salary and benefits forecasting
- Supports multiple budget roll-up perspectives and levels (i.e., by program, organization, etc.)
- Allows users to track historical budget information
- Includes user-defined flexible on-line budget forms
- Includes user-defined chart of account elements
- Supports "what if" analysis
- Includes standard reports
- Supports agency-defined performance-based budgeting consistent with GPRA

The following additional modules are available and provide related, supplemental performance management and/or budgeting functions required by some agencies:

Momentum Performance Budgeting—Budget Book Publishing Option

This is an optional add-on component to Momentum Performance Budgeting to allow automated budget publication. The specific capabilities include the following:

- Rapid in-house budget document and exhibits publication
- One set of information sources to multiple outputs including print, web, CD
- Flexible formatting capability for tables, images, multi-column text, and pages
- Connects to various data sources and databases

Momentum CCR Connector and Momentum CCR Connector Plus

The Momentum Central Contractor Registration (CCR) Connector is a web-based, multi-user application that enables the customer to select appropriate CCR vendors and automatically integrate the vendors into designated agency application(s). The Momentum CCR Connector solution includes:

- A staging database for the bulk transfer of the initial vendor data (and any periodic vendor additions, removal/deletions or updates) from the CCR database into the customer's environment.

- A web-based interface that will enable users to select vendors, which are appropriate for the customer, in order to automatically transfer, via a seamless integration process, the relevant data elements in parallel and populate the designated target agency applications.

The following system capabilities are included in Momentum CCR Connector:

- Momentum CCR Staging Database—allows agencies to store and manage CCR records before they are uploaded into the specific agency applications.

- Momentum CCR Transformation Agent—enables agencies to load vendor data from CCR and specify which CCR vendors are to be transferred from the Momentum CCR Staging Database to the agency target applications.

- Momentum CCR Publishing Agent—enables agencies to transform a file containing CCR records that have been selected for use from the Momentum CCR Staging Database for publication to agency target applications.

- Momentum CCR Subscribing Agent—enables agencies to automatically update target agency applications with published CCR records. CGI provides Subscribing Agents for each of the CGI Product Suites (Momentum Financials, and Momentum Acquisitions).
- Momentum System Administration—provides supporting tools for the Momentum CCR Connector process (e.g., configuration of information security controls).

The distinction between Momentum CCR Connector and Momentum CCR Connector Plus is that Momentum CCR Connector Plus includes WebLogic to support the application's web-based architecture.

Momentum CCR Connector and Momentum CCR Connector Plus are licensed in increments of two (2) CPUs for production usage. The minimum purchase level is two (2) CPUs. A predefined number of CPUs will be included for development, test, and continuity of operations environments.

Momentum Timekeeping and Momentum Timekeeping Plus

Momentum Timekeeping is a web-based, multi-user application that supports online collection and processing of employee time and attendance data. This includes such functions as creation, maintenance, submission, and approval of employee timesheets. Data collected through Momentum Timekeeping can be used as input for payroll processing, customer billing, managerial cost accounting, and for manpower and budget management functions.

Momentum Timekeeping can be implemented as a seamless component of CGI's product suite. Alternatively, Momentum Timekeeping can be implemented as a web platform for the collection of time and attendance information that can interact directly with non-CGI external systems to exchange business data and process interdependent transactions.

The following system capabilities are included in Momentum Timekeeping:

- **Timesheet Creation**—allows for manual and automated methods for creating employee timesheets for the current or future pay periods.
- **Timesheet Maintenance**—supports day-to-day posting of employee time against agency defined work codes, as well as the recording of the clock hours worked.
- **Timesheet Submission**—supports the system validation and employee certification and submission of timesheets for approval by the employee's supervisor.
- **Timesheet Approval/Rejection**—provides approvers with the option to approve an employee's timesheet or reject the submitted timesheet and return it back to the submitting employee with comments.
- **Timesheet Revision**—allows an employee to revise an approved timesheet and re-submit it to their supervisor for approval.
- **Employee Surrogate**—allows for identified authorized users to create and maintain timesheets for other employees.
- **System Administration**—provides supporting tools for the Timekeeping process (e.g., configuration of information security controls).

The distinction between Momentum Timekeeping and Momentum Timekeeping Plus is that Momentum Timekeeping Plus includes WebLogic to support the application's web-based architecture.

Momentum Timekeeping and Momentum Timekeeping Plus are licensed in increments of two (2) CPUs for production usage. The minimum purchase level is two (2) CPUs. A predefined number of CPUs will be included for development, test, and continuity of operations environments.

Momentum Vendor Self Service and Momentum Vendor Self-Service Plus

Momentum Vendor Self Service is a web-based, multi-user application that supports online interaction and business information exchange between a buying organization and the vendor community via a web site. This includes such functions as solicitation posting, vendor solicitation responses, award and order posting, invoice submission, payment status posting, and vendor performance evaluation information exchange.

Momentum Vendor Self Service can be implemented as a seamless component of CGI's product suite. Alternatively, with the purchase of Momentum Enterprise Integration Frameworks, Momentum Vendor Self Service can be implemented as a web platform for vendor interaction that can interact directly with non-CGI external systems to exchange business data and process interdependent transactions.

The following system capabilities are included in Momentum Vendor Self Service:

- **Solicitation Posting**—posts solicitations and solicitation amendments for vendor access.
- **Vendor Solicitation Responses**—enables vendors to enter responses to a solicitation (e.g., price and proposal information) and submit their responses to the buying organization.
- **Award and Order Posting**—posts award and order information, including modifications, to winning vendors.
- **Invoice Submission**—enables vendors to submit invoices to the buying organization.
- **Payment Status Posting**—presents payment status information to vendors.
- **Vendor Performance Evaluation**—enables the buying organization to post performance evaluation information for review by the vendor being evaluated. This capability also enables the vendor to submit self-evaluations of their performance to the buying organization.
- **System Administration**—provides supporting tools for the vendor self service process (e.g., configuration of information security controls).

The distinction between Momentum Vendor Self Service and Momentum Vendor Self Service Plus is that Momentum Vendor Self Service Plus includes BEA WebLogic to support the application' s web-based architecture.

Momentum Vendor Self Service and Momentum Vendor Self Service Plus are licensed in increments of two (2) CPUs for production usage. The minimum purchase level is two (2) CPUs. A predefined number of CPUs will be included for development, test, and continuity of operations environments.

Momentum Enterprise Integration Framework

Momentum with administrative applications is offered by other vendors and tools for integrating with the agency's custom applications. In addition, these components provide an agency with the ability to utilize EDI, XML, and other avenues to carryout business with external organizations.

The Momentum Enterprise Integration Framework provides a robust mechanism for integrating the Momentum suite with other applications – including legacy systems, programmatic systems, and modules from other COTS vendors. The framework provides adapters to the Momentum modules as well as most relational databases, flat files, and other COTS products. The Momentum Enterprise Integrations Frameworks license provides for integrations within Momentum systems and with Momentum systems and other applications only. Integrations between systems that are not part of Momentum are not allowed.

Momentum MAXIMO Asset Management

The Momentum MAXIMO Asset Management, powered by IBM, provides comprehensive asset management capabilities. This solution, which has been integrated with Momentum Financials and Momentum Acquisitions, enables agencies to successfully manage production & operations equipment, facilities, IT, and

transportation assets in alignment with their business objectives. This solution consists of six key modules which are provided as a single bundle:

Asset Management—a comprehensive system with the controls to track and manage asset data throughout its life cycle.

Work Management—supports both planned and unplanned maintenance activities, from initial work request and work order generation through completion and recording of actuals.

Service Management—allows end-users to submit service requests, as well as track and update open service requests.

Contract Management—provides comprehensive contract management functionality giving control over vendor contracts and supporting purchase, lease, rental, warranty, labor rate, master, blanket and user-defined contracts.

Materials Management—tracks asset-related materials and their usage. All transactions involving materials are recorded, allowing for real-time knowledge of materials status.

Procurement Management—supports all phases of enterprise-wide procurement, including direct purchase requirements and inventory replenishment. These capabilities inform buyers about requisition, quotation, vendor, purchase order and contract data, allowing them to plan proactively.

Momentum MAXIMO Integration Adaptor contains the integration logic for the integration between Momentum Financials/Acquisitions and Momentum – MAXIMO Asset Management. This module is available only for those agencies that already own Momentum and MAXIMO licenses and want to integrate the products. This application is included with the purchase of Momentum – MAXIMO Asset Management.

The following modules are available to complement Momentum - MAXIMO Asset Management. These three modules provide remote access to the asset management functionality through a wide variety of hand-held computing devises. Each of these modules are priced and purchased separately:

Momentum MAXIMO Mobile Work Manager—provides technicians with mobile access to the full range of capabilities needed to work more productively.

Momentum MAXIMO Mobile Inventory Manager—keeps a storeroom running smoothly to provide the right parts, for the right job at the right time.

Momentum MAXIMO Mobile Auditor—maintains accountability for critical assets and collects/enhances vital asset information.

The pricing tables for the Momentum Suite of products follows:

Momentum Suite of Products	SIN 132-32 30 – Year Restricted Rights License	SIN 132-34 Monthly Base Maintenance	Notes
Momentum Financials			
Base License Fee (for licensing entity)	$499,000	$9,600	1,8
User License Fees (per group of named users)			
1-25 Users	$109,000	$2,067	1,2,5
26-50 Users	$186,000	$3,525	1,2,5
51-100 Users	$317,000	$6,000	1,2,5
101-200 Users	$542,000	$10,225	1,2,5
201-300 Users	$735,000	$13,825	1,2,5
301-400 Users	$899,000	$16,875	1,2,5
401-500 Users	$1,041,000	$19,525	1,2,5
501-600 Users	$1,162,000	$21,750	1,2,5
601-700 Users	$1,267,000	$23,650	1,2,5
701-800 Users	$1,357,000	$25,275	1,2,5
801-1000 Users	$1,627,000	$30,275	1,2,5,9
Optional: Reports Portal (per user)	$55	$1	1,4,5
Momentum Financials *Plus*			
Base License Fee (for licensing entity)	$499,000	$9,600	1,5,6,19
User License Fees (per group of named users)			
1-25 Users	$143,000	$2,495	1,2,5
26-50 Users	$251,000	$4,300	1,2,5
51-100 Users	$428,000	$7,375	1,2,5
101-200 Users	$749,000	$12,825	1,2,5
201-300 Users	$1,019,000	$17,350	1,2,5
301-400 Users	$1,270,000	$21,550	1,2,5
401-500 Users	$1,484,000	$25,050	1,2,5
501-600 Users	$1,683,000	$28,100	1,2,5
601-700 Users	$1,871,000	$30,875	1,2,5
701-800 Users	$2,038,000	$33,375	1,2,5
801-1000 Users	$2,414,000	$39,925	1,2,5,9
Optional: Reports Portal (per user)	$67	$1	1,4,5

Additional Modules available for Momentum Financials:

Momentum Contract Management			
Base License Fee (for licensing entity)	$93,000	$1,795	1,4,8
User License Fees (per group of named users)			
1-25 Users	$21,000	$410	1,2,5
26-50 Users	$36,000	$695	1,2,5
51-100 Users	$62,000	$1,185	1,2,5

Momentum Contract Management			
101-200 Users	$105,000	$2,020	1,2,5
201-300 Users	$142,000	$2,725	1,2,5
301-400 Users	$173,000	$3,330	1,2,5
401-500 Users	$200,000	$3,840	1,2,5
501-600 Users	$222,000	$4,275	1,2,5
601-700 Users	$241,000	$4,640	1,2,5
701-800 Users	$258,000	$4,955	1,2,5
801-1000 Users	$308,000	$5,930	1,2, 5,9

Momentum Fixed Assets			
Base License Fee (for a Licensing Entity)	$84,500	$1,645	1,4,8
User License Fees (per group of Named Users)			
1-25 Users	$18,500	$355	1,2,5
26-50 Users	$31,500	$605	1,2,5
51-100 Users	$53,500	$1,030	1,2,5
101-200 Users	$91,000	$1,750	1,2,5
201-300 Users	$122,500	$2,365	1,2,5
301-400 Users	$150,000	$2,885	1,2,5
401-500 Users	$173,000	$3,325	1,2,5
501-600 Users	$192,500	$3,705	1,2,5
601-700 Users	$209,000	$4,025	1,2,5
701-800 Users	$223,500	$4,295	1,2,5
801-1000 Users	$267,000	$5,140	1,2,5,9

Momentum Project Cost Accounting			
Base License Fee (for licensing entity)	$85,500	$1,645	1,4,8
User License Fees (per group of named users)			
1-25 Users	$18,500	$355	1,2,5
26-50 Users	$31,500	$605	1,2,5
51-100 Users	$53,500	$1,030	1,2,5
101-200 Users	$91,000	$1,750	1,2,5
201-300 Users	$122,500	$2,365	1,2,5
301-400 Users	$150,000	$2,885	1,2,5
401-500 Users	$173,000	$3,325	1,2,5
501-600 Users	$192,500	$3,705	1,2,5
601-700 Users	$209,000	$4,025	1,2,5
701-800 Users	$223,500	$4,295	1,2,5
801-1000 Users	$267,000	$5,140	1,2,5,9

Momentum Travel Accounting			
Base License Fee (for licensing entity)	$84,500	$1,645	1,4,8
User License Fees (per group of named users)			
1-25 Users	$19,500	$362	1,2,5
26-50 Users	$33,500	$620	1,2,5
51-100 Users	$57,500	$1,060	1,2,5
101-200 Users	$99,500	$1,815	1,2,5
201-300 Users	$135,500	$2,460	1,2,5
301-400 Users	$167,000	$3,015	1,2,5
401-500 Users	$194,000	$3,490	1,2,5
501-600 Users	$218,000	$3,895	1,2,5
601-700 Users	$239,000	$4,250	1,2,5
701-800 Users	$257,500	$4,555	1,2,5
801-1000 Users	$310,000	$5,480	1,2,5,9

Momentum Acquisitions			
Base License Fee (for licensing entity)	$156,000	$3,015	1,4,8,16
User License Fees (per group of named users)			
1-25 Users	$35,000	$685	1,2,5
26-50 Users	$46,000	$890	1,2,5
51-100 Users	$57,000	$1,095	1,2,5
101-200 Users	$67,000	$1,300	1,2,5
201-300 Users	$78,000	$1,505	1,2,5
301-400 Users	$89,000	$1,710	1,2,5
401-500 Users	$99,000	$1,920	1,2,5
501-600 Users	$110,000	$2,125	1,2,5
601-700 Users	$121,000	$2,330	1,2,5
701-800 Users	$131,000	$2,535	1,2,5
801-1000 Users	$142,000	$2,740	1,2,5,9
Optional: Reports Portal (per user)	$55	$1	1,4,5

Momentum Acquisitions *Plus*			
Base License Fee (for licensing entity)	$164,000	$3,315	1,4,5,6,16,19
User License Fees (per group of named users)			
1-25 Users	$72,000	$1,115	1,2,5
26-50 Users	$115,000	$1,650	1,2,5
51-100 Users	$168,000	$2,285	1,2,5
101-200 Users	$281,000	$3,500	1,2,5
201-300 Users	$373,000	$4,575	1,2,5
301-400 Users	$472,000	$5,490	1,2,5
401-500 Users	$564,000	$6,520	1,2,5
501-600 Users	$652,000	$7,510	1,2,5

Momentum Acquisitions *Plus*			
601-700 Users	$740,000	$8,510	1,2,5
701-800 Users	$826,000	$9,560	1,2,5
801-1000 Users	$1,017,000	$11,825	1,2,5,9
Optional: Reports Portal (per user)	$67	$1	1,4,5

Modules Within Momentum Enterprise Business Intelligence:

Momentum Business Analytics			
Base License Fee (for licensing entity)	$108,000	$1,990	1,4,5,6
User License Fees (per group of named users)			
1-25 Users	$7,700.00	$113	1,2,5
26-50 Users	$16,000.00	$225	1,2,5
51-100 Users	$31,900.00	$450	1,2,5
101-200 Users	$63,800.00	$900	1,2,5
201-300 Users	$85,800.00	$1,355	1,2,5
301-400 Users	$127,600.00	$1,805	1,2,5
401-500 Users	$159,500.00	$2,255	1,2,5
501-600 Users	$191,400.00	$2,705	1,2,5
601-700 Users	$223,300.00	$3,165	1,2,5
701-800 Users	$255.200.00	$3,610	1,2,5
801-1000 Users	$319,000.00	$4,510	1,2,5,9

Momentum Business Analytics Lite			
Base License Fee (for licensing entity)	$32,500	$625	1,4,5,6
User License Fees (per group of named users)			
1-25 Users	$10,532	$150	1,2,5
26-50 Users	$21,065	$300	1,2,5
51-100 Users	$42,130	$600	1,2,5
101-200 Users	$84,260	$1,205	1,2,5
201-300 Users	$126,390	$1,810	1,2,5
301-400 Users	$168,520	$2,410	1,2,5
401-500 Users	$210,650	$3,010	1,2,5
501-600 Users	$252,780	$3,615	1,2,5
601-700 Users	$294,910	$4,215	1,2,5
701-800 Users	$337,040	$4,820	1,2,5
801-1000 Users	$421,300	$6,025	1,2,5,9

Momentum Business Dashboard			
Base License Fee (for licensing entity)	$32,500	$625	1,4,5,6
User License Fees (per group of named users)			
1-25 Users	$13,125	$185	1,2,5
26-50 Users	$26,249	$370	1,2,5
51-100 Users	$52,498	$745	1,2,5

Momentum Business Dashboard			
101-200 Users	$104,996	$1,490	1,2,5
201-300 Users	$157,494	$2,240	1,2,5
301-400 Users	$209,992	$2,985	1,2,5
401-500 Users	$262,490	$3,730	1,2,5
501-600 Users	$314,988	$4,475	1,2,5
601-700 Users	$367,486	$5,225	1,2,5
701-800 Users	$419,984	$5,970	1,2,5
801-1000 Users	$524,980	$7,465	1,2,5,9

Additional Modules Within Momentum Enterprise Business Intelligence:

Momentum Business Monitor			
Base License Fee (for licensing entity)	$32,500	$625	1,4,5,6
User License Fees (per group of named users)			
1-25 Users	$7,941	$115	1,2,5
26-50 Users	$15,881	$225	1,2,5
51-100 Users	$31,762	$455	1,2,5
101-200 Users	$63,524	$915	1,2,5
201-300 Users	$95,286	$1,375	1,2,5
301-400 Users	$127,048	$1,830	1,2,5
401-500 Users	$158,810	$2,290	1,2,5
501-600 Users	$190,572	$2,750	1,2,5
601-700 Users	$222,334	$3,210	1,2,5
701-800 Users	$254,096	$3,665	1,2,5
801-1000 Users	$317,620	$4,585	1,2,5,9

Momentum Business Data Warehouse			
License Fee per 4 CPUs	$184,920	$2,986	1,3,4,5,6,7,24
License Fee per 6 CPUs	$277,380	$4,479	1,3,4,5,6,7,24
License Fee per 8 CPUs	$369,840	$5,972	1,3,4,5,6,7,24
Additional License Fee (per 2 CPUs)	$92,460	$1,493	1,3,4,5,6,7,24

Momentum Performance Budgeting			
Base License Fee (for licensing entity)	$106,000	$2,055	1,4,8
User License Fees (per group of named users)			
1-25 Users	$45,500	$960	1,2,5
26-50 Users	$74,750	$1,000	1,2,5
51-100 Users	$123,500	$1,585	1,2,5
101-200 Users	$211,250	$2,420	1,2,5
201-300 Users	$282,750	$2,710	1,2,5
301-400 Users	$344,500	$3,295	1,2,5
401-500 Users	$399,750	$3,625	1,2,5
501-600 Users	$438,750	$4,210	1,2,5
601-700 Users	$477,750	$4,835	1,2,5

Momentum Performance Budgeting			
701-800 Users	$503,750	$5,585	1,2,5
801-1000 Users	$596,000	$6,170	1,2, 5,9

Momentum Performance Budgeting *Plus*			
Base License Fee (for licensing entity)	$106,000	$2,055	1,4,5,6,19
User License Fees (per group of named users)			
1-25 Users	$109,000	$1,970	1,2,5
26-50 Users	$120,000	$2,070	1,2,5
51-100 Users	$161,000	$2,620	1,2,5
101-200 Users	$229,000	$3,455	1,2,5
201-300 Users	$298,000	$4,290	1,2,5
301-400 Users	$344,000	$4,705	1,2,5
401-500 Users	$416,000	$5,595	1,2,5
501-600 Users	$443,000	$5,640	1,2,5
601-700 Users	$478,000	$5,855	1,2,5
701-800 Users	$543,000	$6,610	1,2,5
801-1000 Users	$596,000	$6,685	1,2,5,9

Momentum Performance Budgeting – Budget Book Publishing Option			
Initial Client Machine	$15,125	$370	5,6,17
Each Additional Client Machine	$6,050	$70	5,6,17

Momentum CCR Connector			
License Fee per 2 CPUs	$32,500	$625	1,3,4,5,7,8,24
License Fee per 4 CPUs	$65,000	$1,250	1,3,4,5,7,8,24
License Fee per 6 CPUs	$97,500	$1,875	1,3,4,5,7,8,24
License Fee per 8 CPUs	$130,000	$2,500	1,3,4,5,7,8,10,24

Momentum CCR Connector *Plus*			
License Fee per 2 CPUs	$61,903	$1,050	1,3,4,5,6,7,20
License Fee per 4 CPUs	$114,005	$1,955	1,3,4,5,6,7,20
License Fee per 6 CPUs	$175,908	$3,005	1,3,4,5,6,7,20
License Fee per 8 CPUs	$228,010	$3,915	1,3,4,5,6,7,10,20

Momentum Timekeeping			
License Fee per 2 CPUs	$32,500	$625	1,3,4,5,7,8,24
License Fee per 4 CPUs	$65,000	$1,250	1,3,4,5,7,8,24
License Fee per 6 CPUs	$97,500	$1,875	1,3,4,5,7,8,24
License Fee per 8 CPUs	$130,000	$2,500	1,3,4,5,7,8,10,24

Momentum Timekeeping *Plus*			
License Fee per 2 CPUs	$61,903	$1,050	1,3,4,5,6,7,20
License Fee per 4 CPUs	$114,005	$1,955	1,3,4,5,6,7,20
License Fee per 6 CPUs	$175,908	$3,005	1,3,4,5,6,7,20
License Fee per 8 CPUs	$228,010	$3,915	1,3,4,5,6,7,10,20

Momentum Vendor Self Service			
License Fee per 2 CPUs	$32,500	$625	1,3,4,5,7,8,24
License Fee per 4 CPUs	$65,000	$1,250	1,3,4,5,7,8,24
License Fee per 6 CPUs	$97,500	$1,875	1,3,4,5,7,8,24
License Fee per 8 CPUs	$130,000	$2,500	1,3,4,5,7,8,10,24

Momentum Vendor Self Service *Plus*			
License Fee per 2 CPUs	$61,903	$1,050	1,3,4,5,6,7,20
License Fee per 4 CPUs	$114,005	$1,955	1,3,4,5,6,7,20
License Fee per 6 CPUs	$175,908	$3,005	1,3,4,5,6,7,20
License Fee per 8 CPUs	$228,010	$3,915	1,3,4,5,6,7,20

Momentum CCR			
License Fee per 2 CPUs	$32,500	$625	1,3,4,5,7,8,24
License Fee per 4 CPUs	$65,000	$1,250	1,3,4,5,7,8,24
License Fee per 6 CPUs	$97,500	$1,875	1,3,4,5,7,8,24
License Fee per 8 CPUs	$130,000	$2,500	1,3,4,5,7,8,10,24

Momentum Enterprise Integration Frameworks			
Enterprise License Fee	$594,900	$8,325	5,6,11,12

Momentum MAXIMO Asset Management			
Base License Fee (for licensing entity)	$32,500	$1,215	4,5,6,25
User License Fees (per group of named users)			
1-25 Users	$125,408	$1,850	5,6
26-50 Users	$232,330	$3,395	5,6
51-100 Users	$451,737	$6,550	5,6
101-200 Users	$707,847	$10,280	5,6
201-300 Users	$930,594	$13,525	5,6
301-400 Users	$1,032,861	$15,070	5,6
401-500 Users	$1,277,223	$18,570	5,6
501-600 Users	$1,328,101	$19,370	5,6
601-700 Users	$1,402,818	$20,485	5,6
701-800 Users	$1,483,577	$21,675	5,6
801-1000 Users	$1,842,828	$26,870	5,6,9

Momentum MAXIMO Integration Adaptor			
Base License Fee (for licensing entity)	$32,500	$1,220	4,5,8,25
User License Fees (per group of named users)			
1-25 Users	$20,885	$400	2,5,8,22
26-50 Users	$32,260	$620	2,5,8,22
51-100 Users	$51,597	$990	2,5,8,22
101-200 Users	$84,471	$1,620	2,5,8,22
201-300 Users	$112,413	$2,160	2,5,8,22
301-400 Users	$136,165	$2,615	2,5,8,22

Momentum MAXIMO Integration Adaptor			
401-500 Users	$156,353	$3,005	2,5,8,22
501-600 Users	$173,514	$3,335	2,5,8,22
601-700 Users	$188,100	$3,615	2,5,8,22
701-800 Users	$200,498	$3,855	2,5,8,22
801-1000 Users	$238,979	$4,595	2,5,8,9,22

Notes:

1. The technical environment to be supported for the Momentum and Momentum Plus software products will be identified in CGI's technical proposal to the client agency. Standard maintenance support will be limited to the technical environment then supported by CGI. If however, the Government requests CGI to support the software in a non-standard technical environment, then this service will be available under technical support services, SIN 132-51. Below is listing of CGI's currently supported technical environments for the Momentum and Momentum Plus software products. Note that some combinations of these operating and database environments may not be supported. The following list is subject to change by CGI without prior notice:

        Operating Environments: Windows, AIX, Solaris, Linux

        Database Environments: Oracle, Sybase, SQL Server, DB2

2. When a licensing entity requires additional user licenses which exceed the licensed number of users then the licensing entity must provide funding for the differential between the current GSA list price at the licensing entities' present user tier level and the current GSA list price at the new user tier level. For example, if a licensing entity has paid for a 1-25 Users license fee for Momentum Financials and they want to move to the 26-50 Users license, then the new order must be funded as follows:

Momentum Financials, 26-50 Users License Fees	$186,000
Less: Momentum Financials, 1-25 Users License Fees Paid	($109,000)
Net Amount of Funding Required by Licensing Entity	$ 77,000

If a licensing entity purchases licenses for additional users, those additional users do not re-earn a warranty. The additional users go immediately under maintenance if the initially purchased user licenses are under maintenance. If these additional users are purchased during the warranty period of the initial purchase, these users will enjoy the same remaining warranty period as the initial users.

3. When a licensing entity requires additional CPU-based licenses which exceed the licensed number of CPUs then the licensing entity must provide funding for the differential between the current GSA list price at the licensing entities' present CPU tier level and the current GSA list price at the new CPU tier level.

For example, if a licensing entity has paid for a 2 CPU license fee for Momentum Timekeeping and they want to move to the 6 CPU license, then the new order must be funded as follows:

Momentum Timekeeping, 6 CPU License Fee	$97,500
Less: Momentum Timekeeping, 2 CPUs License Fee Paid	($32,500)
Net Amount of Funding Required by Licensing Entity	$65,000

If a licensing entity purchases licenses for additional CPUs, those additional CPUs do not re-earn a warranty. The additional licensed CPUs go immediately under maintenance if the initially purchased licenses are under maintenance. If these additional licenses are purchased during the warranty period of the initial purchase, the licenses will enjoy the same remaining warranty period as the initial licenses.

4. If a Momentum module is purchased subsequent to the initial Momentum purchase, that module does not re-earn a warranty. If the additional module is purchased during the initial maintenance period, the additional module will be on the same timeline as the original warranty or maintenance period, so maintenance fees will be due in the month following the end of the initial maintenance period. If the additional module is purchased after the end of the initial maintenance period, no warranty applies. Maintenance fees will be due in the month directly following its purchase.

5. Monthly maintenance fees cited will be in effect for the first fiscal year. Pricing for subsequent years will be in accordance with the GSA Schedule pricing in effect at that time.

6. License Fees for 'Plus' type products are for CGI supplied software and for the third party products identified in this Price List only. See the description of the software for a listing of the embedded third party products. Additional required third party products will be identified in CGI's technical proposal to the client agency.

7. Momentum CCR Connector Plus, Momentum Timekeeping Plus, and Momentum Vendor Self Service Plus are only available in increments of two (2) CPUs. The minimum purchase for each of these products is two (2) CPUs. Momentum Business Data Warehouse is only available in increments of two (2) CPUs. The minimum purchase this product is four (4) CPUs. Production and Non-Production CPUs use the same pricing tiers. Non-production CPUs are not required.

8. License Fees for non-'Plus' type products are for CGI supplied software only and do not include required third party software products. Required third party products will be identified in CGI's technical proposal to the client agency.

9. For clients who require licenses above 1000 named user licenses, CGI will negotiate user license fees on a case-by-case basis. CGI reserves the right to offer and negotiate with the ordering entity terms, conditions, and prices which will constitute a site license for the licensing entity.

10. For clients who require licenses above 8 CPUs, CGI will negotiate license fees on a case-by-case basis. CGI reserves the right to offer and negotiate with the ordering entity terms, conditions, and prices which will constitute a site license for the licensing entity.

11. The Momentum Enterprise Integration Framework licenses are restricted to the integration of internal and external systems explicitly with Momentum.

12. The Momentum Enterprise Integration Framework Enterprise license is not to exceed a combined 20 CPUs on the Integration and Broker servers. The product suites provide an unlimited number of development licenses.

13. Reserved
14. Reserved
15. Reserved
16. Reserved

17. Momentum Performance Budgeting – Budget Book Publishing is licensed for use on 'client machines' such as a desktop. Additional charges may apply for use on servers. This product also requires Adobe Framemaker that must be procured separately by the customer.

18. Reserved

19. The pricing of CGI software is based on an assumption that the customer is using a specific number of CPUs for production and non-production purposes (e.g., testing, development, etc.) to support the number of named user licenses purchased.
The number of CPUs is determined as follows:

- For 1- 300 named user licenses, 2 production CPUs and 4 non-production CPUs
- For 301 – 500 named user licenses, 4 production CPUs and 8 non-production CPUs
- For 501 – 700 named user licenses, 6 production CPUs and 8 non-production CPUs
- For 801 – 1,000 named user licenses, 8 production CPUs and 8 non-production CPUs

If the customer desires more CPUs than the number included in the pricing, there may be an additional cost for the software. If the customer requires more CPUs and or support for multi-core CPUs (such as Dual Core, etc.) than those used in the pricing, there may be additional license fees and maintenance costs for the software. CGI will work with the customer to determine the price differential, if any.

20. The pricing of CGI software is based on an assumption that the customer is using a specific number of CPUs for production and non-production purposes (e.g., testing, development, etc.) based on the number of CPUs licensed. The number of CPUs is determined as follows:

- For a 2 CPU license, 2 production CPUs and 2 non-production CPUs
- For a 4 CPU license, 4 production CPUs and 2 non-production CPUs
- For a 6 CPU license, 6 production CPUs and 4 non-production CPUs
- For an 8 CPU license, 8 production CPUs and 4 non-production CPUs

If the customer desires more CPUs usage than the number included in the pricing, there may be an additional cost for the software. If the customer requires more CPUs and or support for multi-core CPUs (such as Dual Core, etc.) than those used in the pricing, there may be additional license fees and maintenance costs for the software. CGI will work with the customer to determine the price differential, if any.

21. Reserved

22. Number of user licenses purchased for Momentum MAXIMO Integration Adapter must be equal to number of MAXIMO users.

23. Reserved

24. The pricing of CGI software is based on a defined CPU type. If the customer requires support for multi-core CPUs (such as Dual Core, etc.), there may be additional license fees and maintenance costs for the software. CGI will work with the customer to determine the price differential, if any.

25. The license fees for these software products include 40 hours of bundled services for CGI to enable the MAXIMO extensibility features leveraged by the integration during the initial install and integration upgrades. If the leveraged elements of MAXIMO are already in use for another purpose, the hours will be used to provide a deliverable detailing the commended alternate approach for enabling the integration. If more than 40 hours of services are required, client may purchase additional support under SIN 132-51, IT Professional Services.

**TERMS AND CONDITIONS
APPLICABLE TO INFORMATION TECHNOLOGY (IT) PROFESSIONAL SERVICES
(SPECIAL ITEM NUMBER 132-51) AND
ELECTRONIC COMMERCE (EC) (SPECIAL ITEM NUMBER 132-52)**

1.   SCOPE

a.   The prices, terms and conditions stated under Special Item Number 132-51 Information Technology Professional Services and Special Item Number 132-52 Electronic Commerce apply exclusively to IT Professional/EC Services within the scope of this Information Technology Schedule.

b.   The Contractor shall provide services at the Contractor's facility and/or at the ordering activity location, as agreed to by the Contractor and the ordering activity.

2.   PERFORMANCE INCENTIVES I-FSS-60 PERFORMANCE INCENTIVES (APRIL 2000)

a.   Performance incentives may be agreed upon between the Contractor and the ordering activity on individual fixed price orders or Blanket Purchase Agreements under this contract.

b.   The ordering activity must establish a maximum performance incentive price for these services and/or total solutions on individual orders or Blanket Purchase Agreements.

c.   Incentives should be designed to relate results achieved by the contractor to specified targets. To the maximum extent practicable, ordering activities shall consider establishing incentives where performance is critical to the ordering activity's mission and incentives are likely to motivate the contractor. Incentives shall be based on objectively measurable tasks.

3.   ORDER

a.   Agencies may use written orders, EDI orders, blanket purchase agreements, individual purchase orders, or task orders for ordering services under this contract. Blanket Purchase Agreements shall not extend beyond the end of the contract period; all services and delivery shall be made and the contract terms and conditions shall continue in effect until the completion of the order. Orders for tasks which extend beyond the fiscal year for which funds are available shall include FAR 52.232-19 (Deviation – May 2003) Availability of Funds for the Next Fiscal Year. The purchase order shall specify the availability of funds and the period for which funds are available.

b.   All task orders are subject to the terms and conditions of the contract. In the event of conflict between a task order and the contract, the contract will take precedence.

4.   PERFORMANCE OF SERVICES

a.   The Contractor shall commence performance of services on the date agreed to by the Contractor and the ordering activity.

b.   The Contractor agrees to render services only during normal working hours, unless otherwise agreed to by the Contractor and the ordering activity.

c.   The ordering activity should include the criteria for satisfactory completion for each task in the Statement of Work or Delivery Order. Services shall be completed in a good and workmanlike manner.

d.   Any Contractor travel required in the performance of IT Professional/EC Services must comply with the Federal Travel Regulation or Joint Travel Regulations, as applicable, in effect on the date(s) the travel is performed. Established Federal Government per diem rates will apply to all Contractor travel. Contractors cannot use GSA city pair contracts.

5. STOP-WORK ORDER (FAR 52.242-15) (AUG 1989)

a.   The Contracting Officer may, at any time, by written order to the Contractor, require the Contractor to stop all, or any part, of the work called for by this contract for a period of 90 days after the order is delivered to the Contractor, and for any further period to which the parties may agree. The order shall be specifically identified as a stop-work order issued under this clause. Upon receipt of the order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. Within a period of 90 days after a stop-work is delivered to the Contractor, or within any extension of that period to which the parties shall have agreed, the Contracting Officer shall either-

>   (1) Cancel the stop-work order; or

>   (2) Terminate the work covered by the order as provided in the Default, or the Termination for Convenience of the Government, clause of this contract.

b.   If a stop-work order issued under this clause is canceled or the period of the order or any extension thereof expires, the Contractor shall resume work. The Contracting Officer shall make an equitable adjustment in the delivery schedule or contract price, or both, and the contract shall be modified, in writing, accordingly, if-

>   (1) The stop-work order results in an increase in the time required for, or in the Contractor's cost properly allocable to, the performance of any part of this contract; and

>   (2) The Contractor asserts its right to the adjustment within 30 days after the end of the period of work stoppage; provided that, if the Contracting Officer decides the facts justify the action, the Contracting Officer may receive and act upon the claim submitted at any time before final payment under this contract.

c.   If a stop-work order is not canceled and the work covered by the order is terminated for the convenience of the Government, the Contracting Officer shall allow reasonable costs resulting from the stop-work order in arriving at the termination settlement.

d.   If a stop-work order is not canceled and the work covered by the order is terminated for default, the Contracting Officer shall allow, by equitable adjustment or otherwise, reasonable costs resulting from the stop-work order.

6. INSPECTION OF SERVICES

In accordance with FAR 52.212-4 CONTRACT TERMS AND CONDITIONS--COMMERCIAL ITEMS (MAR 2009) (DEVIATION I - FEB 2007) for Firm-Fixed Price orders and FAR 52.212-4 CONTRACT TERMS AND CONDITIONS –COMMERCIAL ITEMS (MAR 2009) (ALTERNATE I – OCT 2008) (DEVIATION I – FEB 2007) applies to Time-and-Materials and Labor-Hour Contracts orders placed under this contract.

7. RESPONSIBILITIES OF THE CONTRACTOR

The Contractor shall comply with all laws, ordinances, and regulations (Federal, State, City, or otherwise) covering work of this character. If the end product of a task order is software, then FAR 52.227-14 (Dec 2007) Rights in Data – General, may apply.

8. RESPONSIBILITIES OF THE ORDERING ACTIVITY

Subject to security regulations, the ordering activity shall permit Contractor access to all facilities necessary to perform the requisite IT Professional/EC Services.

9. INDEPENDENT CONTRACTOR

All IT Professional/EC Services performed by the Contractor under the terms of this contract shall be as an independent Contractor, and not as an agent or employee of the ordering activity.

10. ORGANIZATIONAL CONFLICTS OF INTEREST

a.   Definitions.

"Contractor" means the person, firm, unincorporated association, joint venture, partnership, or corporation that is a party to this contract.

"Contractor and its affiliates" and "Contractor or its affiliates" refers to the Contractor, its chief executives, directors, officers, subsidiaries, affiliates, subcontractors at any tier, and consultants and any joint venture involving the Contractor, any entity into or with which the Contractor subsequently merges or affiliates, or any other successor or assignee of the Contractor.

An "Organizational conflict of interest" exists when the nature of the work to be performed under a proposed ordering activity contract, without some restriction on activities by the Contractor and its affiliates, may either (i) result in an unfair competitive advantage to the Contractor or its affiliates or (ii) impair the Contractor's or its affiliates' objectivity in performing contract work.

b.   To avoid an organizational or financial conflict of interest and to avoid prejudicing the best interests of the ordering activity, ordering activities may place restrictions on the Contractors, its affiliates, chief executives, directors, subsidiaries and subcontractors at any tier when placing orders against schedule contracts. Such restrictions shall be consistent with FAR 9.505 and shall be designed to avoid, neutralize, or mitigate organizational conflicts of interest that might otherwise exist in situations related to individual orders placed against the schedule contract. Examples of situations, which may require restrictions, are provided at FAR 9.508.

11. INVOICES

The Contractor, upon completion of the work ordered, shall submit invoices for IT Professional/EC services. Progress payments may be authorized by the ordering activity on individual orders if appropriate. Progress payments shall be based upon completion of defined milestones or interim products. Invoices shall be submitted monthly for recurring services performed during the preceding month.

12. PAYMENTS

For firm-fixed price orders the ordering activity shall pay the Contractor, upon submission of proper invoices or vouchers, the prices stipulated in this contract for service rendered and accepted. Progress payments shall be made only when authorized by the order. For time-and-materials orders, the Payments under Time-and-Materials and Labor-Hour Contracts at FAR 52.212-4 (MAR 2009) (ALTERNATE I – OCT 2008) (DEVIATION I – FEB 2007) applies to time-and-materials orders placed under this contract. For labor-hour orders, the Payment under Time-and-Materials and Labor-Hour Contracts at FAR 52.212-4 (MAR 2009) (ALTERNATE I – OCT 2008) (DEVIATION I – FEB 2007) applies to labor-hour orders placed under this contract. 52.216-31(Feb 2007) Time-and-Materials/Labor-Hour Proposal Requirements—Commercial Item Acquisition. As prescribed in 16.601(e)(3), insert the following provision:

a.   The Government contemplates award of a Time-and-Materials or Labor-Hour type of contract resulting from this solicitation.

b.   The offeror must specify fixed hourly rates in its offer that include wages, overhead, general and administrative expenses, and profit. The offeror must specify whether the fixed hourly rate for each labor category applies to labor performed by—

   (1) The offeror;

   (2) Subcontractors; and/or

   (3) Divisions, subsidiaries, or affiliates of the offeror under a common control.

13. RESUMES

Resumes shall be provided to the GSA Contracting Officer or the user ordering activity upon request.

14. INCIDENTAL SUPPORT COSTS

Incidental support costs are available outside the scope of this contract. The costs will be negotiated separately with the ordering activity in accordance with the guidelines set forth in the FAR.

15. APPROVAL OF SUBCONTRACTS

The ordering activity may require that the Contractor receive, from the ordering activity's Contracting Officer, written consent before placing any subcontract for furnishing any of the work called for in a task order.

16. DESCRIPTION OF IT PROFESSIONAL/EC SERVICES AND PRICING

a.   The Contractor shall provide a description of each type of IT Professional/EC Service offered under Special Item Number 132-51. IT Professional/EC Services should be presented in the same manner as the Contractor sells to its commercial and other ordering activity customers. If the Contractor is proposing hourly rates, a description of all corresponding commercial job titles (labor categories) for those individuals who will perform the service should be provided.

b.   Pricing for all IT Professional/EC Services shall be in accordance with the Contractor's customary commercial practices; e.g., hourly rates, monthly rates, term rates, and/or fixed prices, minimum general experience and minimum education.

CGI will provide IT Professional services in support of the classes of service under SIN 132-51 (a full description of each class of service follows). EC Service offerings are provided under SIN 132-52.

Information Technology Strategy

CGI is a recognized leader in working with Federal Agency and program leaders to develop effective Information Technology (IT) Strategies and Management Processes that maximize the potential of IT investments and leverage an Agency's scarce financial and human resources.

CGI recognizes that Federal agencies face increasing pressure to leverage information technology to reinvent programs and organizations, and to secure high returns on IT expenditures. Further, most Federal business strategies are increasingly reliant on the effective use of IT to meet Agency goals and objectives. CGI provides Federal agencies with analytical support and leadership in the development of Information Strategies and Plans for their organizations, for specific Agency programs, and for special IT initiatives, such as groupware/collaborative work environments, data warehousing, electronic commerce, and Year 2000 compliance. Our strategies and plans map required future organizational capabilities (identified in Strategic Business Plans) to their supporting IT capabilities, identify where Agency IT capabilities must be enhanced, and plan the necessary investments and architectures to realize these new capabilities. CGI develops pragmatic IT strategies and plans that prioritize potential IT investments, clearly communicate the planned role of IT in the Agency's future, and delineate the roles and responsibilities required for successful implementation. Our analysis yields a road map for how to implement the strategy, and includes:

- Strategic Business Plans
- IT Visions, which articulate a vision for how IT will support the business direction
- IT Strategic Plans, which describe how the IT Vision will be implemented
- Information Architectures and Technology Architectures
- IT Performance Measurement Systems
- Network and Capacity Planning.

CGI also recognizes that Federal agencies face pressure on budgets and staffing available to implement their IT strategies. This makes it imperative for agencies to derive maximum leverage from existing IT assets and resources. CGI helps Federal agencies develop best practice models for managing their IT processes and projects. These best practice models include development of:

- Processes to effectively plan IT investments

- Customized System Development Life Cycle (SDLC) methodologies
- Frameworks to identify and manage risk in large IT projects
- Programs to assess and improve the quality of applications and data.

CGI can also support agency IT initiatives by providing consulting services for:

- *Technology/Tools Analysis*—CGI can assist agencies in effectively evaluating and utilizing new technologies. We can identify options by analyzing industry offerings, evaluating proposed solutions, and supporting agency procurements.

- *IT Policies, Procedures, and Standards*—CGI can assist agencies with developing and implementing IT standards, including identifying sound configuration management policies and procedures. Standards address the procedures, guidelines, and rules that govern a specific system development project or an entire department or initiative. For example, we identify and document technical standards and graphical user interface (GUI) standards to ensure consistency and effectiveness in code development and to ensure the most effective software maintainability and usability is achieved. Configuration management policy and procedures address version/release management and procedures for naming, tracking, storing, and backing up software modules. Change management procedures define how the portfolio of potential system changes will be prioritized and addressed.

- *Performance Modeling*—CGI is expert in conducting application performance modeling in a distributed computing environment. Performance modeling enables the system development team to see the effect of complex system component interactions, plan for hardware and network capacity, and tune the technical architecture.

- *Network and Capacity Planning*—CGI provides technical analysis, capacity planning, and consulting in support of local area networks (LAN), wide area networks (WAN), wireless networks, and Internet. Services provided include the definition, configuration, administration, tuning, and support of LAN/WAN architecture and data communications issues. We conduct performance modeling and estimation for sizing network and system requirements. We develop technical strategies and network implementation plans. We develop network and system configuration management policies and procedures.

  - CGI analyzes network and system response times, access, and password security; LAN-to-host logon and password communications; physical network problems; network issues; deployment of tools for isolating the application environment from the technical platform details (hardware, operating systems, networks); procedures for handling network communications activities; LAN technology; remote change control; software distribution; software installations; communications protocols; and workstation setups.

  - CGI provides consulting services and expertise in WAN administration, public network lines, network protocols, network engineering, wire and cabling design, PBX, router, condenser, and multiplexer services.

By adopting these best practice models, Federal agencies can ensure that major IT initiatives meet quality and cost targets, and support the overall IT strategy.

Business Process Renewal

Business process renewal is the fundamental redesign of an organization's business processes to achieve improvements in business performance. Our business process architects and practitioners evaluate the economics and cycle time for accomplishing specific business processes and design new processes to achieve target performance improvements. *CGI Best Practices™* methodology is developed to help organizations' *Achieve Breakthrough Performance*® (ABP). ABP is CGI's method for transforming an organization into a *high performance organization* by integrating and incorporating four disciplines:

- Business process renewal

- System development and information technology management
- Organization development
- Change management.

CGI is expert in helping agencies in business process renewal (BPR) activities, including:

- *Business Process Re-engineering*—This includes business modeling and development of as-is and to-be process models. CGI creates business models that design and build a higher performing organization. CGI analyzes the activities within a business operation, responds to customer needs, and designs changes that transform inputs into value-added outputs. Business process renewal is grounded in the organization's business strategy and is enabled by organization development and information technology. This includes introduction of new methodologies, such as activity-based costing.

- *Organizational Development*—Organizational development is the alignment of people with process, structure, and technological change. It consists of analyzing, designing, and implementing changes in an organization's work setting to achieve and sustain higher performance. Carefully planned organizational changes can smooth the process of introducing new business processes and technology and can help organizations use them to full effect. CGI is expert in applying organizational development techniques to process improvements to ensure successful adaptation to change.

- *Change Management*—Change management helps organizations make the most of new technology and new business processes. It is a leadership-driven process for preparing an organization to accept changes designed to achieve breakthrough performance. CGI is expert at helping organizations effect change by reducing resistance to change and inspiring individuals in the organization to embrace change as quickly as possible. Our *Best Practices™* change management methodology focuses on seven activities: communicating the change, leading the change, engaging stakeholders, measuring performance, monitoring readiness for change, organizing for change, and planning for transition. Our *Best Practices™* change management methodology verifies the successful adoption of changes by measuring performance. It also plans and fulfills the transition to a higher performing organization.

Systems Analysis and Design

CGI provides analysis and design for the development of custom systems and custom interfaces between systems. Design activities address all information technologies, including: client/sever, object-oriented, fourth-generation languages, mainframe, collaborative work environments, and Web-based applications.

Services include: requirements analysis; use of facilitated work sessions and joint application design (JAD) sessions; rapid application design (RAD) and functional prototyping; use of CASE (computer aided software engineering) which employs automated tools to design, develop, and maintain computer application systems), business and data modeling, and other design tools. CGI has over 50 experienced, trained facilitators to conduct workshops to identify system requirements and develop application designs. We are also experienced in conducting workshops enhanced with electronic facilitation groupware tools. The use of facilitated group meeting technologies provides additional mechanisms to enhance facilitation and data capture.

Design activities include developing business system concepts, general designs, and detailed designs. CGI is experienced in a number of structured analysis and design techniques, including Yourdon-DeMarco, Information Engineering state transition diagrams, data flow diagrams, entity-relationship models, data models, business process models, and activity models. We have experienced user interface experts (human factors experts, usability testing experts) to assist in designing and developing intuitive systems. We are equipped with a User Interface and Digital Media Laboratory in which we can conduct usability testing on applications.

Systems Development and Implementation

CGI is expert in providing a contemporary solution-based approach to systems development and implementation. CGI is adept in all of the activities necessary to develop a system solution and build a computer application. We develop creative solutions that address the unique characteristics of the business problem. Our development process includes structured analysis and design; information engineering; and architected software techniques. We are experienced in systems integration of custom and package components and technologies.

CGI designs, develops, tests, and installs systems in a variety of technical environments, including: client/server; object-oriented; mainframe; collaborative work environments; electronic commerce, Web, and Internet; electronic data interchange (EDI); data warehousing, decision support and management reporting; imaging systems; and customer care systems and computer telephony integration (CTI)/voice technology. CGI:

- Prepares overall designs and detailed specifications for system components.
- Ensures that software components meet business needs and are technically feasible.
- Crafts the components necessary to build the organization's technical vision.
- Creates and delivers fully tested functional systems and operational software components.
- Ensures that each part of the system is constructed to specifications and that quality is built in throughout.
- Assembles the components into a working system.
- CGI provides complete support for systems development and installation. We address:
- The architectural complexity of connecting internal and external users, organizations, and systems through networks such as the Internet
- The underlying technical issues of the network, protocols, topologies, and architectures
- Security and controls technologies that secure systems and enable the use of public networks
- Strengths and weaknesses of emerging development environments
- Researching user interface (UI) and security technologies
- UI usability testing, with emphasis on navigation of multi-part forms and error notification and correction
- Integrating Web and Internet technologies with existing back-end systems.
- Development of custom integrations between systems.
- Our systems installation services include full operational, administrative, and implementation support.

Conversion and Implementation Support

CGI provides expert services in conversion and implementation support for both new custom and COTS systems. Conversion services include data mapping, conversion design and development, conversion testing, and conversion execution. Implementation services include managing and coordinating the implementation of system applications throughout all phases of the systems implementation life-cycle. Implementation includes planning, requirements analysis, design, development, testing, installation, and post-implementation support. Conversion and implementation services cover the full range of conversion situations, ranging from system rehosting to comprehensive system modifications, such as Year 2000 projects.

CGI is expert in conducting organizational and operational readiness assessments to prepare organizations for transition to new systems and technologies. We identify and conduct change management activities in support of the new system implementation. We help define policies and procedures to support the new system.

CGI develops and manages implementation schedules and roll-out plans to support the transition to the new system. We manage implementation tasks, schedule training, and manage software releases. CGI establishes and manages hotline/helpdesk functions and provides post-implementation support for end users. We manage and report on pre- and post-implementation activities.

Project Management

CGI provides information resource management services. This includes managing and coordinating the implementation of systems applications through all phases of the systems development life-cycle, including planning, requirements analysis, design, development, testing, installation, and evaluation.

CGI develops and tracks work plans, milestones, and deliverables. We develop and manage staffing plans to ensure that the appropriate resources are identified and deployed to meet the project schedule. We establish and maintain mechanisms for tracking and reporting on open issues, action items, and dependency status.

CGI incorporates risk management into project management—we use a task-based approach to risk management. For each identified project risk we devise a mitigation strategy that details specific activities and tasks that are then integrated into the overall project work plan.

We provide quality management and quality assurance services, including creating project quality plans that document the approach, standards, and procedures to be applied on the project. CGI quality plans include an overview of the project; a summary of project scope, phase activities, and major deliverables; a summary of major activities related to quality management processes such as issue tracking and resolution and change management and control; a description of planned reviews and who will participate in each; and a summary of how quality management activities will be documented.

Database Planning and Design

CGI provides expert consulting services in all aspects of data design and management, including:

- RDBMS' and object-relational database technologies
- On-line transaction processing (OLTP) systems and data warehouses
- Data warehouse justification, feasibility, and proof-of-concept studies, and data warehouse design and development
- Data warehousing tools and techniques that help store and manage large amounts of data
- Data modeling, entity relationship diagrams (ERD), and logical and physical database design
- Database performance tuning
- Decision support and on-line analytical processing (OLAP) tools
- Management reporting tools.

CGI also provides expert consulting services in data mining and modeling. Data mining enables organizations to find meaning in their data. By discovering new patterns or fitting models to the data, Federal organizations can extract information to develop strategies and answer complex business questions. CGI can:

- Assist Federal organizations in discovering new patterns in their data that can help managers better understand what is happening in their organization and
- Provide techniques to analyze large amounts of operational data.

Training

CGI is expert in the development and delivery of classroom-based and computer-based training for commercial off-the-shelf software and custom systems. Services provided included curricula development, computer-based training (CBT) design and development, Electronic Performance Support Systems (EPSS), classroom instruction/hands-on training delivery, train-the-trainer, and desk-side support.

CGI's approach to training follows the industry-standard Instructional Systems Design (ISD) methodology. We first understand the audience—the prevailing attitude about the new system or organization, previous experience with similar changes, preferred means of learning—and then use an appropriate vehicle for conveying knowledge about specific components and how they work together. Alternatives include in-class

training, technology-based training, and different types of self-study materials. Our training takes into account business processes, work setting, technology, and the process of change itself.

The training services we offer include:

- Consulting for enterprise-wide educational effectiveness
- Explicit training needs and performance analysis
- Text-based instructional design and development
- Instructor-led training development and delivery
- Train-the-trainer materials development and delivery
- Interactive computer-based training development
- Electronic performance support systems development.

Our training services also include preparing reference materials for users, including user manuals, quick reference guides, help sheets, training workbooks, and instructor manuals.

Facilities Maintenance and Asset Management

CGI offers a full range of Facilities Maintenance and Asset Management services to Government agencies, employing the latest maintenance information systems and information technology solutions. The specific consulting services offered include:

- Asset and Maintenance Management Consulting to support a full range of Asset Management activities, including assessment, planning and scheduling, data capture, physical asset validation, training, business process re-engineering support, strategy, organizing and implementing a complete asset management and maintenance program, and project management.

- Asset Management System Integration using functional and industry knowledge of the enterprise assed management (EAM) environment and re-engineering expertise to fully support EAM requirements analysis, EAM integration/implementation, and integrated maintenance process.

- Asset and Maintenance Engineering Analysis strategy to improve Asset and Facilities Maintenance Management through the effective use of reliability-centered maintenance methodologies, preventive maintenance standards development, assessment, benchmarking, material condition assessment, work force - work load balancing, and preventive maintenance plan and route development.

- Asset and Maintenance Information Technology Solutions that focus on improving business process and applying technology to enable improvements in Asset and Facilities Maintenance Management using mobile computing solutions, pen computers, bar coding, integration of mobile and host system technologies, client/server applications, system architecture, communications (wired serial (direct or modem), networking, local area wireless, and wide area wireless (radio and cellular)), maintenance support tools, touch memory, digital photography/video, and wearable/ voice activated computers.

- Asset and Maintenance Logistics that combine industry expertise and technical insights to find solutions for logistics and maintenance problems using logistics systems, logistics maintenance on-site support, logistics training, configuration management, inventory planning and control, and logistics procedures and documentation.

- Asset and Maintenance Effectiveness Reviews that capitalize and build on in-place systems and processes and ensure the best asset management and maintenance approach is being used (such as review of in-place scheduled/unscheduled maintenance).

- Risk-Based Asset and Maintenance Strategies that take into account the critical nature of unscheduled "downtime" and how it relates to overall performance based on assessing and prioritizing activities based on contribution, evaluating effects of maintenance reductions on asset and facilities performance, and maximizing the assets and facilities performance.

SERVICES PRICE LIST
(HOURLY FIRM FIXED PRICES)
FOR
INFORMATION TECHNOLOGY PROFESSIONAL SERVICES
(SPECIAL ITEM NUMBER 132-51)

Base Year (1 – 5)

Labor Category	Year 1 Rates 1/23/98–1/22/99	Year 2 Rates 1/23/99–1/22/00	Year 3-4 Rates 1/23/00–5/10/01	Year 4-6 Rates 5/11/01–11/14/03
Sr. Project Director Level II	$170.27	$187.30	$206.03	$226.63
Sr. Project Director Level I	$151.35	$166.49	$183.14	$201.45
Sr. Technologist	$131.94	$145.13	$159.64	$175.60
Sr. Functional Expert	$121.77	$133.95	$147.35	$162.09
Project Manager	$121.77	$133.95	$147.35	$162.09
Technical Expert	$104.78	$115.26	$126.79	$139.47
Functional Expert	$103.54	$113.89	$125.28	$137.81
Application Development Team Leader	$104.78	$115.26	$126.79	$139.47
Systems Integration Engineer	$109.22	$120.14	$132.15	$145.37
Technical Specialist	$104.78	$115.26	$126.79	$139.47
Sr. Business Systems Consultant	$98.46	$108.31	$119.14	$131.05
Sr. Client/Server Developer	$93.14	$102.45	$112.70	$123.97
Business Systems Analyst	$89.61	$98.57	$108.43	$119.27
Training Specialist	$85.37	$93.91	$103.30	$113.63
Sr. Systems Programmer	$110.00	$121.00	$133.10	$146.41
Systems Programmer	$85.00	$93.50	$102.85	$113.14
Analyst/Programmer	$62.09	$68.30	$75.13	$82.64
Documentation Specialist	$74.73	$82.20	$90.42	$99.46
Research Analyst	$67.57	$74.33	$81.76	$89.94
Project Administration Staff	$40.00	$44.00	$48.40	$53.24

Notes:

1. Travel costs will be additional to the labor rates, as authorized in the order.

Option Years (6 – 10)

Labor Category	Year 6 11/15/03-12/31/03	Year 7-8 1/1/04-6/14/05	Year 8-9 6/15/05-4/1/07	Year 9–10 4/2/07-2/18/08
Sr. Project Director Level II	$237.96	$237.37	$249.24	$249.24
Sr. Project Director Level I	$211.52	$210.99	$221.54	$221.54
Sr. Technologist	$184.38	$183.92	$193.12	$193.12
Sr. Functional Expert	$170.19	$169.76	$178.25	$178.25
Project Manager	$170.19	$169.76	$178.25	$178.25
Technical Expert	$146.44	$146.04	$153.34	$153.34
Functional Expert	$144.70	$144.34	$151.56	$151.56
Application Development Team Leader	$146.44	$146.07	$153.37	$153.37
Systems Integration Engineer	$152.64	$152.26	$159.87	$159.87
Technical Specialist	$146.44	$146.07	$153.37	$153.37
Sr. Business Systems Consultant	$137.60	$137.26	$144.12	$144.12
Sr. Client/Server Developer	$130.17	$129.84	$136.33	$136.33
Business Systems Analyst	$125.23	$129.92	$131.17	$131.17
Training Specialist	$119.31	$119.01	$124.96	$124.96
Sr. Systems Programmer	$153.73	$153.35	$161.02	$161.02
Systems Programmer	$118.80	$118.50	$124.43	$124.43
Analyst/Programmer	$86.77	$86.55	$90.88	$90.88
Documentation Specialist	$104.43	$104.17	$109.38	$109.38
Research Analyst	$94.44	$94.20	$98.91	$98.91
Project Administration Staff	$55.90	$55.76	$58.55	$58.55
I&A Operational Support Technician III	N/A	N/A	N/A	$48.09
I&A Operational Support Technician II	N/A	N/A	N/A	$42.71
I&A Operational Support Technician I	N/A	N/A	N/A	$32.10

Notes:

1. Travel costs will be additional to the labor rates, as authorized in the order.

Option Years (11-15)

Labor Category	Year 11 2/19/08-11/17/08	Year 11/12 11/18/08-11/17/09	Year 12/13 11/18/09–11/17/10	Year 13/14 11/18/10– 11/17/11	Year 14/15 11/18/11-11/17/12	Year 15 11/18/12–1/22/13
Sr. Project Director Level II	$249.24	$270.62	$281.72	$293.27	$305.29	$317.81
Sr. Project Director Level I	$221.54	$230.62	$240.08	$249.92	$260.17	$270.84
Sr. Technologist	$193.12	$193.12	$201.04	$209.28	$217.86	$226.79
Sr. Functional Expert	$178.25	$178.25	$185.56	$193.17	$201.09	$209.33
Project Manager	$178.25	$188.68	$196.42	$204.47	$212.85	$221.58
Technical Expert	$153.34	$166.50	$173.33	$180.44	$187.84	$195.54
Functional Expert	$151.56	$151.56	$157.77	$164.24	$170.97	$177.98
Application Development Team Leader	$153.37	$163.40	$170.10	$177.07	$184.33	$191.89
Systems Integration Engineer	$159.87	$170.45	$177.44	$184.72	$192.29	$200.17
Technical Specialist	$153.37	$159.66	$166.21	$173.02	$180.11	$187.49
Sr. Business Systems Consultant	$144.12	$149.62	$155.75	$162.14	$168.79	$175.71
Sr. Client/Server Developer	$136.33	$148.02	$154.09	$160.41	$166.99	$173.84
Business Systems Analyst	$131.17	$131.17	$136.55	$142.15	$147.98	$154.05
Training Specialist	$124.96	$135.67	$141.23	$147.02	$153.05	$159.33
Sr. Systems Programmer	$161.02	$170.41	$177.40	$184.67	$192.24	$200.12
Systems Programmer	$124.43	$131.00	$136.37	$141.96	$147.78	$153.84
Analyst/Programmer	$90.88	$98.68	$102.73	$106.94	$111.32	$115.88
Documentation Specialist	$109.38	$109.38	$113.86	$118.53	$123.39	$128.45
Research Analyst	$98.91	$98.91	$102.97	$107.19	$111.58	$116.15
Project Administration Staff	$58.55	$45.79	$47.67	$49.62	$51.65	$53.77
Labor Category	Year 11 2/19/08-11/17/08	Year 11/12 11/18/08-11/17/09	Year 12/13 11/18/09–06/29/10	Year 13/14 06/30/10– 06/29/11	Year 14/15 06/30/11-06/29/12	Year 15 06/30/12–1/22/13
I&A Operational Support Technician III	$48.09	$48.09	$48.09	$50.06	$52.11	$54.25
I&A Operational Support Technician II	$42.71	$42.71	$42.71	$44.46	$46.28	$48.18
I&A Operational Support Technician I	$32.10	$32.10	$32.10	$33.42	$34.79	$36.22
Application Developer III	$123.37	$123.37	$123.37	$128.43	$133.70	$139.18
Application Developer II	$92.01	$92.01	$92.01	$95.78	$99.71	$103.80
Application Developer I	$68.28	$68.28	$68.28	$71.08	$73.99	$77.02
Application Analyst III	$120.10	$120.10	$120.10	$125.02	$130.15	$135.49
Application Analyst II	$85.38	$85.38	$85.38	$88.88	$92.52	$96.31
Application Analyst I	$65.05	$65.05	$65.05	$67.72	$70.50	$73.39
Database Administrator	$128.40	$128.40	$128.40	$133.66	$139.14	$144.84
Application Operator II	$63.36	$63.36	$63.36	$65.96	$68.66	$71.48
Application Operator I	$53.18	$53.18	$53.18	$55.36	$57.63	$59.99
Help Desk Manager	$105.13	$105.13	$105.13	$109.44	$113.93	$118.60
Help Desk III	$74.18	$74.18	$74.18	$77.22	$80.39	$83.69
Help Desk II	$64.58	$64.58	$64.58	$67.23	$69.99	$72.86
Help Desk I	$59.03	$59.03	$59.03	$61.45	$63.97	$66.59

Option Years (11-15)
(Continued)

Labor Category	Year 11 2/19/08-11/17/08	Year 11/12 11/18/08-11/17/09	Year 12/13 11/18/09–06/16/10	Year 13/14 06/17/10– 06/29/11	Year 14/15 06/30/11-06/29/12	Year 15 06/30/12–1/22/13
Systems Operator	N/A	N/A	N/A	$77.58	$80.77	$84.08
Security Specialist	N/A	N/A	N/A	$119.73	$124.64	$129.75
Systems Administrator	N/A	N/A	N/A	$123.50	$128.57	$133.84
Storage Engineer	N/A	N/A	N/A	$120.85	$125.80	$130.96
Network Engineer	N/A	N/A	N/A	$126.16	$131.33	$136.71
Infrastructure Architect	N/A	N/A	N/A	$195.85	$203.88	$212.24

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Option Years (16 – 20)

Labor Category	Year 16 (1/23/13-1/22/14)	Year 17 (1/23/14-1/22/15)	Year 18 (1/23/15-1/22/16)	Year 19 (1/23/16-1/22/17)	Year 20 (1/23/17-1/22/18)
Sr. Project Director Level II	$254.25	$ 259.97	$ 265.82	$ 271.80	$ 277.92
Sr. Project Director Level I	$234.15	$ 239.42	$ 244.81	$ 250.31	$ 255.95
Sr. Technologist	$196.07	$ 200.48	$ 204.99	$ 209.60	$ 214.32
Sr. Functional Expert	$138.84	$ 141.96	$ 145.16	$ 148.42	$ 151.76
Project Manager	$177.26	$ 181.25	$ 185.33	$ 189.50	$ 193.76
Technical Expert	$156.43	$ 159.95	$ 163.55	$ 167.23	$ 170.99
Functional Expert	$153.88	$ 157.34	$ 160.88	$ 164.50	$ 168.20
Applications Development Team Leader	$165.89	$ 169.62	$ 173.44	$ 177.34	$ 181.33
Systems Integration Engineer	$ 71.15	$ 72.75	$ 74.39	$ 76.06	$ 77.77
Technical Specialist	$162.10	$ 165.75	$ 169.48	$ 173.29	$ 177.19
Sr. Business Systems Consultant	$140.57	$ 143.73	$ 146.97	$ 150.27	$ 153.65
Sr. Client/Server Developer	$150.29	$ 153.67	$ 157.13	$ 160.66	$ 164.28
Business Systems Analyst	$123.24	$ 126.01	$ 128.85	$ 131.75	$ 134.71
Training Specialist	$122.34	$ 125.09	$ 127.91	$ 130.79	$ 133.73
Sr. Systems Programmer	$160.10	$ 163.70	$ 167.39	$ 171.15	$ 175.00
Systems Programmer	$123.07	$ 125.84	$ 128.67	$ 131.57	$ 134.53
Analyst/Programmer	$100.19	$ 102.44	$ 104.75	$ 107.11	$ 109.52
Documentation Specialist	$ 48.82	$ 49.92	$ 51.04	$ 52.19	$ 53.36
Research Analyst	$102.81	$ 105.12	$ 107.49	$ 109.91	$ 112.38
Project Administration Staff	$ 46.49	$ 47.54	$ 48.61	$ 49.70	$ 50.82
I&A Operational Support Technician III	$ 48.82	$ 49.92	$ 51.04	$ 52.19	$ 53.36
I&A Operational Support Technician II	$ 43.36	$ 44.34	$ 45.33	$ 46.35	$ 47.40
I&A Operational Support Technician I	$ 32.60	$ 33.33	$ 34.08	$ 34.85	$ 35.63
Application Developer III	$106.88	$ 109.28	$ 111.74	$ 114.26	$ 116.83
Application Developer II	$ 65.30	$ 66.77	$ 68.27	$ 69.81	$ 71.38
Application Developer I	$ 69.32	$ 70.88	$ 72.47	$ 74.11	$ 75.77
Application Analyst III	$121.94	$ 124.68	$ 127.49	$ 130.36	$ 133.29
Application Analyst II	$ 86.68	$ 88.63	$ 90.62	$ 92.66	$ 94.75
Application Analyst I	$ 66.05	$ 67.54	$ 69.06	$ 70.61	$ 72.20
Database Administrator	$130.36	$ 133.29	$ 136.29	$ 139.36	$ 142.49
Application Operator II	$ 64.33	$ 65.78	$ 67.26	$ 68.77	$ 70.32
Application Operator I	$ 53.99	$ 55.20	$ 56.45	$ 57.72	$ 59.02
Help Desk Manager	$106.74	$ 109.14	$ 111.60	$ 114.11	$ 116.68
Help Desk III	$ 75.32	$ 77.01	$ 78.75	$ 80.52	$ 82.33
Help Desk II	$ 65.58	$ 67.06	$ 68.56	$ 70.11	$ 71.68
Help Desk I	$ 59.93	$ 61.28	$ 62.66	$ 64.07	$ 65.51

Option Years (16 – 20)
(Continued)

Labor Category	Year 16 (1/23/13-1/22/14)	Year 17 (1/23/14-1/22/15)	Year 18 (1/23/15-1/22/16)	Year 19 (1/23/16-1/22/17)	Year 20 (1/23/17-1/22/18)
Systems Operator	$ 75.67	$ 77.37	$ 79.11	$ 80.89	$ 82.71
Security Specialist	$116.78	$ 119.41	$ 122.09	$ 124.84	$ 127.65
Systems Administrator	$120.46	$ 123.17	$ 125.94	$ 128.78	$ 131.67
Storage Engineer	$117.87	$ 120.52	$ 123.23	$ 126.01	$ 128.84
Network Engineer	$123.04	$ 125.81	$ 128.64	$ 131.53	$ 134.49
Infrastructure Architect	$191.01	$ 195.31	$ 199.70	$ 204.20	$ 208.79

Notes:

1. Travel costs will be additional to the labor rates, as authorized in the order.

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Labor Category Descriptions and Qualifications

Labor Category	Functional Responsibility	Minimum/General Experience	Minimum Education
Senior Project Director Level II	Senior member of CGI management with ability to commit the firm and with extensive experience in systems development. Responsible for highest-level client liaison. Ability to secure necessary professional resources within the firm to meet requirements of project.	Minimum of twelve years experience. Each post-graduate degree equivalent to up to three years experience (post-graduate study may be substituted for experience at the rate of three credit hours of study for three months of experience, up to 36 credit hours).	BS/BA or equivalent experience.
Senior Project Director Level I	Responsible for project oversight and direction. Ensures conformance with work standards; interprets policies, procedures, and goals and objectives of the organization. Ensures appropriate resources are applied to the project.	Minimum of ten years experience. Each post-graduate degree equivalent to up to three years experience (post-graduate study may be substituted for experience at the rate of three credit hours of study for three months of experience, up to 36 credit hours).	BS/BA or equivalent experience.
Senior Technologist	Has substantial expertise in design and operation of computer systems. Provides senior guidance on analysis and resolution of hardware, software, and telecommunications issues. High degree of technical experience. May have specific expertise in technical tools or subject areas such as relational database management systems or computer telephony systems.	Minimum of seven years experience. Each post-graduate degree equivalent to up to three years experience (post-graduate study may be substituted for experience at the rate of three credit hours of study for three months of experience, up to 36 credit hours). Certifications such as database administrator (DBA) or Certified PowerBuilder Developer (CPD) equivalent to two years experience.	BS/BA or equivalent experience.
Senior Functional Expert	Has substantial expertise in a specific functional area. May direct analyses of requirements for information systems. May direct the design of adaptations to software. May be knowledgeable in process analysis techniques such as flowcharting, process mapping, benchmarking, and activity-based costing. May have subject matter expertise in areas such as facilitation, organizational development, and change management. May have specific expertise in business or functional areas such as financial management, accounting, procurement, maintenance management system integration, maintenance engineering analysis, maintenance management consulting, maintenance effectiveness review procedures, Reliability-Centered Maintenance principles and methodology, or logistics policy development. May have demonstrated experience in configuration management, maintenance planning, supply management, outfitting/fitting out, data management, training, or logistics/configuration information systems.	Minimum of seven years experience. Each post-graduate degree equivalent to up to three years experience (post-graduate study may be substituted for experience at the rate of three credit hours of study for three months of experience, up to 36 credit hours). Certifications such as Certified Public Accountant (CPA) equivalent to two years experience.	BS/BA or equivalent experience.
Project Manager	Supervises or directly manages and coordinates project through all phases of the systems development life cycle, including planning, requirements analysis, design, development, testing, installation, and evaluation. Responsible for conducting the project in a timely manner, ensuring the quality of work products, maintaining financial soundness of the project, managing interactions, and reporting progress and issues. Ensures conformance with work standards; interprets policies, procedures, and goals and objectives of the organization. Coordinates work effort with all parties. Reviews work products for quality, completeness, and adherence to design concepts and user requirements. Has significant expertise in managing systems projects. Responsible for client liaison.	Minimum of five years experience. Each post-graduate degree equivalent to up to three years experience (post-graduate study may be substituted for experience at the rate of three credit hours of study for three months of experience, up to 36 credit hours).	BS/BA or equivalent experience.

Labor Category	Functional Responsibility	Minimum/General Experience	Minimum Education
Technical Expert	Provides expertise in application and systems software. Performs performance tuning. Undertakes analyses of complex hardware, software, and telecommunications issues. High degree of technical experience and performance. May have expertise in maintenance and engineering systems design, development, assessment, and analysis. May be knowledgeable in Reliability-Centered Maintenance principles and methodology.	Minimum of five years experience. Each post-graduate degree equivalent to up to three years experience (post-graduate study may be substituted for experience at the rate of three credit hours of study for three months of experience, up to 36 credit hours). Certifications such as database administrator (DBA) or Certified PowerBuilder Developer (CPD) equivalent to two years experience.	BS/BA or equivalent experience.
Functional Expert	Provides business and analytical expertise in support of project. Provides an understanding of the client's objectives and has extensive knowledge of typical core processes. May prepare overall designs and detailed specifications for system components. Offers knowledge, experience, and insight in a particular area, such as facilitation.	Minimum of five years experience. Each post-graduate degree equivalent to up to three years experience (post-graduate study may be substituted for experience at the rate of three credit hours of study for three months of experience, up to 36 credit hours). Certifications such as Certified Public Accountant (CPA) equivalent to two years experience.	BS/BA or equivalent experience.
Application Development Team Leader	Provides technical direction to personnel performing systems analyses and system development tasks. Coordinates and performs logical and physical systems designs. Reviews and prepares system documents or specifications. Prepares reports, studies, and documentation, delivers presentations, and participates in meetings.	Minimum of three years experience. Each post-graduate degree equivalent to up to three years experience (post-graduate study may be substituted for experience at the rate of three credit hours of study for three months of experience, up to 36 credit hours).	BS/BA or equivalent experience.
Systems Integration Engineer	Responsible for ensuring a stable and usable system through the integration of various software and hardware platforms and components. Provides technical support to the project team. Establishes and maintains development and testing environments and the configuration management process and structures. Serves as point-of-contact for third-party software and hardware vendors.	Minimum of three years experience. Each post-graduate degree equivalent to up to three years experience (post-graduate study may be substituted for experience at the rate of three credit hours of study for three months of experience, up to 36 credit hours).	BS/BA or equivalent experience.
Technical Specialist	Provides expertise in application and systems software. Performs performance tuning. Undertakes analyses of complex hardware, software, and telecommunications issues. Has experience in development of software and technical operations analyses.	Minimum of three years experience. Each post-graduate degree equivalent to up to three years experience (post-graduate study may be substituted for experience at the rate of three credit hours of study for three months of experience, up to 36 credit hours).	BS/BA or equivalent experience.
Senior Business Systems Consultant	Has experience in systems analyses. Provides leadership or analytical expertise to analysts. Operates with substantial independence and initiative. Undertakes analyses and user consultation tasks at all phases of design and implementation of an application.	Minimum of three years experience. Each post-graduate degree equivalent to up to three years experience (post-graduate study may be substituted for experience at the rate of three credit hours of study for three months of experience, up to 36 credit hours).	BS/BA or equivalent experience.
Senior Client/Server Developer	Creates fully tested and operational software components. Responsible for ensuring that each part of the system is constructed to specifications and that quality is built in throughout. Assembles software components into a working system.	Minimum of three years experience. Each post-graduate degree equivalent to up to three years experience (post-graduate study may be substituted for experience at the rate of three credit hours of study for three months of experience, up to 36 credit hours).	BS/BA or equivalent experience.
Business Systems Analyst	Performs functional and technical analysis, assessment, and development tasks. Participates in requirements analyses, data gathering, interviews, and facilitated sessions. Provides analytical skills in design, testing, training, and implementation activities. Contributes to deliverables. May be knowledgeable in Reliability-Centered Maintenance principles and methodology.	BS/BA or equivalent experience. Four years experience equivalent to BS/BA.	BS/BA or equivalent experience.

Labor Category	Functional Responsibility	Minimum/General Experience	Minimum Education
Training Specialist	Designs, develops, documents, and delivers training courses to a wide range of audiences. Employs various training techniques including formal lectures, seminars, tutorials and self-paced exercises, and computer-based training (CBT). Provides professional guidance to managers, analysts, specialists, and programmers in the use of the software. Participates in user-support related tasks. Leads efforts in the areas of training plan development, training material preparation, curricula definition and training course delivery.	BS/BA or equivalent experience. Four years experience equivalent to BS/BA.	BS/BA or equivalent experience.
Sr. Systems Programmer	Analyzes programs and outlines for such factors as type and extent of information to be transferred from storage units, sorting, and format of final results. Confers with technical and analytical personnel, and designs detailed programs, flow charts, and diagrams indicating required computations and sequence of machine operations. Translates design into coded instructions. Verifies accuracy and validity of programs by preparing sample data and testing. Corrects program errors and modifies the program as required by revising instructions. Reviews and/or prepares system documents and specifications.	Minimum of five years experience. Each post-graduate degree equivalent to up to three years experience (post-graduate study may be substituted for experience at the rate of three credit hours of study for three months of experience, up to 36 credit hours).	BS/BA or equivalent experience.
Systems Programmer	Analyzes system requirements and design specifications. Develops block diagrams, logic flow charts, and coding structures. Translates detailed design into computer program coded instructions; tests, debugs, and refines the computer program to produce the product required by the written specifications. Documents procedures used throughout the program to allow the program to be run as a part of a system, and to make changes as may be required.	Minimum of three years experience. Each post-graduate degree equivalent to up to three years experience (post-graduate study may be substituted for experience at the rate of three credit hours of study for three months of experience, up to 36 credit hours).	BS/BA or equivalent experience.
Analyst/ Programmer	Designs, codes, and tests software. Performs software troubleshooting and corrects errors in software and operating procedures. Conducts system analysis and programming tasks. Prepares test data, and tests and debugs programs. Prepares documentation of programs and user procedures. Assists in installing and operating system. May have demonstrated experience in configuration management, maintenance planning, supply management, outfitting/fitting out, data management, training, or logistics/configuration information systems.	BS/BA or equivalent experience. Four years experience equivalent to BS/BA.	BS/BA or equivalent experience.
Documentation Specialist	Prepares and edits system documentation that incorporates information provided by user, specialist, analyst, and programmer personnel. Writes, edits, and prepares reports, studies, and presentation material of technical information for both technical and non-technical audiences. Interprets technical documentation standards and prepares documentation according to the standards. May provide graphics support.	BS/BA or equivalent experience. Four years experience equivalent to BS/BA.	BS/BA or equivalent experience.
Research Analyst	Assists with data collection, analysis, and collation. Researches technologies. Accesses electronic media for literature searches. Prepares summations of findings. Assists with data analysis and deliverable preparation. Provides support for project financial administration.	BS/BA or equivalent experience. Four years experience equivalent to BS/BA.	BS/BA or equivalent experience.

Labor Category	Functional Responsibility	Minimum/General Experience	Minimum Education
Project Administration Staff	Provides administrative support to the project. Supports the production of project deliverables and performs clerical and administrative functions required to complete work related to the project.	Minimum of one-year experience or BS/BA.	BS/BA or equivalent experience.
I&A Operational Support Technician III	Processes security consent forms; approves users or authorized/delegated officials; approves user and user group access; provides phone, customer service, and troubleshooting support; identifies problems, investigates causes, and recommends solutions; and assists lower level technicians with complex problems.	Minimum four years related experience in customer service support. Team lead/supervisory experience required.	HS Diploma, or equivalent, BS/BA preferred.
I&A Operational Support Technician II	Processes security consent forms; registers users or authorized/delegated officials; administers user and user group access (e.g., enable/disable access, assist with forgotten IDs/passwords, assist with user systems errors); provides phone, customer service, and troubleshooting support.	Minimum three years related experience in customer service support	HS Diploma, or equivalent.
I&A Operational Support Technician I	Registers users; administers user and user group access (e.g., enable/disable access, assist with forgotten IDs/passwords, assist with user systems errors); and provides phone and customer service support.	One year customer service support preferred	HS Diploma, or equivalent
Application Developer III	Designs, codes, and tests complex software. Troubleshoots software and corrects errors. Prepares test data, tests and debugs programs. Documents programs and user procedures. Supervises junior developers.	5 years experience	BA/BS or equivalent experience
Application Developer II	Designs, codes, and tests mid to complex software. Troubleshoots software and corrects errors. Prepares test data, tests and debugs programs. Documents programs and user procedures.	2 years experience	BA/BS or equivalent experience
Application Developer I	Designs, codes, and tests software. Troubleshoots software and corrects errors. Prepares test data, tests and debugs programs. Documents programs and user procedures.	Training in application development methodology, technologies, and tools	BA/BS or equivalent experience
Application Analyst III	Directs functional/technical issue analysis for the application which includes gathering data, conducting issue analysis/troubleshooting, determining root cause, and providing resolution to the end user. Develops test cases and tests complex functional scenarios.	Five years experience	BA/BS or equivalent experience
Application Analyst II	Conducts issue analysis/testing for support applications. Develops and documents test case scenarios, sets up test data and test conditions, carries out regression testing, executes tests and documents the results on the applications.	Two years experience	BA/BS or equivalent experience
Application Analyst I	Conducts issue analysis/testing for support applications, documents resolutions.	Training in application functional/technical analysis and troubleshooting	BA/BS or equivalent experience

Labor Category	Functional Responsibility	Minimum/General Experience	Minimum Education
Database Administrator	Defines required database administration policies, procedures, standards, and guidelines. Provides expertise and guidance in logical and physical database design, development, operations, and maintenance. Evaluates and advises on data processing techniques, database management, and management information systems, concepts, and applications.	Six years experience	BA/BS or equivalent experience
Application Operator II	Executes and monitors application processes, retrieves and dispatches interface input/output files, responds to exception conditions resulting from execution of the process(es). Prepares and maintains schedules. Supervises application operation functions.	Three years experience	AA/AS or equivalent experience
Application Operator I	Executes and monitors application processes, retrieves and dispatches interface input/output files, responds to exception conditions resulting from execution of the process(es).	One year experience	AA/AS or equivalent experience
Help Desk Management	Supervises and directs overall operation of the help desk. Ensures standard methodology is followed and projects are successfully completed within resource constraints.	Five years experience	BA/BS or equivalent experience
Help Desk III	Performs senior level analyses and resolves ticket escalations. Assists manager in development and maintenance of organizational structure and assignment of resources.	Three years experience	BA/BS or equivalent experience
Help Desk II	Receives and records tickets. Performs second level analyses and resolves/escalates, follows up with end users on resolutions to tickets.	Two years experience	BA/BS or equivalent experience
Help Desk I	Receives and records tickets. Performs preliminary analysis, initial assignment, and follows up with end users on resolutions to tickets.	One year experience	AA/AS or equivalent experience
Systems Operator	Operates, monitors and controls computer systems and peripheral equipment. Routes input/output data, monitors job streams, and performs with back-ups. Responsible for resolving level 1 incidents.	Two years experience	BA/BS or equivalent experience
Security Specialist	Analyzes and defines security requirements for Multilevel Security (MLS) issues. Provides subject matter expertise for computer security incidents, provides governance, monitors and enforces broad spectrum industry best practices, and is familiar with and follows NIST guidelines. Designs, develops, engineers, and implements the Information Security (IS) Plan and IS solutions, including penetration tests and vulnerability scans. Performs risk and gap analyses, and develops mitigation plans for all deficits. Gathers and organizes technical information about an organization's mission goals and needs, existing security products, and ongoing programs in the MLS arena.	Eight years experience	BA/BS or equivalent experience
Systems Administrator	Designs, develops, installs, modifies and troubleshoots operating systems and applications architectures. Defines design specifications and parameters, and supports configuration, security, systems monitoring, and performance activities. Performs root cause analyses and recommends solutions to hardware/software interface and performance issues.	Three years experience	BA/BS or equivalent experience

Labor Category	Functional Responsibility	Minimum/General Experience	Minimum Education
Storage Engineer	Installs, configures, and operates storage systems and backup recovery servers. Designs installations and configurations for Network Attached Storage (NAS) and Storage Area Network (SAN). Installs and configures disk arrays, virtual storage devices, storage resource management/tape library/archive systems management software, file systems, and volume managers.	Three years experience	BA/BS or equivalent experience
Network Engineer	Administers and maintains local and wide area networks (LAN/WAN) including planning, designing, evaluating, selecting, installing, and upgrading operating systems and protocol suites. Configures communication media with concentrators, bridges, and other devices and systems to requirements. Resolves interoperability issues across platforms.	Five years experience	BA/BS or equivalent experience
Infrastructure Architect	Designs and manages IT solutions and architectures to support current requirements and future cross-functional requirements and interfaces. Scopes, designs, develops, installs, and maintains enterprise-wide or large-scale information systems. Ensures systems are compatible and in compliance with application standards such as NIST, IEEE reference models, open systems architecture standards, and that the common operating environment is architecturally compliant. Analyzes, defines, and provides solutions for resolving issues that exist in data center disciplines.	Ten years experience	BA/BS or equivalent experience

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Application Management Service

The Application Management Service is a service for hosting client software applications – either ordering activity- or third-party- developed or commercial, off-the-shelf software packages. CGI's Center of Excellence (COE) provides this application management and hosting service for ordering activity Information Technology (IT) systems. The service comprises the technical infrastructure necessary to host those applications subject to a Service Level Agreement.

The Application Management Service is delivered through a set of TechnologyPaks, which are flexible building blocks configured with the technology necessary to support hosted applications at appropriate service levels.

All TechnologyPaks include the following data center service items: floor/cage/rack space, which includes climate control, smoke detection, fire suppression and equipment maintenance; power; backup services (media, offsite vaulting) and operations setup. TechnologyPaks with reduced configurations can be provided at a discount, on an as-negotiated basis.

To suit different needs of ordering activities, CGI's COE provides five different types of TechnologyPaks which can be configured appropriate to the needs of the application or systems running on the server, as well as appropriate to the terms of the associated Service Level Agreement (SLA).

TechnologyPak – Server - provides logical or physical servers configured for application hosting consistent with specific agency requirements. This TechnologyPak includes hardware, server operating system, storage services (i.e., online storage) intrusion, CGI COE infrastructure and monitoring console servicesas well as other components appropriate to the terms of the associated SLA..

Successive TechnologyPaks – Server (1-7) incorporate additional computing power, capacity processor speed, storage and increasing levels of services.

TechnologyPak – Data Communication - provides data communications among components of the application or system, including network monitoring as well as other components appropriate to the terms of the associated SLA. This includes LAN, WAN, load balancing services, network infrastructure and network monitoring.

Successive TechnologyPak – Data Communication (1-5) provides additional capacity to increase network throughput, reduce latency and packet loss and increased monitoring services.

TechnologyPak – Security - provides security through technologies and components that provide physical and logical security for the hosted system and its data and communications, including security monitoring. This includes firewalls, monitoring services and virus detection.

Successive TechnologyPaks – Security (1-5) provide for additional increments of security assurance through the application of more sophisticated, more powerful and more extensive security methods and technologies.

TechnologyPak – Database - provides software to control the organization, storage and retrieval, security and integrity of data in a database.

Successive TechnologyPaks – Database (1-7) provide for additional increments of processing power on which the DBMS runs, or additional increments of processing power dedicated to the support of the data needs of the hosted application, consistent with the requirements of the SLA.

TechnologyPak – Disaster Recovery - provides for emergency access to any of the other TechnologyPaks for disaster recovery.

Successive TechnologyPaks – Disaster Recovery (1-7) support more demanding Recovery Point and Recovery Time Objectives as well as providing backup for more powerful and complex TechnologyPaks. Frequency of Disaster Recovery exercises are also increased as a more demanding Disaster Recovery level is required by the SLA.

CGI will work with the ordering activity to define the combination of TechnologyPaks and the Paks in each series that are appropriate to the ordering activity's needs and requirements.

Consumables and Connectivity

To provide the right-size solution, CGI has incorporated additional storage and connectivity options. Online and backup storage is offered by GB and internet capacity (bandwidth) is offered by Mbps.

Subscription

The Application Management Service is available on a subscription basis. For a fixed term and a fixed monthly fee, an ordering activity subscribing to the service receives the benefits of use of the TechnologyPaks to which the ordering activity subscribes. Prices quoted here are for a 36 month subscription, subscriptions for longer a term are available at a discount, on an as-negotiated basis.

Warranty

The warranty offered with the Application Management Service is provided through the SLA.

Service Level Agreement (SLA)

SLAs are developed jointly with the ordering activity based on the ordering activity's business requirements for the applications to be hosted, the combination of TechnologyPaks provided, and the operating characteristics of the underlying technologies.

Ownership

A service subscription encompasses the services described herein. The subscription does not transfer ownership of software, hardware, or other elements of the Application Management Service. If components of TechnologyPaks are provided as GFE, the prices quoted here will be discounted accordingly.

Data Communications

The ordering activity provides data communications between the ordering activity's site and the CGI COE; however, CGI can provide and price data communications services on a case-by-case basis, if required. While the Application Management Service can be made available, through data communications to any location within the geographic scope of this contract, the use of specific encryption technology and the transmission of encrypted data may violate the laws or regulations of the United States or other nations. It is the ordering activity's responsibility to identify applicable laws and regulations, and define a compliance approach with CGI to ensure compliance with those laws and regulations prior to beginning use of the service.

Service	SIN 132-52 Subscription/Unit Fee
TechnologyPak – Server	**Monthly Recurring Costs**
TechnologyPak-SVR-1	$792.00
TechnologyPak-SVR-2	$1,692.00
TechnologyPak-SVR-3	$3,096.00
TechnologyPak-SVR-4	$6,876.00
TechnologyPak-SVR-5	$12,456.00
TechnologyPak-SVR-6	$39,996.00
TechnologyPak-SVR-7	$121,896.00

Service	SIN 132-52 Subscription/Unit Fee
TechnologyPak – Data Communication	**Monthly Recurring Costs**
TechnologyPak-DC-1	$504.00
TechnologyPak-DC-2	$1,080.00
TechnologyPak-DC-3	$1,800.00
TechnologyPak-DC-4	$5,688.00
TechnologyPak-DC-5	$47,160.00
TechnologyPak – Security	**Monthly Recurring Costs**
TechnologyPak-SEC-1	$576.00
TechnologyPak-SEC-2	$1,152.00
TechnologyPak-SEC-3	$5,760.00
TechnologyPak-SEC-4	$9,792.00
TechnologyPak-SEC-5	$70,272.00
TechnologyPak – Database	**Monthly Recurring Costs**
TechnologyPak-DB-1	$5,598
TechnologyPak-DB-2	$11,196
TechnologyPak-DB-3	$16,794
TechnologyPak-DB-4	$22,392
TechnologyPak-DB-5	$33,588
TechnologyPak-DB-6	$67,176
TechnologyPak-DB-7	$134,352
TechnologyPak – Disaster Recovery	**Monthly Recurring Costs**
TechnologyPak-DR-1	$547.00
TechnologyPak-DR-2	$1,447.00
TechnologyPak-DR-3	$2,851.00
TechnologyPak-DR-4	$6,631.00
TechnologyPak-DR-5	$12,211.00
Technology-Pak-DR-6	$39,751.00
Technology-Pak-DR-7	$121,651.00

Service	SIN 132-52 Subscription/Unit Fee
Consumables and Connectivity	**Monthly Recurring Costs**
Tier 1 Primary Data Storage (Ultra-fast SAN) capacity per GB per month	$2.69
Tier 2 Secondary Data Storage (Fast SAN) capacity per GB per month	$1.34
Backup Storage capacity per GB stored per month	$0.90
Internet (Bandwidth) capacity with IPS per Mbps per month	$158.45
Documentum Software as a Service	**Monthly Recurring Costs**
Documentum Platform	$28.51
Documentum Custom Client	$4.28
Documentum Formal Records Management	$32.63

Notes:

1. Monthly fees are invoiced each month for the month just ended.

2. CGI will provide the services listed herein for the monthly fee in the pricelist. Continuation of service is dependent on payment of the monthly fees within 30 days of receipt of the monthly invoice.

3. CGI reserves the right to negotiate early termination fees with ordering activities who terminate a contract prior to expiration. Early termination fees will be negotiated on a case-by-case basis.

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USA COMMITMENT TO PROMOTE
SMALL BUSINESS PARTICIPATION
PROCUREMENT PROGRAMS

PREAMBLE

CGI Federal Inc. provides commercial products and services to ordering activities. We are committed to promoting participation of small, small disadvantaged and women-owned small businesses in our contracts. We pledge to provide opportunities to the small business community through reselling opportunities, mentor-protégé programs, joint ventures, teaming arrangements, and subcontracting.

COMMITMENT

- To actively seek and partner with small businesses.

- To identify, qualify, mentor and develop small, small disadvantaged and women-owned small businesses by purchasing from these businesses whenever practical.

- To develop and promote company policy initiatives that demonstrate our support for awarding contracts and subcontracts to small business concerns.

- To undertake significant efforts to determine the potential of small, small disadvantaged and women-owned small business to supply products and services to our company.

- To insure procurement opportunities are designed to permit the maximum possible participation of small, small disadvantaged, and women-owned small businesses.

- To attend business opportunity workshops, minority business enterprise seminars, trade fairs, procurement conferences, etc., to identify and increase small businesses with whom to partner.

- To publicize in our marketing publications our interest in meeting small businesses that may be interested in subcontracting opportunities.

- We signify our commitment to work in partnership with small, small disadvantaged and women-owned small businesses to promote and increase their participation in Federal Government contracts. To accelerate potential opportunities please contact the Small Business Liaison Office at (703) 227.6000.

BEST VALUE
BLANKET PURCHASE AGREEMENT
FEDERAL ACQUISITION SERVICE SCHEDULE

(Insert Customer Name)

In the spirit of the Federal Acquisition Streamlining Act (Ordering Activity) and (CGI Federal Inc.) enter into a cooperative agreement to further reduce the administrative costs of acquiring commercial items from the General Services Administration (GSA) Federal Acquisition Service Schedule Contract(s) GS-35F-4797H.

Federal Acquisition Service Schedule contract BPAs eliminate contracting and open market costs such as: search for sources; the development of technical documents, solicitations and the evaluation of offers. Teaming Arrangements are permitted with Federal Acquisition Service Schedule Contractors in accordance with Federal Acquisition Regulation (FAR) 9.6.

This BPA will further decrease costs, reduce paperwork, and save time by eliminating the need for repetitive, individual purchases from the schedule contract. The end result is to create a purchasing mechanism for the ordering activity that works better and costs less.

Signatures

Ordering Activity Date	CGI Federal Inc. Date

BPA NUMBER_____

(CUSTOMER NAME)
BLANKET PURCHASE AGREEMENT

Pursuant to GSA Federal Acquisition Service Schedule Contract Number(s) GS-35F-4797H, Blanket Purchase Agreements, the Contractor agrees to the following terms of a Blanket Purchase Agreement (BPA) exclusively with (Ordering Activity):

(1)   The following contract items can be ordered under this BPA. All orders placed against this BPA are subject to the terms and conditions of the contract, except as noted below:

MODEL NUMBER/PART NUMBER   *SPECIAL BPA DISCOUNT/PRICE

(2)   Delivery:

DESTINATION   DELIVERY SCHEDULES / DATES

(3)   The ordering activity estimates, but does not guarantee, that the volume of purchases through this agreement will be _____.

(4)   This BPA does not obligate any funds.

(5)   This BPA expires on _____ or at the end of the contract period, whichever is earlier.

(6)   The following office(s) is hereby authorized to place orders under this BPA:

OFFICE   POINT OF CONTACT

(7)   Orders will be placed against this BPA via Electronic Data Interchange (EDI), FAX, or paper.

(8)   Unless otherwise agreed to, all deliveries under this BPA must be accompanied by delivery tickets or sales slips that must contain the following information as a minimum:

   (a)   Name of Contractor;

   (b)   Contract Number;

   (c)   BPA Number;

   (d)   Model Number or National Stock Number (NSN);

   (e)   Purchase Order Number;

   (f)   Date of Purchase;

(g)   Quantity, Unit Price, and Extension of Each Item (unit prices and extensions need not be shown when incompatible with the use of automated systems; provided, that the invoice is itemized to show the information); and

(h)   Date of Shipment.

(9)   The requirements of a proper invoice are specified in the Federal Acquisition Service Schedule contract. Invoices will be submitted to the address specified within the purchase order transmission issued against this BPA.

(10)   The terms and conditions included in this BPA apply to all purchases made pursuant to it. In the event of an inconsistency between the provisions of this BPA and the Contractor's invoice, the provisions of this BPA will take precedence.

BASIC GUIDELINES FOR USING
"CONTRACTOR TEAM ARRANGEMENTS"

Federal Acquisition Service Schedule Contractors may use "Contractor Team Arrangements" (see FAR 9.6) to provide solutions when responding to ordering activity requirements.

These Team Arrangements can be included under a Blanket Purchase Agreement (BPA). BPAs are permitted under all Federal Acquisition Service Schedule contracts.

Orders under a Team Arrangement are subject to terms and conditions or the Federal Acquisition Service Schedule Contract.

Participation in a Team Arrangement is limited to Federal Acquisition Service Schedule Contractors.

Customers should refer to FAR 9.6 for specific details on Team Arrangements.

Here is a general outline on how it works:

- The customer identifies their requirements.
- Federal Acquisition Service Schedule Contractors may individually meet the customers needs, or
- Federal Acquisition Service Schedule Contractors may individually submit a Schedules "Team Solution" to meet the customer's requirement.
- Customers make a best value selection.

GENERAL SERVICES ADMINISTRATION

Federal Supply Service

Authorized Federal Supply Schedule Price List

On-line access to contract ordering information, terms and conditions, up-to-date pricing, and the option to create an electronic delivery order are available through GSA *Advantage!*, a menu-driven database system. The INTERNET address for GSA *Advantage!* is: GSAAdvantage.gov.

Schedule Title: **Financial and Business Solutions**
FSC Group: **520**

Contract Number: **GS-23F-0037W**

For more information on ordering from Federal Supply Schedules click on the FSS Schedules at fss.gsa.gov.

Contract Period: **March 12, 2010 to March 11, 2015**
Contractor Name: **Horne LLP**
Address: **1020 Highland Colony Parkway, Suite 400, Ridgeland, MS 39157**
Phone Number: **601-326-1126**
Fax Number
Web site: **www.horne-llp.com**
Contact for contract administration: **Joey Havens, Partner**

Business size: **Large**

Prices Shown Herein are Net (discount deducted)

Date: **March 17, 2010**

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CUSTOMER INFORMATION PAGE

1a. **520-7** Financial & Performance Audits; **520-11** Accounting; and **520-22** Grants Management Support Services

1b. See **Page 4 for FSS pricelist.**

1c. See **Page 5 for Labor Category Descriptions.**

2. Maximum order: **$1,000,000.00**

3. Minimum order: **$300.00**

4. Geographic coverage (delivery area): **Domestic delivery only**

5. Point(s) of production (city, county, and state or foreign country): **Not applicable.**

6. Discount from list prices or statement of net price: **To be negotiated at the task order level.**

7. Quantity discounts: **2% for contracts greater than $5 Million**

8. Prompt payment terms: **0.25%/15 Days, Net 30 Days**

9a. Notification that Government purchase cards are accepted at or below the micro-purchase threshold. **Yes**

9b. Notification whether Government purchase cards are accepted or not accepted above the micro-purchase threshold. **Yes**

10. Foreign items: Not applicable.

11a. Time of delivery: **To be negotiated at the task order level.**

11b. Expedited delivery: Not applicable.

11c. Overnight and 2-day delivery: Not applicable.

11d. Urgent requirements: **See contract clause I-FSS-14-B. Agencies can contact the contact for contract administration to obtain faster delivery.**

12. F.O.B. point(s): **Destination.**

13a. Ordering address: **1020 Highland Colony Parkway, Suite 400, Ridgeland, MS 39157**

13b. Ordering procedures: **For supplies and services, the ordering procedures, information on blanket purchase agreements (BPA's), and a sample BPA can be found at the GSA/FSS schedule homepage (fss.gsa.gov/schedules).**

14. Payment address: **1020 Highland Colony Parkway, Suite 400, Ridgeland, MS 39157**

15. Warranty provision: Not applicable.

16. Export packing charges: Not applicable.

17. Terms and conditions of Government purchase card acceptance (any thresholds above the micro-purchase level). Not applicable.

18. Terms and conditions of rental maintenance, and repair – Not applicable.

19. Terms and conditions of installation – Not applicable.

20. Terms and conditions of repair parts – Not applicable.

20a. Terms and conditions for any other services – Not applicable.

21. List of service and distribution points – Not applicable

22. List of participating dealers –Not applicable.

23. Preventative maintenance – Not applicable.

24a. Special attributes such as environmental attributes: Not applicable.

24b

25.   Data Universal Number System (DUNS) number: ▮▮▮▮▮
26.   Notification regarding registration in Central Contractor Registration (CCR)
      database. **Registered; Registration valid to 02/04/11.**

HORNE
CPAs & Business Advisors

Through our customized plans, HORNE LLP creates value for our clients, taking them one step closer to their financial goals. We are more than an accounting and business advisory service provider—we are respected partners and trusted friends. In fact, our deep level of client commitment, our allegiance to furthering the development of our team, and our dedication to high standards have helped us grow into one of the Top 10 firms in the Southeast and one of the Top 50 firms in the country.

HORNE
CPAs & Business Advisors

SIN(s) PROPOSED	SERVICE PROPOSED (e.g. Job Title/Task)	Year 1 2010 PRICE OFFERED TO GSA	Year 2 2011 PRICE OFFERED TO GSA	Year 3 2012 PRICE OFFERED TO GSA	Year 4 2013 PRICE OFFERED TO GSA	Year 5 2014 PRICE OFFERED TO GSA
520-7, 520-11, 520-22	Partner/Principal	$ 268.41	$ 273.78	$ 279.26	$ 284.84	$ 290.54
520-7, 520-11, 520-22	Sr. Manager/Director	$ 238.94	$ 243.72	$ 248.60	$ 253.57	$ 258.64
520-7, 520-11, 520-22	Manager	$ 188.87	$ 192.64	$ 196.50	$ 200.43	$ 204.44
520-7, 520-11, 520-22	Supervisor	$ 169.17	$ 172.55	$ 176.00	$ 179.52	$ 183.11
520-7, 520-11, 520-22	Sr. Associate	$ 139.24	$ 142.03	$ 144.87	$ 147.77	$ 150.72
520-7, 520-11, 520-22	Associate	$ 129.47	$ 132.06	$ 134.70	$ 137.40	$ 140.14
520-7, 520-11, 520-22	Senior Accounting Technician	$ 114.48	$ 116.77	$ 119.10	$ 121.49	$ 123.92
520-7, 520-11, 520-22	Accounting Technician	$ 89.71	$ 91.51	$ 93.34	$ 95.20	$ 97.11
520-7, 520-11, 520-22	Senior Administrative Assistant	$ 44.47	$ 45.36	$ 46.27	$ 47.20	$ 48.14

HORNE
CPAs & Business Advisors

Labor Categories	Functional Responsibilities	Min Yr Experience	Min Education/Degree	Certification Required
Partner/Principal	Understands and carries out the Firm's mission. A Partner has the technical ability to successfully plan, program, and see that assignments are carried out properly. A Partner must demonstrate the ability to work well with others-especially the capacity to command the confidence and respect of clients, Partners, staff, and administrative support personnel. The Partner must have superior supervisory skills. He/she must train and encourage staff members not only on a day-to-day basis, but also for the long-term by serving as a Mentor. The Partner will understand and meet the needs of clients. He/she must be able to provide forward-looking services that are creative and innovative. Partners should possess the characteristics of an entrepreneur.	10+ Years public accounting experience	Bachelor's degree in accounting, or Master's degree in accounting, or degree appropriate to practice area.	A current and valid certified public accountant's license is required, if appropriate to practice area. 2. If CPA, must be a member in good standing with the American Institute of CPAs and respective state societies.
Sr. Manager/Director	A Senior Manager is an experienced professional who demonstrates high competence in an area of expertise and shows potential in acquiring management and practice promotion skills. The Senior Manager functions under direction of a Partner. The Senior Manager is encouraged to develop his/her strengths and demonstrate potential Partner qualities. The Senior Manager may be a career position.	Normally seven (7) to ten (10) years experience in public accounting or consulting, demonstrating a progression in complexity, scope, and number of projects managed	Bachelor's degree in accounting, or Master's degree in accounting, or degree appropriate to practice area.	A current and valid certified public accountant's license is required, if appropriate to practice area. If CPA, must be a member in good standing with the American Institute of CPAs and respective state societies.
Manager	A Manager is an experienced professional who demonstrates high competence in an area of expertise and shows potential in acquiring management and practice promotion skills. The Manager functions under direction of a Senior Manager. The Manager is encouraged to develop his/her strengths and demonstrate potential Senior Manager qualities. The Manager may be a career position.	Normally five (5) to seven (7) years experience in public accounting or consulting, demonstrating a progression in complexity, scope, and number of projects managed	Bachelor's degree in accounting, or Master's degree in accounting, or degree appropriate to practice area.	A current and valid certified public accountant's license is required, if appropriate to practice area. If CPA, must be a member in good standing with the American Institute of CPAs and respective state societies.

Labor Categories	Functional Responsibilities	Min Yr Experience	Min Education/Degree	Certification Required
Supervisor	The Supervisor is responsible for larger more complex projects than the Senior Associate, and may manage two or more projects simultaneously. Supervisors assume responsibility for supervising projects and special assignments, can review working papers and financial statements, and can communicate with clients on a one-on-one basis. Supervisors are responsible for complying with pronouncements of professional and other regulatory groups. The Supervisor may be a career position.	Normally three (3) to five (5) years experience in public accounting or consulting, demonstrating a progression in complexity, scope, and number of projects managed.	Bachelor's degree in accounting with additional hours to satisfy CPA eligibility requirements, or Master's degree in accounting, or degree appropriate to practice area.	Either hold a current and valid certified public accountant's license or be working toward obtaining the license by taking and passing the applicable state CPA exam, if appropriate to practice area. If CPA, must be a member in good standing with the American Institute of CPAs and respective state societies.
Sr. Associate	Senior Associates perform most work assigned with minimal assistance. They often lead one or more Associates, instruct them in work to be performed, review the work done, and direct necessary revisions. Senior Associates are required to make decisions on all but the most unusual accounting and consulting matters.	Normally two (2) to three (3) years experience in public accounting or consulting, demonstrating a progression in complexity and number of projects.	Bachelor's degree in accounting with additional hours to satisfy CPA eligibility requirements, or Master's degree in accounting, or degree appropriate to practice area.	Either hold a current and valid certified public accountant's license or be working toward obtaining the license by taking and passing the applicable state CPA exam, if appropriate to practice area. If CPA, must be a member in good standing with the American Institute of CPAs and respective state societies.
Associate	Associates are given a wide variety of diversified accounting and consulting assignments under the supervision of different professionals. Performance is judged based on the quality of work, application of accounting and consulting knowledge, and ability to meet time constraints.	Entry level position; no work related experience required	Bachelor's degree in accounting with additional hours to satisfy CPA eligibility requirements, or Master's degree in accounting, or degree appropriate to practice area.	Either hold a current and valid certified public accountant's license or be working toward obtaining the license by taking and passing the applicable state CPA exam, if appropriate to practice area. If CPA, must be a member in good standing with the American Institute of CPAs and respective state societies.
Sr. Accounting Technician	The Sr. Accounting Technician handles a variety of complex bookkeeping tasks. Quickbooks and Excel experience required. MAS 90 experience preferred. Must have experience with monthly write-ups in bank reconciliation; coding and data entry of checks; financial statement preparation; payroll processing, including tax related reports (W2's, 1099's, etc)	Five (5) to seven (7) years' bookkeeping experience in professional office environment	Bachelor's degree required; accounting or business related degree preferred.	Certified Bookkeeper preferrred

LABOR CATEGORY DESCRIPTIONS

Labor Categories	Functional Responsibilities	Min Yr Experience	Min Education/Degree	Certification Required
Accounting Technician	The Accounting Technical performs the day-to-day general accounting functions for the Firm's client accounting needs using established systems and procedures. Responsibilities could include monthly write-up work, coding and data entry, financial statement preperation, payroll processing and various tax reporting.	Entry level position prefer related work experience.	Associates degree required, Bachelor's degree preffered.	None
Administrative Assistant	The Administrative Assistant performs day-to-day functions for the Firm using established systems and procedures and may provide direction to other administrative staff. High school diploma required; Associate Degree preferred. Must be able to maintain complete confidentiality and display excellent judgment skills. Must be detail oriented with organizational skills, excellent verbal and written communication skills; and self starter requiring minimum supervision. Must have excellent Microsoft Office and Internet research skills.	Entry level position without related work experience required.	High school diploma required; however, Associates or Bachelor's degree is highly preferred.	None

AUTHORIZED
INFORMATION TECHNOLOGY SCHEDULE PRICELIST
GENERAL PURPOSE COMMERCIAL INFORMATION TECHNOLOGY
EQUIPMENT, SOFTWARE AND SERVICES

Special Item No. 132-33 Perpetual Software Licenses

Special Item No. 132-34 Maintenance of Software as a Service

Special Item No. 132-50 Training Courses

SPECIAL ITEM NUMBER 132-33 - PERPETUAL SOFTWARE LICENSES

FSC CLASS 7030 - INFORMATION TECHNOLOGY SOFTWARE

Software maintenance as a product includes the publishing of bug/defect fixes via patches and updates/upgrades in function and technology to maintain the operability and usability of the software product. It may also include other no charge supports that are included in the purchase price of the product in the commercial marketplace. No charge support includes items such as user blogs, discussion forums, on-line help libraries and FAQs (Frequently Asked Questions), hosted chat rooms, and limited telephone, email and/or web-based general technical support for user's self diagnostics.

Software maintenance as a product does <u>NOT</u> include the creation, design, implementation, integration, etc. of a software package. These examples are considered software maintenance as a service.

    <u>Large Scale Computers</u>

        Operating System Software
        Application Software
        Electronic Commerce (EC) Software
        Utility Software
        Communications Software
        Core Financial Management Software
        Ancillary Financial Systems Software
        Special Physical, Visual, Speech, and Hearing Aid Software

Microcomputers

        Operating System Software
        Application Software
        Electronic Commerce (EC) Software
        Utility Software
        Communications Software
        Core Financial Management Software
        Ancillary Financial Systems Software
        Special Physical, Visual, Speech, and Hearing Aid Software

NOTE: Offerors are encouraged to identify within their software items any component interfaces that support open standard interoperability. An item's interface may be identified as interoperable on the basis of participation in a Government agency-sponsored program or in an independent organization program. Interfaces may be identified by reference to an interface registered in the component registry located at http://www.core.gov.

SPECIAL ITEM NUMBER 132-34 - MAINTENANCE OF SOFTWARE AS A SERVICE

Software maintenance as a service creates, designs, implements, and/or integrates customized changes to software that solve one or more problems and is not included with the price of the software. Software maintenance as a service includes person-to-person communications regardless of the medium used to communicate: telephone support, on-line technical support, customized support, and/or technical expertise which are charged commercially. Software maintenance as a service is billed arrears in accordance with 31 U.S.C. 3324.

SIN 132-50 - TRAINING COURSES FOR INFORMATION TECHNOLOGY EQUIPMENT AND SOFTWARE (FPDS Code U012)

Note 1: All non-professional labor categories must be incidental to and used solely to support hardware, software and/or professional services, and cannot be purchased separately.

Note 2: Offerors and Agencies are advised that the Group 70 – Information Technology Schedule is <u>not</u> to be used as a means to procure services which properly fall under the Brooks Act. These services include, but are not limited to, architectural, engineering, mapping, cartographic production, remote sensing, geographic information systems, and related services. FAR 36.6 distinguishes between mapping services of an A/E nature and mapping services which are not connected nor incidental to the traditionally accepted A/E Services.

Note 3: This solicitation is not intended to solicit for the reselling of IT Professional Services, except for the provision of implementation, maintenance, integration, or training services in direct support of a product. Under such circumstances the services must be performance by the publisher or manufacturer or one of their authorized agents.

Open Text Corporation
275 Frank Tompa Drive
Waterloo, ON
Canada N2L 0A1

www.opentext.com

Contract Number: **GS-35F-0480J**

Period Covered by Contract: **May 27, 2009 thru May 26, 2014**

General Services Administration Federal Supply Service

Pricelist current through Modification #105, dated 03/04/2013

Products and ordering information in this Authorized FSS Information Technology Schedule Pricelist are also available on the GSA Advantage! System (http://www.gsaadvantage.gov).

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INFORMATION FOR ORDERING ACTIVITIES
APPLICABLE TO ALL SPECIAL ITEM NUMBERS

SPECIAL NOTICE TO AGENCIES: Small Business Participation

SBA strongly supports the participation of small business concerns in the Federal Acquisition Service. To enhance Small Business Participation SBA policy allows agencies to include in their procurement base and goals, the dollar value of orders expected to be placed against the Federal Supply Schedules, and to report accomplishments against these goals.

For orders exceeding the micro purchase threshold, FAR 8.404 requires agencies to consider the catalogs/pricelists of at least three schedule contractors or consider reasonably available information by using the GSA Advantage!™ On-line shopping service (www.gsaadvantage.gov). The catalogs/pricelists, GSA Advantage!™ and the Federal Acquisition Service Home Page (www.fss.gsa.gov) contains information on a broad array of products and services offered by small business concerns.

This information should be used as a tool to assist ordering activities in meeting or exceeding established small business goals. It should also be used as a tool to assist in including small, small disadvantaged, and women-owned small businesses among those considered when selecting pricelists for a best value determination.

For orders exceeding the micro purchase threshold, customers are to give preference to small business concerns when two or more items at the same delivered price will satisfy their requirement.

1.   GEOGRAPHIC SCOPE OF CONTRACT:

Domestic delivery is delivery within the 48 contiguous states, Alaska, Hawaii, Puerto Rico, Washington, DC, and U.S. Territories. Domestic delivery also includes a port or consolidation point, within the aforementioned areas, for orders received from overseas activities.

Overseas delivery is delivery to points outside of the 48 contiguous states, Washington, DC, Alaska, Hawaii, Puerto Rico, and U.S. Territories.

Offerors are requested to check one of the following boxes:

   [**X**]   The Geographic Scope of Contract will be domestic delivery only.

2.   CONTRACTOR'S ORDERING ADDRESS AND PAYMENT INFORMATION:

Contractor must accept the credit card for payments equal to or less than the micro-purchase for oral or written orders under this contract. Credit cards will be acceptable for payment above the micro-purchase threshold. In addition, bank account information for wire transfer payments will be shown on the invoice.

Ordering Address: Open Text Corporation
1301 S Mopac Expressway, Ste 150
Austin, TX 78746
443-315-3274-Phone
Fax

Payment Address: Open Text Corporation
P. O. Box 15075, Station A
Toronto, ON M5W 1C1 CANADA
443-315-3274-Phone
█████████ Fax

The following telephone number can be used by ordering activities to obtain technical and/or ordering assistance:

800-540-7292 (8am – 8 pm EST)

3. LIABILITY FOR INJURY OR DAMAGE

The Contractor shall not be liable for any injury to ordering activity personnel or damage to ordering activity property arising from the use of equipment maintained by the Contractor, unless such injury or damage is due to the fault or negligence of the Contractor.

4. STATISTICAL DATA FOR GOVERNMENT ORDERING OFFICE COMPLETION OF STANDARD FORM 279:

A. Statistical Data for Government Ordering Office Completion of Standard Form 279:
 Block 9: G. Order/Modification under Federal Schedule
 Block 16: Data Universal Numbering System (DUNS) Number: █████████
 Block 30: Type of Contractor – Large Business
 Block 31: Woman-Owned Small Business – NO
 Block 36: Contractor's Taxpayer Identification Number (TIN): █████████

B. CAGE Code: **3AJ28**

5. FOB: DESTINATION

6. DELIVERY SCHEDULE

- TIME OF DELIVERY: The Contractor shall deliver to destination within the number of calendar days after receipt of order (ARO), as set forth below:

SPECIAL ITEM NUMBER	DELIVERY TIME (Days ARO)
132-33	30 days
132-34	As agreed upon between the contractor and ordering agency
132-50	As agreed upon between the contractor and ordering agency

- URGENT REQUIREMENTS: When the Federal Supply Schedule contract delivery period does not meet the bona fide urgent delivery requirements of an ordering activity, ordering activities are encouraged, if time permits, to contact the Contractor for the purpose of obtaining accelerated delivery. The Contractor shall reply to the inquiry within 3 workdays after receipt. (Telephonic replies shall be confirmed by the Contractor in writing.) If the Contractor offers an accelerated

delivery time acceptable to the ordering activity, any order(s) placed pursuant to the agreed upon accelerated delivery time frame shall be delivered within this shorter delivery time and in accordance with all other terms and conditions of the contract.

7.   **DISCOUNTS:** Prices shown are NET Prices; Basic Discounts have been deducted.

    a. Prompt Payment: NONE
    b. Quantity: NONE
    c. Dollar Volume: NONE
    d. Government Educational Institutions: Same discounts as all other Government customers
    e. Other: NONE

8.   **TRADE AGREEMENTS ACT OF 1979, as amended:**
    All items are U.S. made end products, designated country end products, Caribbean Basin country end products, Canadian end products, or Mexican end products as defined in the Trade Agreements Act of 1979, as amended.

9.   **STATEMENT CONCERNING AVAILABILITY OF EXPORT PACKING:** Export packing is beyond the scope of this   contract.

10.   **Small Requirements:** The minimum dollar value of orders to be issued is $100.00

11.   **MAXIMUM ORDER (All dollar amounts are exclusive of any discount for prompt payment.)**

    1. The Maximum Order value for the following Special Item Numbers (SINs) is $500,000:

     a. Special Item Number 132-33 - Perpetual Software Licenses
     b. Special Item Number 132-34 - Maintenance of Software as a Service

     2. The Maximum Order value for the following Special Item Numbers (SINs) is $25,000:
        Special Item Number 132-50 - Training Courses

12.   **ORDERING PROCEDURES FOR FEDERAL SUPPLY SCHEDULE CONTRACTS**

    Ordering activities shall use the ordering procedures of Federal Acquisition Regulation (FAR) 8.405 when placing an order or establishing a BPA for supplies or services. These procedures apply to all schedules.

    a. FAR 8.405-1 Ordering procedures for supplies, and services not requiring a statement of work.

    b. FAR 8.405-2 Ordering procedures for services requiring a statement of work.

    In accordance with FAR 8.404:

    Orders placed pursuant to a Multiple Award Schedule (MAS), using the procedures in FAR 8.404, are considered to be issued pursuant to full and open competition. Therefore, when placing orders under Federal Supply Schedules, ordering activities need not seek further competition, synopsize the requirement, make a separate determination of fair and reasonable pricing, or consider small business

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set-asides in accordance with subpart 19.5. GSA has already determined the prices of items under schedule contracts to be fair and reasonable. By placing an order against a schedule using the procedures outlined below, the ordering activity has concluded that the order represents the best value and results in the lowest overall cost alternative (considering price, special features, administrative costs, etc.) to meet the ordering activity's needs.

a. Orders placed at or below the micro-purchase threshold. Ordering activities can place orders at or below the micro-purchase threshold with any Federal Supply Schedule Contractor.

b. Orders exceeding the micro-purchase threshold but not exceeding the maximum order threshold. Orders should be placed with the Schedule Contractor that can provide the supply or service that represents the best value. Before placing an order, ordering activities should consider reasonably available information about the supply or service offered under MAS contracts by using the "GSA Advantage!" on-line shopping service, or by reviewing the catalogs/pricelists of at least three Schedule Contractors and selecting the delivery and other options available under the schedule that meets the ordering activity's needs. In selecting the supply or service representing the best value, the ordering activity may consider—

   1. Special features of the supply or service that are required in effective program performance and that is not provided by a comparable supply or service;
   2. Trade-in considerations;
   3. Probable life of the item selected as compared with that of a comparable item;
   4. Warranty considerations;
   5. Maintenance availability;
   6. Past performance; and
   7. Environmental and energy efficiency considerations.

c. Orders exceeding the maximum order threshold. Each schedule contract has an established maximum order threshold. This threshold represents the point where it is advantageous for the ordering activity to seek a price reduction. In addition to following the procedures in paragraph b, above, and before placing an order that exceeds the maximum order threshold, ordering activities shall--

Review additional Schedule Contractors'

1. catalogs/pricelists or use the "GSA Advantage!" on-line shopping service;
2. Based upon the initial evaluation, generally seek price reductions from the Schedule Contractor(s) appearing to provide the best value (considering price and other factors); and
3. After price reductions have been sought, place the order with the Schedule Contractor that provides the best value and results in the lowest overall cost alternative. If further price reductions are not offered, an order may still be placed, if the ordering activity determines that it is appropriate.

NOTE: For orders exceeding the maximum order threshold, the Contractor may:

1. Offer a new lower price for this requirement (the Price Reductions clause is not applicable to orders placed over the maximum order in FAR 52.216-19 Order Limitations);
2. Offer the lowest price available under the contract; or
3. Decline the order (orders must be returned in accordance with FAR 52.216-19).

d. Blanket purchase agreements (BPAs). The establishment of Federal Supply Schedule BPAs is permitted when following the ordering procedures in FAR 8.404. All schedule contracts contain BPA provisions. Ordering activities may use BPAs to establish accounts with Contractors to fill recurring requirements. BPAs should address the frequency of ordering and invoicing, discounts, and delivery locations and times.

e. Price reductions. In addition to the circumstances outlined in paragraph c, above, there may be instances when ordering activities will find it advantageous to request a price reduction. For example, when the ordering activity finds a schedule supply or service elsewhere at a lower price or when a BPA is being established to fill recurring requirements, requesting a price reduction could be advantageous. The potential volume of orders under these agreements, regardless of the size of the individual order, may offer the ordering activity the opportunity to secure greater discounts. Schedule Contractors are not required to pass on to all schedule users a price reduction extended only to an individual ordering activity for a specific order.

f. Small business. For orders exceeding the micro-purchase threshold, ordering activities should give preference to the items of small business concerns when two or more items at the same delivered price will satisfy the requirement.

g. Documentation. Orders should be documented, at a minimum, by identifying the Contractor the item was purchased from, the item purchased, and the amount paid. If an ordering activity requirement, in excess of the micro-purchase threshold, is defined so as to require a particular brand name, product, or feature of a product peculiar to one manufacturer, thereby precluding consideration of a product manufactured by another company, the ordering activity shall include an explanation in the file as to why the particular brand name, product, or feature is essential to satisfy the ordering activity's needs.

13. **FEDERAL INFORMATION TECHNOLOGY/TELECOMMUNICATION STANDARDS REQUIREMENTS:** ordering activities acquiring products from this Schedule must comply with the provisions of the Federal Standards Program, as appropriate (reference: NIST Federal Standards Index). Inquiries to determine whether or not specific products listed herein comply with Federal Information Processing Standards (FIPS) or Federal Telecommunication Standards (FED-STDS), which are cited by ordering activities, shall be responded to promptly by the Contractor.

13.1 **FEDERAL INFORMATION PROCESSING STANDARDS PUBLICATIONS (FIPS PUBS):** Information Technology products under this Schedule that do not conform to Federal Information Processing Standards (FIPS) should not be acquired unless a waiver has been granted in accordance with the applicable "FIPS Publication." Federal Information Processing Standards Publications (FIPS PUBS) are issued by the U.S. Department of Commerce, National Institute of Standards and Technology (NIST), pursuant to National Security Act. Information concerning their availability and applicability should be obtained from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia 22161. FIPS PUBS include voluntary standards when these are adopted for Federal use. Individual orders for FIPS PUBS should be referred to the NTIS Sales Office, and orders for subscription service should be referred to the NTIS Subscription Officer, both at the above address, or telephone number (703) 487-4650.

13.2 **FEDERAL TELECOMMUNICATION STANDARDS (FED-STDS):** Telecommunication products under this Schedule that do not conform to Federal Telecommunication Standards (FED-STDS) should

not be acquired unless a waiver has been granted in accordance with the applicable "FED-STD." Federal Telecommunication Standards are issued by the U.S. Department of Commerce, National Institute of Standards and Technology (NIST), pursuant to National Security Act. Ordering information and information concerning the availability of FED-STDS should be obtained from the GSA, Federal Acquisition Service, Specification Section, 470 East L'Enfant Plaza, Suite 8100, SW, Washington, DC 20407, telephone number (202)619-8925. Please include a self-addressed mailing label when requesting information by mail. Information concerning their applicability can be obtained by writing or calling the U.S. Department of Commerce, National Institute of Standards and Technology, Gaithersburg, MD 20899, telephone number (301)975-2833.

14.   CONTRACTOR TASKS / SPECIAL REQUIREMENTS (C-FSS-370) (NOV 2003)

a. Security Clearances: The Contractor may be required to obtain/possess varying levels of security clearances in the performance of orders issued under this contract. All costs associated with obtaining/possessing such security clearances should be factored into the price offered under the Multiple Award Schedule.

b. Travel: The Contractor may be required to travel in performance of orders issued under this contract. Allowable travel and per diem charges are governed by Pub .L. 99-234 and FAR Part 31, and are reimbursable by the ordering agency or can be priced as a fixed price item on orders placed under the Multiple Award Schedule. Travel in performance of a task order will only be reimbursable to the extent authorized by the ordering agency. The Industrial Funding Fee does NOT apply to travel and per diem charges.

c. Certifications, Licenses and Accreditations: As a commercial practice, the Contractor may be required to obtain/possess any variety of certifications, licenses and accreditations for specific FSC/service code classifications offered. All costs associated with obtaining/ possessing such certifications, licenses and accreditations should be factored into the price offered under the Multiple Award Schedule program.

d. Insurance: As a commercial practice, the Contractor may be required to obtain/possess insurance coverage for specific FSC/service code classifications offered. All costs associated with obtaining/possessing such insurance should be factored into the price offered under the Multiple Award Schedule program.

e. Personnel: The Contractor may be required to provide key personnel, resumes or skill category descriptions in the performance of orders issued under this contract. Ordering activities may require agency approval of additions or replacements to key personnel.

f. Organizational Conflicts of Interest: Where there may be an organizational conflict of interest as determined by the ordering agency, the Contractor's participation in such order may be restricted in accordance with FAR Part 9.5.

g. Documentation/Standards: The Contractor may be requested to provide products or services in accordance with rules, regulations, OMB orders, standards and documentation as specified by the agency's order.

h. Data/Deliverable Requirements: Any required data/deliverables at the ordering level will be as specified or negotiated in the agency's order.

i. Government-Furnished Property: As specified by the agency's order, the Government may provide property, equipment, materials or resources as necessary.

j. Availability of Funds: Many Government agencies' operating funds are appropriated for a specific fiscal year. Funds may not be presently available for any orders placed under the contract or any option year. The Government's obligation on orders placed under this contract is contingent upon the availability of appropriated funds from which payment for ordering purposes can be made. No legal liability on the part of the Government for any payment may arise until funds are available to the ordering Contracting Officer.

k. Overtime: For professional services, the labor rates in the Schedule should not vary by virtue of the Contractor having worked overtime. For services applicable to the Service Contract Act (as identified in the Schedule), the labor rates in the Schedule will vary as governed by labor laws (usually assessed a time and a half of the labor rate).

15. CONTRACT ADMINISTRATION FOR ORDERING ACTIVITIES:

Any ordering activity, with respect to any one or more delivery orders placed by it under this contract, may exercise the same rights of termination as might the GSA Contracting Officer under provisions of FAR 52.212-4, paragraphs (l) Termination for the ordering activity's convenience, and (m) Termination for Cause (See 52.212-4)

16. GSA ADVANTAGE!

GSA Advantage! is an on-line, interactive electronic information and ordering system that provides on-line access to vendors' schedule prices with ordering information. GSA Advantage! will allow the user to perform various searches across all contracts including, but not limited to:

a. Manufacturer;
b. Manufacturer's Part Number; and
c. Product categories.

Agencies can browse GSA Advantage! by accessing the Internet World Wide Web utilizing a browser (ex.: NetScape). The Internet address is http://www.gsaadvantage.gov

17. PURCHASE OF OPEN MARKET ITEMS

NOTE: Open Market Items are also known as incidental items, noncontract items, non-Schedule items, and items not on a Federal Supply Schedule contract. ODCs (Other Direct Costs) are not part of this contract and should be treated as open market purchases. Ordering Activities procuring open market items must follow FAR 8.402(f).

For administrative convenience, an ordering activity contracting officer may add items not on the Federal Supply Multiple Award Schedule (MAS) -- referred to as open market items -- to a Federal Supply Schedule blanket purchase agreement (BPA) or an individual task or delivery order, **only if**-

a. All applicable acquisition regulations pertaining to the purchase of the items not on the Federal Supply Schedule have been followed (e.g., publicizing (Part 5), competition requirements (Part 6), acquisition of commercial items (Part 12), contracting methods (Parts 13, 14, and 15), and small business programs (Part 19));

b. The ordering activity contracting officer has determined the price for the items not on the Federal Supply Schedule is fair and reasonable;

c. The items are clearly labeled on the order as items not on the Federal Supply Schedule; and

d. All clauses applicable to items not on the Federal Supply Schedule are included in the order.

18.   CONTRACTOR COMMITMENTS, WARRANTIES AND REPRESENTATIONS

a. For the purpose of this contract, commitments, warranties and representations include, in addition to those agreed to for the entire schedule contract:

1. Time of delivery/installation quotations for individual orders;

2. Technical representations and/or warranties of products concerning performance, total system performance and/or configuration, physical, design and/or functional characteristics and capabilities of a product/equipment/ service/software package submitted in response to requirements which result in orders under this schedule contract.

3. Any representations and/or warranties concerning the products made in any literature, description, drawings and/or specifications furnished by the Contractor.

b. The above is not intended to encompass items not currently covered by the GSA Schedule contract.

19.   OVERSEAS ACTIVITIES

The terms and conditions of this contract shall apply to all orders for installation, maintenance and repair of equipment in areas listed in the pricelist outside the 48 contiguous states and the District of Columbia, except as indicated below: **NONE**

Upon request of the Contractor, the ordering activity may provide the Contractor with logistics support, as available, in accordance with all applicable ordering activity regulations. Such ordering activity support will be provided on a reimbursable basis, and will only be provided to the Contractor's technical personnel whose services are exclusively required for the fulfillment of the terms and conditions of this contract.

20.   BLANKET PURCHASE AGREEMENTS (BPAs)

The use of BPAs under any schedule contract to fill repetitive needs for supplies or services is allowable. BPAs may be established with one or more schedule contractors. The number of BPAs to be established is within the discretion of the ordering activity establishing the BPA and should be based on a strategy that is expected to maximize the effectiveness of the BPA(s). Ordering activities shall follow FAR 8.405-3 when creating and implementing BPA(s).

21. CONTRACTOR TEAM ARRANGEMENTS

Contractors participating in contractor team arrangements must abide by all terms and conditions of their respective contracts. This includes compliance with Clauses 552.238-74; Industrial Funding Fee and Sales Reporting, i.e., each contractor (team member) must report sales and remit the IFF for all products and services provided under its individual contract.

22. INSTALLATION, DEINSTALLATION, REINSTALLATION

The Davis-Bacon Act (40 U.S.C. 276a-276a-7) provides that contracts in excess of $2,000 to which the United States or the District of Columbia is a party for construction, alteration, or repair (including painting and decorating) of public buildings or public works with the United States, shall contain a clause that no laborer or mechanic employed directly upon the site of the work shall received less than the prevailing wage rates as determined by the Secretary of Labor. The requirements of the Davis-Bacon Act do not apply if the construction work is incidental to the furnishing of supplies, equipment, or services. For example, the requirements do not apply to simple installation or alteration of a public building or public work that is incidental to furnishing supplies or equipment under a supply contract. However, if the construction, alteration or repair is segregable and exceeds $2,000, then the requirement of the Davis-Bacon Act applies.

The ordering activity issuing the task order against this contract will be responsible for proper administration and enforcement of the Federal labor standards covered by the Davis-Bacon Act. The proper Davis-Bacon wage determination will be issued by the ordering activity at the time a request for quotations is made for applicable construction classified installation, deinstallation, and reinstallation services under SIN 132-8 or 132-9.

23. SECTION 508 COMPLIANCE.

If applicable, Section 508 compliance information on the supplies and services in this contract are available in Electronic and Information Technology (EIT) at the following: www.opentext.com The EIT standard can be found at: www.Section508.gov/.

24. PRIME CONTRACTOR ORDERING FROM FEDERAL SUPPLY SCHEDULES.

Prime Contractors (on cost reimbursement contracts) placing orders under Federal Supply Schedules, on behalf of an ordering activity, shall follow the terms of the applicable schedule and authorization and include with each order –

a. A copy of the authorization from the ordering activity with whom the contractor has the prime contract (unless a copy was   previously furnished to the Federal Supply Schedule contractor); and

b. The following statement:

13

This order is placed under written authorization from _____ dated _____. In the event of any inconsistency between the terms and conditions of this order and those of your Federal Supply Schedule contract, the latter will govern.

25. **INSURANCE—WORK ON A GOVERNMENT INSTALLATION (JAN 1997) (FAR 52.228-5)**

    a. The Contractor shall, at its own expense, provide and maintain during the entire performance of this contract, at least the kinds and minimum amounts of insurance required in the Schedule or elsewhere in the contract.

    b. Before commencing work under this contract, the Contractor shall notify the Contracting Officer in writing that the required insurance has been obtained. The policies evidencing required insurance shall contain an endorsement to the effect that any cancellation or any material change adversely affecting the Government's interest shall not be effective—

1. For such period as the laws of the State in which this contract is to be performed prescribe; or

2. Until 30 days after the insurer or the Contractor gives written notice to the Contracting Officer, whichever period is longer.

    c. The Contractor shall insert the substance of this clause, including this paragraph (c), in subcontracts under this contract that require work on a Government installation and shall require subcontractors to provide and maintain the insurance required in the Schedule or elsewhere in the contract. The Contractor shall maintain a copy of all subcontractors' proofs of required insurance, and shall make copies available to the Contracting Officer upon request.

26. **SOFTWARE INTEROPERABILITY.**

Offerors are encouraged to identify within their software items any component interfaces that support open standard interoperability. An item's interface may be identified as interoperable on the basis of participation in a Government agency-sponsored program or in an independent organization program. Interfaces may be identified by reference to an interface registered in the component registry located at http://www.core.gov.

27. **ADVANCE PAYMENTS**

A payment under this contract to provide a service or deliver an article for the United States Government may not be more than the value of the service already provided or the article already delivered. Advance or pre-payment is not authorized or allowed under this contract. (31 U.S.C. 3324)

TERMS AND CONDITIONS APPLICABLE TO PERPETUAL SOFTWARE LICENSES (SPECIAL ITEM NUMBER 132-33) AND MAINTENANCE AS A SERVICE (SPECIAL ITEM NUMBER 132-34) OF GENERAL PURPOSE COMMERCIAL INFORMATION TECHNOLOGY SOFTWARE

1. **INSPECTION/ACCEPTANCE**

The Contractor shall only tender for acceptance those items that conform to the requirements of this contract. The ordering activity reserves the right to inspect or test any software that has been tendered for acceptance. The ordering activity may require repair or replacement of nonconforming software at no increase in contract price. The ordering activity must exercise its post acceptance rights (1) within a

reasonable time after the defect was discovered or should have been discovered; and (2) before any substantial change occurs in the condition of the software, unless the change is due to the defect in the software.

2. **GUARANTEE/WARRANTY**

a. Unless specified otherwise in this contract, the Contractor's standard commercial guarantee/warranty as stated in the contract's commercial pricelist will apply to this contract. **13 Months on Media.**

b. Limitation of Liability. Except as otherwise provided by an express or implied warranty, the Contractor will not be liable to the ordering activity for consequential damages resulting from any defect or deficiencies in accepted items.

Open Text

Limited Media Warranty. OTC warrants to Licensee that the media on which the Software is delivered to Licensee will be free from defects in materials and workmanship under normal use for sixty (60) days from the date of first delivery of same to Licensee under this EULA. OTC's entire liability to Licensee and Licensee's sole remedy against OTC, for each breach of the warranty contained in this Section 16.1 is limited to requiring OTC to replace the defective media without charge.

Limited Software Warranty. OTC warrants to Licensee that the Software delivered to Licensee under this EULA: (a) will be free of viruses at the time of first delivery of same to Licensee under this EULA; and (b) will perform substantially in accordance with its accompanying user Documentation for sixty (60) days from the date of first delivery of same to Licensee under this EULA. OTC's entire liability, and Licensee's sole remedy against OTC, for each breach by OTC of the warranty contained in: (i) Section 16.2 (a) above shall be limited to requiring OTC to deliver a replacement copy of the relevant Software to Licensee free of viruses; and/or (ii) Section 16.2 (b) above shall be limited to requiring OTC, at OTC's option, to either: (1) correct the error giving rise to such breach ("Error"); or (2) help the Licensee work around the Error, the type and extent of such help to be in OTC's sole discretion; or (3) subject to Section 18 hereof, refund all license fees paid to OTC by Licensee hereunder for the defective portion of the Software.

Warranty Exclusions. The OTC warranty in Section 16.2 shall not apply to any breach and/or Error caused by: (a) any change to the Software made by any party other than OTC; (b) accident, neglect, or misuse by any party other than OTC; (c) Licensee's failure to provide a suitable installation and/or operating environment for the Software; (d) use of the Software on a software and/or hardware platform not approved by OTC in writing; (e) software, hardware, firmware, data, and/or technology not licensed or approved by OTC in writing; (f) any telecommunications medium used by Licensee; (g) Licensee's own computer system; and/or (h) failure of Licensee and/or user to comply with the Documentation.

OTC DOES NOT WARRANT THAT THE MEDIA AND/OR SOFTWARE LICENSED UNDER THIS EULA WILL BE ERROR FREE, THAT EACH ERROR IN SAME WILL BE CORRECTED BY OTC AND/OR OTC'S LICENSORS, THAT THE SOFTWARE WILL OPERATE ON ANY AND ALL HARDWARE AND/OR SOFTWARE PLATFORMS, OR THAT THE SOFTWARE WILL IDENTIFY ALL KNOWN VIRUSES.

EXCEPT FOR THE EXPRESS LIMITED WARRANTIES PROVIDED BY OTC IN SECTIONS 16.1 AND 16.2 ABOVE, ALL MEDIA AND SOFTWARE PROVIDED TO LICENSEE UNDER THIS EULA SHALL BE PROVIDED BY OTC ON AN "AS IS BASIS".

EXCEPT FOR THE EXPRESS LIMITED WARRANTIES PROVIDED BY OTC IN SECTIONS 16.1 AND 16.2 ABOVE, OTC AND OTC'S LICENSORS DISCLAIM ANY AND ALL EXPRESS AND/OR IMPLIED WARRANTIES AND CONDITIONS OF EVERY KIND PERTAINING IN ANY WAY TO THE MEDIA AND/OR SOFTWARE LICENSED BY OTC UNDER THIS EULA, INCLUDING WITHOUT LIMITATION, EACH WARRANTY AND/OR CONDITION OF QUALITY, MERCHANTABILITY, DESCRIPTION, OPERATION, ADEQUACY, SUITABILITY, FITNESS FOR PARTICULAR PURPOSE, TITLE, INTERFERENCE WITH USE OR ENJOYMENT, AND/OR NON INFRINGEMENT, WHETHER EXPRESS OR IMPLIED BY STATUTE, COMMON LAW, USAGE OF TRADE, COURSE OF DEALING, CUSTOM, OR OTHERWISE. NEITHER OTC, NOR OTC'S LICENSORS, MAKE ANY REPRESENTATION, NOR PROVIDE ANY WARRANTY AND/OR CONDITION, REGARDING THE ADEQUACY OF THE MEDIA AND/OR SOFTWARE FOR ANY PARTICULAR PURPOSE, OR THE ADEQUACY OF THE MEDIA AND/OR SOFTWARE TO PRODUCE ANY PARTICULAR RESULT.

SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OF CERTAIN IMPLIED WARRANTIES, LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY MAY LAST, OR THE EXCLUSION OR LIMITATION OF INCIDENTAL, CONSEQUENTIAL, OR SPECIAL DAMAGES. IF ANY JURISDICTION HAVING APPLICABILITY TO THIS EULA DOES NOT PERMIT ANY SUCH EXCLUSION AND/OR LIMITATION: (A) EACH WARRANTY WHICH CANNOT BE EXCLUDED SHALL BE LIMITED IN TIME TO THE SIXTY (60) DAY PERIOD SET OUT IN SECTION 16.2 ABOVE; AND (B) OTC'S TOTAL LIABILITY TO LICENSEE FOR BREACH OF ANY AND/OR ALL SUCH WARRANTIES SHALL BE LIMITED TO THE AMOUNT STATED IN SECTION 18.3 OF THIS EULA.

Hummingbird

Hummingbird warrants that Hummingbird will conform in all material respects to its then current published specifications (User and Supervisor Manuals) for a period of one (1) year after the ordering activity customer receives it. If the ordering activity customer discovers nonconformity and reports it directly to Hummingbird during the on-year period, Hummingbird will correct the nonconformity at no cost to the ordering activity.
c. The Contractor warrants and implies that the items delivered hereunder are merchantable and fit for use for the particular purpose described in this contract...

3. TECHNICAL SERVICES

The Contractor, without additional charge to the ordering activity, shall provide a hot line technical support number **800-540-7292** for the purpose of providing user assistance and guidance in the implementation of the software. The technical support number is available from 8:00 a.m. to 8:00 p.m. EST.

4. SOFTWARE MAINTENANCE

4a. Software maintenance as it is defined:

___X___   **1. Software Maintenance as a Product (SIN 132-32 or SIN 132-33)**
Software maintenance as a product includes the publishing of bug/defect fixes via patches and updates/upgrades in function and technology to maintain the operability and usability

of the software product. It may also include other no charge support that is included in the purchase price of the product in the commercial marketplace. No charge support includes items such as user blogs, discussion forums, on-line help libraries and FAQs (Frequently Asked Questions), hosted chat rooms, and limited telephone, email and/or web-based general technical support for user's self diagnostics.

Software maintenance as a product does **NOT** include the creation, design, implementation, integration, etc. of a software package. These examples are considered software maintenance as a service.

   __X__   **2.   Software Maintenance as a Service (SIN 132-34)**

Software maintenance as a service creates, designs, implements, and/or integrates customized changes to software that solve one or more problems and is not included with the price of the software. Software maintenance as a service includes person-to-person communications regardless of the medium used to communicate: telephone support, on-line technical support, customized support, and/or technical expertise which are charged commercially. Software maintenance as a service is billed arrears in accordance with 31 U.S.C. 3324.

4b. Invoices for maintenance service shall be submitted by the Contractor on a quarterly or monthly basis, after the completion of such period. Maintenance charges must be paid in arrears (31 U.S.C. 3324). PROMPT PAYMENT DISCOUNT, IF APPLICABLE, SHALL BE SHOWN ON THE INVOICE.

Software maintenance service shall include the following:

1. ***Open Text*** - *See Live Link End User Agreement at the end of this section.*

2. ***Hummingbird*** - *SOFTWARE SUBSCRIPTION SERVICE/MAINTENANCE TERMS:*

a. SSS may only be purchased by customers with HUMMINGBIRD Software Licenses.

b. SSS may be purchased along with the initial order of HUMMINGBIRD software or within thirty (30) days of the initial purchase.

c. In the event SSS is purchased, it is required that all HUMMINGBIRD workstation and server product licenses be covered under the contract.

d. SSS can be purchased for a one (1) year term. The effective date of SSS is as follows: If SSS is purchased before the 15th day of the purchase month, then the SSS start date begins on the 1st day of the month in which the purchase was made or; If the SSS is purchased after the 15th day of the purchase month, then the start date begins on the 1st day of the month following the purchase month.

e. HUMMINGBIRD will give the customer an additional 3 months of SSS for the initial year of SSS if SSS is purchased with the initial purchase of HUMMINGBIRD Software. This offer

does not apply to additional purchases of HUMMINGBIRD Software.

f. SSS for HUMMINGBIRD Software will not automatically renew. Two (2) separate notifications of expiration will be sent to the Customer approximately 60 days and approximately 30 days prior to the expiration data.

g. SSS renewal rates will reflect HUMMINGBIRD then current GSA rates

4c. SOFTWARE SUBSCRIPTION SERVICE/MAINTENANCE RENEWAL:

1. Payment terms are 2%-net 30 from date of purchase order

2. Customer must notify HUMMINGBIRD in writing of any changes related to such renewal including, but not exclusive to, shipping addresses, contact person and number of licenses.

3. SSS customers will receive notification of any version or maintenance upgrades of PC

4. DOCS Software. However, SSS customers are responsible for requesting current upgrades by submitting an Upgrade Request form, which are available from HUMMINGBIRD. Upgrades are not shipped automatically.

4d. SOFTWARE SUBSCRIPTION SERVICE/MAINTENANCE ENTITLES THE CUSTOMERS TO:

1. Any new releases, versions, or maintenance updates for the Products which are generally made available to other   HUMMINGBIRD customers at no additional charge. Any software sent to Customers hereunder will be subject to the terms of the license accompanying such software.

2. Any documentation that accompanies a new release, version, or update.

3. Priority consideration for receiving new upgrades and versions.

4. Access to the HUMMINGBIRD Bulletin Board Service.

5. Standard telephone support for the Products during normal business hours (Monday – Friday 8am to 8pm EST) at **800-942-5000**. HUMMINGBIRD will use its reasonable efforts to correct any reported problems, but does not guarantee that it can correct all of customer's reported problems.

4e. THIRD PARTY PRODUCTS:

1. Supported SQL database software upgrades are not included in HUMMINGBIRD SSS offerings.

2. New releases of third party products which form part of HUMMINGBIRD core products will be incorporated at HUMMINGBIRD discretion.

4f. CUSTOMERS WITHOUT SOFTWARE SUBSCRIPTION SERVICE/MAINTENANCE:

1. The customer must purchase each release of maintenance or version upgrades at the current GSA price.

2. If a customer wants to order SSS after thirty (30) days have elapsed from the initial purchase date, they must 1st purchase the current version upgrade available before qualifying for SSS.

3. Technician response time is 8 hours (compared to 4 hours for customers with SSS.)

4. Technical support is billable on a per incident basis at the then current commercial price.

5. PERIODS OF MAINTENANCE (SIN 132-34)

a. The Contractor shall honor orders for periods for the duration of the contract period or a lesser period of time.

b. Maintenance may be discontinued by the ordering activity on thirty (30) calendar days written notice to the Contractor.

c. Annual Funding. When annually appropriated funds are cited on an order for maintenance, the period of the maintenance shall automatically expire on September 30 of the contract period, or at the end of the contract period, whichever occurs first. Renewal of the maintenance orders citing the new appropriation shall be required, if the maintenance is to be continued during any remainder of the contract period.

d. Cross-Year Funding Within Contract Period. Where an ordering activity's specific appropriation authority provides for funds in excess of a 12 month (fiscal year) period, the ordering activity may place an order under this schedule contract for a period up to the expiration of the contract period, notwithstanding the intervening fiscal years.

e. Ordering activities should notify the Contractor in writing thirty (30) calendar days prior to the expiration of an order, if the term licenses and/or maintenance are to be terminated at that time. Orders for the continuation of term licenses and/or maintenance will be required if the term licenses and/or maintenance is to be continued during the subsequent period.

6. CONVERSION FROM TERM LICENSE TO PERPETUAL LICENSE

a. The ordering activity may convert term licenses to perpetual licenses for any or all software at any time following acceptance of software. At the request of the ordering activity the Contractor shall furnish, within ten (l0) calendar days, for each software product that is contemplated for conversion, the total amount of conversion credits which have accrued while the software was on a term license and the date of the last update or enhancement.

b. Conversion credits which are provided shall, within the limits specified, continue to accrue from one contract period to the next, provided the software remains on a term license within the ordering activity.

c. The term license for each software product shall be discontinued on the day immediately preceding

the effective date of conversion from a term license to a perpetual license.

d. The price the ordering activity shall pay will be the perpetual license price that prevailed at the time such software was initially ordered under a term license, or the perpetual license price prevailing at the time of conversion from a term license to a perpetual license, whichever is the less, minus an amount equal to _____% of all term license payments during the period that the software was under a term license within the ordering activity.

7.   TERM LICENSE CESSATION

a. After a software product has been on a continuous term license for a period of _____ * months, a fully paid up, non-exclusive, perpetual license for the software product shall automatically accrue to the ordering activity. The period of continuous term license for automatic accrual of a fully paid up perpetual license does not have to be achieved during a particular fiscal year; it is a written Contractor commitment which continues to be available for software that is initially ordered under this contract, until a fully paid up perpetual license accrues to the ordering activity. However, should the term license of the software be discontinued before the specified period of the continuous term license has been satisfied, the perpetual license accrual shall be forfeited.

*Each separately priced software product shall be individually enumerated, if different accrual periods apply for the purpose of perpetual license attainment.**

b. The Contractor agrees to provide updates and maintenance service for the software after a perpetual license has accrued, at the prices and terms of Special Item Number l32-34, if the licensee elects to order such services. Title to the software shall remain with the Contractor.

8.   UTILIZATION LIMITATIONS - (SIN 132-33 AND SIN 132-34)

a. Software acquisition is limited to commercial computer software defined in FAR Part 2.101.

b. When acquired by the ordering activity, commercial computer software and related documentation so legend shall be subject to the following:

1. Title to and ownership of the software and documentation shall remain with the Contractor, unless otherwise specified.

2. Software licenses are by site and by ordering activity. An ordering activity is defined as a cabinet level or independent ordering activity. The software may be used by any subdivision of the ordering activity (service, bureau, division, command, etc.) that has access to the site the software is placed at, even if the subdivision did not participate in the acquisition of the software. Further, the software may be used on a sharing basis where multiple agencies have joint projects that can be satisfied by the use of the software placed at one ordering activity's site. This would allow other agencies access to one ordering activity's database. For ordering activity public domain databases, user agencies and third parties may use the computer program to enter, retrieve, analyze and present data. The user ordering activity will take appropriate action by instruction, agreement, or otherwise, to protect the Contractor's proprietary property with any third parties that are permitted access to the computer programs and documentation in connection with the user ordering activity's permitted use of the

computer programs and documentation. For purposes of this section, all such permitted third parties shall be deemed agents of the user ordering activity.

3. Except as is provided in paragraph 8.b(2) above, the ordering activity shall not provide or otherwise make available the software or documentation, or any portion thereof, in any form, to any third party without the prior written approval of the Contractor. Third parties do not include prime Contractors, subcontractors and agents of the ordering activity who have the ordering activity's permission to use the licensed software and documentation at the facility, and who have agreed to use the licensed software and documentation only in accordance with these restrictions. This provision does not limit the right of the ordering activity to use software, documentation, or information therein, which the ordering activity may already have or obtains without restrictions.

4. The ordering activity shall have the right to use the computer software and documentation with the computer for which it is acquired at any other facility to which that computer may be transferred, or in cases of Disaster Recovery, the ordering activity has the right to transfer the software to another site if the ordering activity site for which it is acquired is deemed to be unsafe for ordering activity personnel; to use the computer software and documentation with a backup computer when the primary computer is inoperative; to copy computer programs for safekeeping (archives) or backup purposes; to transfer a copy of the software to another site for purposes of benchmarking new hardware and/or software; and to modify the software and documentation or combine it with other software, provided that the unmodified portions shall remain subject to these restrictions.

5. "Commercial Computer Software" may be marked with the Contractor's standard commercial restricted rights legend, but the schedule contract and schedule pricelist, including this clause, "Utilization Limitations" are the only governing terms and conditions, and shall take precedence and supersede any different or additional terms and conditions included in the standard commercial legend.

9.   SOFTWARE CONVERSIONS - (SIN 132-32 AND SIN 132-33)

Full monetary credit will be allowed to the ordering activity when conversion from one version of the software to another is made as the result of a change in operating system, or from one computer system to another. Under a perpetual license (132-33), the purchase price of the new software shall be reduced by the amount that was paid to purchase the earlier version. Under a term license (132-32), conversion credits which accrued while the earlier version was under a term license shall carry forward and remain available as conversion credits which may be applied towards the perpetual license price of the new version.

10.   DESCRIPTIONS AND EQUIPMENT COMPATIBILITY

The Contractor shall include, in the schedule pricelist, a complete description of each software product and a list of equipment on which the software can be used. Also, included shall be a brief, introductory explanation of the modules and documentation which are offered.

HUMMINGBIRD is the leading worldwide provider of open document management systems for enterprise networks, the Internet, and corporate Intranets. Hummingbird's family of products delivers dramatic productivity improvements by easily transforming unorganized document collections into accessible information assets.

Hummingbird DM transforms document-based electronic information into knowledge assets with an enterprise-ready platform that facilitates the capture, sharing, and protection of corporate content resources. User queries are easily executed across global DM repositories, enabling users to find and control documents and easily distribute them for review, collaboration, and publication with project teams inside and outside the traditional corporate landscape

Hummingbird RM provides Hummingbird's multi-tiered Records Management Solution. The browser based component of Hummingbird RM provides records management user functions for the Web, allowing users to manage both their documents and records through one interface. Also included are the downloadable RM application integration components providing records management functionality through MSOutlook, Windows Explorer, and integrated office applications.

Hummingbird RM Admin Windows-based tool is used to perform Records Management Administration for Hummingbird RM.

Hummingbird Collaboration is a collaborative framework that provides a secure, document-centric collaboration environment suitable for intra- and inter-enterprise deployments across any industry. It increases the effectiveness of collaborative activities between employees, customers, partners and suppliers, increasing team productivity, reducing costs, and shortening project timelines.

Hummingbird KM is a complete information search and categorization solution that allows organizations to harness the collected enterprise knowledge assets from a single, logical point of access. It confers the ability to use organizational information to create real world business solutions, gain competitive advantage, and improve profitability by automatically bringing context to enterprise content.

Hummingbird Portal is an ideal solution for organizations looking for a solid platform for building a solution that not only integrates existing enterprise content and applications, but incorporates the tools for better accessing, managing, sharing, and understanding them. Hummingbird leverages its experience and proven capabilities in content and document management, business intelligence, host access and network connectivity, collaboration, and data integration to integrate demand-driven functionality and create a highly secure, fully customizable Web-based workspace that truly delivers on the promise of enterprise portals.

Hummingbird DM Extension for AutoCAD provides application integration between AutoCAD 200x and Hummingbird DM. It enables an engineer to track and manage drawings, revisions, blocks, symbols, and reference files - reaping the benefits of document management without changing the way they work.

Hummingbird DM WorkFlow™ provides routing of documents managed within the Hummingbird DM environment. It is unique to the industry in its ability to enable non-technical users to very easily interact with the workflow processes associated with documents.

Hummingbird Imaging provides sophisticated imaging features combined with electronic document management access, control, security, and sharing capabilities for paper-based documents.

DOCS Open™ Enterprise Document Management System provides a secure infrastructure to store, locate, retrieve, and manage information across a network and over the Internet.

DOCS Enterprise Suite unifies enterprise document management, imaging, and routing capabilities into one comprehensive suite.

DOCS Imaging enables DOCS Open users to integrate and manage scanned documents, faxes, OCR text, and other electronic images on their network.

DOCS Routing allows DOCS Open users to logically route documents for review and approval, incorporating comments and providing status checks.

CyberDOCS™ provides Web browser access to DOCS Open and enables documents to be published to a Web server.
DOCS Unplugged™ extends full DOCS Open functionality to mobile computer users and to desktop users when they are not connected to their network.
DOCS Interchange™ for Microsoft® Exchange™ enables DOCS Open users to publish documents stored in a DOCS Open library to specified public folders in Microsoft Exchange.

DOCS Interchange™ for Lotus® Notes™ allows users to replicate documents from DOCS Open libraries to a Lotus Notes database, while still maintaining links between replicated copies.
DOCS Document Sentry Agent (DSA) provides an added layer of configurable security for DOCS Open libraries.

DOCS Document Sentry Agent (DSA) provides an added layer of configurable security for DOCS Open libraries.

DOCS Open Integration Toolkit enables developers and system integrators to build customized applications for DOCS Open with an object-oriented tool set.

DOCS Open Workstation Configuration Based on in-house benchmark tests of DOCS Open v 3.X with Word 6.0, the following configuration guidelines are offered. It is suggested that you consult with your HUMMINGBIRD Authorized Integrator for exact configuration recommendations for your system based on the full complement of applications to be used with DOCS Open.

	Minimum	**Recommended**	**Comments**
Professor	486/33	486DX/66	Based on our benchmarks, given the same amount of memory, a 486DX/66 has about 20% performance than a 486/33. A Pentium 90 MHz has about 15% better performances than a 486DX/66.
Memory	8MB	12MB	Memory has the greatest impact on DOCS Open performance. DOCS open will operate with 8MB but, according to our benchmark tests, increasing memory from 8MB to

			12MB yields approximately a 45% performance improvement. Increasing memory from 8MB to 15MB yields approximately a 55% performance improvement.
Desktop OS	Windows 3.1 or greater same (386 Enhanced)	Windows 95	Based on our benchmarks, given the
		Windows NT 20-Mode)	amount of memory, Windows 95 has about 30% better than Windows 3.x or Windows for Workgroup.

DOCS Open supports three client/server database products on all platforms supported by that vendor:

• Sybase: Sybase System 10, 11 and SQL Server Version 4 are supported on all platforms, including NT, NetWare NLM, and several flavors of UNIX.

• Oracle: Oracle 7 is supported on all platforms, including NT, NetWare NLM, and several flavors of UNIX.

• Microsoft: Microsoft SQL Server for Windows NT and Novell.

In addition, DOCS Open runs on SQL Anywhere (formerly known as Watcom SQL) Standalone, which is bundled with the DOCS Unplugged product.

Network Operating Systems
Supported Document Servers
DOCS Open supports any Windows-compatible network file system. The following chart shows the different platforms, and the features supported on each:

File Level Security Supported	User & Group Directory	OS-Level HSM Support
Yes	Yes	For 4.1
w/Agent	Yes	3rd-party
w/Agent*	Yes	3rd-party

* DOCS Open provides a security agent for both Banyan Vines and Windows NT-based document servers

Hummingbird DM Client Configuration

Based on in-house benchmark tests of Hummingbird DM 5.X with Word 2000, the following configuration guidelines are offered. It is suggested that you consult with your HUMMINGBIRD Authorized Integrator for exact configuration recommendations for your system based on the full complement of applications to be used with Hummingbird DM.

Client Workstation

Processor	Pentium 600 or better (recommended)
	Pentium III 500 (minimum)
Memory	256 MB or greater (recommended)
	128 MB (minimum)
Database System	Windows 98 SE
	Windows 2000
	Windows XP
	Windows NT 4.0
Database	Database Client for R< Administration Tool only
Web Browser	Netscape 6.2
	Internet Explorer 5.5
	Internet 6.0

Figure 1 – Hummingbird DM Client Workstation Hardware and Software Requirements
        Hummingbird DM Server Configuration

Based on in-house benchmark tests of Hummingbird DM 5.X with Word 2000, the following configuration guidelines is offered. It is suggested that you consult with your Hummingbird Authorized Integrator for exact configuration recommendations for your system based on the full complement of applications to be used with Hummingbird DM.

	DM Server	Document Server	DM Web Server
Processor	Dual Pentium 600 or better (recommended) Pentium 600 (minimum)	N/A	Dual Pentium 600 or better (recommended) Pentium 600 (minimum)
Memory	1GB or greater (1GB minimum)	N/A	1 GB or greater 1 GB (minimum)
Operating System	2000Server/Advanced Windows NT Server	NetWare 5.x or 6.X NT Server 4.0 Windows 2000 Win 2000 ADS Svr UNIX Generic with NFS Maestro™ for connectivity	Win 200 Server Windows Server/Advanced Server

11.   RIGHT-TO-COPY PRICING

Open Text Corporation does not offer Right-to-Copy.

1. **SCOPE**

    a. The Contractor shall provide training courses normally available to commercial customers, which will permit ordering activity users to make full, efficient use of general purpose commercial IT products. Training is restricted to training courses for those products within the scope of this solicitation.

    b. The Contractor shall provide training at the Contractor's facility and/or at the ordering activity's location, as agreed to by the Contractor and the ordering activity.

2. **ORDER**

    Written orders, EDI orders (GSA Advantage! and FACNET), credit card orders, and orders placed under blanket purchase agreements (BPAs) shall be the basis for the purchase of training courses in accordance with the terms of this contract. Orders shall include the student's name, course title, course date and time, and contracted dollar amount of the course.

3. **TIME OF DELIVERY**

    The Contractor shall conduct training on the date (time, day, month, and year) agreed to by the Contractor and the ordering   activity.

4. **CANCELLATION AND RESCHEDULING**

    a. The ordering activity will notify the Contractor at least seventy-two (72) hours before the scheduled training date, if a student will be unable to attend. The Contractor will then permit the ordering activity to either cancel the order or reschedule the training at no additional charge. In the event the training class is rescheduled, the ordering activity will modify its original training order to specify the time and date of the rescheduled training class.

    b. In the event the ordering activity fails to cancel or reschedule a training course within the time frame specified in paragraph a, above, the ordering activity will be liable for the contracted dollar amount of the training course. The Contractor agrees to permit the ordering activity to reschedule a student who fails to attend a training class within ninety (90) days from the original course date, at no additional charge.

    c. The ordering activity reserves the right to substitute one student for another up to the first day of class.

    d. In the event the Contractor is unable to conduct training on the date agreed to by the Contractor and the ordering activity, the Contractor must notify the ordering activity at least seventy-two (72) hours before the scheduled training date.

5. **FOLLOW-UP SUPPORT**

The Contractor agrees to provide each student with unlimited telephone support for a period of one (1) year from the completion of the training course. During this period, the student may contact the Contractor's instructors for refresher assistance and answers to related course curriculum questions.

6. PRICE FOR TRAINING

The price that the ordering activity will be charged will be the ordering activity training price in effect at the time of order placement, or the ordering activity price in effect at the time the training course is conducted, whichever is less.

7. INVOICES AND PAYMENT

Invoices for training shall be submitted by the Contractor after ordering activity completion of the training course. Charges for training must be paid in arrears (31 U.S.C. 3324). PROMPT PAYMENT DISCOUNT, IF APPLICABLE, SHALL BE SHOWN ON THE INVOICE.

8. FORMAT AND CONTENT OF TRAINING

a. The Contractor shall provide written materials (i.e., manuals, handbooks, texts, etc.) normally provided with course offerings. Such documentation will become the property of the student upon completion of the training class.

b. For hands-on training courses, there must be a one-to-one assignment of IT equipment to students.

c. The Contractor shall provide each student with a Certificate of Training at the completion of each training course.

d. The Contractor shall provide the following information for each training course offered:

1. The course title and a brief description of the course content, to include the course format (e.g. lecture, discussion, hands- on training);
2. The length of the course;
3. Mandatory and desirable prerequisites for student enrollment;
4. The minimum and maximum number of students per class;
5. The locations where the course is offered;
6. Class schedules; and
7. Price (per student, per class (if applicable)).

e. For those courses conducted at the ordering activity's location, instructor travel charges (if applicable), including mileage and daily living expenses, must be indicated below. Rates paid as a result of travel must comply with the Federal Travel Regulation or Joint Travel Regulations, as applicable, in effect on the date(s) the travel is performed. Contractors cannot use GSA city pair contracts.

9. "NO CHARGE" TRAINING

The Contractor shall describe any training provided with equipment and/or software provided under this contract, free of charge, in the space provided below. None.

USA COMMITMENT TO PROMOTE
SMALL BUSINESS PARTICIPATION
PROCUREMENT PROGRAMS

<u>PREAMBLE</u>

Open Text Corporation provides commercial products and services to ordering activities. We are committed to promoting participation of small, small disadvantaged and women-owned small businesses in our contracts. We pledge to provide opportunities to the small business community through reselling opportunities, mentor-protégé programs, joint ventures, teaming arrangements, and subcontracting.

<u>COMMITMENT</u>

To actively seek and partner with small businesses.

To identify, qualify, mentor and develop small, small disadvantaged and women-owned small businesses by purchasing from these businesses whenever practical.

To develop and promote company policy initiatives that demonstrates our support for awarding contracts and subcontracts to small business concerns.

To undertake significant efforts to determine the potential of small, small disadvantaged and women-owned small business to supply products and services to our company.

To insure procurement opportunities are designed to permit the maximum possible participation of small, small disadvantaged and women-owned small businesses.

To attend business opportunity workshops, minority business enterprise seminars, trade fairs, procurement conferences, etc., to identify and increase small businesses with whom to partner.

To publicize in our marketing publications our interest in meeting small businesses that may be interested in subcontracting opportunities.

We signify our commitment to work in partnership with small, small disadvantaged and women-owned small businesses to promote and increase their participation in ordering activity contracts. To accelerate potential opportunities please contact:

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Contract Manager
Open Text Corporation
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9.2   Limited Software Warranty. OT warrants to Licensee that the Software delivered to Licensee under this EULA: (a) will be free of all known viruses at the time of first delivery to Licensee; and (b) will perform substantially in accordance with its accompanying Documentation for sixty (60) days from the date of first delivery of the Software to Licensee. OT's entire liability, and Licensee's sole remedy against OT, for each breach by OT of the warranty contained in: (i) Section 9.2 (a) above shall be limited to requiring OT to deliver a replacement copy of the relevant Software to Licensee free of known viruses; and (ii) Section 9.2 (b) above shall be limited to requiring OT to correct or work around the portion of the Software giving rise to such breach within a commercially reasonable period of time, failing which OT shall refund all License Fees paid to OT by Licensee hereunder which are attributable to the portion of the Software giving rise to the breach.

9.3   Warranty Exclusions. The warranty in Section 9.2 shall not apply to any breach caused by: (a) any change to the Software, except where such changes were made by OT in relation to the provision maintenance and support services; (b) Licensee's failure to provide a suitable installation or operating environment for the Software; (c) use of the Software on a software or hardware platform not approved by OT in writing; (d) software, hardware, firmware, data, or technology not licensed or approved by OT in writing; (e) any telecommunications medium used by Licensee; (f) Licensee's own computer system; or (g) failure of Licensee

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9.5   Inability to Exclude Warranties. Some jurisdictions do not allow the exclusion of certain implied warranties, limitations on how long an implied warranty may last, or the exclusion or limitation of incidental, consequential, or special damages. If any jurisdiction having applicability to this EULA does not permit any such exclusion or limitation: (a) each warranty which cannot be excluded shall be limited in time to sixty (60) days from the date of first delivery of the applicable Software; and (b) OT's total liability to Licensee for breach of any or all such warranties shall be limited to the amount stated in section 11.2 of this EULA.

10.0   OT Infringement Indemnity

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Licensee. OT's entire liability, and Licensee's sole and exclusive remedy with respect to any Claims shall be limited to the remedies set out in sections 10.1 and 10.2 of this EULA.

11.0   Limitation of Overall OT Liability

11.1   DISCLAIMER OF DAMAGES / LOSSES. *NOTWITHSTANDING ANY PROVISION IN THIS EULA, ANY AND ALL BREACHES BY OT OF THIS EULA (INCLUDING FUNDAMENTAL BREACH), THE TERMINATION BY OT OF THIS EULA, OR ANY OBLIGATION THAT OT MAY HAVE IN CONTRACT, TORT, EQUITY, AT LAW, OR OTHERWISE; IN NO EVENT SHALL OT BE LIABLE OR OBLIGATED TO LICENSEE, TO ANY USER OF THE SOFTWARE, OR TO ANY OTHER PARTIES FOR: (A) ANY INDIRECT, INCIDENTAL, SPECIAL, CONSEQUENTIAL, AGGRAVATED, EXEMPLARY, OR PUNITIVE DAMAGES; OR (B) ANY LOST SALES, LOST REVENUE, LOST PROFITS, LOST DATA, OR REPROCUREMENT AMOUNT; EVEN IF OT HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES OR LOSSES ARISING AND NOTWITHSTANDING THE FAILURE OF ESSENTIAL PURPOSE OF ANY REMEDY CONTAINED HEREIN.*

11.2   LIMITATION OF LIABILITY. *NOTWITHSTANDING ANY OTHER PROVISION OF THIS EULA, OT'S TOTAL, CUMULATIVE, AND AGGREGATE LIABILITY AND OBLIGATION TO LICENSEE: (A) ARISING UNDER THE PROVISIONS OF THIS EULA; (B) FOR ANY AND ALL BREACHES BY OT OF THIS EULA (INCLUDING FUNDAMENTAL BREACH) OR THE FAILURE OF ESSENTIAL PURPOSE OF ANY REMEDY CONTAINED HEREIN; (C) FOR ANY TERMINATION BY OT OF THIS EULA; OR (D) FOR ANY OTHER ACT, OMISSION, OR EVENT RELATED IN ANY WAY TO THIS EULA; SHALL NOT EXCEED THE TOTAL AMOUNT OF LICENSE FEES RECEIVED BY OT (OR RESELLER) FROM LICENSEE UNDER THIS EULA, WHETHER OT'S LIABILITY IS BASED IN CONTRACT, TORT, EQUITY, AT LAW, OR UPON ANY OTHER THEORY OF LIABILITY. LICENSEE AGREES THAT OT WOULD NOT HAVE ENTERED INTO THIS EULA WITHOUT THIS SECTION 11 BEING INCLUDED HEREIN.*

12.0   Term and Termination

12.1   Term. The term of this EULA shall begin on the Effective Date and shall continue in full force until terminated pursuant to this Section 12 ("**Term**").

12.2   Termination For Default. Either party may terminate this EULA for default if the other party: (a) becomes insolvent; (b) files any proceeding in bankruptcy or acquires the status of a bankrupt; (c) has a receiver or receiver manager appointed with respect to it or any of its assets; (d) seeks the benefit of any statute providing protection from creditors or takes or suffers any similar or analogous procedure, action or event in consequence of debt in any jurisdiction. Either party may also terminate this EULA for default if the other party breaches any provision of this EULA provided: (i) the non-breaching party provides the breaching party with written notice of breach and a ten (10) day period to cure the breach ("**Cure Period**"); and (ii) the breaching party fails to cure each breach by the end of the Cure Period. Any termination of this EULA shall be without prejudice to each right or remedy which the non-breaching party may possess against the breaching party under this EULA, at law, in equity, or otherwise.

12.3   Effect of Termination -- Generally. Except in the event of a termination for default under section 12.2 based on breach of this EULA by OT, upon any termination or expiry of this EULA: (a) all licenses granted by OT herein shall immediately terminate; (b) Licensee shall immediately cease all use of the Software; c) sections 2, 4, 5, 6.4, 6.5, 6.6, 7, 8, 11, 12, and 13 of this EULA shall survive and shall continue in full force; and d) Licensee must either deliver to OT or destroy all originals and copies of Software, Documentation and OT Confidential Information in Client's possession, custody or control. Within fifteen (15) days after such termination, one of Licensee's authorized officers must certify in writing to OT that all such originals and copies have been so delivered or destroyed.

12.4   Effect of Termination – Based on breach by OT. In the event of a termination for default under section 12.2 based on breach of this EULA by OT: a) licenses granted by OT herein shall not terminate, and b) sections 1, 2, 3, 4, 5, 6.6, 8, 9.3, 9.4, 9.5, 11 and 13 of this EULA shall survive and shall continue in full force.

13.0   Miscellaneous Provisions

13.1   Confidentiality. Licensee shall: (a) receive and maintain the Software in confidence; and (b) use the same degree of care with respect to the Software as Licensee employs to protect Licensee's own confidential or trade secret information from unauthorized use, duplication or disclosure, but not less than a high degree of care.

13.2   Automated Verification. Licensee acknowledges that the Software may contain a license key to prevent unauthorized installation or to enforce limits of a particular Software License, and may contain devices to monitor compliance with Licensee's license obligations under this EULA.

13.3   Developer Tools. If the Licensee creates additional software code or software products using software developer tools licensed by OT to Licensee (collectively "**Licensee Software**"), OT shall not be responsible or liable in any way for the development or use of such Licensee Software and Licensee shall defend and indemnify OT against any claims, damages, costs, losses or expenses related to the development or use of the Licensee Software.

13.4   Independent Contractors. OT and Licensee are independent contractors. Neither OT nor Licensee shall have any authority to bind the other in any manner.

13.5   Waiver, Amendment, Assignment. No waiver of any provision of this EULA is binding on either party unless set out in a mutually signed written waiver. This EULA shall only be amended by a written document signed by OT and Licensee stating such document is an amendment or an addendum hereto. This EULA may be assigned by OT to an Affiliate of OT or to a successor-in-interest/title of OT without consent. This EULA shall not be assigned by Licensee, in whole or in part, without OT's prior written consent.

13.6   Vienna Convention. All provisions of the United Nations Convention on Contracts for the International Sale of Goods are hereby rejected by the parties and excluded from this EULA in their entirety.

13.7   Governing Law. This EULA shall be governed by the laws of *the Province Of Ontario (Canada)* excluding its conflicts or choice of law rules. Except for injunctive relief required by OT to protect its intellectual property, all related litigation shall occur in the courts located in such jurisdiction. If Licensee or OT commence any litigation or proceeding against the other related to this EULA, the prevailing party shall be entitled to an award of its reasonable attorneys fees and court costs.

13.8   Force Majeure. Except for payment obligations (including License Fees, maintenance and support fees, and Applicable Taxes) or any obligations relating to the protection of or restrictions applicable to the other party's confidential information or intellectual property, neither party shall be liable to the other or be in breach of this EULA due to any failure or delay in performance of its obligations to the extent the failure or delay arises (and only for the duration that the affected party is precluded from performing) as a result of acts of God, fire, disaster, explosion, vandalism, storm, adverse weather conditions, strikes, labor disputes or disruptions, epidemics, wars, national emergencies, riots, civil disturbances, shortages of materials, actions or inactions of government authorities, terrorist acts, lockout, work stoppages or other labor difficulties, border delays, failures or interruptions of utilities or telecommunications equipment or services, system failures or any other cause that is beyond the reasonable control of that party.

13.9   Severability.   Should any provision of this EULA be deemed contrary to applicable law or unenforceable by any court of competent jurisdiction, the provision shall be considered severed from this EULA but all remaining provisions shall continue in full force.

13.10   Export Laws.   Software, including Documentation and technical data, is subject to U.S. export control laws, including the U.S. Export Administration Act and its associated regulations, and may be subject to export or import regulations in other countries. Licensee agrees to comply strictly with all such regulations and acknowledges that it has the responsibility to obtain licenses to export, re-export, or import Software, Documentation and/or technical data.

13.11   Press Release.   Licensee agrees OT may use and disclose Licensee's name and the nature of this EULA in an OT public press release and marketing materials.

13.12   UCITA Not Applicable.   Licensee and OT agree that the Uniform Computer Information Transactions Act, or any version thereof, adopted by any state located in the United States, in any form ("**UCITA**") shall not apply to this EULA. To the extent that UCITA is applicable, the parties agree to opt out of the applicability of UCITA pursuant to the opt-out provisions contained therein.

13.13   Attribution Notices.   Within the Software, including the graphical user interfaces of the Software, OT has inserted various ownership, attribution or branding notices (all such notices and instances collectively referred to as "**Attribution Notices**"). Without prior written consent of OT, the Licensee shall not: a) remove, modify, obscure, re-size or re-locate Notices, or b) cause any Notices to become not visible to any users of the Software.

13.14   Third Party Software.   OT may resell licenses to software products owned by third parties ("**Third Party Software**"). If OT resells licenses to Third Party Software to the Licensee, the use of Third Party Software is governed by a license agreement between the owner of such software and the Licensee. OT does not provide any warranties related to the use or functionality of Third Party Software, and the parties agree that OT has no liability or obligation to the Licensee related to the use or licensing of Third Party Software. The fact that OT and the Licensee include or identify the resale of licenses for Third Party Software on an Order Document that also includes or identifies OT Software Licenses, does not imply that OT is licensing Third Party Software.

13.15   US Government End Users-Restricted Rights Legend.   If the Software is being licensed directly or indirectly on behalf of the United States government, the following shall apply. For civilian agencies and departments: the Software was developed at private expense and is "restricted computer software" submitted with restricted rights in accordance with subparagraphs (a) through (d) of the Commercial Computer Software-Restricted Rights clause of FAR 52.227-19 and its successors, and it is unpublished and all rights are reserved under the copyright laws of the United States. For units of the Department of Defense, the Software is "commercial computer software" and "commercial computer software documentation" under the Rights in Computer Software and Computer Software Documentation clause of DFAR 227.7202-3 (a) and its successors, and all use, duplication or disclosure is subject to the license and restrictions set forth in this EULA.

13.16   Entire License Agreement.   This EULA, together with each written and signed schedule, each Applicable License Model Schedule, each applicable Order Document, and each written and signed addendum, sets forth the entire agreement between OT and Licensee with respect to the subject matter hereof, and supersedes all prior related oral and written agreements and understandings between the parties. Neither party is bound by or is liable for any alleged representation, promise, nor inducement not expressly stated in this EULA.

13.17 Third Party Rights. No term of this EULA is intended to confer a benefit on, or to be enforceable by, any person or entity who is not a party to this EULA.

13.18 Legal Review and Interpretation. It is acknowledged that this EULA was initially prepared by OT. Both parties, however, have had an opportunity for legal review of all terms. The parties therefore agree that, in interpreting any issues which may arise, any rules of construction related to who prepared the EULA shall be inapplicable, each party having contributed or having had the opportunity to clarify any issue. In addition, the headings used in this EULA are for convenience only and do not in any way limit or otherwise affect the meaning of any terms of this EULA.

13.19 Notices. Any notice under this EULA that must be given by a party in writing is deemed effective when sent via Federal Express or other commercial courier to the other party's address specified at the beginning of this EULA or on the most recent Order Document.

13.20 Hardware. If OT sells computer/IT hardware along with Software Licenses, the legal terms and conditions which govern the purchase, sale and use of such hardware are the subject of a separate agreement between the parties (even if such hardware is identified in an Order Document governed by this EULA). Unless the separate agreement provides differently, OT disclaims all warranties and liability with respect to the purchase, sale and use of the hardware.

WWWW   **YYYY**

_____   _____

Name: _____   Name: _____

Title: _____   Title: _____

Date: _____   Date: _____

License Model Schedule

for the Open Text End User License Agreement -- Americas

between

WWWW ("OT") and YYYY ("Licensee")

dated ZZZZ ("the EULA")

1) Introduction

This License Model Schedule includes three types of provisions: a) Definitions (section 2), b) License Model descriptions (sections 3 – 13), and c) Product Specific Use Restrictions and/or Limitations (section 14).

2) Definitions

In the event of any conflict between definitions found in this License Model Schedule and definitions found in the EULA, the definitions found in this License Model Schedule will prevail to the extent of any inconsistency. Any capitalized terms used in this Schedule and for which a definition is not provided below, shall have the meaning set out in the EULA.

a) "**Affiliate**" means any entity controlled by, controlling, or under common control with a party to the EULA. Control shall exist through ownership, directly or indirectly, of a majority of the outstanding equity capital and of the outstanding shares or other securities entitled to vote generally in elections of directors or similar officials. If an entity ceases to meet this criteria, it shall cease to be an Affiliate under the EULA and this License Model Schedule.

b) "**Citrix/TSE Environment**" means (for the purposes of the Connectivity Products License Models only) a single Computer or a single cluster of Computers on which Citrix Metaframe for Windows, Citrix Presentation Server for Windows, Citrix XenApp, Microsoft Terminal Services, or Microsoft Remote Desktop Services is installed.

c) "**Client**" means any personal computer, workstation, laptop computer, desktop computer, netbook computer, tablet computer, smart phone, mobile communication device, point-of-sale device (such as a cash register), computer used as a scanning station, or other similar computer or device on which the Software is loaded or executed.

d) "**Cluster**" means a single set of data (or single database) processed by two or more Instances of the Software installed on one or more Servers.

e) "**Computer**" means (for the purposes of the Connectivity Products License Models only) a single computer device, regardless of platform or operating environment, on which Licensee will install and/or use the Software.

f) "**CPU**" means a single central processing unit (a single processing core).

g) "**Derivative Works**" means any modification, change, translation, addition, enhancement, extension, upgrade, update, or improvement made to the Software by the Licensee using Software licensed under the Developer Named User License Model.

h) "**Digital Asset**" means a single XML representation of a piece of digital content (for example: an image caption/thumbnail, an article, a blog posting, a video caption/thumbnail, etc.)

i) "**Documentation**" means user guides, operating manuals, and release notes in effect as of the date of shipment of the applicable Software, that are authorized by Open Text Corporation for general release to OT licensees of such Software.

j) "**Electronic Employee File**" means the set of all electronic documents and records relating to an individual human being and subject to management by the human resources department in a single employee master record.

k) "**Environment**" means an area within a computer system designated to operate for a specific purpose (examples include but are not limited to: test, production, development, archive, and disaster recovery).

l) "**Logical CPU**" means a single virtual central processing unit that is formed by multiple CPUs (of a particular type), provided that the maximum aggregate capacity of such virtual central processing unit to execute the Software must not exceed the capacity of a single CPU (of such particular type) to execute the Software.

m) "**Multi-Function Product Device**" means a single office machine which incorporates printing, scanning, photocopying, faxing and/or emailing functionality in a single device, so as to have a smaller physical footprint or to provide centralized document management, distribution and/or production in a large office setting.

n) "**Network Scanning Device**" means a single office machine that optically scans documents and converts them to a digital image, and makes such images available on a network location or emails such images.

o) "**Network Server Computer**" means a single physical network server computer owned by the Licensee upon which a single copy of an operating system (such as Windows, Linux or Solaris) is loaded. If the Licensee has two copies of an operating system loaded on a single physical network server computer, such a configuration shall be deemed to be two Network Server Computers for the purposes of this Schedule. In no event shall a single Network Server Computer have more than 32 CPUs.

p) "**Program**" means a packaged collection of instructions written in any computer programming language that instruct a computer how to process data based on information inputs.

q) "**Program Instance**" means a single copy of the Software which has been loaded into the memory of a Server. Multiple Program Instances of the Software shall mean that the Software has been loaded into the Server's memory multiple times.

r) "**Server**" means either: a) a single Network Server Computer, or b) a single Virtual Server.

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u) "**Support Software**" means all maintenance and/or support software, updates, upgrades, patches, fixes and/or new versions of the Software provided to Licensee pursuant to an Open Text Corporation maintenance and/or support program, together with all related Documentation provided to Licensee pursuant to such program.

v) "**Third-Party Software**" means any and all software products from companies other than Open Text Corporation (and its licensors) and their accompanying Documentation and Support Software, which access or connect to the Software;

w) "**User License Models**" means the license models set out in sections 2, 3 and 4 of this Schedule.

x) "**Virtual Server**" means a software implementation of a single Network Server Computer owned by the Licensee that executes Software in a manner identical to a Network Server Computer, and is comprised of one copy of an operating system (such as Windows, Linux or Solaris) along with one or more software processes running in an isolated partition within the Network Server Computer. In no event shall a single Virtual Server have more than 32 CPUs.

3) Named User License Models

A) Standard Named User License Model – The following terms, conditions and limitations shall apply to the use of Software licensed under the *Standard Named User License Model*:

a) The Licensee must purchase and allocate an individual Software License for each individual human being who is authorized to access and/or use the Software, or who enjoys the benefit of the functionality of the Software.

b) The Licensee may only allocate Software Licenses to employees or contractors of the Licensee and/or the Licensee's Affiliates, and employees or contractors of the Licensee's customers and business partners,

c) The allocation of Software Licenses is permanent and Software Licenses cannot be shared or exchanged between individuals. Notwithstanding the above, Software Licenses may be re-allocated to another individual in the event that the original individual is no longer employed by the Licensee or has been assigned to a new role where access to the Software will no longer be required on a permanent basis.

d) When the Licensee allocates a Software License to an individual, the Licensee must also assign a unique password and login combination to such individual for the purposes of allowing the individual to access the Software. For each additional login and password combination assigned to an individual, the Licensee must purchase an additional Software License.

e) The Licensee may not use software or hardware that reduces the number of individuals directly accessing or utilizing the Software (sometimes called "multiplexing" or "pooling" software or hardware). The use of such hardware or software does not reduce the number of Software Licenses

required. The required number of Software Licenses equals the number of distinct human beings who access the Software at any time via the front end of the multiplexing or pooling software or hardware.

f) The Software may only be used to support the internal business operations of the Licensee.

g) The Software may be loaded and executed on an unlimited number of Servers, CPUs and/or Program Instances.

h) Individuals who have been allocated a Software License may not programmatically extend, integrate, or modify the Software in any manner.

i) In the event that the Software licensed under the Standard Named User License Model is also licensed under the Administrator Named User License Model, individuals who have been allocated a Software License under the Standard Named User License Model may not use the administration features of the Software or administer a system based on the Software.

B) **Read Only Named User License Model** – The following terms, conditions and limitations shall apply to the use of Software licensed under the *Read Only Named User License Model*:

The terms, conditions and limitations applicable to the use of Software licensed under the *Read Only Named User License Model* shall be identical to those that apply to Software licensed under the *Standard Named User License Model*, with the exception that the individual who has been allocated the Software License may only search, browse, view, print and download data/contents of the Software system; and the individual may not upload, add, edit, move, arrange or otherwise modify data/content located within the Software system.

C) **Standard Named User License Model (Internal Users Only) --** The following terms, conditions and limitations shall apply to the use of Software licensed under the *Standard Named User License Model (Internal Users Only)*:

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E) eBusiness Read-Only Named User License Model (External Users Only) – The following terms, conditions and limitations shall apply to the use of Software licensed under the *eBusiness Read-Only Named User License Model (External Users Only)*:

The terms, conditions and limitations applicable to the use of Software licensed under the *eBusiness Read-Only Named User License Model (External Users Only)* shall be identical to those that apply to Software licensed under the *Read-Only Named User License Model*, with the following two exceptions:

  i.   The Licensee may only allocate Software Licenses to individuals who are employees of the Licensee's customers or business partners, and not to individuals who are employees or contractors of the Licensee and/or the Licensee's Affiliates.

  ii.   Individuals who have been allocated a Software License shall have the right to initiate or participate in business processes managed by the workflows in Software that contains workflow functionality.

F) Standard Named User License Model (Server/CPU/Program Instance License Required) – The following terms, conditions and limitations shall apply to the use of Software licensed under the *Standard Named User License Model (Server/CPU/Program Instance License Required)*:

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G) Limited Use Named User License Model – The following terms, conditions and limitations shall apply to the use of Software licensed under the *Limited Use Named User License Model*:

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H) Occasional Named User License Model – The following terms, conditions and limitations shall apply to the use of Software licensed under the *Occasional Named User License Model*:

The terms, conditions and limitations applicable to the use of Software licensed under the *Occasional Named User License Model* shall be identical to those that apply to Software licensed under the *Standard Named User License Model*, with the exception that users with this license may not use the Software for more than 52 days per calendar year.

I) Web Named User License Model (for SAP-related products) – The following terms, conditions and limitations shall apply to the use of Software licensed under the *Web Named User License Model*:

The terms, conditions and limitations applicable to the use of Software licensed under the *Web Named User License Model* shall be identical to those that apply to Software licensed under the *Standard Named User License Model (External and Internal Users Permitted)*, with the following exceptions:

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J) **SAP Standard Named User License Model (for Open Text Extended ECM *for SAP Solutions*)** – The following terms, conditions and limitations shall apply to the use of Software licensed under the *SAP Standard Named User License Model (for Open Text Extended ECM for SAP Solutions)*:

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Scanner Type	Column A Maximum Speed	Column B Certain Features
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High	>90 ppm	Duplex/Continuous Feed; Production, mission-critical, Image processing, barcode, imprinter, Multi-Stream, etc., PixTrans ISIS Level P
Ultra	N/A	Specifically for IBML ImageTrac Scanners

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@version 3.0 (December 2000) Optimised ANSI C code for the Rijndael cipher (now AES)
@author Vincent Rijmen <vincent.rijmen@esat.kuleuven.ac.be>
@author Antoon Bosselaers <antoon.bosselaers@esat.kuleuven.ac.be>
@author Paulo Barreto <paulo.barreto@terra.com.br>

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Total Maintenance/Support and Training Fees					$

Hardware

In the event that OT provides computer/IT hardware under this Order Schedule, the legal terms and conditions which govern the purchase, sale and use of such hardware are the subject of a separate agreement between the parties. Unless the separate agreement provides differently, OT disclaims all warranties and liability with respect to the purchase, sale and use of the hardware.

Line Item #	**Product Name/Description**	**Quantity**		**Fee per Unit**		**Total Fee for each Line Item**

9				$
Additional product specific use restrictions and/or limitations that apply to Line Item above				

Total Hardware Fees	$
Total of all Software License Fees, Third Party Software License Resale Fees, Maintenance/Support & Training Fees, and Hardware Fees (before taxes)	$
Applicable Taxes	$
Grand Total	$

Notes and Conditions:

First Year Maintenance Expiration Date: _____, 201__
Payment Terms: Net 30
Taxes: Not Included
Shipping Information: FOB Shipping Point

License Model Definitions: Unless otherwise provided for in the EULA, the definitions and descriptions for License Models identified in this Order Schedule are found in the version of the "License Model Schedule – Americas" located at www.opentext.com/agreements which is effective as of the Effective Date of this Order Schedule.

SPECIAL PROVISIONS APPLICABLE TO THIS ORDER SCHEDULE

(for example, are there are license limitations related to territory, term of license, language, purpose of use, etc.)

All other terms and conditions of the EULA shall remain in full force and effect.

WWWW   YYYY

_____   _____

Name: _____   Name: _____

Title: _____   Title: _____

Date: _____   Date: _____

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technology corp

AUTHORIZED FEDERAL SUPPLY SERVICE
INFORMATION TECHNOLOGY SCHEDULE PRICELIST

GENERAL PURPOSE COMMERCIAL INFORMATION TECHNOLOGY
EQUIPMENT, SOFTWARE AND SERVICES

Special Item No. 132-3 Leasing of Product
Special Item No. 132-8 Purchase of New Equipment
Special Item No. 132-12 Equipment Maintenance
Special Item No. 132-32 Term Software Licenses
Special Item No. 132-33 Perpetual Software Licenses
Special Item No. 132-34 Maintenance of Software as a Service
Special Item No. 132-50 Training Courses
Special Item No. 132-51 Information Technology Professional Services
Special Item No. 132-53 Wireless Services

_____

SPECIAL ITEM NUMBER 132-3 LEASPECIAL ITEM NUMBERG OF PRODUCT

_____

SPECIAL ITEM NUMBER 132-8 PURCHASE OF EQUIPMENT

FSC CLASS 7010 - SYSTEM CONFIGURATION

End User Computers/Desktop Computers
Professional Workstations
Servers
Laptop/Portable/Notebook Computers
Large Scale Computers
Optical and Imaging Systems
Other Systems Configuration Equipment, Not Elsewhere Classified

FSC CLASS 7025 - INPUT/OUTPUT AND STORAGE DEVICES

Printers
Display
Graphics, including Video Graphics, Light Pens, Digitizers, Scanners, and Touch Screens
Network Equipment
Other Communications Equipment
Optical Recognition Input/Output Devices
Storage Devices including Magnetic Storage, Magnetic Tape Storage and Optical Disk Storage
Other Input/Output and Storage Devices, Not Elsewhere Classified

FSC CLASS 7035 - ADP SUPPORT EQUIPMENT

ADP Support Equipment

FSC Class 7042 - MINI AND MICRO COMPUTER CONTROL DEVICES

Microcomputer Control Devices
Telephone Answering and Voice Messaging Systems

FSC CLASS 7050 - ADP COMPONENTS

ADP Boards

FSC CLASS 5995 - CABLE, CORD, AND WIRE ASSEMBLIES: COMMUNICATIONS EQUIPMENT

Communications Equipment Cables

GSA Schedule # GS-35F-0131R   **1**

FSC CLASS 6015 - FIBER OPTIC CABLES

Fiber Optic Cables

FSC CLASS 6020 - FIBER OPTIC CABLE ASSEMBLES AND HARNESSES

Fiber Optic Cable Assemblies and Harnesses

FSC CLASS 6145 - WIRE AND CABLE, ELECTRICAL

Coaxial Cables

FSC Class 5805 - TELEPHONE AND TELEGRAPH EQUIPMENT

Telephone Equipment
Audio and Video Teleconferencing Equipment

FSC CLASS 5810 - COMMUNICATIONS SECURITY EQUIPMENT AND COMPONENTS

Communications Security Equipment

FSC CLASS 5815 - TELETYPE AND FACSIMILE EQUIPMENT

Facsimile Equipment (FAX)

FSC CLASS 5820 - RADIO AND TELEVISION COMMUNICATION EQUIPMENT, EXCEPT AIRBORNE

Two-Way Radio Transmitters/Receivers/Antennas
Broadcast Band Radio Transmitters/Receivers/Antennas
Microwave Radio Equipment/Antennas and Waveguides
Satellite Communications Equipment

FSC CLASS 5821 - RADIO AND TELEVISION COMMUNICATION EQUIPMENT, AIRBORNE

Airborne Radio Transmitters/Receivers

FSC CLASS 5825 - RADIO NAVIGATION EQUIPMENT, EXCEPT AIRBORNE

Radio Navigation Equipment/Antennas

FSC CLASS 5826 - RADIO NAVIGATION EQUIPMENT, AIRBORNE

Airborne Radio Navigation Equipment

FSC CLASS 5830 - INTERCOMMUNICATION AND PUBLIC ADDRESS SYSTEMS, EXCEPT AIRBORNE

Pagers and Public Address Systems (wired and wireless transmissions, including background music systems)

FSC CLASS 5841 - RADAR EQUIPMENT, AIRBORNE

Airborne Radar Equipment

FSC CLASS 5895 - MISCELLANEOUS COMMUNICATION EQUIPMENT

Miscellaneous Communications Equipment

- Installation (FPDS Code N070) for Equipment Offered
- Deinstallation (FPDS N070)
- Reinstallation (FPDS N070)

NOTE: Installation must be incidental to, in conjunction with and in direct support of the products sold under SPECIAL ITEM NUMBER 132-8 of this contract and cannot be purchased separately.

If the construction, alteration or repair is segregable and exceeds $2,000, then the requirements of the Davis-Bacon Act apply. In applying the Davis-Bacon Act, ordering activities are required to incorporate wage rate determinations into orders, as applicable.

SPECIAL ITEM NUMBER 132-12 - MAINTENANCE OF EQUIPMENT (FPDS Code J070 - (FPDS Code J070 - Maintenance and Repair Service) (Repair Parts/Spare Parts - See FSC Class for basic equipment)

- Maintenance
- Repair Service
- Repair Parts/Spare Parts
- Third Party Maintenance

SPECIAL ITEM NUMBER 132-32 - TERM SOFTWARE LICENSES

Software maintenance as a product includes the publishing of bug/defect fixes via patches and updates/upgrades in function and technology to maintain the operability and usability of the software product. It may also include other no charge support that is included in the purchase price of the product in the commercial marketplace. No charge support includes items such as user blogs, discussion forums, on-line help libraries and FAQs (Frequently Asked Questions), hosted chat rooms, and limited telephone, email and/or web-based general technical support for user's self diagnostics.

Software maintenance as a product does NOT include the creation, design, implementation, integration, etc. of a software package. These examples are considered software maintenance as a service.

FSC CLASS 7030 - INFORMATION TECHNOLOGY SOFTWARE

Large Scale Computers

      Operating System Software
      Application Software
      Electronic Commerce (EC) Software
      Utility Software
      Communications Software
      Core Financial Management Software
      Ancillary Financial Systems Software
      Special Physical, Visual, Speech, and Hearing Aid Software

Microcomputers

      Operating System Software
      Application Software
      Electronic Commerce (EC) Software
      Utility Software
      Communications Software
      Core Financial Management Software
      Ancillary Financial Systems Software
      Special Physical, Visual, Speech, and Hearing Aid Software

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SPECIAL ITEM NUMBER 132-33 - PERPETUAL SOFTWARE LICENSES

Software maintenance as a product includes the publishing of bug/defect fixes via patches and updates/upgrades in function and technology to maintain the operability and usability of the software

product. It may also include other no charge support that is included in the purchase price of the product in the commercial marketplace. No charge support includes items such as user blogs, discussion forums, on-line help libraries and FAQs (Frequently Asked Questions), hosted chat rooms, and limited telephone, email and/or web-based general technical support for user's self diagnostics.

Software maintenance as a product does <u>NOT</u> include the creation, design, implementation, integration, etc. of a software package. These examples are considered software maintenance as a service.

FSC CLASS 7030 - INFORMATION TECHNOLOGY SOFTWARE
Large Scale Computers
      Operating System Software
      Application Software
      Electronic Commerce (EC) Software
      Utility Software
      Communications Software
      Core Financial Management Software
      Ancillary Financial Systems Software
      Special Physical, Visual, Speech, and Hearing Aid Software

Microcomputers

Operating System Software
Application Software
Electronic Commerce (EC) Software
Utility Software
Communications Software
Core Financial Management Software
Ancillary Financial Systems Software
Special Physical, Visual, Speech, and Hearing Aid Software

_____

SPECIAL ITEM NUMBER 132-34 - MAINTENANCE OF SOFTWARE AS A SERVICE

Software maintenance as a service creates, designs, implements, and/or integrates customized changes to software that solve one or more problems and is not included with the price of the software. Software maintenance as a service includes person-to-person communications regardless of the medium used to communicate: telephone support, on-line technical support, customized support, and/or technical expertise which are charged commercially.

Software maintenance as a service is billed arrears in accordance with 31 U.S.C. 3324.

_____

SPECIAL ITEM NUMBER 132-50 - TRAINING COURSES (FPDS Code U012)
_____
SPECIAL ITEM NUMBER 132-51 - INFORMATION TECHNOLOGY (IT) PROFESSIONAL SERVICES
FPDS Code D301 IT Facility Operation and Maintenance
FPDS Code D302 IT Systems Development Services
FPDS Code D306 IT Systems Analysis Services
FPDS Code D307 Automated Information Systems Design and Integration Services
FPDS Code D308 Programming Services
FPDS Code D310 IT Backup and Security Services

FPDS Code D311 IT Data Conversion Services
FPDS Code D313 Computer Aided Design/Computer Aided Manufacturing (CAD/CAM) Services
FPDS Code D316 IT Network Management Services
FPDS Code D317 Creation/Retrieval of IT Related Automated News Services, Data Services, or
                 Other Information Services (All other information services belong under Schedule 76)
FPDS Code D399 Other Information Technology Services, Not Elsewhere Classified

Note 1: All non-professional labor categories must be incidental to and used solely to support hardware, software and/or professional services, and cannot be purchased separately.

Note 2: Offerors and Agencies are advised that the Group 70 – Information Technology Schedule is <u>not</u> to be used as a means to procure services which properly fall under the Brooks Act. These services include, but are not limited to, architectural, engineering, mapping, cartographic production, remote senSpecial Item Numbers, geographic information systems, and related services. FAR 36.6 distinguishes between mapping services of an A/E nature and mapping services which are not connected nor incidental to the traditionally accepted A/E Services.

Note 3: This solicitation is not intended to solicit for the reselling of IT Professional Services, except for the provision of implementation, maintenance, integration, or training services in direct support of a product. Under such circumstances the services must be performance by the publisher or manufacturer or one of their authorized agents.

_____

SPECIAL ITEM NO. 132-53 WIRELESS SERVICES (FPDS CODE D304) Excluding local and long distance voice, data, video, and dedicated transmission services which are NOT mobile.)

Paging Services
Cellular/PCS Voice Services

AUTHENTICATION PRODUCTS AND SERVICES – Authentication products and services provide for authentication of individuals for purposes of physical and logical access control, electronic signature, and performance of E-buSpecial Item Numbers transactions and delivery of Government services. Authentication Products and Services consist of hardware, software components and supporting services that provide for identity assurance.   Refer to clause C.65 Authentication Products and Services for requirements that must be met prior to award.

carahsoft
technology corp

Carahsoft Technology, Corp.
12369 Sunrise Valley Drive, Suite D-2, Reston, VA 20191
(703) 871-8500 (main)
▮▮▮▮▮▮▮▮▮ fax)
www.carahsoft.com

Contract Number: GS-35F-0131R
Period Covered by Contract: November 19, 2004 through March 31, 2013.

Pricelist current through Modification # PO-0745, dated March 15, 2013.

Approved IT Manufacturers:

Acsis	Bomgar	Dorado	Janeeva	Prescint	Verdiem
Adapx	CADapult	Endeca Technologies	Jive	Prostor	ViewPath
AgentLogic	Carbon Networks	Everyscape	Language Weaver	Q1 Labs	Vizioncore
Aladdin	Clearwell	Filemaker	Lombardi	Saratoga	Vormetric
AlarmPoint	Composite	Forterra	MapQuest	Seeburger	VMWare
Alexsys	Connect Solutions	Fortisphere	MetaPass	ServerVault	VXL
Altiris	Corticon	FortiusOne	Meridium	Streambase	Zend
Appistry	Data Domain	iMove	Narus	Telemate	Zos
Aster Data	DataDirect	Imperva	NGrain	TrustDigital	
BasicGov	Decisive Analytics	Initiate	Packet General	Trusted Computer Solutions	
Boeing		IronKey	Parabon	Vayusphere	
BMC					

Products and ordering information in this Authorized FSS Information Technology Schedule Pricelist are also available on the GSA Advantage! system. Agencies can browse GSA Advantage! by accessing the Federal Supply Service's Home Page via the Internet at http://www.fss.gsa.gov/. The current End User License Agreements for the above approved manufacturers can be seen via the Internet at www.carahsoft.com/contracts/eula.

Up-To-Date Contract information can be located at http://www.carahsoft.com/GS-35F-0131R.htm

* -SAP Public Services Inc Software requires specialized configuration to determine the applicable contract pricing. Please contact Carahsoft directly and we will process your pricing and configuration needs.

Table of Contents

INFORMATION FOR ORDERING ACTIVITIES
APPLICABLE TO ALL SPECIAL ITEM NUMBERS

SPECIAL NOTICE TO AGENCIES: Small Business Participation

SBA strongly supports the participation of small business concerns in the Federal Supply Schedules Program. To enhance Small Business Participation SBA policy allows agencies to include in their procurement base and goals, the dollar value of orders expected to be placed against the Federal Supply Schedules, and to report accomplishments against these goals.

For orders exceeding the micropurchase threshold, FAR 8.404 requires agencies to consider the catalogs/pricelists of at least three schedule contractors or consider reasonably available information by using the GSA Advantage!™ on-line shopping service (www.fss.gsa.gov). The catalogs/pricelists, GSA Advantage!™ and the Federal Supply Service Home Page (www.fss.gsa.gov) contain information on a broad array of products and services offered by small business concerns.

This information should be used as a tool to assist ordering activities in meeting or exceeding established small business goals. It should also be used as a tool to assist in including small, small disadvantaged, and women-owned small businesses among those considered when selecting pricelists for a best value determination.

For orders exceeding the micropurchase threshold, customers are to give preference to small business concerns when two or more items at the same delivered price will satisfy their requirement.

1.   Geographic Scope of Contract:

Domestic delivery is delivery within the 48 contiguous states, Alaska, Hawaii, Puerto Rico, Washington, DC, and U.S. Territories. Domestic delivery also includes a port or consolidation point, within the aforementioned areas, for orders received from overseas activities.

Overseas delivery is delivery to points outside of the 48 contiguous states, Washington, DC, Alaska, Hawaii, Puerto Rico, and U.S. Territories.

Offerors are requested to check one of the following boxes:

    [ ]   The Geographic Scope of Contract will be domestic and overseas delivery.
    [ ]   The Geographic Scope of Contract will be overseas delivery only.
    [X]   The Geographic Scope of Contract will be domestic delivery only.

For Special Item Number 132-53 Wireless Services ONLY, if awarded, list the limited geographic coverage area:
  See Attached Pricelist_____

2.   Contractor's Ordering Address and Payment Information:

        Carahsoft Technology, Corp.
        12369 Sunrise Valley Drive, Ste. D2
        Reston, VA 20191

Contractor must accept the credit card for payments equal to or less than the micro-purchase for oral or written orders under this contract. The Contractor and the ordering agency may agree to use the credit card for dollar

amounts over the micro-purchase threshold (See GSAR 552.232-79 Payment by Credit Card). In addition, bank account information for wire transfer payments will be shown on the invoice.

The following telephone number(s) can be used by ordering activities to obtain technical and/or ordering assistance:

(703) 871-8500 or 1-866-662-2724 (toll free)

When Authorized Dealers are allowed by the Contractor to bill ordering activities and accept payment, the order and/or payment must be in the name of the Contractor, in care of the Authorized Dealer.

3.   LIABILITY FOR INJURY OR DAMAGE

The Contractor shall not be liable for any injury to ordering activity personnel or damage to ordering activity property arising from the use of equipment maintained by the Contractor, unless such injury or damage is due to the fault or negligence of the Contractor.

4.   Statistical Data for Government Ordering Office Completion of Standard Form 279:

Block 9: G. Order/Modification Under Federal Schedule
Block 16: Data Universal Numbering System (DUNS) Number:
Block 30: Type of Contractor - _____B_____

A.   Small Disadvantaged Business
B.   Other Small Business
C.   Large Business
G.   Other Nonprofit Organization
L.   Foreign Contractor

Block 31: Woman-Owned Small Business - ___No_____
Block 36: Contractor's Taxpayer Identification Number (TIN): __

4a.   CAGE Code: __1P3C5____
4b.   Contractor has registered with the Central Contractor Registration Database.

5.   FOB Destination

6.   DELIVERY SCHEDULE

a.   TIME OF DELIVERY: The Contractor shall deliver to destination within the number of calendar days after receipt of order (ARO), as set forth below:

SPECIAL ITEM NUMBER	DELIVERY TIME (Days ARO)
_____132-8_____	_30__ Days
____132-33_____	_30__ Days

Expedited/2 Day delivery is available for an extra fee

b.   URGENT REQUIREMENTS: When the Federal Supply Schedule contract delivery period does not meet the bona fide urgent delivery requirements of an ordering activity, ordering activities are encouraged, if time permits, to contact the Contractor for the purpose of obtaining accelerated delivery. The Contractor shall reply to the inquiry within 3 workdays after receipt. (Telephonic replies shall be confirmed by the Contractor in writing.) If the Contractor offers an accelerated delivery time acceptable to the ordering activity, any order(s) placed pursuant to the agreed upon accelerated delivery time frame shall be delivered within this shorter delivery time and in accordance with all other terms and conditions of the contract.

7.   Discounts: Prices shown are NET Prices; Basic Discounts have been deducted.

a.   Prompt Payment: 0% - 30 days from receipt of invoice or date of acceptance, whichever is later.

b.   Quantity – None.

c.   Dollar Volume – None.

d.   Government Educational Institutions – None.

e.   Other – None.

8.   Trade Agreements Act of 1979, as amended:

All items are U.S. made end products, designated country end products, Caribbean Basin country end products, Canadian end products, or Mexican end products as defined in the Trade Agreements Act of 1979, as amended.

9.   Statement Concerning Availability of Export Packing:

Not available within the scope of this contract.

10.   Small Requirements: The minimum dollar value of orders to be issued is $_100_.

11.   Maximum Order (All dollar amounts are exclusive of any discount for prompt payment.)

a.   The Maximum Order value for the following Special Item Numbers (SINs) is $500,000:

Special Item Number 132-3 - Leasing of Product
Special Item Number 132-8 - Purchase of Equipment
Special Item Number 132-12 - Equipment Maintenance
Special Item Number 132-32 - Term Software Licenses
Special Item Number 132-33 - Perpetual Software Licenses
Special Item Number 132-34 - Maintenance of Software as a Service
Special Item Number 132-51 - Information Technology Professional Services
Special Item Number 132-52 - Electronic Commerce (EC) Services
Special Item Number 132-53 – Wireless Services

b.   The Maximum Order value for the following Special Item Numbers (SINs) is $25,000:

Special Item Number 132-50 - Training Courses

12.   ORDERING PROCEDURES FOR FEDERAL SUPPLY SCHEDULE CONTRACTS

Ordering activities shall use the ordering procedures of Federal Acquisition Regulation (FAR) 8.405 when placing an order or establishing a BPA for supplies or services. These procedures apply to all schedules.

a.   FAR 8.405-1 Ordering procedures for supplies, and services not requiring a statement of work.

b.   FAR 8.405-2 Ordering procedures for services requiring a statement of work.

13.   FEDERAL INFORMATION TECHNOLOGY/TELECOMMUNICATION STANDARDS REQUIREMENTS: ordering activities acquiring products from this Schedule must comply with the provisions of the Federal Standards Program, as appropriate (reference: NIST Federal Standards Index). Inquiries to determine whether or not specific products listed herein comply with Federal Information Processing Standards (FIPS) or Federal Telecommunication Standards (FED-STDS), which are cited by ordering activities, shall be responded to promptly by the Contractor.

13.1   FEDERAL INFORMATION PROCESSING STANDARDS PUBLICATIONS (FIPS PUBS): Information Technology products under this Schedule that do not conform to Federal Information Processing Standards (FIPS) should not be acquired unless a waiver has been granted in accordance with the applicable "FIPS Publication." Federal Information Processing Standards Publications (FIPS PUBS) are issued by the U.S. Department of Commerce, National Institute of Standards and Technology (NIST), pursuant to National Security Act. Information concerning their availability and applicability should be obtained from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia 22161. FIPS PUBS include voluntary standards when these are adopted for Federal use. Individual orders for FIPS PUBS should be referred to the NTIS Sales Office, and

orders for subscription service should be referred to the NTIS Subscription Officer, both at the above address, or telephone number (703) 487-4650.

13.2   FEDERAL TELECOMMUNICATION STANDARDS (FED-STDS): Telecommunication products under this Schedule that do not conform to Federal Telecommunication Standards (FED-STDS) should not be acquired unless a waiver has been granted in accordance with the applicable "FED-STD." Federal Telecommunication Standards are issued by the U.S. Department of Commerce, National Institute of Standards and Technology (NIST), pursuant to National Security Act. Ordering information and information concerning the availability of FED-STDS should be obtained from the GSA, Federal Supply Service, Specification Section, 470 East L'Enfant Plaza, Suite 8100, SW, Washington, DC 20407, telephone number (202)619-8925. Please include a self-addressed mailing label when requesting information by mail. Information concerning their applicability can be obtained by writing or calling the U.S. Department of Commerce, National Institute of Standards and Technology, Gaithersburg, MD 20899, telephone number (301)975-2833.

14.   CONTRACTOR TASKS / SPECIAL REQUIREMENTS (C-FSS-370) (NOV 2001)

(a)   Security Clearances: The Contractor may be required to obtain/possess varying levels of security clearances in the performance of orders issued under this contract. All costs associated with obtaining/possessing such security clearances should be factored into the price offered under the Multiple Award Schedule.

(b)   Travel: The Contractor may be required to travel in performance of orders issued under this contract. Allowable travel and per diem charges are governed by Pub .L. 99-234 and FAR Part 31, and are reimbursable by the ordering agency or can be priced as a fixed price item on orders placed under the Multiple Award Schedule. The Industrial Funding Fee does NOT apply to travel and per diem charges.

(c)   Certifications, Licenses and Accreditations: As a commercial practice, the Contractor may be required to obtain/possess any variety of certifications, licenses and accreditations for specific FSC/service code classifications offered. All costs associated with obtaining/ possessing such certifications, licenses and accreditations should be factored into the price offered under the Multiple Award Schedule program.

(d)   Insurance: As a commercial practice, the Contractor may be required to obtain/possess insurance coverage for specific FSC/service code classifications offered. All costs associated with obtaining/possessing such insurance should be factored into the price offered under the Multiple Award Schedule program.

(e)   Personnel: The Contractor may be required to provide key personnel, resumes or skill category descriptions in the performance of orders issued under this contract. Ordering activities may require agency approval of additions or replacements to key personnel.

(f)   Organizational Conflicts of Interest: Where there may be an organizational conflict of interest as determined by the ordering agency, the Contractor's participation in such order may be restricted in accordance with FAR Part 9.5.

(g)   Documentation/Standards: The Contractor may be requested to provide products or services in accordance with rules, regulations, OMB orders, standards and documentation as specified by the agency's order.

(h)   Data/Deliverable Requirements: Any required data/deliverables at the ordering level will be as specified or negotiated in the agency's order.

(i)   Government-Furnished Property: As specified by the agency's order, the Government may provide property, equipment, materials or resources as necessary.

(j)   Availability of Funds: Many Government agencies' operating funds are appropriated for a specific fiscal year. Funds may not be presently available for any orders placed under the contract or any option year. The Government's obligation on orders placed under this contract is contingent upon the availability of appropriated

funds from which payment for ordering purposes can be made. No legal liability on the part of the Government for any payment may arise until funds are available to the ordering Contracting Officer.

(k)   Overtime: For professional services, the labor rates in the Schedule should not vary by virtue of the Contractor having worked overtime. For services applicable to the Service Contract Act (as identified in the Schedule), the labor rates in the Schedule will vary as governed by labor laws (usually assessed a time and a half of the labor rate).

15.   CONTRACT ADMINISTRATION FOR ORDERING ACTIVITIES: Any ordering activity, with respect to any one or more delivery orders placed by it under this contract, may exercise the same rights of termination as might the GSA Contracting Officer under provisions of FAR 52.212-4, paragraphs (l) Termination for the ordering activity's convenience, and (m) Termination for Cause (See 52.212-4)

16.   GSA Advantage!

GSA Advantage! is an on-line, interactive electronic information and ordering system that provides on-line access to vendors' schedule prices with ordering information. GSA Advantage! will allow the user to perform various searches across all contracts including, but not limited to:

      (1)   Manufacturer;
      (2)   Manufacturer's Part Number; and
      (3)   Product categories.

Agencies can browse GSA Advantage! by accessing the Internet World Wide Web utilizing a browser (ex.: NetScape). The Internet address is http://www.gsaadvantage.gov

17.   PURCHASE OF OPEN MARKET ITEMS

NOTE: Open Market Items are also known as incidental items, noncontract items, non-Schedule items, and items not on a Federal Supply Schedule contract. ODCs (Other Direct Costs) are not part of this contract and should be treated as open market purchases. Ordering Activities procuring open market items must follow FAR 8.402(f).

For administrative convenience, an ordering activity contracting officer may add items not on the Federal Supply Multiple Award Schedule (MAS) -- referred to as open market items -- to a Federal Supply Schedule blanket purchase agreement (BPA) or an individual task or delivery order, **only if**-

      (1)   All applicable acquisition regulations pertaining to the purchase of the items not on the Federal Supply Schedule have been followed (e.g., publicizing (Part 5), competition requirements (Part 6), acquisition of commercial items (Part 12), contracting methods (Parts 13, 14, and 15), and small business programs (Part 19));

      (2)   The ordering activity contracting officer has determined the price for the items not on the Federal Supply Schedule is fair and reasonable;

      (3)   The items are clearly labeled on the order as items not on the Federal Supply Schedule; and

      (4)   All clauses applicable to items not on the Federal Supply Schedule are included in the order.

18.   CONTRACTOR COMMITMENTS, WARRANTIES AND REPRESENTATIONS

a.   For the purpose of this contract, commitments, warranties and representations include, in addition to those agreed to for the entire schedule contract:

      (1)   Time of delivery/installation quotations for individual orders;

      (2)   Technical representations and/or warranties of products concerning performance, total system performance and/or configuration, physical, design and/or functional characteristics and capabilities of a product/equipment/ service/software package submitted in response to requirements which result in orders under this schedule contract.

      (3)   Any representations and/or warranties concerning the products made in any literature, description, drawings and/or specifications furnished by the Contractor.

b.   The above is not intended to encompass items not currently covered by the GSA Schedule contract.

19.   OVERSEAS ACTIVITIES

The terms and conditions of this contract shall apply to all orders for installation, maintenance and repair of equipment in areas listed in the pricelist outside the 48 contiguous states and the District of Columbia, except as indicated below:

The geographic scope of this contract is CONUS, Alaska, Hawaii and Puerto Rico.

Upon request of the Contractor, the ordering activity may provide the Contractor with logistics support, as available, in accordance with all applicable ordering activity regulations. Such ordering activity support will be provided on a reimbursable basis, and will only be provided to the Contractor's technical personnel whose services are exclusively required for the fulfillment of the terms and conditions of this contract.

20.   BLANKET PURCHASE AGREEMENTS (BPAs)

The use of BPAs under any schedule contract to fill repetitive needs for supplies or services is allowable. BPAs may be established with one or more schedule contractors. The number of BPAs to be established is within the discretion of the ordering activity establishing the BPA and should be based on a strategy that is expected to maximize the effectiveness of the BPA(s). Ordering activities shall follow FAR 8.405-3 when creating and implementing BPA(s).

21.   CONTRACTOR TEAM ARRANGEMENTS

Contractors participating in contractor team arrangements must abide by all terms and conditions of their respective contracts. This includes compliance with Clauses 552.238-74, Industrial Funding Fee and Sales Reporting, i.e., each contractor (team member) must report sales and remit the IFF for all products and services provided under its individual contract.

22.   INSTALLATION, DEINSTALLATION, REINSTALLATION

The Davis-Bacon Act (40 U.S.C. 276a-276a-7) provides that contracts in excess of $2,000 to which the United States or the District of Columbia is a party for construction, alteration, or repair (including painting and decorating) of public buildings or public works with the United States, shall contain a clause that no laborer or mechanic employed directly upon the site of the work shall received less than the prevailing wage rates as determined by the Secretary of Labor. The requirements of the Davis-Bacon Act do not apply if the construction work is incidental to the furnishing of supplies, equipment, or services. For example, the requirements do not apply to simple installation or alteration of a public building or public work that is incidental to furnishing supplies or equipment under a supply contract. However, if the construction, alteration or repair is segregable and exceeds $2,000, then the requirements of the Davis-Bacon Act applies.

The ordering activity issuing the task order against this contract will be responsible for proper administration and enforcement of the Federal labor standards covered by the Davis-Bacon Act. The proper Davis-Bacon wage determination will be issued by the ordering activity at the time a request for quotations is made for applicable construction classified installation, deinstallation, and reinstallation services under SIN 132-8 or 132-9.

23.   SECTION 508 COMPLIANCE.

If applicable, Section 508 compliance information on the supplies and services in this contract are available in Electronic and Information Technology (EIT) at the following:

      www.carahsoft.com/508

The EIT standard can be found at: www.Section508.gov/.

24.   PRIME CONTRACTOR ORDERING FROM FEDERAL SUPPLY SCHEDULES.

Prime Contractors (on cost reimbursement contracts) placing orders under Federal Supply Schedules, on behalf of an ordering activity, shall follow the terms of the applicable schedule and authorization and include with each order –

      (a)   A copy of the authorization from the ordering activity with whom the contractor has the prime contract (unless a copy was previously furnished to the Federal Supply Schedule contractor); and

      (b)   The following statement:

      This order is placed under written authorization from _____ dated _____. In the event of any inconsistency between the terms and conditions of this order and those of your Federal Supply Schedule contract, the latter will govern.

25.   INSURANCE—WORK ON A GOVERNMENT INSTALLATION (JAN 1997)(FAR 52.228-5)

(a)   The Contractor shall, at its own expense, provide and maintain during the entire performance of this contract, at least the kinds and minimum amounts of insurance required in the Schedule or elsewhere in the contract.

(b)   Before commencing work under this contract, the Contractor shall notify the Contracting Officer in writing that the required insurance has been obtained. The policies evidencing required insurance shall contain an endorsement to the effect that any cancellation or any material change adversely affecting the Government's interest shall not be effective—

      (1)   For such period as the laws of the State in which this contract is to be performed prescribe; or

      (2)   Until 30 days after the insurer or the Contractor gives written notice to the Contracting Officer, whichever period is longer.

(c)   The Contractor shall insert the substance of this clause, including this paragraph (c), in subcontracts under this contract that require work on a Government installation and shall require subcontractors to provide and maintain the insurance required in the Schedule or elsewhere in the contract. The Contractor shall maintain a copy of all subcontractors' proofs of required insurance, and shall make copies available to the Contracting Officer upon request.

26.   SOFTWARE INTEROPERABILITY.

Offerors are encouraged to identify within their software items any component interfaces that support open standard interoperability. An item's interface may be identified as interoperable on the basis of participation in a Government agency-sponsored program or in an independent organization program. Interfaces may be identified by reference to an interface registered in the component registry located at http://www.core.gov.

27.   ADVANCE PAYMENTS

A payment under this contract to provide a service or deliver an article for the United States Government may not be more than the value of the service already provided or the article already delivered. Advance or pre-payment is not authorized or allowed under this contract. (31 U.S.C. 3324)

| TERMS AND CONDITIONS APPLICABLE TO |
| LEASING OF GENERAL PURPOSE COMMERCIAL |
| INFORMATION TECHNOLOGY PRODUCTS |
| (SPECIAL ITEM NUMBER 132-3) |

LEASE TYPES

The ordering activity will consider proposals for the following lease types:

      a.   Lease to Ownership,

      b.   Lease with Option to Own, and

      c.   Step Lease.

Orders for leased products must specify the leasing type.

OPTION 1:

1.   STATEMENT

a.   It is understood by all parties to this contract that orders issued under this SIN shall constitute a lease arrangement. Unless the ordering activity intends to obligate other than annual appropriations to fund the lease, the base period of the lease is from the date of the product acceptance through September 30 of the fiscal year in which the order is placed.

b.   Agencies are advised to follow the guidance provided in Federal Acquisition Regulation (FAR) Subpart 7.4 Product Lease or Purchase and OMB Circular A-11. Agencies are responsible for the obligation of funding consistent with all applicable legal principles when entering into any lease arrangement.

2.   FUNDING AND PERIODS OF LEASING ARRANGEMENTS

a.   Annual Funding. When annually appropriated funds are cited on an order for leasing, the following applies:

      (1)   The base period of an order for any lease executed by the ordering activity shall be for the duration of the fiscal year. All ordering activity renewal options under the lease shall be specified in the delivery order. All orders for leasing shall remain in effect through September 30 of the fiscal year or the planned expiration date of the lease, whichever is earlier, unless the ordering activity exercises its rights hereunder to acquire title to the product prior to the planned expiration date or unless the ordering activity exercises its right to terminate under FAR 52.212-4. Orders under the lease shall not be deemed to obligate succeeding fiscal year's funds or to otherwise commit the ordering activity to a renewal.

      (2)   All orders for leasing shall automatically terminate on September 30, unless the ordering activity notifies the Contractor in writing thirty (30) calendar days prior to the expiration of such orders of the ordering activity's intent to renew. Such notice to renew shall not bind the ordering activity. The ordering activity has the option to renew each year at the original rate in effect at the time the order is placed. This rate applies for the duration of the order. If the ordering activity exercises its option to renew, the renewal order, shall be issued within 15 days after funds become available for obligation by the ordering activity, or

as specified in the initial order. No termination fees shall apply if the ordering activity does not exercise an option.

b.   Crossing Fiscal Years Within Contract Period. Where an ordering activity has specific authority to cross fiscal years with annual appropriations, the ordering activity may place an order under this option to lease product for a period up to the expiration of its period of appropriation availability, or twelve months, whichever occurs later, notwithstanding the intervening fiscal years.

3.   DISCONTINUANCE AND TERMINATION

Notwithstanding any other provision relating to this SIN, the ordering activity may terminate products leased under this agreement, at any time during a fiscal year in accordance with the termination provisions contained in FAR 52.212-4. (l) Termination for the ordering activity's convenience, or (m) Termination for cause. Additionally, no termination for cost or fees shall be charged for non-renewal of an option.

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OPTION 2

To the extent an Offeror wishes to propose alternative lease terms and conditions that provide for lower discounts/prices based on the ordering activity's stated intent to fulfill the projected term of a lease including option years, while at the same time including separate charges for early end of the lease, the following terms apply. These terms address the timing and extent of the ordering activity's financial obligation including any potential charges for early end of the lease.

1.   LEASING PRICE LIST NOTICE:

Contractors must include the following notice in their contract price list for SIN 132-3:

"The ordering activity is responsible for the obligation of funds consistent with applicable law. Agencies are advised to review the lease terms and conditions contained in this price list prior to ordering and obligating funding for a lease."

2.   STATEMENT OF ORDERING ACTIVITY INTENT:

(a)   The ordering activity and the Contractor understand that a delivery order issued pursuant to this SIN is a lease arrangement and contemplates the use of the product for the term of the lease specified in such delivery order (the "Lease Term"). In that regard, the ordering Activity, as lessee, understands that the lease provisions contained herein and the rate established for the delivery order are premised on the ordering Activity's intent to fulfill that agreement, including acquiring products for the period of time specified in the order. Each lease hereunder shall be initiated by a delivery order which shall, either through a statement of work or other attachment, specify the product being leased, and the required terms of the transaction.

(b)   Each ordering activity placing a delivery order under the terms of this option intends to exercise each renewal option and to extend the lease until completion of the Lease Term so long as the need of the ordering activity for the product or functionally similar product continues to exist and funds are appropriated. Contractor may request information from the ordering activity concerning the essential use of the products.

3.   LEASE TERM:

(a)   The date on which the ordering activity accepts the products is the Commencement Date of the lease. For acceptance to occur, the products must operate in accordance with the product's published specifications and statement of work. Acceptance shall be in accordance with the terms of the contract or as otherwise negotiated by the ordering activity and the Contractor.

(b)   Any lease is executed by the ordering activity on the basis that the known requirement for such product exceeds the initial base period of the delivery order, which is typically 12 months, or for the remainder of the fiscal year. Pursuant to FAR 32.703-3(b), delivery orders with options to renew that are funded by annual (fiscal year) appropriations may provide for initial base periods and option periods that cross fiscal years as long as the initial base period or each option period does not exceed a 12 month period. Defense agencies must also consider DOD

FAR supplement (DFAR) 232.703-3(b) in determining whether to use cross fiscal year funding. This cross fiscal year authority does not apply to multi-year leases.

(c)   The total Lease Term will be specified in each delivery order, including any relevant renewal options of the ordering activity. All delivery orders, whether for the initial base period or renewal period, shall remain in effect through September 30 of the fiscal year (unless extended by statute), through any earlier expiration date specified in the delivery order, or until the ordering activity exercises its rights hereunder to acquire title to the product prior to such expiration date. The ordering activity, at its discretion, may exercise each option to extend the term of the lease through the lease term. Renewal delivery orders shall not be issued for less than all of the product and/or software set forth in the original delivery order**.**   Delivery orders under this SIN shall not be deemed to obligate succeeding fiscal year funds. The ordering activity shall provide the Contractor with written notice of exercise of each renewal option as soon as practicable. Notice requirements may be negotiated on an order-by-order basis.

(d)   Where an ordering activity's specific appropriation or procurement authority provides for contracting beyond the fiscal year period, the ordering activity may place a delivery order for a period up to the expiration of the Lease Term, or to the expiration of the period of availability of the multi-year appropriation, or whatever is appropriate under the applicable circumstance.

4.   LEASE TERMINATION:

(a)   The ordering activity must elect the Lease Term of the relevant delivery order. The Contractor (and assignee, if any) will rely on the ordering activity's representation of its intent to fulfill the full Lease Term to determine the monthly lease payments calculated herein.

    (i)   The ordering activity may terminate or not renew leases under this option at no cost, pursuant to a Termination for Non-Appropriation as defined herein (see paragraph (c) below). In any other event, the ordering activity's contracting officer may either terminate the relevant delivery order for cause or Termination for Convenience in accordance with FAR 52.212-4 paragraphs (l) and (m).

    (ii)   The Termination for Convenience at the end of a fiscal year allows for separate charges for the early end of the lease (see paragraph (d) below). In the event of termination for the convenience of the ordering activity, the ordering activity may be liable only up to the amount beyond the order's Termination Ceiling. Any termination charges calculated under the Termination for Convenience clause must be determined or identified in the delivery order or in the lease agreement.

(b)   Termination for Convenience of the Ordering Activity**:** Leases entered into under this option may not be terminated except by the ordering activity's contracting office responsible for the delivery order in accordance with FAR 52.212-4, Contract Terms and Conditions-Commercial Items, paragraph (l), *Termination for Convenience of the ordering activity.* The costs charged to the ordering activity as the result of any Termination for Convenience of the ordering activity must be reasonable and may not exceed the sum of the fiscal year's payment obligations less payments made to date of termination plus the Termination Ceiling.

(c)   Termination for Non-Appropriation: The ordering activity reasonably believes that the bona fide need will exist for the entire Lease Term and corresponding funds in an amount sufficient to make all payment for the lease Term will be available to the ordering activity. Therefore, it is unlikely that leases entered into under this option will terminate prior to the full Lease Term. Nevertheless, the ordering activity's contracting officer may terminate or not renew leases at the end of any initial base period or option period under this paragraph if (a) it no longer has a bona fide need for the product or functionally similar product; or (b) there is a continuing need, but adequate funds have not been made available to the ordering activity in an amount sufficient to continue to make the lease payments. If this occurs, the ordering activity will promptly notify the Contractor, and the product lease will be terminated at the end of the last fiscal year for which funds were appropriated. Substantiation to support a termination for non-appropriation shall be provided to the Contractor upon request.

(d)   Termination Charges: At the initiation of the lease, termination ceilings will be established for each year of the lease term. The termination ceiling is a limit on the amount that a Contractor may be paid by the ordering activity on the Termination for Convenience of a lease. No claim will be accepted for future costs: supplies, maintenance, usage charges or interest expense beyond the date of termination. In accordance with the bona fide

needs rule, all termination charges must reasonably represent the value the ordering activity received for the work performed based upon the shorter lease term. No Termination for Convenience costs will be associated with the expiration of the lease term.

(e)   At the order level, the ordering activity may, consistent with legal principles, negotiate lower monthly payments or rates based upon appropriate changes to the termination conditions in this section.

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LEASE PROVISIONS COMMON TO
ALL TYPES OF LEASE AGREEMENTS

1.   ORDERING PROCEDURES:

(a)   When an ordering activity expresses an interest in leasing a product(s), the ordering activity will provide the following information to the prospective Contractor:

(i)   Which product(s) is (are) required.
(ii)   The required delivery date.
(iii)   The proposed lease plan and term of the lease.
(iv)   Where the product will be located.
(v)   Description of the intended use of the product.
(vi)   Source and type of appropriations to be used.

(b)   The Contractor will respond with:

(i)   Whether the Contractor can provide the required product.
(ii)   The estimated residual value of the product (Lease with Option to Own and Step Lease only).
(iii)   The monthly payment based on the rate.
(iv)   The estimated cost, if any, of applicable State or local taxes. State and local personal property taxes are to be estimated as separate line items in accordance with FAR 52.229-1, which may be identified and added to the monthly lease payment.
(v)   A confirmation of the availability of the product on the required delivery date.
(vi)   Extent of warranty coverage, if any, of the leased products.
(vii)   The length of time the quote is valid.

(c)   The ordering activity may issue a delivery order to the Contractor based on the information set forth in the Contractor's quote. In the event that the ordering activity does not issue a delivery order within the validity period stated in the Contractor's quote letter, the quote shall expire.

2.   ASSIGNMENT OF CLAIMS:

GSAR 552.232-23, Assignment of Claims, is incorporated herein by reference as part of these lease provisions. The ordering activity's contracting officer will acknowledge the assignment of claim for a lease in accordance with FAR 32.804-5. The extent of the assignee's protection is in accordance with FAR 32.804. Any setoff provision must be in accordance with FAR 32.803.

3.   PEACEFUL POSSESSION AND UNRESTRICTED USE:

In recognition of the types of products available for lease and the potential adverse impact to the ordering activity's mission, the ordering activity's quiet and peaceful possession and unrestricted use of the product shall not be disturbed in the event the product is sold by the Contractor, or in the event of bankruptcy of the Contractor, corporate dissolution of the Contractor, or other event. The product shall remain in the possession of the ordering activity until the expiration of the lease. Any assignment, sale, bankruptcy, or other transfer of the leased product by

the Contractor will not relieve the Contractor of its obligations to the ordering activity, and will not change the ordering activity's duties or increase the burdens or risks imposed on the ordering activity.

4.   COMMENCEMENT OF LEASE:

The date on which the ordering activity accepts the products is the Commencement Date of the lease. Acceptance is as defined elsewhere in the contract, or as further specified in the order.

5.   INSTALLATION AND MAINTENANCE:

a.   Installation and Maintenance, when applicable, normally are not included in the charge for leasing. The Contractor may require the ordering activity to obtain installation and maintenance services from a qualified source. The ordering activity may obtain installation and/or maintenance on the open market, from the Contractor's schedule contract, or from other sources. The ordering activity may also perform installation and/or maintenance in house, if qualified resources exist. In any event, it is the responsibility of the ordering activity to ensure that maintenance is in effect for the Lease term for all products leased.

b.   When installation and/or maintenance are ordered under this schedule to be performed by the Contractor, the payments, terms and conditions as stated in this contract apply. The rates and terms and conditions in effect at the time the order is issued shall apply during any subsequent renewal period of the lease. The maintenance rates and terms and conditions may be added to the lease payments with mutual agreement of the parties.

6.   MONTHLY PAYMENTS:

a.   Prior to the placement of an order under this Special Item Number, the ordering activity and the Contractor must agree on a "base value" for the products to be leased. For Lease to Ownership (Capital Lease) the base value will be the contract purchase price (less any discounts). For Lease with Option to Own (Operating Lease), the base value will be the contract purchase price (less any discounts), less a mutually agreed upon residual value (pre-stated purchase option price at the conclusion of the lease) for the products. The residual value will be used in the calculation of the original lease payment, lease extension payments, and the purchase option price.

b.   To determine the initial lease term payment, the Contractor agrees to apply the negotiated lease factor to the agreed upon base value: 4% percent over the rate for the three year (or other term) Treasury Bill (T-bill) at the most current U. S. Treasury auction.

The lease payment may be calculated by using a programmed business calculator or by using "rate" functions provided in commercial computer spreadsheets (e.g., Lotus 1-2-3, Excel).

c.   For any lease extension, the extension lease payment will be based on the original residual value, in lieu of the purchase price. The ordering activity and the Contractor shall agree on a new residual value based on the estimated fair market price at the end of the extension. The formula to determine the lease payment will be that in 6.b. above.

d.   The purchase option price will be the fair market value of the product or payment will be based upon the unamortized principle, as shown on the payment schedule as of the last payment prior to date of transfer of ownership, whichever is less.

NOTE: At the order level, ordering activity may elect to obtain a lower rate for the lease by setting the purchase option price as either, the fair market value of the product or unamortized principle. The methodology for determining lump sum payments may be identified in the pricelist.

e.   The point in time when monthly rates are established is subject to negotiation and evaluation at the order level.

In the event the ordering activity desires, at any time, to acquire title to product leased hereunder, the ordering activity may make a one-time lump sum payment.

7.   LEASE END/DISCONTINUANCE OPTIONS:

a.   Upon the expiration of the Lease Term, Termination for Convenience, or Termination for Non-Appropriation, the ordering activity will return the Product to the Contractor unless the ordering activity by 30 days written notice elects either:

   (i)   to purchase the product for the residual value of the product, or

   (ii)   to extend the term of the Lease, as mutually agreed. To compute the lease payment, the residual value from the preceding lease shall be the initial value of the leased product. A new residual value shall be negotiated for the extended lease and new lease payments shall be computed.

b.   Relocation - The ordering activity may relocate products to another location within the ordering activity with prior written notice. No other transfer, including sublease, is permitted. Ordering activity shall not assign, transfer or otherwise dispose of any products, or any interest therein, or crate or suffer any levy, lien or encumbrance then except those created for the benefit of Contractor or its assigns.

c.   Returns:

   (i)   Within fourteen (14) days after the date of expiration, non-renewal or termination of a lease, the ordering activity shall, at its own risk and expense, have the products packed for shipment in accordance with manufacturer's specifications and return the products to Contractor at the location specified by Contractor in the continental US, in the same condition as when delivered, ordinary wear and tear excepted. Any expenses necessary to return the products to good working order shall be at ordering activity's expense.

   (ii)   The Contractor shall conduct a timely inspection of the returned products and within 45 days of the return, assert a claim if the condition of the product exceeds normal wear and tear.

   (iii)   Product will be returned in accordance with the terms of the contract and in accordance with Contractor instruction.

   (iv)   With respect to software, the ordering activity shall state in writing to the Contractor that it has:

      (1)   deleted or disabled all files and copies of the software from the equipment on which it was installed;
      (2)   returned all software documentation, training manuals, and physical media on which the software was delivered; and
      (3)   has no ability to use the returned software.

8.   UPGRADES AND ADDITIONS:

a.   The ordering activity may affix or install any accessory, addition, upgrade, product or device on the product ("additions") provided that such additions:

   (1)   can be removed without causing material damage to the product;

   (2)   do not reduce the value of the product; and

   (3)   are obtained from or approved by the Contractor, and are not subject to the interest of any third party other than the Contractor.

b.   Any other additions may not be installed without the Contractor's prior written consent. At the end of the lease term, the ordering activity shall remove any additions which:

   (1)   were not leased from the Contractor, and

   (2)   are readily removable without causing material damage or impairment of the intended function, use, or value of the product, and restore the product to its original configuration.

c.   Any additions that are not so removable will become the Contractor's property (lien free).

d.   Leases of additions and upgrades must be co-terminus with that of the product.

9.   RISK OF LOSS OR DAMAGE:

The ordering activity is relieved from all risk of loss or damage to the product during periods of transportation, installation, and during the entire time the product is in possession of the ordering activity, except when loss or damage is due to the fault or negligence of the ordering activity. The ordering activity shall assume risk of loss or damage to the product during relocation, (i.e., moving the product from one ordering activity location to another ordering activity location), unless the Contractor shall undertake such relocation.

10.   TITLE:

During the lease term, product shall always remain the property of the Contractor. The ordering activity shall have no property right or interest in the product except as provided in this leasing agreement and shall hold the product subject and subordinate to the rights of the Contractor. Software and software licenses shall be deemed personal property. The ordering activity shall have no right or interest in the software and related documentation except as provided in the license and the lease. Upon the Commencement Date of the Lease Term, the ordering activity shall have an encumbered license to use the software for the Lease Term. The ordering activity's encumbered license rights in the software will be subject to the same rights as provided to a purchaser of a license under the terms of this contract except that the ordering activity will not have an unencumbered, paid-up license until it has made all lease payments for the full Lease Term in the case of an Lease To Ownership or has otherwise paid the applicable purchase option price.

11.   TAXES:

The lease payments, purchase option prices, and interest rates identified herein exclude all state and local taxes levied on or measured by the contract or sales price of the product furnished hereunder. The ordering activity will be invoiced for any such taxes as Contractor receives such tax notices or assessments from the applicable local taxing authority. Pursuant to the provisions of FAR 52.229-1 (Deviation – May 2003), State and Local Taxes, the ordering activity agrees to pay tax or provide evidence necessary to support an exemption from the tax.

12.   OPTION TO PURCHASE EQUIPMENT (FEB 1995) (FAR 52.207-5)

(a)   The Government may purchase the equipment provided on a lease or rental basis under this contract. The Contracting Officer may exercise this option only by providing a unilateral modification to the Contractor. The effective date of the purchase will be specified in the unilateral modification and may be any time during the period of the contract, including any extensions thereto.

(b)   Except for final payment and transfer of title to the Government, the lease or rental portion of the contract becomes complete and lease or rental charges shall be discontinued on the day immediately preceding the effective date of purchase specified in the unilateral modification required in paragraph (a) of this clause.

(c)   The purchase conversion cost of the equipment shall be computed as of the effective date specified in the unilateral modification required in paragraph (a) of this clause, on the basis of the purchase price set forth in the contract, minus the total purchase option credits accumulated during the period of lease or rental, calculated by the formula contained elsewhere in this contract.

(d)   The accumulated purchase option credits available to determine the purchase conversion cost will also include any credits accrued during a period of lease or rental of the equipment under any previous Government contract if the equipment has been on continuous lease or rental. The movement of equipment from one site to another site shall be "continuous rental."

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**TERMS AND CONDITIONS APPLICABLE TO PURCHASE OF
GENERAL PURPOSE COMMERCIAL INFORMATION TECHNOLOGY NEW
EQUIPMENT (SPECIAL ITEM NUMBER 132-8)**

1.   MATERIAL AND WORKMANSHIP

All equipment furnished hereunder must satisfactorily perform the function for which it is intended.

2.   ORDER

Written orders, EDI orders (GSA Advantage! and FACNET), credit card orders, and orders placed under blanket purchase agreements (BPA) agreements shall be the basis for purchase in accordance with the provisions of this contract. If time of delivery extends beyond the expiration date of the contract, the Contractor will be obligated to meet the delivery and installation date specified in the original order.

For credit card orders and BPAs, telephone orders are permissible.

3.   TRANSPORTATION OF EQUIPMENT

FOB DESTINATION. Prices cover equipment delivery to destination, for any location within the geographic scope of this contract.

4.   INSTALLATION AND TECHNICAL SERVICES

a.   INSTALLATION. When the equipment provided under this contract is not normally self-installable, the Contractor's technical personnel shall be available to the ordering activity, at the ordering activity's location, to install the equipment and to train ordering activity personnel in the use and maintenance of the equipment. The charges, if any, for such services are listed below, or in the price schedule:

See Attached Price Schedule

b.   INSTALLATION, DEINSTALLATION, REINSTALLATION. The Davis-Bacon Act (40 U.S.C. 276a-276a-7) provides that contracts in excess of $2,000 to which the United States or the District of Columbia is a party for construction, alteration, or repair (including painting and decorating) of public buildings or public works with the United States, shall contain a clause that no laborer or mechanic employed directly upon the site of the work shall received less than the prevailing wage rates as determined by the Secretary of Labor. The requirements of the Davis-Bacon Act do not apply if the construction work is incidental to the furnishing of supplies, equipment, or services. For example, the requirements do not apply to simple installation or alteration of a public building or public work that is incidental to furnishing supplies or equipment under a supply contract. However, if the construction, alteration or repair is segregable and exceeds $2,000, then the requirements of the Davis-Bacon Act apply.

The ordering activity issuing the task order against this contract will be responsible for proper administration and enforcement of the Federal labor standards covered by the Davis-Bacon Act. The proper Davis-Bacon wage determination will be issued by the ordering activity at the time a request for quotations is made for applicable construction classified installation, deinstallation, and reinstallation services under SIN 132-8.

c.   OPERATING AND MAINTENANCE MANUALS. The Contractor shall furnish the ordering activity with one (1) copy of all operating and maintenance manuals which are normally provided with the equipment being purchased.

5.   INSPECTION/ACCEPTANCE

The Contractor shall only tender for acceptance those items that conform to the requirements of this contract. Items ordered by the contracting activity are deemed accepted at the date of delivery. The ordering activity reserves the right to inspect or test any equipment that has been tendered for acceptance. The ordering activity may require repair or replacement of nonconforming equipment at no increase in contract price. The ordering activity must

exercise its post acceptance rights (1) within a reasonable time after the defect was discovered, or should have been discovered, but no later than 30 days from the date of delivery; and (2) before any substantial change occurs in the condition of the item, unless the change is due to the defect in the item.

6.   WARRANTY

a.   Unless specified otherwise in this contract, the Contractor's standard commercial warranty as stated in the contract's commercial pricelist will apply to this contract.

b.   The Contractor warrants and implies that the items delivered hereunder are merchantable and fit for use for the particular purpose described in this contract.

c.   Limitation of Liability. Except as otherwise provided by an express or implied warranty, the Contractor will not be liable to the ordering activity for consequential damages resulting from any defect or deficiencies in accepted items.

d.   If inspection and repair of defective equipment under this warranty will be performed at the Contractor's plant, the address is as follows:

Carahsoft Technology Corporation
12369 Sunrise Valley Drive, Ste D-2
Reston, VA 20191

7.   PURCHASE PRICE FOR ORDERED EQUIPMENT

The purchase price that the ordering activity will be charged will be the ordering activity purchase price in effect at the time of order placement, or the ordering activity purchase price in effect on the installation date (or delivery date when installation is not applicable), whichever is less.

8.   RESPONSIBILITIES OF THE CONTRACTOR

The Contractor shall comply with all laws, ordinances, and regulations (Federal, State, City or otherwise) covering work of this character, and shall include all costs, if any, of such compliance in the prices quoted in this offer.

9.   TRADE-IN OF INFORMATION TECHNOLOGY EQUIPMENT

When an ordering activity determines that Information Technology equipment will be replaced, the ordering activity shall follow the contracting policies and procedures in the Federal Acquisition Regulation (FAR), the policies and procedures regarding disposition of information technology excess personal property in the Federal Property Management Regulations (FPMR) (41 CFR 101-43.6), and the policies and procedures on exchange/sale contained in the FPMR (41 CFR part 101-46).

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> **TERMS AND CONDITIONS APPLICABLE TO MAINTENANCE, REPAIR SERVICE AND REPAIR PARTS/SPARE PARTS FOR GOVERNMENT-OWNED GENERAL PURPOSE COMMERCIAL INFORMATION TECHNOLOGY EQUIPMENT, RADIO/TELEPHONE EQUIPMENT, (AFTER EXPIRATION OF GUARANTEE/WARRANTY PROVISIONS AND/OR WHEN REQUIRED SERVICE IS NOT COVERED BY GUARANTEE/WARRANTY PROVISIONS) AND FOR LEASED EQUIPMENT (SPECIAL ITEM NUMBER 132-12)**

1.   SERVICE AREAS

a.   The maintenance rates listed herein are applicable to any ordering activity location within a 25 mile radius of the Contractor's service points. If any additional charge is to apply because of the greater distance from the Contractor's service locations, the mileage rate or other distance factor shall be stated in paragraphs 7.d and 8.d of this Special Item Number 132-12.

b.   When maintenance services cannot be performed at the ordering activity installation site, the maintenance services will be performed at the Contractor's plant(s) listed below:

> Carahsoft Technology Corporation
> 12369 Sunrise Valley Drive, Suite D-2
> Reston, VA 20191
>
> Or, manufacturer support center as listed on the order

2.   MAINTENANCE ORDER

a.   Agencies may use written orders, EDI orders, credit card orders, or BPAs, for ordering maintenance under this contract. The Contractor shall confirm orders within fifteen (15) calendar days from the date of receipt, except that confirmation of orders shall be considered automatic for renewals for maintenance (Special Item Number 132-12). Automatic acceptance of order renewals for maintenance service shall apply for machines which may have been discontinued from use for temporary periods of time not longer than 120 calendar days. If the order is not confirmed by the Contractor as prescribed by this paragraph, the order shall be considered to be confirmed by the Contractor.

b.   The Contractor shall honor orders for maintenance for the duration of the contract period or a lesser period of time, for the equipment shown in the pricelist. Maintenance service shall commence on a mutually agreed upon date, which will be written into the maintenance order. Maintenance orders shall not be made effective before the expiration of any applicable maintenance and parts guarantee/warranty period associated with the purchase of equipment. Orders for maintenance service shall not extend beyond the end of the contract period.

c.   Maintenance may be discontinued by the ordering activity on thirty (30) calendar days written notice, or shorter notice when agreed to by the Contractor; such notice to become effective thirty (30) calendar days from the date on the notification. However, the ordering activity may extend the original discontinuance date upon written notice to the Contractor, provided that such notice is furnished at least ten (10) calendar days prior to the original discontinuance date.

d.   Annual Funding. When annually appropriated funds are cited on a maintenance order, the period of maintenance shall automatically expire on September 30th of the contract period, or at the end of the contract period, whichever occurs first. Renewal of a maintenance order citing the new appropriation shall be required, if maintenance is to continue during any remainder of the contract period.

e.   Cross-year Funding Within Contract Period. Where an ordering activity's specific appropriation authority provides for funds in excess of a 12 month, fiscal year period, the ordering activity may place an order under this schedule contract for a period up to the expiration of the contract period, notwithstanding the intervening fiscal years.

f.   Ordering activities should notify the Contractor in writing thirty (30) calendar days prior to the expiration of maintenance service, if maintenance is to be terminated at that time. Orders for continued maintenance will be required if maintenance is to be continued during the subsequent period.

3.   REPAIR SERVICE AND REPAIR PARTS/SPARE PARTS ORDERS

Repair service and repair parts/spare parts are not available under the scope of this contract.

4.   LOSS OR DAMAGE

When the Contractor removes equipment to his establishment for repairs, the Contractor shall be responsible for any damage or loss, from the time the equipment is removed from the ordering activity installation, until the equipment is returned to such installation.

5.   SCOPE

a.   The Contractor shall provide maintenance for all equipment listed herein, as requested by the ordering activity during the contract term. Repair service and repair parts/spare is not available under the scope of this contract.

b.   Equipment placed under maintenance service shall be in good operating condition.

      (1)   In order to determine that the equipment is in good operating condition, the equipment shall be subject to inspection by the Contractor, without charge to the ordering activity.

      (2)   Costs of any repairs performed for the purpose of placing the equipment in good operating condition shall be borne by the Contractor, if the equipment was under the Contractor's guarantee/warranty or maintenance responsibility prior to the effective date of the maintenance order.

      (3)   If the equipment was not under the Contractor's responsibility, the costs necessary to place the equipment in proper operating condition are to be borne by the ordering activity, in accordance with the provisions of Special Item Number 132-12 (or outside the scope of this contract).

6.   RESPONSIBILITIES OF THE ORDERING ACTIVITY

a.   Ordering activity personnel shall not perform maintenance or attempt repairs to equipment while such equipment is under the purview of a maintenance order, unless agreed to by the Contractor.

b.   Subject to security regulations, the ordering activity shall permit access to the equipment which is to be maintained or repaired.

7.   RESPONSIBILITIES OF THE CONTRACTOR

For equipment not covered by a maintenance contract or warranty, the Contractor will assist the customer in obtaining out-of-warranty/maintenance service from the Manufacturer or from a Manufacturer authorized service center, if the customer so desires.

8.   MAINTENANCE RATE PROVISIONS

a.   The Contractor shall bear all costs of maintenance, including labor, parts, and such other expenses as are necessary to keep the equipment in good operating condition, provided that the required repairs are not occasioned by fault or negligence of the ordering activity.

b.   REGULAR HOURS

The basic monthly rate for each make and model of equipment shall entitle the ordering activity to maintenance service during a mutually agreed upon nine (9) hour principal period of maintenance, Monday through Friday, exclusive of holidays observed at the ordering activity location.

c.   AFTER HOURS

Should the ordering activity require that maintenance be performed outside of Regular Hours, charges for such maintenance, if any, will be specified in the pricelist. Periods of less than one hour will be prorated to the nearest quarter hour.

d.   TRAVEL AND TRANSPORTATION

If any charge is to apply, over and above the regular maintenance rates, because of the distance between the ordering activity location and the Contractor's service area, the charge will be in accordance with Federal Travel Regulations.

e.   QUANTITY DISCOUNTS

No quantity discounts are offered.

9.   REPAIR SERVICE RATE PROVISIONS – NOT COVERED BY A MAINTENANCE CONTRACT OR WARRANTY

Repair service is not covered under the scope of this contract.

10.   REPAIR PARTS/SPARE PARTS RATE PROVISIONS

Repair parts/spare parts are not covered under the scope of this contract.

11.   GUARANTEE/WARRANTY—REPAIR SERVICE AND REPAIR PARTS/SPARE PARTS

Repair service and repair parts/spare parts are not covered under the scope of this contract.

12.   INVOICES AND PAYMENTS

a.   Maintenance Service

(1)   Invoices for maintenance service shall be submitted by the Contractor. PROMPT PAYMENT DISCOUNT, IF APPLICABLE, SHALL BE SHOWN ON THE INVOICE.

(2)   Payment for maintenance service of less than one month's duration shall be prorated at 1/30th of the monthly rate for each calendar day.

b.   Repair Service and Repair Parts/Spare Parts

Repair service and repair parts/spare parts are not covered under the scope of this contract.

TERMS AND CONDITIONS APPLICABLE TO TERM SOFTWARE LICENSES (SPECIAL ITEM NUMBER 132-32), PERPETUAL SOFTWARE LICENSES (SPECIAL ITEM NUMBER 132-33) AND MAINTENANCE AS A SERVICE (SPECIAL ITEM NUMBER 132-34) OF GENERAL PURPOSE COMMERCIAL INFORMATION TECHNOLOGY SOFTWARE

1.   INSPECTION/ACCEPTANCE

The Contractor shall only tender for acceptance those items that conform to the requirements of this contract. The ordering activity reserves the right to inspect or test any software that has been tendered for acceptance. The ordering activity may require repair or replacement of nonconforming software at no increase in contract price. The ordering activity must exercise its post acceptance rights (1) within a reasonable time after the defect was discovered or should have been discovered; and (2) before any substantial change occurs in the condition of the software, unless the change is due to the defect in the software.

2.   GUARANTEE/WARRANTY

a.   Unless specified otherwise in this contract, the Contractor's standard commercial guarantee/warranty as stated in the contract's commercial pricelist will apply to this contract.

b.   The Contractor warrants and implies that the items delivered hereunder are merchantable and fit for use for the particular purpose described in this contract.

c.   Limitation of Liability. Except as otherwise provided by an express or implied warranty, the Contractor will not be liable to the ordering activity for consequential damages resulting from any defect or deficiencies in accepted items.

3.   TECHNICAL SERVICES

The Contractor, without additional charge to the ordering activity, shall provide a hot line technical support number 888-662-2724 for the purpose of providing user assistance and guidance in the implementation of the software. The technical support number is available from 8 AM Eastern Time to 5 PM Eastern Time.

The Contractor shall direct the ordering agency to the manufacturer's technical support information, as provided by on the individual order.

4.   SOFTWARE MAINTENANCE

a.   Software maintenance as it is defined:

1. Software Maintenance as a Product (SIN 132-32 or SIN 132-33)

Software maintenance as a product includes the publishing of bug/defect fixes via patches and updates/upgrades in function and technology to maintain the operability and usability of the software product. It may also include other no charge support that is included in the purchase price of the product in the commercial marketplace. No charge support includes items such as user blogs, discussion forums, on-line help libraries and FAQs (Frequently Asked Questions), hosted chat rooms, and limited telephone, email and/or web-based general technical support for user's self diagnostics.

Software maintenance as a product does NOT include the creation, design, implementation, integration, etc. of a software package. These examples are considered software maintenance as a service.

2. Software Maintenance as a Service (SIN 132-34)

Software maintenance as a service creates, designs, implements, and/or integrates customized changes to software that solve one or more problems and is not included with the price of the software. Software maintenance as a service includes person-to-person communications regardless

of the medium used to communicate: telephone support, on-line technical support, customized support, and/or technical expertise which are charged commercially. Software maintenance as a service is billed arrears in accordance with 31 U.S.C. 3324.

b.   Invoices for maintenance service shall be submitted by the Contractor on a quarterly or monthly basis, after the completion of such period. Maintenance charges must be paid in arrears (31 U.S.C. 3324). PROMPT PAYMENT DISCOUNT, IF APPLICABLE, SHALL BE SHOWN ON THE INVOICE.

5.   PERIODS OF TERM LICENSES (132-32) AND MAINTENANCE (132-34)

a.   The Contractor shall honor orders for periods for the duration of the contract period or a lesser period of time.

b.   Term licenses and/or maintenance may be discontinued by the ordering activity on thirty (30) calendar days written notice to the Contractor.

c.   Annual Funding. When annually appropriated funds are cited on an order for term licenses and/or maintenance, the period of the term licenses and/or maintenance shall automatically expire on September 30 of the contract period, or at the end of the contract period, whichever occurs first. Renewal of the term licenses and/or maintenance orders citing the new appropriation shall be required, if the term licenses and/or maintenance is to be continued during any remainder of the contract period.

d.   Cross-Year Funding Within Contract Period. Where an ordering activity's specific appropriation authority provides for funds in excess of a 12 month (fiscal year) period, the ordering activity may place an order under this schedule contract for a period up to the expiration of the contract period, notwithstanding the intervening fiscal years.

e.   Ordering activities should notify the Contractor in writing thirty (30) calendar days prior to the expiration of an order, if the term licenses and/or maintenance is to be terminated at that time. Orders for the continuation of term licenses and/or maintenance will be required if the term licenses and/or maintenance is to be continued during the subsequent period.

6.   CONVERSION FROM TERM LICENSE TO PERPETUAL LICENSE

Not available

7.   TERM LICENSE CESSATION

Not available

8.   UTILIZATION LIMITATIONS - (132-32, 132-33, AND 132-34)

a.   Software acquisition is limited to commercial computer software defined in FAR Part 2.101.

b.   When acquired by the ordering activity, commercial computer software and related documentation so legend shall be subject to the following:

(1)   Title to and ownership of the software and documentation shall remain with the Contractor, unless otherwise specified.

(2)   Software licenses are by site and by ordering activity and as per the manufacturer's standard license practice. An ordering activity is defined as a cabinet level or independent ordering activity. The software may be used by any subdivision of the ordering activity (service, bureau, division, command, etc.) that has access to the site the software is placed at, even if the subdivision did not participate in the acquisition of the software. Further, the software may be used on a sharing basis where multiple agencies have joint projects that can be satisfied by the use of the software placed at one ordering activity's site. This would allow other agencies access to one ordering activity's database. For ordering activity public domain databases, user agencies and third parties may use the computer program to enter, retrieve, analyze and present data. The user ordering activity will take appropriate action by instruction, agreement, or otherwise, to protect the Contractor's proprietary property with any third parties that are permitted access to the computer

programs and documentation in connection with the user ordering activity's permitted use of the computer programs and documentation. For purposes of this section, all such permitted third parties shall be deemed agents of the user ordering activity.

(3)   Except as is provided in paragraph 8.b(2) above, the ordering activity shall not provide or otherwise make available the software or documentation, or any portion thereof, in any form, to any third party without the prior written approval of the Contractor. Third parties do not include prime Contractors, subcontractors and agents of the ordering activity who have the ordering activity's permission to use the licensed software and documentation at the facility, and who have agreed to use the licensed software and documentation only in accordance with these restrictions. This provision does not limit the right of the ordering activity to use software, documentation, or information therein, which the ordering activity may already have or obtains without restrictions.

(4)   The ordering activity shall have the right to use the computer software and documentation with the computer for which it is acquired at any other facility to which that computer may be transferred, or in cases of disaster recovery, the ordering activity has the right to transfer the software to another site if the ordering activity site for which it is acquired is deemed to be unsafe for ordering activity personnel; to use the computer software and documentation with a backup computer when the primary computer is inoperative; to copy computer programs for safekeeping (archives) or backup purposes; to transfer a copy of the software to another site for purposes of benchmarking new hardware and/or software; and to modify the software and documentation or combine it with other software, provided that the unmodified portions shall remain subject to these restrictions.

(5)   "Commercial Computer Software" may be marked with the Contractor's standard commercial restricted rights legend, but the schedule contract and schedule pricelist, including this clause, "Utilization Limitations" are the only governing terms and conditions, and shall take precedence and supersede any different or additional terms and conditions included in the standard commercial legend.

9.   SOFTWARE CONVERSIONS (132-32 AND 132-33)

Not available

10.   DESCRIPTIONS AND EQUIPMENT COMPATIBILITY

The Contractor shall include, in the schedule pricelist, a complete description of each software product and a list of equipment on which the software can be used. Also, included shall be a brief, introductory explanation of the modules and documentation which are offered.

11.   RIGHT-TO-COPY PRICING

Not available

carahsoft
technology corp

TERMS AND CONDITIONS APPLICABLE TO PURCHASE OF TRAINING COURSES FOR GENERAL PURPOSE COMMERCIAL INFORMATION TECHNOLOGY EQUIPMENT AND SOFTWARE (SPECIAL ITEM NUMBER 132-50)

1.   SCOPE

a.   The Contractor shall provide training courses normally available to commercial customers, which will permit ordering activity users to make full, efficient use of general purpose commercial IT products. Training is restricted to training courses for those products within the scope of this solicitation.

b.   The Contractor shall provide training at the Contractor's facility and/or at the ordering activity's location, as agreed to by the Contractor and the ordering activity.

2.   ORDER

Written orders, EDI orders (GSA Advantage! and FACNET), credit card orders, and orders placed under blanket purchase agreements (BPAs) shall be the basis for the purchase of training courses in accordance with the terms of this contract. Orders shall include the student's name, course title, course date and time, and contracted dollar amount of the course.

3.   TIME OF DELIVERY

The Contractor shall conduct training on the date (time, day, month, and year) agreed to by the Contractor and the ordering activity.

4.   CANCELLATION AND RESCHEDULING

a.   The ordering activity will notify the Contractor at least seventy-two (72) hours before the scheduled training date, if a student will be unable to attend. The Contractor will then permit the ordering activity to either cancel the order or reschedule the training at no additional charge. In the event the training class is rescheduled, the ordering activity will modify its original training order to specify the time and date of the rescheduled training class.

b.   In the event the ordering activity fails to cancel or reschedule a training course within the time frame specified in paragraph a, above, the ordering activity will be liable for the contracted dollar amount of the training course. The Contractor agrees to permit the ordering activity to reschedule a student who fails to attend a training class within ninety (90) days from the original course date, at no additional charge.

c.   The ordering activity reserves the right to substitute one student for another up to the first day of class.

d.   In the event the Contractor is unable to conduct training on the date agreed to by the Contractor and the ordering activity, the Contractor must notify the ordering activity at least seventy-two (72) hours before the scheduled training date.

5.   FOLLOW-UP SUPPORT

The Contractor agrees to provide each student with unlimited telephone support for a period of 30 days from the completion of the training course. During this period, the student may contact the Contractor's instructors for refresher assistance and answers to related course curriculum questions.

6.   PRICE FOR TRAINING

The price that the ordering activity will be charged will be the ordering activity training price in effect at the time of order placement, or the ordering activity price in effect at the time the training course is conducted, whichever is less.

7.   INVOICES AND PAYMENT

Invoices for training shall be submitted by the Contractor after ordering activity completion of the training course. Charges for training must be paid in arrears (31 U.S.C. 3324). PROMPT PAYMENT DISCOUNT, IF APPLICABLE, SHALL BE SHOWN ON THE INVOICE.

8.   FORMAT AND CONTENT OF TRAINING

a.   The Contractor shall provide written materials (i.e., manuals, handbooks, texts, etc.) normally provided with course offerings. Such documentation will become the property of the student upon completion of the training class.

b.   **If applicable** For hands-on training courses, there must be a one-to-one assignment of IT equipment to students.

c.   The Contractor shall provide each student with a Certificate of Training at the completion of each training course.

d.   The Contractor shall provide the following information for each training course offered:

(1)   The course title and a brief description of the course content, to include the course format (e.g., lecture, discussion, hands-on training);

(2)   The length of the course;

(3)   Mandatory and desirable prerequisites for student enrollment;

(4)   The minimum and maximum number of students per class;

(5)   The locations where the course is offered;

(6)   Class schedules; and

(7)   Price (per student, per class (if applicable)).

e.   For those courses conducted at the ordering activity's location, instructor travel charges (if applicable), including mileage and daily living expenses, must comply with the Federal Travel Regulation or Joint Travel Regulations, as applicable, in effect on the date(s) the travel is performed. Contractors cannot use GSA city pair contracts.

f.   For Online Training Courses, a copy of all training material must be available for electronic download by the students.

9.   "NO CHARGE" TRAINING

Not offered.

TERMS AND CONDITIONS APPLICABLE TO INFORMATION TECHNOLOGY (IT) PROFESSIONAL SERVICES (SPECIAL ITEM NUMBER 132-51)

1.   SCOPE

a.   The prices, terms and conditions stated under Special Item Number 132-51 Information Technology Professional Services apply exclusively to IT/EC Services within the scope of this Information Technology Schedule.

b.   The Contractor shall provide services at the Contractor's facility and/or at the ordering activity location, as agreed to by the Contractor and the ordering activity.

2.   PERFORMANCE INCENTIVES I-FSS-60 Performance Incentives (April 2000)

a.   Performance incentives may be agreed upon between the Contractor and the ordering activity on individual fixed price orders or Blanket Purchase Agreements under this contract in accordance with this clause.

b.   The ordering activity must establish a maximum performance incentive price for these services and/or total solutions on individual orders or Blanket Purchase Agreements.

c.   Incentives should be designed to relate results achieved by the contractor to specified targets. To the maximum extent practicable, ordering activities shall consider establishing incentives where performance is critical to the ordering activity's mission and incentives are likely to motivate the contractor. Incentives shall be based on objectively measurable tasks.

3.   ORDER

a.   Agencies may use written orders, EDI orders, blanket purchase agreements, individual purchase orders, or task orders for ordering services under this contract. Blanket Purchase Agreements shall not extend beyond the end of the contract period; all services and delivery shall be made and the contract terms and conditions shall continue in effect until the completion of the order. Orders for tasks which extend beyond the fiscal year for which funds are available shall include FAR 52.232-19 (Deviation – May 2003) Availability of Funds for the Next Fiscal Year. The purchase order shall specify the availability of funds and the period for which funds are available.

b.   All task orders are subject to the terms and conditions of the contract. In the event of conflict between a task order and the contract, the contract will take precedence.

4.   PERFORMANCE OF SERVICES

a.   The Contractor shall commence performance of services on the date agreed to by the Contractor and the ordering activity.

b.   The Contractor agrees to render services only during normal working hours, unless otherwise agreed to by the Contractor and the ordering activity.

c.   The ordering activity should include the criteria for satisfactory completion for each task in the Statement of Work or Delivery Order. Services shall be completed in a good and workmanlike manner.

d.   Any Contractor travel required in the performance of IT/EC Services must comply with the Federal Travel Regulation or Joint Travel Regulations, as applicable, in effect on the date(s) the travel is performed. Established Federal Government per diem rates will apply to all Contractor travel. Contractors cannot use GSA city pair contracts.

5.   STOP-WORK ORDER (FAR 52.242-15) (AUG 1989)

(a)   The Contracting Officer may, at any time, by written order to the Contractor, require the Contractor to stop all, or any part, of the work called for by this contract for a period of 90 days after the order is delivered to the Contractor, and for any further period to which the parties may agree. The order shall be specifically identified as a stop-work order issued under this clause. Upon receipt of the order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order

during the period of work stoppage. Within a period of 90 days after a stop-work is delivered to the Contractor, or within any extension of that period to which the parties shall have agreed, the Contracting Officer shall either-

> (1)   Cancel the stop-work order; or

> (2)   Terminate the work covered by the order as provided in the Default, or the Termination for Convenience of the Government, clause of this contract.

(b)   If a stop-work order issued under this clause is canceled or the period of the order or any extension thereof expires, the Contractor shall resume work. The Contracting Officer shall make an equitable adjustment in the delivery schedule or contract price, or both, and the contract shall be modified, in writing, accordingly, if-

> (1)   The stop-work order results in an increase in the time required for, or in the Contractor's cost properly allocable to, the performance of any part of this contract; and

> (2)   The Contractor asserts its right to the adjustment within 30 days after the end of the period of work stoppage; provided that, if the Contracting Officer decides the facts justify the action, the Contracting Officer may receive and act upon the claim submitted at any time before final payment under this contract.

(c)   If a stop-work order is not canceled and the work covered by the order is terminated for the convenience of the Government, the Contracting Officer shall allow reasonable costs resulting from the stop-work order in arriving at the termination settlement.

(d)   If a stop-work order is not canceled and the work covered by the order is terminated for default, the Contracting Officer shall allow, by equitable adjustment or otherwise, reasonable costs resulting from the stop-work order.

6.   INSPECTION OF SERVICES

The Inspection of Services–Fixed Price (AUG 1996) (Deviation – May 2003) clause at FAR 52.246-4 applies to firm-fixed price orders placed under this contract. The Inspection–Time-and-Materials and Labor-Hour (JAN 1986) (Deviation – May 2003) clause at FAR 52.246-6 applies to time-and-materials and labor-hour orders placed under this contract.

7.   RESPONSIBILITIES OF THE CONTRACTOR

The Contractor shall comply with all laws, ordinances, and regulations (Federal, State, City, or otherwise) covering work of this character. If the end product of a task order is software, then FAR 52.227-14 (Deviation – May 2003) Rights in Data – General, may apply.

8.   RESPONSIBILITIES OF THE ORDERING ACTIVITY

Subject to security regulations, the ordering activity shall permit Contractor access to all facilities necessary to perform the requisite IT/IAM Professional Services.

9.   INDEPENDENT CONTRACTOR

All IT/IAM Professional Services performed by the Contractor under the terms of this contract shall be as an independent Contractor, and not as an agent or employee of the ordering activity.

10.   ORGANIZATIONAL CONFLICTS OF INTEREST

a.   Definitions.

"Contractor" means the person, firm, unincorporated association, joint venture, partnership, or corporation that is a party to this contract.

"Contractor and its affiliates" and "Contractor or its affiliates" refers to the Contractor, its chief executives, directors, officers, subsidiaries, affiliates, subcontractors at any tier, and consultants and any joint venture involving

the Contractor, any entity into or with which the Contractor subsequently merges or affiliates, or any other successor or assignee of the Contractor.

An "Organizational conflict of interest" exists when the nature of the work to be performed under a proposed ordering activity contract, without some restriction on ordering activities by the Contractor and its affiliates, may either (i) result in an unfair competitive advantage to the Contractor or its affiliates or (ii) impair the Contractor's or its affiliates' objectivity in performing contract work.

b.   To avoid an organizational or financial conflict of interest and to avoid prejudicing the best interests of the ordering activity, ordering activities may place restrictions on the Contractors, its affiliates, chief executives, directors, subsidiaries and subcontractors at any tier when placing orders against schedule contracts. Such restrictions shall be consistent with FAR 9.505 and shall be designed to avoid, neutralize, or mitigate organizational conflicts of interest that might otherwise exist in situations related to individual orders placed against the schedule contract. Examples of situations, which may require restrictions, are provided at FAR 9.508.

11.   INVOICES

The Contractor, upon completion of the work ordered, shall submit invoices for IT/EC services. Progress payments may be authorized by the ordering activity on individual orders if appropriate. Progress payments shall be based upon completion of defined milestones or interim products. Invoices shall be submitted monthly for recurring services performed during the preceding month.

12.   PAYMENTS

For firm-fixed price orders the ordering activity shall pay the Contractor, upon submission of proper invoices or vouchers, the prices stipulated in this contract for service rendered and accepted. Progress payments shall be made only when authorized by the order. For time-and-materials orders, the Payments under Time-and-Materials and Labor-Hour Contracts at FAR 52.212-4 (OCT 2008) (ALTERNATE I – OCT 2008) (DEVIATION I – FEB 2007) applies to time-and-materials orders placed under this contract. For labor-hour orders, the Payment under Time-and-Materials and Labor-Hour Contracts at FAR 52.212-4 (OCT 2008) (ALTERNATE I – OCT 2008) (DEVIATION I – FEB 2007) applies to labor-hour orders placed under this contract. 52.216-31(Feb 2007) Time-and-Materials/Labor-Hour Proposal Requirements—Commercial Item Acquisition As prescribed in 16.601(e) (3), insert the following provision:

(a) The Government contemplates award of a Time-and-Materials or Labor-Hour type of contract resulting from this solicitation.
(b) The offeror must specify fixed hourly rates in its offer that include wages, overhead, general and administrative expenses, and profit. The offeror must specify whether the fixed hourly rate for each labor category applies to labor performed by—
        (1) The offeror;
        (2) Subcontractors; and/or
        (3) Divisions, subsidiaries, or affiliates of the offeror under a common control.

13.   RESUMES

Resumes shall be provided to the GSA Contracting Officer or the user ordering activity upon request.

14.   INCIDENTAL SUPPORT COSTS

Incidental support costs are available outside the scope of this contract. The costs will be negotiated separately with the ordering activity in accordance with the guidelines set forth in the FAR.

15.   APPROVAL OF SUBCONTRACTS

The ordering activity may require that the Contractor receive, from the ordering activity's Contracting Officer, written consent before placing any subcontract for furnishing any of the work called for in a task order.

16. DESCRIPTION OF IT/IAM PROFESSIONAL SERVICES AND PRICING

a. The Contractor shall provide a description of each type of IT/IAM Service offered under Special Item Numbers 132-51 IT/IAM Professional Services should be presented in the same manner as the Contractor sells to its commercial and other ordering activity customers. If the Contractor is proposing hourly rates, a description of all corresponding commercial job titles (labor categories) for those individuals who will perform the service should be provided.

b. Pricing for all IT/IAM Professional Services shall be in accordance with the Contractor's customary commercial practices; e.g., hourly rates, monthly rates, term rates, and/or fixed prices.

Information Architect

Minimum/General Experience: Has approximately 2 years of experience with skills covering the planning, research, development, design, testing, evaluation, production, analysis, and implementation of multi tier network configurations for web enabled applications. Possesses a clear understanding of the interrelationships of firewalls, network devices, and servers and clear knowledge of a specific web enabling technology (i.e. Microsoft or Netscape servers). Possesses experience with database and/or email integration, Internet network design (DMZ, routers, switching) and system administration practices.

Functional Responsibility: Designs Intranet/Internet/Extranet architectures and develops implementations plans; administration activity; i.e., hardware, security, firewalls. Implements security architecture using LDAP, SSL and firewalls. Installs, configures and maintains all Intranet/Internet/Extranet tools, databases and features; provides support to e-commerce and other systems. Implements server design, development, and operation as well as analyze and develop requirements for hardware sizing/capacity, data validation, security and integration points to other applications.

Project Manager

Minimum/General Experience: Has approximately 2 years experience within information system project oriented environments. Leads planning, scheduling, monitoring, and reporting activities for projects. Facilitates needs assessment and development of recommended project control solutions to be used for planning, scheduling and tracking of each project though integration of various project management tools. Develops project controls and reporting procedures. Assists in the training of the project team on application of the procedures. Analyzes project progress/costs and assists with development and evaluation of alternatives when the project falls behind schedule or exceeds budget. Develops and delivers presentations to customer management. Integrates specific industry methodologies to appropriate project management solutions.

Functional Responsibility: Possesses a thorough understanding of the process requirements and provide both technical and management oversight of the project. Responsible for customer satisfaction, serves as the single point of contact, compliance with the Statement of Work, project planning and management, resource allocation, and reporting.

Consulting Engineer

Minimum/General Experience: Has approximately 5 years of experience. Possesses understanding covering the planning, research, development, design, testing, evaluation, production, analysis, and implementation of information systems, programs and equipment. Provides technical assistance to others working on requirements, definition, system requirements analysis, system level design and integration, operations support planning and/or the coordination of the preparation of system development specifications and specialty engineering plans. May be skilled in systems engineering, electrical engineering or industrial engineering activities.

Functional Responsibility: Working under close supervision, person provides technical or scientific and project support for multiple large-scale projects that cross-cut multiple specialization and product development areas. Applies advanced business and/or technical expertise to assist others with defining, analyzing, validating and documenting complex customer operating environments, states of technology and current engineering processes.

Provides advanced technical support to others involved in applying specialized knowledge to complex customer processes and requirements. Supports complex technical investigations through advanced research techniques, analysis or development phases of engineering projects. Works with other engineering disciplines in the development and application of processes to improve quality, reliability, cost customer appeal, and satisfaction.

Business Analyst

Minimum/General Experience: Has approximately 5 years of experience related to the delivery of information technology (IT) management assistance services and the ability to perform work across a broad spectrum of management activities. Expertise includes: 1) determination of IT requirements for budgeting, funding, manpower, facilities, equipment, supplies and services; 2) information systems design, procurement, production, distribution, maintenance, transportation, and utilization of material; 3) understanding of common and distinct business elements and how they can be enhanced by integrated information engineering and systems support techniques; and 4) application of specialized knowledge and understanding of financial and logistics support requirements as well as attainment of mission or program goals. The position also includes the ability to conduct IT business case analysis; complete risk management studies; perform feasibility and technical trade-off studies, and conduct best practices reviews.

Functional Responsibility: Responsible for providing IT expertise in a functional, technical and/or industry specific area. Responsible for issue analysis in the consulting field and the IT business system application of technology. Applies expertise in assessing scope of issues as well as development and execution of strategic client programs. Serves as functional or industry specialist within the areas of strategic planning, financial process analysis, activity based costing, benchmarking, and organizational and operational management issues.

Senior Information Architect

Minimum/General Experience: Has approximately 7 years of experience with skills covering the planning, research, development, design, testing, evaluation, production, analysis, and implementation of multi tier network configurations for web enabled applications. Possesses a clear understanding of the interrelationships of firewalls, network devices, and servers and clear knowledge of a specific web enabling technology (i.e. Microsoft or Netscape servers). Possesses experience with database and/or email integration, Internet network design (DMZ, routers, switching) and system administration practices.

Functional Responsibility: Provides supervision, person designs Intranet/Internet/Extranet architectures and develops implementations plans; administration activity; i.e., hardware, security, firewalls. Implements security architecture using LDAP, SSL and firewalls. Installs, configures and maintains all Intranet/Internet/Extranet tools, databases and features; provides support to e-commerce and other systems. Implements server design, development, and operation as well as analyze and develop requirements for hardware sizing/capacity, data validation, security and integration points to other applications.

Senior Project Manager

Minimum/General Experience: Has approximately 7 years experience within information system project oriented environments. Leads planning, scheduling, monitoring, and reporting activities for projects. Facilitates needs assessment and development of recommended project control solutions to be used for planning, scheduling and tracking of each project though integration of various project management tools. Develops project controls and reporting procedures. Assists in the training of the project team on application of the procedures. Analyzes project progress/costs and assists with development and evaluation of alternatives when the project falls behind schedule or exceeds budget. Develops and delivers presentations to customer management. Integrates specific industry methodologies to appropriate project management solutions.

Functional Responsibility: Provides supervision, person possesses a thorough understanding of the process requirements and provide both technical and management oversight of the project. Responsible for customer satisfaction, serves as the single point of contact, compliance with the Statement of Work, project planning and management, resource allocation, and reporting.

Senior Consulting Engineer

Minimum/General Experience: Has approximately 10 years of experience. Possesses understanding covering the planning, research, development, design, testing, evaluation, production, analysis, and implementation of information systems, programs and equipment. Provides technical assistance to others working on requirements, definition, system requirements analysis, system level design and integration, operations support planning and/or the coordination of the preparation of system development specifications and specialty engineering plans. May be skilled in systems engineering, electrical engineering or industrial engineering activities.

Functional Responsibility: Provides supervision, person provides technical or scientific and project support for multiple large-scale projects that cross-cut multiple specialization and product development areas. Applies advanced business and/or technical expertise to assist others with defining, analyzing, validating and documenting complex customer operating environments, states of technology and current engineering processes. Provides advanced technical support to others involved in applying specialized knowledge to complex customer processes and requirements. Supports complex technical investigations through advanced research techniques, analysis or development phases of engineering projects. Works with other engineering disciplines in the development and application of processes to improve quality, reliability, cost customer appeal, and satisfaction.

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| TERMS AND CONDITIONS APPLICABLE TO |
| WIRELESS SERVICES (SPECIAL ITEM NUMBER 132-53) |

1.   ACCEPTANCE TESTING

The Contractor shall provide acceptance test plans and procedures for ordering activity approval. The Contractor shall perform acceptance testing of the systems for ordering activity approval in accordance with the approved test procedures.

PLEASE SEE THE PRICELIST

2.   EQUIPMENT

The Contractor shall make available cellular voice and data devices. The cellular devices offered shall be compatible with the cellular access standards employed within the geographical scope of contract.

The Contractor shall provide programming of any cellular telephone device, including Contractor-provided and ordering activity-furnished devices, that conforms to the cellular service furnished by the Contractor.

3.   WARRANTY

The Contractor shall provide a warranty covering each Contractor-provided device. The minimum duration of the warranty shall be the duration of the manufacturer's commercial warranty for the item listed below:

PLEASE SEE THE PRICELIST

The warranty shall commence upon the later of the following:

        a.   Activation of the user's service
        b.   Installation/delivery of the equipment

The Contractor, by repair or replacement of the defective item, shall complete all warranty services within five working days of notification of the defect. Warranty service shall be deemed complete when the user has possession of the repaired or replaced item. If the Contractor renders warranty service by replacement, the user shall return the defective item(s) to the Contractor as soon as possible but not later than ten (10) working days after notification.

4.   MANAGEMENT AND OPERATIONS PRICING

The Offeror shall provide management and operations pricing on a uniform basis. All management and operations requirements for which pricing elements are not specified shall be provided as part of the basic service.

5.   TRAINING

The Contractor shall provide normal commercial installation, operation, maintenance, and engineering interface training on the system. If there is a separate charge, indicate below:

PLEASE SEE THE PRICELIST

6.   MONTHLY REPORTS

In accordance with commercial practices, the Contractor may furnish the ordering activity/User with a monthly summary ordering activity report.

7.   WIRELESS SERVICE PLAN

(a)   Describe the wireless service plan and eligibility requirements. Include, but not limited to, service area, monthly service charge, minutes included, etc.

PLEASE SEE THE PRICELIST

 (b)   Describe charges, if any, for additional minutes, domestic wireless long distance, roaming, nights and weekends, etc.

PLEASE SEE THE PRICELIST

 (c)   Describe corporate volume discounts and eligibility requirements.

PLEASE SEE THE PRICELIST

USA COMMITMENT TO PROMOTE
SMALL BUSINESS PARTICIPATION
PROCUREMENT PROGRAMS

PREAMBLE

(Name of Company) provides commercial products and services to ordering activities. We are committed to promoting participation of small, small disadvantaged and women-owned small businesses in our contracts. We pledge to provide opportunities to the small business community through reselling opportunities, mentor-protégé programs, joint ventures, teaming arrangements, and subcontracting.

COMMITMENT

To actively seek and partner with small businesses.

To identify, qualify, mentor and develop small, small disadvantaged and women-owned small businesses by purchasing from these businesses whenever practical.

To develop and promote company policy initiatives that demonstrates our support for awarding contracts and subcontracts to small business concerns.

To undertake significant efforts to determine the potential of small, small disadvantaged and women-owned small business to supply products and services to our company.

To insure procurement opportunities are designed to permit the maximum possible participation of small, small disadvantaged, and women-owned small businesses.

To attend business opportunity workshops, minority business enterprise seminars, trade fairs, procurement conferences, etc., to identify and increase small businesses with whom to partner.

To publicize in our marketing publications our interest in meeting small businesses that may be interested in subcontracting opportunities.

carahsoft
technology corp

We signify our commitment to work in partnership with small, small disadvantaged and women-owned small businesses to promote and increase their participation in ordering activity contracts. To accelerate potential opportunities please contact **Craig P. Abod, Phone: 703-871-8500, email: cpa@carahsoft.com, Fax:**

ATTACHMENT 1 –AUTHORIZED PARTICIPATING DEALERS

Carahsoft certifies that all dealers participating in the performance of this contract have agreed that their performance will be in accordance with all terms and conditions of this GSA Schedule.

For the complete listing of authorized participating dealers please see:

www.carahsoft.com/participtatingdealers

Special Item No. 132-8/132-8STLOC/132-8ROC Commercial Information Technology Equipment
Special Item No. 132-9/132-9STLOC/132-9ROC Used and Refurbished IT Equipment

A&T Marketing, Inc.

DBA A&T Networks
9861 Broken Land Pkwy, Ste 154
Columbia, MD 21046

Telephone No. (410) 312-9900
Fax No.
http://www.atnetworks.com
gsasales@atnetworks.com

Contract Number: GS-35F-0519J

Period Covered by Contract: 6/15/2009 THRU 6/14/2014

General Services Administration
Federal Supply Service

Price list current through Modification #   834ACJ9O____, dated   **08/08/2012**   .

Products and ordering information in this Authorized FSS INFORMATION TECHNOLOGY Schedule **70** Price list are also available on the GSA Advantage System. Agencies can browse GSAAdvantage by accessing the Federal Supply Service's Home Page via the Internet at http://www.gsaadvantage.gov.

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Information for Ordering Offices

SPECIAL NOTICE TO AGENCIES:

Small Business Participation

SBA strongly supports the participation of small business concerns in the Federal Supply Schedules Program. To enhance Small Business Participation SBA policy allows agencies to include in their procurement base and goals, the dollar value of orders expected to be placed against the Federal Supply Schedules, and to report accomplishments against these goals.

For orders exceeding the micropurchase threshold, FAR 8.404 requires agencies to consider the catalogs/pricelists of at least three schedule contractors or consider reasonably available information by using the GSA Advantage!™ On-line shopping service (www.fss.gsa.gov). The catalogs/pricelists, GSA Advantage!™ and the Federal Supply Service Home Page (www.fss.gsa.gov) contain information on a broad array of products and services offered by small business concerns.

This information should be used as a tool to assist ordering activities in meeting or exceeding established small business goals. It should also be used as a tool to assist in including small, small disadvantaged, and women-owned small businesses among those considered when selecting pricelists for a best value determination.

For orders exceeding the micropurchase threshold, customers are to give preference to small business concerns when two or more items at the same delivered price will satisfy their requirement.

1. **Geographic Scope of Contract:**

The geographic scope of the contract includes the 48 contiguous states, the District of Columbia. Prices do not include shipping cost to AK, HI & PR.

2. **Contractor's Ordering Address and Payment Information:**

Ordering Address: Payment Address:

A&T Marketing, Inc.   A&T Marketing, Inc.
(DBA A&T Networks)
9861 Broken Land Pkwy, Ste 154   9861 Broken Land Pkwy, Ste 154
Columbia, MD 21046   Columbia, MD 21046
Contractors are required to accept the Government purchase card for payments equal to or less than the micro-purchase threshold for oral or written delivery orders. Government

purchase cards will be acceptable for payment above the micro-purchase threshold. In addition, bank account information for wire transfer payments will be shown on the invoice.

The following email address and telephone number (s) can be used by ordering agencies to obtain technical and/or ordering assistance:

gsasales@atnetworks.com, orders@atnetworks.com

Phone: (410) 312-9900   Fax:

3. **Liability for Injury or Damage**

The Contractor shall not be liable for any injury to Government personnel or damage to Government property arising from the use of equipment maintained by the Contractor, unless such injury or damage is due to the fault or negligence of the Contractor.

4. **Statistical Data for Government Ordering Office Completion of Standard Form 279:**

      Block 9: G. Order/Modification Under Federal Schedule

      Block 16: Contractor Establishment Code (DUNS):

      Block 30: Type of Contractor -   B. Small Business

      Block 31: Woman-Owned Small Business - YES

      Block 36: Contractor's Taxpayer Identification Number (TIN) –

4a. CAGE Code: 0ZPX2

5. **FOB: Destination**

6. **DELIVERY SCHEDULE**

    a. TIME OF DELIVERY: The Contractor shall deliver to destination within the number of calendar days after receipt of order (ARO), as set forth below:

SPECIAL ITEM NUMBER	DELIVERY TIME (Days ARO)
132-8	15 to 30 days
132-9	15 to 30 days

Special order items, built to order items and backorder items might take longer than normal. Customer is advised to check availability before ordering. Expedited delivery are available by phone, 410-312-9900 opt. 1

       b.   URGENT REQUIREMENTS: When the Federal Supply Schedule contract delivery period does not meet the bona fide urgent delivery requirements of an ordering agency, agencies are encouraged, if time permits, to contact the Contractor for the purpose of obtaining accelerated delivery. The Contractor shall reply to the inquiry within 3 workdays after receipt. (Telephonic replies shall be confirmed by the Contractor in writing.) If the Contractor offers an accelerated delivery time acceptable to the ordering agency, any order(s) placed pursuant to the agreed upon accelerated delivery time frame shall be delivered within this shorter delivery time and in accordance with all other terms and conditions of the contract.

7. **Discounts:** Prices shown are NET Prices; Basic Discounts have been deducted.

      a.   Prompt Payment: <u>0%</u> - <u>N/A</u> days from receipt of invoice or date of acceptance, whichever is later.

      b.   Quantity Discounts – **None.**

      c.   Dollar Volume Discounts – **None**.

      d.   Government Educational Institutions – Same as Schedule pricing.

      e.   Discount for use of Government Commercial Credit Card – None.

      f.   Other – None.

8. **Trade Agreements Act of 1979, as amended:**

All items are U.S. made end products, designated country end products, Caribbean Basin country end products, Canadian end products, or Mexican end products as defined in the Trade Agreements Act of 1979, as amended.

9.   **Statement Concerning Availability of Export Packing: N/A.**

10.   **Small Requirements**: The minimum dollar value of orders to be issued is <u>$200.00</u> per order.

11.   **Maximum Order:** (All dollar amounts are exclusive of any discount for prompt payment.)
a.   Special Item 132-8 – Purchase of Equipment

The maximum dollar value per order for all purchased equipment will be $500,000.

b.   Special Item 132-9 – Purchase of Used/Refurbished Equipment.
The maximum dollar value per order for for all purchased used and refurbished equipment will be $500,000.

12.   USE OF FEDERAL SUPPLY SERVICE INFORMATION TECHNOLOGY SCHEDULE CONTRACTS. In accordance with FAR 8.404:
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Orders placed pursuant to a Multiple Award Schedule (MAS), using the procedures in FAR 8.404, are considered to be issued pursuant to full and open competition. Therefore, when placing orders under Federal Supply Schedules, ordering offices need not seek further competition, synopsize the requirement, make a separate determination of fair and reasonable pricing, or consider small business set-asides in accordance with subpart 19.5. GSA has already determined the prices of items under schedule contracts to be fair and reasonable. By placing an order against a schedule using the procedures outlined below, the ordering office has concluded that the order represents the best value and results in the lowest overall cost alternative (considering price, special features, administrative costs, etc.) to meet the Government's needs.

     a.   Orders placed at or below the micro-purchase threshold. Ordering offices can place orders at or below the micro-purchase threshold with any Federal Supply Schedule Contractor.

     b.   Orders exceeding the micro-purchase threshold but not exceeding the maximum order threshold. Orders should be placed with the Schedule Contractor that can provide the supply or service that represents the best value. Before placing an order, ordering offices should consider reasonably available information about the supply or service offered under MAS contracts by using the "GSA Advantage!" on-line shopping service, or by reviewing the catalogs/pricelists of at least three Schedule Contractors and selecting the delivery and other options available under the schedule that meets the agency's needs. In selecting the supply or service representing the best value, the ordering office may consider--

     (1)   Special features of the supplies that are required in effective program performance and that are not provided by a comparable supply;

     (2)   Trade-in considerations;

     (3)   Probable life of the item selected as compared with that of a comparable item;

(4)   Warranty considerations;

(5)   Maintenance availability;

(6)   Past performance; and

(7)   Environmental and energy efficiency considerations.

    c.   Orders exceeding the maximum order threshold. Each schedule contract has an established maximum order threshold. This threshold represents the point where it is advantageous for the ordering office to seek a price reduction. In addition to following the procedures in paragraph b, above, and before placing an order that exceeds the maximum order threshold, ordering offices shall--

    (1)   Review additional Schedule Contractors' catalogs/pricelists or use the "GSA Advantage!" on-line shopping service;

    (2)   Based upon the initial evaluation, generally seek price reductions from the Schedule Contractor(s) appearing to provide the best value (considering price and other factors); and

    (3)   After price reductions have been sought, place the order with the Schedule Contractor that provides the best value and results in the lowest overall cost alternative. If further price reductions are not offered, an order may still be placed, if the ordering office determines that it is appropriate.

    NOTE: For orders exceeding the maximum order threshold, the Contractor may:

    (1) Offer a new lower price for this requirement (the Price Reductions clause is not applicable to orders placed over the maximum order in FAR 52.216-19 Order Limitations);

    (2) Offer the lowest price available under the contract; or

    (3) Decline the order (orders must be returned in accordance with FAR 52.216-19).

    d.   Blanket purchase agreements (BPAs). The establishment of Federal Supply Schedule BPAs is permitted when following the ordering procedures in FAR 8.404. All schedule contracts contain BPA provisions. Ordering offices may use BPAs to establish accounts with Contractors to fill recurring requirements. BPAs should address the frequency of ordering and invoicing, discounts, and delivery locations and times.

    e. Price reductions. In addition to the circumstances outlined in paragraph c, above, there may be instances when ordering offices will find it advantageous to request

a price reduction. For example, when the ordering office finds a schedule supply or service elsewhere at a lower price or when a BPA is being established to fill recurring requirements, requesting a price reduction could be advantageous. The potential volume of orders under these agreements, regardless of the size of the individual order, may offer the ordering office the opportunity to secure greater discounts. Schedule Contractors are not required to pass on to all schedule users a price reduction extended only to an individual agency for a specific order.

      f. Small business. For orders exceeding the micro-purchase threshold, ordering offices should give preference to the items of small business concerns when two or more items at the same delivered price will satisfy the requirement.

      g. Documentation. Orders should be documented, at a minimum, by identifying the Contractor the item was purchased from, the item purchased, and the amount paid. If an agency requirement in excess of the micro-purchase threshold is defined so as to require a particular brand name, product, or feature of a product peculiar to one manufacturer, thereby precluding consideration of a product manufactured by another company, the ordering office shall include an explanation in the file as to why the particular brand name, product, or feature is essential to satisfy the agency's needs.

13. FEDERAL INFORMATION TECHNOLOGY/TELECOMMUNICATION STANDARDS REQUIREMENTS: Federal departments and agencies acquiring products from this Schedule must comply with the provisions of the Federal Standards Program, as appropriate (reference: NIST Federal Standards Index). Inquiries to determine whether or not specific products listed herein comply with Federal Information Processing Standards (FIPS) or Federal Telecommunication Standards (FED-STDS), which are cited by ordering offices, shall be responded to promptly by the Contractor.

13.1 FEDERAL INFORMATION PROCESSING STANDARDS PUBLICATIONS (FIPS PUBS): Information Technology products under this Schedule that do not conform to Federal Information Processing Standards (FIPS) should not be acquired unless a waiver has been granted in accordance with the applicable "FIPS Publication." Federal Information Processing Standards Publications (FIPS PUBS) are issued by the U.S. Department of Commerce, National Institute of Standards and Technology (NIST), pursuant to National Security Act. Information concerning their availability and applicability should be obtained from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia 22161. FIPS PUBS include voluntary standards when these are adopted for Federal use. Individual orders for FIPS PUBS should be referred to the NTIS Sales Office, and orders for subscription service should be referred to the NTIS Subscription Officer, both at the above address, or telephone number (703) 487-4650.

13.2 FEDERAL TELECOMMUNICATION STANDARDS (FED-STDS): Telecommunication products under this Schedule that do not conform to Federal Telecommunication Standards (FED-STDS) should not be acquired unless a waiver has

been granted in accordance with the applicable "FED-STD." Federal Telecommunication Standards are issued by the U.S. Department of Commerce, National Institute of Standards and Technology (NIST), pursuant to National Security Act. Ordering information and information concerning the availability of FED-STDS should be obtained from the GSA, Federal Supply Service, Specification Section, 470 East L'Enfant Plaza, Suite 8100, SW, Washington, DC 20407, telephone number (202)619-8925. Please include a self-addressed mailing label when requesting information by mail. Information concerning their applicability can be obtained by writing or calling the U.S. Department of Commerce, National Institute of Standards and Technology, Gaithersburg, MD 20899, telephone number (301)975-2833.

14.   SECURITY REQUIREMENTS. In the event security requirements are necessary, the ordering activities may incorporate, in their delivery orders, a security clause in accordance with current laws, regulations, and individual agency policy; however, the burden of administering the security requirements shall be with the ordering agency. If any costs are incurred as a result of the inclusion of security requirements, such costs will not exceed ten percent (10%) or $100,000, of the total dollar value of the order, whichever is lessor.

15.   CONTRACT ADMINISTRATION FOR ORDERING OFFICES: Any ordering office, with respect to any one or more delivery orders placed by it under this contract, may exercise the same rights of termination as might the GSA Contracting Officer under provisions of FAR 52.212-4, paragraphs (l) Termination for the Government's convenience, and (m) Termination for Cause (See C.1.)

16.   GSA *Advantage*!

GSA *Advantage*! is an on-line, interactive electronic information and ordering system that provides on-line access to vendors' schedule prices with ordering information. GSA *Advantage*! will allow the user to perform various searches across all contracts including, but not limited to:

        (1)   Manufacturer;
        (2)   Manufacturer's Part Number; and
        (3)   Product categories.

Agencies can browse GSA Advantage! by accessing the Internet World Wide Web utilizing a browser (ex.: Internet Explorer or Firefox). The Internet address is http://www.gsaadvantage.gov/.

17.   PURCHASE OF INCIDENTAL, NON-SCHEDULE ITEMS

For administrative convenience, open market (non-contract) items may be added to a Federal Supply Schedule Blanket Purchase Agreement (BPA) or an individual order, provided that the items are clearly labeled as such on the order, all applicable regulations

have been followed, and price reasonableness has been determined by the ordering activity for the open market (non-contract) items.

18.   CONTRACTOR COMMITMENTS, WARRANTIES AND REPRESENTATIONS

a.   For the purpose of this contract, commitments, warranties and representations include, in addition to those agreed to for the entire schedule contract:

(1)   Time of delivery/installation quotations for individual orders;

(2)   Technical representations and/or warranties of products concerning performance, total system performance and/or configuration, physical, design and/or functional characteristics and capabilities of a product/equipment/ service/software package submitted in response to requirements which result in orders under this schedule contract.

(3)   Any representations and/or warranties concerning the products made in any literature, description, drawings and/or specifications furnished by the Contractor.

b.   The above is not intended to encompass items not currently covered by the GSA Schedule contract.

19.   OVERSEAS ACTIVITIES

The terms and conditions of this contract shall apply to all orders for equipment in areas listed in the pricelist outside the 48 contiguous states and the District of Columbia, except as indicated below:

N/A

Upon request of the Contractor, the Government may provide the Contractor with logistics support, as available, in accordance with all applicable Government regulations. Such Government support will be provided on a reimbursable basis, and will only be provided to the Contractor's technical personnel whose services are exclusively required for the fulfillment of the terms and conditions of this contract.

20.   YEAR 2000 WARRANTY — COMMERCIAL SUPPLY ITEMS

(a)   As used in this clause, "Year 2000 compliant" means, with respect to information technology, that the information technology accurately processes date/time data (including, but not limited to, calculating, comparing, and sequencing) from, into, and between the twentieth and twenty-first centuries, and the years 1999 and 2000 and leap

year calculations, to the extent that other information technology used in combination with other information technology, shall accurately process date/time data if the other information technology being acquired, properly exchanges date/time data with it.

(b) The Contractor shall warrant that each hardware, software, and firmware product delivered under this contract shall be able to accurately process date data (including, but not limited to, calculating, comparing, and sequencing) from, into, and between the twentieth and twenty-first centuries, including leap year calculations, when used in accordance with the product documentation provided by the Contractor, provided that all products (e.g. hardware, software, firmware) used in combination with products properly exchange date data with it. If the contract requires that specific listed products must perform as a system in accordance with the foregoing warranty, then that warranty shall apply to those listed products as a system. The duration of this warranty and the remedies available under this warranty shall include repair or replacement of any product whose non-compliance is discovered and made known to the Contractor in writing within ninety (90) days after acceptance (installation is considered acceptance). The Contractor may offer an extended warranty to the Government to include repair or replacement of any product whose non-compliance is discovered and made known to the Contractor in writing at any time prior to June 1, 2000, or for a period of six months following acceptance (installation is considered acceptance) whichever is later. Nothing in this warranty shall be construed to limit any rights or remedies the Government may otherwise have under this contract with respect to defects other than Year 2000 performance.

21. BLANKET PURCHASE AGREEMENTS (BPAs)

Federal Acquisition Regulation (FAR) 13.201(a) defines Blanket Purchase Agreements (BPAs) as "…a simplified method of filling anticipated repetitive needs for supplies or services by establishing 'charge accounts' with qualified sources of supply." The use of Blanket Purchase Agreements under the Federal Supply Schedule Program is authorized in accordance with FAR 13.202(c)(3), which reads, in part, as follows:

"BPAs may be established with Federal Supply Schedule Contractors, if not inconsistent with the terms of the applicable schedule contract."

Federal Supply Schedule contracts contain BPA provisions to enable schedule users to maximize their administrative and purchasing savings. This feature permits schedule users to set up "accounts" with Schedule Contractors to fill recurring requirements. These accounts establish a period for the BPA and generally address issues such as the frequency of ordering and invoicing, authorized callers, discounts, delivery locations and times. Agencies may qualify for the best quantity/volume discounts available under the contract, based on the potential volume of business that may be generated through such an agreement, regardless of the size of the individual orders. In addition, agencies may be able to secure a discount higher than that available in the contract based on the aggregate volume of business possible under a BPA. Finally, Contractors may be open to a

progressive type of discounting where the discount would increase once the sales accumulated under the BPA reach certain prescribed levels. Use of a BPA may be particularly useful with the new Maximum Order feature. See the Suggested Format, contained in this Schedule Pricelist, for customers to consider when using this purchasing tool.

22. CONTRACTOR TEAM ARRANGEMENTS

Federal Supply Schedule Contractors may use "Contractor Team Arrangements" (see FAR 9.6) to provide solutions when responding to a customer agency requirements. The policy and procedures outlined in this part will provide more flexibility and allow innovative acquisition methods when using the Federal Supply Schedules. See the additional information regarding Contractor Team Arrangements in this Schedule Pricelist.

I. TERMS AND CONDITIONS APPLICABLE TO PURCHASE OF GENERAL PURPOSE COMMERCIAL INFORMATION TECHNOLOGY EQUIPMENT (SPECIAL ITEM NUMBER 132-8)

1.   MATERIAL AND WORKMANSHIP

All equipment furnished hereunder must satisfactorily perform the function for which it is intended.

2.   ORDER

Written orders, EDI orders (GSA Advantage! and FACNET), credit card orders, and orders placed under blanket purchase agreements (BPA) agreements shall be the basis for purchase in accordance with the provisions of this contract. If time of delivery extends beyond the expiration date of the contract, the Contractor will be obligated to meet the delivery and installation date specified in the original order.

For credit card orders and BPAs, telephone orders are permissible.

3.   TRANSPORTATION OF EQUIPMENT

FOB DESTINATION. Prices cover equipment delivery to destination, for any location within the geographic scope of this contract.

4.   OPERATING AND MAINTENANCE MANUALS. The Contractor shall furnish the Government with one (1) copy of all operating and maintenance manuals which are normally provided with the equipment being purchased.

5.   INSPECTION/ACCEPTANCE

The Contractor shall only tender for acceptance those items that conform to the requirements of this contract. The Government reserves the right to inspect or test any equipment that has been tendered for acceptance. The Government may require repair or replacement of nonconforming equipment at no increase in contract price. The Government must exercise its postacceptance rights (1) within a reasonable time after the defect was discovered or should have been discovered; and (2) before any substantial change occurs in the condition of the item, unless the change is due to the defect in the item.

6.   WARRANTY

a.   Unless specified otherwise in this contract, the Contractor's standard commercial warranty as stated in the contract's commercial pricelist will apply to this contract.

Contractor's standard Warranty is the standard commercial warranty offered by the manufacturer.

       b.   The Contractor warrants and implies that the items delivered hereunder are merchantable and fit for use for the particular purpose described in this contract.

       c.   Limitation of Liability. Except as otherwise provided by an express or implied warranty, the Contractor will not be liable to the Government for consequential damages resulting from any defect or deficiencies in accepted items.

       d.   If inspection and repair of defective equipment under this warranty will be performed at the Manufacturer's location on the warranty registration card that is included in the package.

7.   PURCHASE PRICE FOR ORDERED EQUIPMENT

The purchase price that the Government will be charged will be the Government purchase price in effect at the time of order placement, or the Government purchase price in effect on the installation date (or delivery date when installation is not applicable), whichever is less.

8.   RESPONSIBILITIES OF THE CONTRACTOR
The Contractor shall comply with all laws, ordinances, and regulations (Federal, State, City or otherwise) covering work of this character, and shall include all costs, if any, of such compliance in the prices quoted in this offer.

9.   TRADE-IN OF INFORMATION TECHNOLOGY EQUIPMENT

When an agency determines that Information Technology equipment will be replaced, the agency shall follow the contracting policies and procedures in the Federal Acquisition Regulation (FAR), the policies and procedures regarding disposition of information technology excess personal property in the Federal Property Management Regulations (FPMR) (41 CFR 101-43.6), and the policies and procedures on exchange/sale contained in the FPMR (41 CFR part 101-46).

PREAMBLE

<u>A&T Marketing, Inc.</u> provides commercial products to the Federal Government. We are committed to promoting participation of small, small disadvantaged and women-owned small businesses in our contracts. We pledge to provide opportunities to the small business community through reselling opportunities, mentor-protégé programs, joint ventures, teaming arrangements, and subcontracting.

COMMITMENT

To actively seek and partner with small businesses.

To identify, qualify, mentor and develop small, small disadvantaged and women-owned small businesses by purchasing from these businesses whenever practical.

To develop and promote company policy initiatives that demonstrate our support for awarding contracts and subcontracts to small business concerns.

To undertake significant efforts to determine the potential of small, small disadvantaged and women-owned small business to supply products and services to our company.

To insure procurement opportunities are designed to permit the maximum possible participation of small, small disadvantaged, and women-owned small businesses.

To attend business opportunity workshops, minority business enterprise seminars, trade fairs, procurement conferences, etc., to identify and increase small businesses with whom to partner.

To publicize in our marketing publications our interest in meeting small businesses that may be interested in subcontracting opportunities.

We signify our commitment to work in partnership with small, small disadvantaged and women-owned small businesses to promote and increase their participation in Federal Government contracts. To accelerate potential opportunities please contact Tony Gharbawi, phone number 410-312-9900, e-mail address <u>tonyg@atnetworks.com</u> and fax number 240-399-1330.

BEST VALUE
BLANKET PURCHASE AGREEMENT
FEDERAL SUPPLY SCHEDULE
(Insert Customer Name)

In the spirit of the Federal Acquisition Streamlining Act ___(Agency)___ and <u>A&T Marketing, Inc..</u> enter into a cooperative agreement to further reduce the administrative costs of acquiring commercial items from the General Services Administration (GSA) Federal Supply Schedule Contract(s) _____.

Federal Supply Schedule contract BPAs eliminate contracting and open market costs such as: search for sources; the development of technical documents, solicitations and the evaluation of offers. Teaming Arrangements are permitted with Federal Supply Schedule Contractors in accordance with Federal Acquisition Regulation (FAR) 9.6.

This BPA will future decrease costs, reduce paperwork, and save time by eliminating the need for repetitive, individual purchases from the schedule contract. The end result is to create a purchasing mechanism for the **Government that works better and costs less**.

Signatures

_____   _____
AGENCY   DATE   A&T Marketing, Inc.   DATE

(CUSTOMER NAME)
BLANKET PURCHASE AGREEMENT

Pursuant to GSA Federal Supply Schedule Contract Number(s)_____, Blanket Purchase Agreements, the Contractor agrees to the following terms of a Blanket Purchase Agreement (BPA) EXCLUSIVELY WITH <u>(Ordering Agency):</u>

(1) The following contract items can be ordered under this BPA. All orders placed against this BPA are subject to the terms and conditions of the contract, except as noted below:

MODEL NUMBER/PART NUMBER DISCOUNT/PRICE	***SPECIAL BPA**
132-8	
132-9	

(2) Delivery:

DESTINATION	**DELIVERY SCHEDULE/DATES**
FOB	15-30 days

(3) The Government estimates, but does not guarantee, that the volume of purchases through this agreement will be _____.

(4) This BPA does not obligate any funds.

(5) This BPA expires on _____ or at the end of the contract period, whichever is earlier.

(6) The following office(s) is hereby authorized to place orders under this BPA:

OFFICE	**POINT OF CONTACT**

(7) Orders will be placed against this BPA via Electronic Data Interchange (EDI), FAX, or paper.

(8) Unless otherwise agreed to, all deliveries under this BPA must be accompanied by delivery tickets or sales slips that must contain the following information as a minimum:

(a) Name of Contractor;

(b) Contract Number;

(c) BPA Number;

(d) Model Number or National Stock Number (NSN);

(e) Purchase Order Number;

(f) Date of Purchase;

(g) Quantity, Unit Price, and Extension of Each Item (unit prices and extensions need not be shown when incompatible with the use of automated systems; provided, that the invoice is itemized to show the information); and

(h) Date of Shipment.

(9) The requirements of a proper invoice are specified in the Federal Supply Schedule contract. Invoices will be submitted to the address specified within the purchase order transmission issued against this BPA.

(10) The terms and conditions included in this BPA apply to all purchases made pursuant to it. In the event of an inconsistency between the provisions of this BPA and the Contractor's invoice, the provisions of this BPA will take precedence.

**BASIC GUIDELINES FOR USING
"CONTRACTOR TEAM ARRANGEMENTS"**

Federal Supply Schedule Contractors may use "Contractor Team Arrangements" (see FAR 9.6) to provide solutions when responding to a customer agency requirements.

These Team Arrangements can be included under a Blanket Purchase Agreement (BPA). BPAs are permitted under all Federal Supply Schedule contracts.

Orders under a Team Arrangement are subject to <u>terms and conditions</u> or the Federal Supply Schedule Contract.

Participation in a Team Arrangement is limited to Federal Supply Schedule Contractors.

Customers should refer to FAR 9.6 for specific details on Team Arrangements.

Here is a general outline on how it works:

- The customer identifies their requirements.

- Federal Supply Schedule Contractors may individually meet the customers needs, or -

- Federal Supply Schedule Contractors may individually submit a Schedules "Team Solution" to meet the customer's requirement.

- Customers make a best value selection.

TEAMING AGREEMENT

NO TEAMING AGREEMENTS FOR THE CURRENT PERIOD.

For questions, please contact

Tony Gharbawi – Contract Administrator
tonyg@atnetworks.com
P: 410-312-9900 X 301
F:

RETURN POLICY

All claims have to be submitted within 30 days from upon receipt of order in writing to the emails below. A return Authorization number must be obtained before shipping your item(s) to the returns center for that particular item.

For faster service, please email us at CS@atnetworks.com and/or gsasales@atnetworks.com, and we will process your request per the guidelines below.

Put the PO# XXX in the subject line.

List the items that you need to return. (Quantities and part numbers).

The condition of each item. (Factory sealed/unopened or opened with a reason).

Credit requested or exchange for each p/n.

A refund will be issued upon receipt and acceptance of your items for each condition below. A credit memo will be issued and used to refund your credit card, mail you a check or applied as a payment towards the replacement order.

Any questions please contact cs@atnetworks.com

Returns Guidelines

1. **Unopened/Factory Sealed Return (in fully resellable condition - i.e. no stickers, markings, etc.)**

    a. Customer can request a return within 30 days of shipment by email.
    b. Memory can only be exchanged from A&T.
    c. Shipping and credit card charges are not refundable. Restocking fees might apply.

2. **Defective or Dead on Arrival (DOA)**

    A&T will replace the product at no cost to the customer under the following conditions.
    a. Customer contacts A&T Tech Support to verify that the issue cannot be resolved over the phone.
    b. Item must be packaged in original box with all package contents.
    c. No stickers or markings on the item or the box.

3. **Freight Lost or Damage**

A case will be issued with the carrier.

a. If a shipment is lost the carrier will issue a trace on it. If the shipment is retrieved A&T will close the case and consider the order completed, otherwise A&T will replace the lost item at no cost to the customer as soon as the trace ticket is closed.

b. If the item is damaged the customer will package the item in the same condition it came in and A&T will replace the item at no cost to the customer.

4. Overgoods

Products not authorized for return, did not meet the guidelines of an RMA or opened/used shall be defined as "overgoods." Overgoods may be returned to you at your expense. If A&T and customer agrees on the return conditions, A&T will issue a credit for the last purchase price, or the current price or the cost of goods less **a restocking fee**.