

ANNEX A-1 – STATEMENT OF WORK – THE DRMIS FOR DND

SOW - Table of Contents

1. Introduction	<u>34</u>
1.1 BACKGROUND	<u>34</u>
1.2 DRMIS CENTRE OF EXCELLENCE (CoE)	<u>45</u>
1.3 RESPONSIBILITIES	<u>56</u>
1.3.1 DND High Level Responsibilities	6
1.3.2 Contractor High Level Responsibilities	6
2. SCOPE	7
2.1 SUMMARY OF WORK	7
2.1.1 Steady-state In-service Support	7
2.1.2 Expansion of the DRMIS footprint (OPTIONAL)	8
2.1.3 Additional Work Requirements	9
2.1.4 Evolving SAP Products and Technologies	9
2.1.5 Performance Standards	9
2.2 DELIVERABLES	9
2.3 ACCEPTANCE – TECHNICAL AUTHORITY	<u>940</u>
2.4 WORKING LOCATION AND HOURS	10
2.5 CONTRACTOR TRAVEL	10
2.6 CoE MANAGEMENT PROCESSES	10
2.7 KICK-OFF MEETING	11
2.8 REPORTING	11
3.0 RESOURCE CATEGORIES	<u>1314</u>
3.1 CONTRACTOR RESOURCE LEVEL OF EXPERTISE	<u>1314</u>
3.2 CONTRACTOR CoE RESOURCE CATEGORIES	14
3.2.1 List of resource categories and levels	14
3.2.1 Project Manager	20
3.2.2 Project Coordinator	20
3.2.3 Application Solution Architect	20
3.2.4 Business Solution Architect	21
3.2.5 Technical Architect	22
3.2.6 SAP Functional Analyst - Core	22
3.2.7 SAP Functional Analyst – Specialized	23
3.2.8 Security Assessment & Authorization (SA&A) Specialist	24
3.2.9 Auditor – Security, Privacy & Internal Controls	24
3.2.10 Business Continuity/Disaster Recovery Specialist	24
3.2.11 Roles & Authorizations (R&A) Architect	25
3.2.12 Security Architect	25
3.2.13 Roles and Authorizations (R&A) Specialist	25
3.2.14 Programmer/Software Developer	26
3.2.15 Interface Specialist	26
3.2.16 Extract, Transform, Load (ETL) Specialist	<u>2627</u>
3.2.17 SAP BI/BW Specialist	27
3.2.18 SAP BusinessObjects Developer	27
3.2.19 Enterprise Performance Management (EPM) Specialist	<u>2728</u>
3.2.20 SAP Portal Specialist	28
3.2.21 BASIS Administrator	29
3.2.22 UNIX and Linux Administrator	29
3.2.23 Windows Administrator	<u>2930</u>
3.2.24 Network Manager	30
3.2.25 Application Administrator	<u>3031</u>
3.2.26 SAP Archiving Specialist	31
3.2.27 Business Analyst	<u>3132</u>
3.2.28 Business Support Specialist	32
3.2.29 Business Transition Analyst	<u>3233</u>
3.2.29 Training Development, Delivery and Support	33

3.2.30	Technical Writer	33
3.2.31	Transport Coordinator	33 34
3.2.32	Configuration Management Specialist	34
3.2.33	Incident Management Coordinator.....	34 35
3.2.34	Change Coordinator.....	35
3.2.35	Test Manager.....	35
3.2.36	Quality Controller	35 36
3.2.37	Tester	36
3.2.38	Subject Matter Expert	36 37

1. INTRODUCTION

1.1 Background

The Department of National Defence (DND) has implemented an integrated information system for the enablement of a number of business processes, the most prominent being those for Materiel Acquisition and Support and for Financial Management. The Defence Resource Management Information System (DRMIS) is currently used by over 20,000 personnel located at every base and station within the Canadian Armed Forces (CAF) and DND.

The DRMIS is a complex system with SAP at the core of the solution (see Annex xx for a list of the SAP modules and functionality currently employed). In addition, there are a number of third-party products such as Pennant's Omega PS and Prometheus' Graphical Work Order Scheduling (GWOS) that provide additional functionalities.

The DRMIS has been implemented in a large, distributed system landscape – along with standard connectivity via the Defence Wide Area Network (DWAN) the solution has been extended out to Her Majesty's Canadian Ships (HMCS) through a deployed solution capable of operating in an interrupted communications environment, and a Mobile configuration has been developed for use in extended operational situations.

As the department continues to leverage the DRMIS to meet evolving requirements, and as functionality is increased and organizational coverage is widened (for example, additional integration into the DRMIS of supply chain functionality and other business processes such as those related to real property management) it is expected that the DRMIS will grow to over 30,000 users in the coming years.

DND continues to identify future opportunities that can allow the organization to achieve maximum benefit from its Enterprise Resource Planning (ERP) platforms. The following excerpt is taken from the DND/CAF Defence Enterprise Resource Planning (DERP) Strategy:

“As part of the IM Group Campaign Plan published June 2009, ADM (IM) has committed to develop and support a DERP capability, the primary goal of which is to harmonize and integrate Departmental business processes to better facilitate decision making across the enterprise. Integral to this commitment is an ERP Strategy that will inform a collaborative approach to legacy system consolidation, as well as direct new requirements, to the targeted ERP platform. This ERP strategy addresses the way forward for system solutions in support of corporate functions, as well as operational support functions described herein.”

The DRMIS is a cornerstone of the DERP Strategy, and as such will be a significant enabler to its intent. Therefore, the DRMIS CoE will be called upon to provide the necessary expertise in order to execute the activities and initiatives as prescribed and prioritized by DND/CAF Senior Management. Rationalization of the department's legacy system landscape will require that the CoE be heavily involved in the analysis, planning and delivery of solutions to transition users and data (where necessary) and to implement new capability requirements into the DRMIS. The roadmap with which to implement the strategy is currently in draft having been developed collaboratively with key departmental stakeholders.

1.2 The DRMIS Centre of Excellence (CoE)

Given the importance of the DRMIS to the day to day workflow of DND/CAF operational deployed and corporate users, a structured approach to supporting, sustaining, and expanding the solution is required. Processes, procedures, tools and resources have been put in place to form the DRMIS CoE in order to

provide appropriate in-service support to a large and diverse user community that is geographically dispersed throughout the world.

The DRMIS CoE is resourced with a combination of DND employees and members of the CAF, all working to provide effective support to users, and the capability to enable the department's strategic direction as necessary.

The mandate of the CoE, at a very high level, is to provide functional, technical and user support to the DRMIS and its users throughout DND/CAF. More specifically, the objectives of the DRMIS CoE are to:

- a. Support operational imperative business processes;
- b. Provide a focal point for the people, processes and tools required to safeguard stable operations of the DRMIS solution;
- c. Provide a common in-service support organization for the DRMIS;
- d. Provide a foundation for reliable, repeatable and scalable services required to sustain the DRMIS solution; and
- e. Provide a foundation that will enable continuous improvement of the solution to support evolving requirements and functional improvements for end users across the DND/CAF.

At its most basic level, the role of the CoE is to support its users so that they can use the DRMIS to do their jobs on a daily basis. Requirements must be gathered, synthesized, analyzed, and prioritized in order for the CoE to respond appropriately to user needs for system fixes, improvements or expansion. Requirements come from various sources, including:

- a. Day to day user transactions where passwords need to be reset, user accounts added, system errors need to be fixed, etc.;
- b. Senior management requirements (i.e. "Governance") to enable transformational activities such as rationalization of the departments application landscapes or expand the use of the DRMIS;
- c. Legislative or Government of Canada (GoC) mandated changes in policy or processes that require a resulting change in the information systems that enable the associated business processes; or
- d. Continuous improvement activities in the department that require changes to existing business processes that result in a change to systems like the DRMIS.

In general terms these requirements fall into 2 main categories: Steady State In-Service Support and Expansion of the Existing Footprint, defined as follows:

- a. Steady-state In-Service Support: day to day break/fix activities that are generally of low level of effort, low degree of complexity, high-severity (user can't perform work), e.g. user passwords need to be reset, master data creation or modification, and user access managed; and
- b. Expansion of Existing DRMIS footprint: Improvement, change or addition of high impact (High level of effort and/or degree of complexity) business processes; addition of new user communities to use existing functionality; addition of major weapon platforms and resulting user community, either legacy fleets or new acquisitions under the department's In-Service Support Contracting Framework (ISSCF) strategy.

1.3 Responsibilities

This Statement of Work (SOW) is intended to outline the activities that will be performed by the Contractor in support of the CoE. DND intends to form an integrated working relationship with the Contractor to form the DRMIS CoE. While a cooperative team approach is important to provide the necessary level of support, it is also important to avoid duplication and overlap of responsibilities as well as an employer/employee relationship as defined by government contracting policy, between DND and the Contractor. High level responsibilities for each are outlined below.

1.3.1 DND High Level Responsibilities

At a high level, DND is responsible for:

- a. Overall Sponsorship and Project Management for all DRMIS activities;
- b. Review and final acceptance of deliverables and the provision of feedback and approvals;
- c. Provision of information, advice and direction in the form of authorized work concerning the implementation of functional and non-functional requirements through the Task Authorization process as defined in the contract;
- d. Overall direction to the contractor in the form of authorized work concerning changes to the solution and technical architectures to satisfy functional and non-functional requirements through the Task Authorization process as defined in the contract;
- e. Coordinating access to subject matter experts concerning functional and non-functional requirements; and
- f. Coordination required in seeking approval of deliverables where stakeholders outside the DRMIS organization must be engaged.

1.3.2 Contractor High Level Responsibilities

The Contractor will plan and manage all professional services resources provided by the Contractor in the performance of the work. The Contractor's responsibilities include overseeing the quality of work delivered by its resources as well as managing the resources to ensure the work is completed within the agreed upon budget and schedule, and meets the inspection and acceptance requirements as determined by the Technical Authority or its designate, as defined in the Task Authorization.

The Contractor's resources will collaborate with DND personnel as appropriate to deliver services, using already established and DND approved tools, methods and processes for maintenance and development activities.

At a high level, the Contractor is responsible for (but is not limited to) the following in the performance of any work:

- a. Project management and planning services;
- b. Requirements mapping and gap analysis;
- c. Change management services;
- d. Business process alignment services;
- e. Business Transition Management services;
- f. Solution Architecture and Design services; and
- g. Solution implementation services including configuration, programming, and testing.

2. SCOPE

2.1 Summary of Work

The Contractor will be required, via approved Task Authorizations, to provide qualified professional services resources in the delivery of work packages associated with the planning, design, development, and implementation required to provide steady state support of the DRMIS. In addition, there may be a need for the Contractor to provide these activities in order to expand and extend the footprint of the DRMIS.

This SOW identifies the professional services required to support the DRMIS. Services to be provided under this SOW include the provision, as and when requested, of all resources with the appropriate skill sets to perform activities that include, but are not limited to:

2.1.1 Steady-state In-service Support

Activities in this category are related to the provision of day to day in-service support which includes general maintenance, troubleshooting, analysis and system development in order to maintain the DRMIS operations for all DRMIS users and locations, as identified in Problem Reports (PRs), Service Requests (SRs), and minor Change Requests (CRs). Examples of this type of work include password resets, analysis and repair of non-functioning DRMIS components, and maintenance of master data. Using the existing DRMIS Change Management Process, activities will include, but are not limited to:

- a. Identification of the cause of reported problems;
- b. Analysis and proposal of resolution for approval;
- c. System configurations for various SAP modules and system components as required;
- d. Update of documentation as necessary;
- e. Repair of interfaces with the DRMIS;
- f. Addition, deletion, or modification of master data;
- g. Addition, deletion, or modification of user accounts;
- h. Establishment of an information exchange between the DRMIS and a new contracted industry partner providing outsourced management of a weapons platform and its associated data by leveraging the current DRMIS/EDE solution;
- i. Implementation of mandated changes to the DRMIS based on changes in GoC legislation or central agency and DND/CAF policies and directives;
- j. Development, implementation and maintenance of corporate reporting capabilities, based on departmental Business Intelligence (BI) requirements;
- k. Delivery of enhancements to the DRMIS to support operational activities;
- l. Upgrade and maintenance of the DRMIS hardware, software and operating systems to take advantage of emerging technologies and functionality; and
- m. Expansion of the DRMIS footprint to manage additional equipment/weapon systems and commodities as they enter service; and
- n. Roll out of the DRMIS to new user communities.

2.1.2 Expansion of the DRMIS footprint (OPTIONAL)

Activities in this category are related to the planning and implementation of major Change Requests, typically initiatives that have been prioritized and assigned to the DRMIS CoE by DND (typically as part of the DND ERP Strategy or new operational or business requirement) and/or the GoC, and are of a higher level of complexity and level of effort than normal in-service support activities. Examples of these types of initiatives are:

- a. Major changes required to the DRMIS in order to enable significant department business process re-engineering, bring additional business processes and/or users into the DRMIS (potentially using new modules of SAP or other new software), or correct a major design flaw;
- b. Departmental direction to migrate non-DRMIS organizations into the DRMIS, requiring system enhancement (new SAP modules, technologies) to address additional DND business functionality.
- c. Legacy system rationalization - migrating data from legacy systems into the DRMIS in order for the department to decommission them; and
- d. Integration/Interface with other information systems and/or 3rd party tools.

At the sole discretion of DND, and as these types of initiatives are identified and the DRMIS CoE is directed to implement the change, the Contractor will be tasked to perform a preliminary analysis of the proposed change. This preliminary analysis will determine the work necessary for the Contractor to prepare an Implementation Plan that will detail the level of effort, resources required, and the cost of affecting the major change to the DRMIS footprint. Once the Implementation Plan is approved by DND, and funding has been approved to do the work, the Contractor will work as part of the DRMIS CoE to implement the change. Typically, each of these types of initiatives would require that a number of activities be performed by the Contractor, and includes but is not limited to:

- a. Initial analysis of major DRMIS initiatives such as the examples provided above in order to determine the necessary work (i.e. level of effort and cost) to develop an Implementation Plan for the initiative;
- b. Development and submission for approval by DND of an Implementation Plan for the initiative, including:
 - Identification of the work required to implement the change, including but not limited to system configuration related to the change or enhancement, interface development, report requirements, training and business transition requirements, identification of necessary technical changes (hardware (HW)/software (SW)), user roles and authorizations requirements;
 - Identification of risks and plans for mitigation;
 - The level of effort required to effect the change, and the schedule to do so;
 - The resources required to perform the work; and
 - The estimated cost to implement the change;
- c. Based upon a DND approved Implementation Plan, a Task Authorization will be raised for the execution of the required work, to include but is not limited to:
 - System configuration of the necessary components of the DRMIS solution (e.g. SAP modules);
 - Development of required interfaces;
 - System coding as required;
 - Development of required reports;
 - Migration of required data from existing legacy systems;
 - Installation of required hardware or software;

- Unit and integration testing of system to ensure system integrity is maintained;
 - Development and/or update of documentation such as business process procedures;
 - Business transition management to prepare user community for change; and
 - Delivery of training and maintenance of training documentation.
- d. Assist the DND Initiative Manager to ensure that the schedule is maintained and delivery is within budget; and
- e. Maintain overall solution/system integrity by applying an “end-to-end” approach to the development and implementation of changes to the DRMIS – ensuring that any change does not adversely affect existing functionality, and provides a resulting solution that requires minimal additional maintenance.

2.1.3 Additional Work Requirements

Additional Work Requirements are defined as any additional business or operational requirements to support DND/CAF, or any unforeseen system enhancements. Services under this scope category could include, but are not limited to, any of the services identified in this SOW.

2.1.4 Evolving SAP Products and Technologies

The DRMIS requirements will require support with the continued evolution of the SAP software platform and must take into consideration any future rebranding of existing SAP products as well as any new modules or technologies.

2.1.5 Performance Standards

The Contractor may be required to develop and provide DND with a plan and/or strategy for migration of the DRMIS support to a model that incorporates a “managed services” approach. Upon acceptance and implementation by DND, the Contractor will be required, on an as and when requested basis, through a Task Authorization, to develop measurable performance standards. These standards could be applied to any work to be performed under the Contract and/or in identifying potential areas of work to be performed under a managed service approach in the future.

2.2 Deliverables

Deliverables will be fully detailed in each Task Authorization.

All softcopy documentation must be delivered by the Contractor to DND in the following formats:

- a. Text documents or presentations: Microsoft Office (Word, PowerPoint, Excel or Access), version 2003 or later;
- b. Diagrams and flowcharts: Microsoft Visio, version 2003 or later; and
- c. Project plans and schedules: Microsoft Project, version 2003 or later.

The Contractor may request approval from the Technical Authority to submit documents in other softcopy formats; this must be expressly authorized in writing and in advance by the Technical Authority. Approval is at Canada’s sole discretion.

2.3 Acceptance – Technical Authority

All deliverables must be approved by the Technical Authority or their assigned delegate.

2.4 Working Location and Hours

The majority of the work will be performed at DND facilities located in the National Capital Region (NCR). Access to facilities, materials and computer systems is available between the hours of 06:00 and 18:00 Monday to Friday. The Contractor's resources may be required to work outside of normal business hours in order to minimize negative impacts on users of the DRMIS and to address operational requirements.

In some cases the Contractor's resources will be required to be available for on-call requirements outside regular business hours 24 hours per day including Saturdays, Sundays and civic and statutory holidays. To support this requirement, DND may provide Contractor personnel with a pager or cell phone. Contractor resources must also be available for call-back requirements when he/she has been authorized to respond to an incident while on call outside of operational business hours.

Any work performed outside of normal business hours (including call-back requirements) must be pre-approved in writing by the Technical Authority. In addition, Technical Authority approval must be obtained in writing prior to the completion of any work that exceeds the 7.5 hours per day. Overtime per diem rates do not apply.

For Contractor resources not located within the NCR, travel and living expenses to the NCR are the responsibility of the Contractor.

DND may approve Contractor resources working off-site if it is found to be economically advantageous to do so, and security considerations can be accommodated. This approval must be obtained in writing and in advance from the Technical Authority.

2.5 Contractor Travel

The Contractor's resources may have to travel outside of the NCR. In such cases, and with the prior written authorization of the Technical Authority, travel and living expenses may be reimbursed to the Contractor. All travel and living expenses are subject to Treasury Board (TB) regulations and guidelines. Travel to or within the NCR will not be reimbursed.

2.6 CoE Management Processes

The Contractor will employ the existing DND and/or DRMIS CoE Management processes. These processes include, but are not limited to:

- a. resource management;
- b. incident management;
- c. change management;
- d. configuration management;
- e. risk/issue management;
- f. business transition management; and
- g. communications management.

Where applicable, the Contractor is encouraged to suggest opportunities to augment or improve the existing DRMIS CoE processes.

2.7 Kick-Off Meeting

A Kick-Off meeting will take place at DND facilities between the Contractor and the DRMIS CoE Staff as an initial contact to acquaint the Contractor with the CoE environment and arrange for the commencement of work. This meeting must be held within one (1) week following Contract Award.

2.8 Reporting

2.8.1 Contractor Led Activities

For Contractor led activities, Project Management Services and related reporting may include, but not limited to; an Action Item Register, Agendas, Minutes, Resource Utilization Plan, Knowledge Transfer Plan, Contractor Schedule Slippage Report and Project Status Reporting.

- a) The Action Item Register provides a list of all action items, identifies which are outstanding and completed; and at a minimum, is updated on a weekly basis and/or as required. The Contractor is not asked to provide the deliverable in the exact format presented below, but must provide all the following information, unless otherwise specified:
 - i) Number of the action item;
 - ii) Description of the action item;
 - iii) Person responsible for following through (or, Office of Primary/Secondary Interest – OPI or OSI);
 - iv) Date Initiated;
 - v) Date due; and,
 - vi) Comments.

- b) Agendas will be circulated to the attendees' a minimum of one day before meetings. The Contractor is not asked to provide the deliverable in the exact format presented below, but must provide all the following information, unless otherwise specified:
 - i) Subject;
 - ii) Date of meeting;
 - iii) Time of meeting;
 - iv) Place of meeting;
 - v) Required attendees;
 - vi) Optional attendees;
 - vii) Action Items listed to be reviewed /discussed; and,
 - viii) Attachments as appropriate.

- c) Minutes will be circulated to attendees a maximum of one day after the meeting. The Contractor is not asked to provide the deliverable in the exact format presented below, but must provide all the following information, unless otherwise specified:
 - i) Title of meeting;
 - ii) Date and time of meeting;
 - iii) Attendees and absentees;
 - iv) Minutes taken by;
 - v) Copy of minutes sent to;
 - vi) Minutes of discussions;

- vii) Record of decisions taken;
 - viii) Action items raised;
 - ix) Other business; and,
 - x) Next meeting information.
- d) The Resource Utilization Plan describes the allocation of team members through the Project for all the phases and activities associated with the Project. A detailed description of all resources and schedules must be provided to support the Plan. The Contractor is not asked to provide the deliverable in the exact format presented below, but must provide all the following information, unless otherwise specified:
- i) Resource names for each activity by month;
 - ii) Over-allocation of resources by activity;
 - iii) Resource Allocation Plan;
 - iv) Holiday Plan;
 - v) Overtime Plan; and,
 - vi) Substitution Plan.
- e) The Knowledge Transfer Plan describes the knowledge transfer from contractor resources to employees. A detailed description of all knowledge transfer activities and schedule, as required, will be provided to support the Plan. The Contractor is not asked to provide the deliverable in the exact format presented below, but must provide all the following information, unless otherwise specified:
- i) Resource names for each activity by month;
 - ii) Identified areas for knowledge transfer;
 - iii) Knowledge Transfer Activity Plan;
 - iv) Risks or issues associated with the plan; and,
 - v) Status of schedule knowledge transfer activities.
- f) The Contractor Schedule Slippage Report describes at a minimum all the activities/tasks, which are falling behind schedule and the impact to the Project. Recommendations are noted in the Report. The Contractor is not asked to provide the deliverable in the exact format presented below, but must provide all the following information, unless otherwise specified:
- i) Activity;
 - ii) Reason for Slippage;
 - iii) Action to Remedy Slippage;
 - iv) Schedule Impact; and,
 - v) Human Resource Impact.
- g) Project Status Reporting for activity and expenditure will be supplied through, but not limited to, the following three types of documents:
- i) Summary of project-related Task Authorization Status Reports;
 - ii) Contractor Management Status Report (monthly, unless otherwise specified); and,
 - iii) Contractor Expenditure Report (monthly or as required).

2.8.2 Task Authorization

For any authorized Task Authorizations, each contracted resource is required to provide the following report. The Contractor is not asked to provide the deliverable in the exact format presented below, but the same template must be used by each contracted resources. The template must provide all the following information, unless otherwise specified:

- a) Task Authorization Status Reports (monthly)
 - i) Work completed last reporting period;
 - ii) Work projected for the next reporting period;
 - iii) New risks that have arisen since the last reporting period;
 - iv) Risks that are in danger of coming due;
 - v) Status of risk mitigation plans in place;
 - vi) Recovery plans for any work that is off schedule; and,
 - vii) Knowledge transfer activities conducted.

2.8.3 Other

- a) Contractor Management Status Report

The Contractor Management Status Report must be delivered within 5 business days of the end of each month. The report must include a summary of all Task Authorizations (TA) from the start of the contract. The report will be provided at the summary and the detailed levels based on the coding and classification of the TAs, unless otherwise specified:

- i) Initial funds authorized;
- ii) Any and all amendments to the funding and/or dates;
- iii) Total funds/effort spent to date;
- iv) Total funds/effort remaining on the Task Authorization;
- v) Estimated funds required to complete the Task Authorization by month;
- vi) Resulting variance;
- vii) Status and issues information relating to completion dates and cost variances;
- viii) Identify any new risks to deliverables and outline mitigation strategies for risks already identified; and,
- ix) Any requests for change.

- b) Contractor Expenditure Report

A monthly Contractor Expenditure Report must be provided identifying line item and summary expenditures from the start of the Contract, unless otherwise specified.

- i) Line item and summary expenditures by month and by Fiscal Year to date;
- ii) Line item and summary projected spending by month and to the end of the Project Definition Phase;
- iii) A line item for each basis of payment category;
- iv) Detailed impact of any contract amendments on available funds and corresponding spending;
- v) Funds remaining and variance analysis reporting provided by category; and,
- vi) Financial coding will be provided as needed by PWGSC to track spending.

3.0 RESOURCE CATEGORIES

3.1 Contractor Resource Level of Expertise

The level of expertise for the Contractor resources is as follows:

- a. Level1: 1 year to less than 5 years of experience;
- b. Level 2: 5 years to less than 10 years of experience
- c. Level 3: 10 years or more of experience.

3.2 Contractor CoE Resource Categories

The following paragraphs detail the tasks to be performed by resource categories. These categories and/or associated tasks represent current requirements and may be revised as technologies evolve.

List of resource categories and levels

Task Authorizations for professional services may be issued for any of the resource categories and levels, with specific tasks, deliverables and resource requirements (including education and/or certifications as required) to be identified at the time of issue.

Table 1 below provides an estimate of the resource categories and levels of expertise that will be required, on an annual basis, for the steady-state in-service support requirement. The number of resources and the number of days for each resource category may vary depending on actual work requirements and will be identified in each Task Authorization.

Table 1- Estimated level of effort - Steady-state in-service support

Resource Category	Level of Expertise	Steady State ISS Estimated # of Resources Required	Security Clearance Required	Estimated # of Resources requiring Canadian Eyes Only
Project Manager	3	1	Secret	
Application Solution Architect	3	1	Secret	
Technical Architect	3	1	Secret	
SAP Functional Analyst - Core	3	17	Secret	2
SAP Functional Analyst - Core	2	8	Secret	2
SAP Functional Analyst - Core	1	2	Secret	2
SAP Functional Analyst – Specialized	3	18	Secret	2
SAP Functional Analyst – Specialized	2	6	Secret	2
SAP Functional Analyst – Specialized	1	1	Secret	2
Auditor - Security, Privacy and Internal Controls	3	1	Secret	1
Roles & Authorizations (R&A) Architect	3	1	Secret	1
Roles & Authorizations (R&A) Specialist	3	1	Secret	
Roles & Authorizations (R&A) Specialist	2	2	Secret	

Programmer/Software Developer	3	10	Secret	2
Programmer/Software Developer	2	8	Secret	2
Programmer/Software Developer	1	3	Secret	
Interface Specialist	3	1	Secret	
Extract, Transform, Load (ETL) Specialist	2	2	Secret	
SAP BI/BW Specialist	3	3	Secret	
SAP BI/BW Specialist	2	2	Secret	
SAP BI/BW Specialist	1	1	Secret	
SAP BusinessObjects Developer	3	3	Secret	
SAP BusinessObjects Developer	2	2	Secret	
Enterprise Performance Management (EPM) Specialist	3	1	Secret	
SAP Portal Specialist	3	2	Secret	
BASIS Administrator	3	2	Secret	1
BASIS Administrator	2	1	Secret	
UNIX and Linux Administrator	2	1	Secret	
Windows Administrator	2	1	Secret	
Network Manager	3	1	Secret	
Network Manager	2	1	Secret	
Application Administrator	3	1	Secret	
Business Support Specialist	1	2	Secret	
Training Development, Delivery and Support	2	3	Secret	
Transport Coordinator	2	1	Secret	
Configuration Management Specialist	3	1	Secret	
Incident Management Coordinator	2	1	Secret	
Change Coordinator	2	1	Secret	
Quality Control	2	1	Secret	
Tester	2	4	Secret	

Table 2 below provides a list of the resource categories and levels of expertise that could be required, on an annual basis, for the optional expansion of the DRMIS footprint and Additional Work requirements (AWRs). The number of resources and the number of days for each resource category will vary depending on actual work requirements and will be identified in each Task Authorization.

Table 2 – Estimated Resource Categories and levels of expertise for optional Expansion of the DRMIS footprint and Additional Work Requirements (AWRs)

Resource Category	Level of Expertise	Security Clearance Required
-------------------	--------------------	-----------------------------

Project Manager	3	Secret
Project Manager	2	Secret
Project Coordinator	3	Secret
Project Coordinator	2	Secret
Project Coordinator	1	Secret
Application Solution Architect	3	Secret
Application Solution Architect	2	Secret
Business Solution Architect	3	Secret
Business Solution Architect	2	Secret
Technical Architect	3	Secret
Technical Architect	2	Secret
SAP Functional Analyst - Core	3	Secret
SAP Functional Analyst - Core	2	Secret
SAP Functional Analyst - Core	1	Secret
SAP Functional Analyst – Specialized	3	Secret
SAP Functional Analyst – Specialized	2	Secret
SAP Functional Analyst – Specialized	1	Secret
Security Assessment and Authorization (SA&A) Specialist	3	Secret
Security Assessment and Authorization (SA&A) Specialist	2	Secret
Security Assessment and Authorization (SA&A) Specialist	1	Secret
Auditor - Security, Privacy and Internal Controls	3	Secret
Auditor - Security, Privacy and Internal Controls	2	Secret
Auditor - Security, Privacy and Internal Controls	1	Secret
Extract, Transform, Load (ETL) Specialist	3	Secret
Business Continuity/Disaster Recovery Specialist	2	Secret
Business Continuity/Disaster Recovery Specialist	1	Secret
Roles & Authorizations (R&A) Architect	3	Secret
Roles & Authorizations (R&A) Architect	2	Secret
Security Architect	3	Secret
Security Architect	2	Secret

Roles & Authorizations (R&A) Specialist	3	Secret
Roles & Authorizations (R&A) Specialist	2	Secret
Roles & Authorizations (R&A) Specialist	1	Secret
Programmer/Software Developer	3	Secret
Programmer/Software Developer	2	Secret
Programmer/Software Developer	1	Secret
Interface Specialist	3	Secret
Interface Specialist	2	Secret
Interface Specialist	1	Secret
Extract, Transform, Load (ETL) Specialist	3	Secret
Extract, Transform, Load (ETL) Specialist	2	Secret
Extract, Transform, Load (ETL) Specialist	1	Secret
SAP BI/BW Specialist	3	Secret
SAP BI/BW Specialist	2	Secret
SAP BI/BW Specialist	1	Secret
SAP BusinessObjects Developer	3	Secret
SAP BusinessObjects Developer	2	Secret
SAP BusinessObjects Developer	1	Secret
Enterprise Performance Management (EPM) Specialist	3	Secret
Enterprise Performance Management (EPM) Specialist	2	Secret
Enterprise Performance Management (EPM) Specialist	1	Secret
SAP Portal Specialist	3	Secret
SAP Portal Specialist	2	Secret
SAP Portal Specialist	1	Secret
BASIS Administrator	3	Secret
BASIS Administrator	2	Secret
BASIS Administrator	1	Secret
UNIX and Linux Administrator	3	Secret
UNIX and Linux Administrator	2	Secret
UNIX and Linux Administrator	1	Secret
Windows Administrator	3	Secret
Windows Administrator	2	Secret
Windows Administrator	1	Secret
Network Manager	3	Secret
Network Manager	2	Secret
Network Manager	1	Secret

Application Administrator	3	Secret
Application Administrator	2	Secret
Application Administrator	1	Secret
SAP Archiving Specialist	3	Secret
SAP Archiving Specialist	2	Secret
SAP Archiving Specialist	1	Secret
Business Analyst	3	Secret
Business Analyst	2	Secret
Business Analyst	1	Secret
Business Support Specialist	3	Secret
Business Support Specialist	2	Secret
Business Support Specialist	1	Secret
Business Transition Analyst	3	Secret
Business Transition Analyst	2	Secret
Business Transition Analyst	1	Secret
Training Development, Delivery and Support	3	Secret
Training Development, Delivery and Support	2	Secret
Training Development, Delivery and Support	1	Secret
Technical Writer	3	Secret
Technical Writer	2	Secret
Technical Writer	1	Secret
Transport Coordinator	3	Secret
Transport Coordinator	2	Secret
Transport Coordinator	1	Secret
Configuration Management Specialist	3	Secret
Configuration Management Specialist	2	Secret
Configuration Management Specialist	1	Secret
Incident Management Coordinator	3	Secret
Incident Management Coordinator	2	Secret
Incident Management Coordinator	1	Secret
Change Coordinator	3	Secret
Change Coordinator	2	Secret
Change Coordinator	1	Secret
Test Manager	3	Secret
Test Manager	2	Secret
Quality Control	3	Secret
Quality Control	2	Secret
Quality Control	1	Secret
Tester	3	Secret
Tester	2	Secret

Tester	1	Secret
--------	---	--------

3.2.1 Project Manager

The required services may include, but are not limited to, the following:

- a. Manage Contractor resources;
- b. Manage steady-state in-service support or expansion of a large IM/IT system during its development and implementation;
- c. Develop and submit an Implementation Plan for system expansion, including estimates of time, cost and scope;
- d. Assist in the development of performance metrics and/or standards that could be applied during the implementation of any initiatives or support activities;
- e. Proactively manage and communicate In-Service support and Project objectives;
- f. Manage of risk mitigation and issue resolution;
- g. Define, document and maintain plans; determine budgetary requirements, the composition, roles and responsibilities and terms of reference for the Contractor resources using a variety of project management tools; and
- h. Conduct Meetings and Provision of written overall status of activities including financial reporting on a weekly basis.
- i. Provide knowledge transfer to departmental personnel on an on-going basis.

3.2.2 Project Coordinator

The required services may include, but are not limited to, the following:

- a. Create and maintain project documentation such as schedules, checklists, status reports, correspondence, change requests and a Master Schedule of all projects and resources if more than one initiative, using Microsoft Project or other project management tools and Microsoft Office Suite;
- b. Amend and maintain the initiative schedule to incorporate any incremental rollouts;
- c. Track the progress of initiative including cost and schedule controls;
- d. Document issues and resolutions related to the Initiative schedule;
- e. Communicate verbally and in writing with the Initiative manager regarding project status and deliverables;
- f. Assist project management in project coordination and synchronization tasks;
- g. Provide administrative and technical support of a clerical nature as required to a project team; and
- h. Provide knowledge transfer to departmental personnel on an on-going basis.

3.2.3 Application Solution Architect

The required services may include, but are not limited to, the following:

- a. Develop SAP technical architectures, frameworks and strategies, either for an organization or for a major application area, to meet the business and application requirements;
- b. Develop and submit an Implementation Plan for system expansion, including estimates of time, cost and scope;
- c. Identify the policies and requirements that drive out a particular solution in SAP;

- d. Analyze and evaluate alternative technology solutions to meet business problems;
- e. Provide advice on implementation of leading practices within the SAP enterprise system;
- f. Ensure the integration of all aspects of SAP technological solutions;
- g. Monitor industry trends to ensure that solutions fit with government and industry directions for technology;
- h. Analyze and validate functional requirements to identify information, procedures and decision flows;
- i. Evaluate existing procedures and methods, identify and document database content, structure, and application sub-systems, and develop data dictionary;
- j. Validate and align interfaces of manual to automated operations within application sub-systems, to external systems and between new and existing systems;
- k. Validate and align input/output sources, including detailed plan for SAP technical design phase, and obtain approval of the system proposal;
- l. Provide technical guidance to functional analysts in their area of expertise;
- m. Assist the project manager in managing issues relevant to their solution areas; and
- n. Validate and align solution options and recommendations based on User requirements.
- o. Provide knowledge transfer to departmental personnel on an on-going basis.

3.2.4 Business Solution Architect

The required services may include, but are not limited to, the following:

- a. Develop policies and rules that allow an organization to carry out its mandate and functional responsibilities, and that govern the organization's actual and planned capabilities in terms of computers, data, information, human resources, communication facilities, software and management responsibilities.
- b. Develop the specifications for where, how and why the various organizational components fit together as they do, and how they support the organization's mandate.
- c. Review existing work processes and organizational structure.
- d. Analyze and develop business success "critical success factors".
- e. Analyze and develop architecture requirements design, process development, process mapping and training.
- f. Analyze business functional requirements to identify information, procedures and decision flows.
- g. Identify candidate processes for re-design; prototype potential solutions, provide trade-off information and suggest a recommended course of action. Identify the modifications to the automated processes.
- h. Provide expert advice in defining new requirements and opportunities for applying efficient and effective solutions; identify and provide preliminary costs of potential options.
- i. Provide expert advice in developing and integrating process and information models between processes to eliminate information and process redundancies.
- j. Identify and recommend new processes and organizational structures.
- k. Provide expert advice on and/or assist in implementing new processes and organizational changes.
- l. Document business processes workflows.
- m. Use business, workflow and organizational modeling software tools.
- n. Lead other functional staff to define business strategy and processes in support of transformation and change management activities.
- o. Participate in change impact analysis and change management activities.

- p. Participate in organizational realignment (job re-design organizational re-structuring).
- q. Create presentations and present to various stakeholders, and facilitate meetings and discussions.
- r. Provide knowledge transfer to departmental personnel on an on-going basis.

3.2.5 Technical Architect

The required services may include, but are not limited to, the following:

- a. Develop SAP technical architectures, frameworks and strategies, either for an organization or for a major application area, to meet the business and application requirements;
- b. Identify policies and requirements that drive out a particular solution in SAP;
- c. Analyze and evaluate alternative technology solutions to meet business problems;
- d. Ensure the integration of all aspects of SAP technological solutions;
- e. Evaluate hardware and software relative to their ability to support specified requirements and recommend improvements in system performance;
- f. Review application and program design or technical infrastructure design to ensure adherence to standards and to recommend performance improvements;
- g. Monitor industry trends to ensure that solutions fit with government and industry directions for technology;
- h. Provide information, direction and support for emerging technologies;
- i. Perform impact analysis of technology changes;
- j. Continuously review the technical landscape of the system to recommend ways to optimize and or simplify it;
- k. Provide support to applications and technical support teams in the proper application of existing infrastructure;
- l. Identify and document system specific standards relating to programming, documentation and testing, covering program libraries, data dictionaries, naming conventions, etc.; and
- m. Provide knowledge transfer to departmental personnel on an on-going basis.

3.2.6 SAP Functional Analyst - Core

All tasks may be applicable and required for various core SAP modules including, but not limited to Finance (Accounts Payable, General Ledger/Special Purpose Ledger, Asset Accounting, Controlling, etc), Materiel Management(Inventory and Warehouse Management), Project Systems and Solution Manager.

The required services may include, but are not limited to, the following:

- a. Develop and document SAP functional, business and/or system requirements specifications;
- b. Develop and document screen, report and interface requirements in SAP;
- c. Develop functional, business and/or system interface or interaction capability as per specifications/requirements;
- d. Gather and analyze information to establish the functional and technical needs of a system or project;

- e. Design methods and procedures for SAP modules that are integrated within an SAP solution;
- f. Develop, test, document and implement changes to SAP modules that are integrated within an SAP solution;
- g. Document forms, manuals, programs, interfaces, release notes, data files work instructions and procedures;
- h. Analyze data conversion requirements to determine data conversion strategies and mechanisms based on strategy;
- i. Analyze, document SAP Service Marketplace Support Portal notes in support of problem and change analysis;
- j. Assist Business Analyst in the conduct of business and system requirements workshops; and
- k. Provide knowledge transfer to departmental personnel on an on-going basis.

3.2.7 SAP Functional Analyst – Specialized

All tasks may be applicable and required for various specialized SAP modules including, but not limited to Defense Forces and Public Security, Mobile Defense Solution, Funds Management, Enterprise Asset Management, Workforce Management- Human Capital Management and Real Estate

The required services may include, but are not limited to, the following:

- a. Develop and document SAP functional, business and/or system requirements specifications;
- b. Develop and document screen, report and interface requirements in SAP;
- c. Develop functional, business and/or system interface or interaction capability as per specifications/requirements;
- d. Gather and analyze information to establish the functional and technical needs of a system or project;
- e. Design methods and procedures for SAP modules that are integrated within an SAP solution;
- f. Develop, test, document and implement changes to SAP modules that are integrated within an SAP solution;
- g. Document forms, manuals, programs, interfaces, release notes, data files work instructions and procedures;
- h. Analyze data conversion requirements to determine data conversion strategies and mechanisms based on strategy;
- i. Analyze, document SAP Service Marketplace Support Portal notes in support of problem and change analysis;
- j. Assist Business Analyst in the conduct of business and system requirements workshops; and
- k. Provide knowledge transfer to departmental personnel on an on-going basis.

3.2.8 Security Assessment & Authorization (SA&A) Specialist

The required services may include, but are not limited to, the following:

- a. Conduct and/or manage IT Security Authorization and Accreditation (SA&A) assessments that include, but are not limited to, the following: security impact assessments, threat risk assessments, vulnerabilities assessments, privacy impact assessments, business impact assessments, and compliance testing of security requirements (Security Requirements Traceability Matrix).
- b. Review, analyze, create, and/or update relevant SA&A documentation, such as: Concept of Operations, IT Security Architecture, Statement of Sensitivity, Statement of Acceptable Risk.
- c. Analyze, review, and make recommendations vis-a-vis the IT Security posture of a system.
- d. Develop and test system Disaster Recovery Plans.
- e. Assess compliance with applicable security policies and standards.
- f. Develop and deliver system security awareness/training sessions.
- g. Provide knowledge transfer to departmental personnel on an on-going basis.

3.2.9 Auditor – Security, Privacy & Internal Controls

The required services may include, but are not limited to, the following:

- a. Review and monitor security and privacy measures against legal, policy and regulatory requirements and report on any deficiencies with recommendations to rectify any issues;
- b. Conduct periodic reviews of system IT General Controls and report on any deficiencies;
- c. Review system logs and access records to ensure that all access to and information in the system is conducted by personnel with the appropriate authorizations and security clearances;
- d. Review interface logs to ensure that only appropriate data is received and sent; and
- e. Provide knowledge transfer to departmental personnel on an on-going basis.

3.2.10 Business Continuity/Disaster Recovery Specialist

The required services may include, but are not limited to, the following:

- a. Develop and document statements of requirements;
- b. Develop and implement business and technology continuity plans.
- c. Develop technology and business continuity and disruption recovery strategies.
- d. Develop crisis communication planning strategies.
- e. Identify past and potential impact resulting from disruptions.
- f. Develop techniques to identify and evaluate potential disruptions.
- g. Develop and implement backup, replication and redundancy strategies as required.
- h. Develop awareness, training, and communication programs with both internal staff and other stakeholders.
- i. Establish coordination activities with internal and external stakeholders and establish actual and potential dependencies.
- j. Develop and implement monitoring activities and performance management.

- k. Provide knowledge transfer to departmental personnel on an on-going basis.

3.2.11 Roles & Authorizations (R&A) Architect

The required services may include, but are not limited to, the following:

- a. Analyze, development, implement and make recommendations related to R&A models and strategies for SAP systems;
- b. Review and recommend technical specifications to ensure adherence to R&A policies and design;
- c. Evaluate and provide guidance related to different SAP R&A approaches and design to meet business requirements;
- d. Provide SAP R&A support to ensure the delivery of new implementations of systems or upgrades to existing systems; and
- e. Provide knowledge transfer to departmental personnel on an on-going basis.

3.2.12 Security Architect

The required services may include, but are not limited to, the following:

- a. Analyze information system security architecture and industry security architecture trends and develop recommendations for changes;
- b. Write or amend security architecture and technical specifications;
- c. Assist in the development and update of training documentation related to changes in security architecture;
- d. Assist with the development of security architectures;
- e. Review, analysis and update of any required Security Assessment and Authorization (SA&A), Concept of Operations (ConOps) and Threat Risk Assessment (TRA) documentation;
- f. Review functional design deliverables for compliance with security requirements;
- g. Monitor integration, functional, system and end user acceptance testing of releases where required to ensure compliance with security requirements, policies and procedures; and
- h. Provide knowledge transfer to departmental personnel on an on-going basis.

3.2.13 Roles and Authorizations (R&A) Specialist

The required services may include, but are not limited to, the following:

- a. Assist in the determination of requirements, design, build and testing of authorization profiles for SAP systems;
- b. Write or amend SAP R&A specifications;
- c. Perform R&A audits and monitoring activities within SAP;
- d. Perform problem recognition, isolation, research, resolution and follow-ups related to SAP R&A issues;
- e. Maintain R&A model for SAP systems;

- f. Adhere to R&A policies and procedures related to roles, authorizations and user access combinations; and
- g. Provide knowledge transfer to departmental personnel on an on-going basis

3.2.14 Programmer/Software Developer

The required services may include, but are not limited to, the following:

- a. Analyze, plan, document, develop, test and support application changes, interfaces and reports;
- b. Develop program enhancements, including SAP Enterprise Portal, Web Application Server (WAS), SAP PI and Business Warehouse (BW), with SAP programming tools ABAP, ABAP Web DynPro, Java Web DynPro, Java, J2EE or other programming tools as needed;
- c. Analyze data conversion requirements and strategies to determine data conversion mechanisms;
- d. Develop, test and execute data conversion strategies and mechanisms;
- e. Analyze, document and apply SAP Service Marketplace Support Portal notes in support of problem and change analysis;
- f. Write and amend technical specifications; and
- g. Provide knowledge transfer to departmental personnel on an on-going basis.

3.2.15 Interface Specialist

The required services may include, but are not limited to, the following:

- a. Install and administer interface software for SAP, including MQSeries and SAP Process Integration;
- b. Analyze, develop, implement and make recommendations related to interfaces models and strategies for SAP systems;
- c. Customize of interface software, such as SAP XI, ALE, IDocs, etc...
- d. Analyze, plan, log and monitor interface performance, problems and changes, and take corrective action as required;
- e. Document SOPs for interfaces; and
- f. Provide knowledge transfer to departmental personnel on an on-going basis.

3.2.16 Extract, Transform, Load (ETL) Specialist

The required services may include, but are not limited to, the following:

- a. Develop and test ETL jobs as per technical design specifications, using ETL tools such as IBM DataStage and its foundation tools and/or Informatica 9.1;
- b. Maintain, enhance, and optimize ETL jobs;
- c. Research, escalate, and resolve support issues related to ETL jobs;
- d. Analyze, design, optimize and implement PL/SQL stored procedures;

- e. Develop ETL specifications in compliance with IT Architecture; and
- f. Provide knowledge transfer to departmental personnel on an on-going basis.

3.2.17 SAP BI/BW Specialist

The required services may include, but are not limited to, the following:

- a. Design, develop, build, maintain and support extractors, process chains, cubes and queries to pull data from source systems into an SAP BI/BW system to facilitate reporting requirements;
- b. Analyze, plan, log and monitor application for performance and data integrity;
- c. Implement SAP BI/BW solutions;
- d. Design, develop, build and support reports using the SAP BI/BW toolsets;
- e. Assist in the development and update of BI/BW training documentation;
- f. Optimize existing cubes, multi- cubes and queries;
- g. Analyze, document and apply SAP Service Marketplace Support Portal notes in support of problem and change analysis;
- h. Assist in the analysis, design, testing and implementation of BI/BW functionality; and
- i. Provide knowledge transfer to departmental personnel on an on-going basis.

3.2.18 SAP BusinessObjects Developer

The required services could include, but are not limited to, the following:

- a. Develop and design SAP BusinessObjects Universes;
- b. Maintain SAP BusinessObjects XI Reporting Server;
- c. Develop and design Webi reports, dashboards and other SAP BusinessObjects documents;
- d. Run queries and reports as required;
- e. Create SAP BusinessObjects reports using InfoView and Universes, and perform web integration of all reports using SDK (Java and .NET) or other SAP tools;
- f. Analyze, document and apply SAP Service Marketplace Support Portal notes in support of problem and change analysis; and
- g. Provide knowledge transfer to departmental personnel on an on-going basis

3.2.19 Enterprise Performance Management (EPM) Specialist

All tasks may be applicable and required for various SAP Enterprise Performance Management Solutions or future evolutions including, but not limited to Strategy Management, Business Planning and Consolidation, Profitability and Cost Management, Financial Consolidation, Financial Disclosure and Financial Information Management.

The required services could include, but are not limited to, the following:

- a. Develop and document SAP functional, business and/or system requirements specifications;
- b. Develop and document screen, report and interface requirements in SAP;
- c. Develop functional, business and/or system interface or interaction capability as per specifications/requirements;
- d. Gather and analyze information to establish the functional and technical needs of a system or project;
- e. Design methods and procedures for SAP modules that are integrated within an SAP solution;
- f. Develop, test, document and implement changes to SAP modules that are integrated within an SAP solution;
- g. Analyze, develop, test, document and implement changes for Business Intelligence or Business Objects integration points and reporting.
- h. Document forms, manuals, programs, interfaces, release notes, data files work instructions and procedures;
- i. Analyze data conversion requirements to determine data conversion strategies and mechanisms based on strategy;
- j. Analyze, document SAP Service Marketplace Support Portal notes in support of problem and change analysis;
- k. Assist Business Analyst in the conduct of business and system requirements workshops;
- m. Provide knowledge transfer to departmental personnel on an on-going basis

3.2.20 SAP Portal Specialist

The required services could include, but are not limited to, the following:

- a. Analyze, plan, document, develop, test and support application changes, interfaces and reports;
- b. Develop program enhancements, including SAP Enterprise Portal, Web Application Server (WAS), SAP PI and Business Warehouse (BW), with SAP programming tools ABAP, ABAP Web DynPro, Java Web DynPro, Java, J2EE or other programming tools as needed;
- c. Design, develop program enhancements, web pages using ABAP Web DynPro, POWL (Personal Object Worklist), MVC (Model View Controller) programming methodology, and Object Oriented Programming.
- d. Develop PI/Proxy services
- e. Design, set up and maintain Portal Content, iViews.
- f. Design, develop and maintain SAP Portal solution using AJAX Framework (CSS, XML, Java Script, and XHTML)
- g. Analyze data conversion requirements and strategies to determine data conversion mechanisms;
- h. Develop, test and execute data conversion strategies and mechanisms;
- i. Analyze, document and apply SAP Service Marketplace Support Portal notes in support of problem and change analysis;
- j. Write and amend technical specifications; and
- k. Provide knowledge transfer to departmental personnel on an on-going basis.

3.2.21 BASIS Administrator

The required services may include, but are not limited to, the following:

- a. Install, administer and monitor of SAP software and other software integrating with SAP;
- b. Configure and customize SAP software and other software integrating with SAP;
- c. Analyze, plan, log and monitor SAP application problems and changes as required by PRs and CRs that are submitted and approved;
- d. Perform SAP system upgrades and support packs (ABAP and Java)
- e. Back-up and restore SAP systems as needed;
- f. Document, develop and/or maintain Standard Operating Procedures (SOPs) and system configuration of all SAP or other software integrated with SAP as required;
- g. Use the change request management tool CHaRM to transport changes through a complex SAP landscape;
- h. Analyze, document and apply SAP Service Marketplace Support Portal notes in support of problem and change analysis;
- i. Monitor and investigate SAP system performance problems and perform corrective action as required including the review and implementation of SAP EarlyWatch session recommendations; and
- j. Provide knowledge transfer to departmental personnel on an on-going basis.

3.2.22 UNIX and Linux Administrator

The required services may include, but are not limited to, the following:

- a. Conduct 24/7 daily operations support for UNIX and Linux based systems;
- b. Manage and maintain an extensive virtualized UNIX and VMWare infrastructure;
- c. Installation, administration and monitoring of UNIX and Linux systems;
- d. Configuration and customization of the UNIX and Linux systems;
- e. Upgrade UNIX and Linux systems as required;
- f. Monitor and investigate UNIX and Linux system and performance problems then perform corrective action as required
- g. Analyze, plan, log and monitor UNIX and Linux problems and changes;
- h. Back-up and restore UNIX and Linux systems as required;
- i. Provide technical support on AIX, SUSE Linux, Solaris UNIX, VMWare and PowerVM
- j. Document, develop and/or maintain Standard Operating Procedures, and Concept of Operations based on system configuration of UNIX and Linux systems as required; and
- k. Provide knowledge transfer to departmental personnel on an on-going basis.

3.2.23 Windows Administrator

The required services may include, but are not limited to, the following:

- a. Conduct 24/7 daily operations support for Windows-based systems;

- b. Manage and maintain an extensive virtualized VMWare infrastructure;
- c. Install, administer and monitor Windows systems;
- d. Monitor and investigate Windows system and performance problems then perform corrective action as required;
- e. Configure and customize Windows systems;
- f. Upgrade and patch Windows systems as required;
- g. Back-up and restore Windows systems as required
- h. Analyze, plan, log and monitor Windows system problems and changes:
- i. Document, develop and/or maintain Standard Operating Procedures and Concept of Ops based on system configuration of Windows systems as required; and
- j. Provide knowledge transfer to departmental personnel on an on-going basis.

3.2.24 Network Manager

The required services may include, but are not limited to, the following:

- a. Install, administer and monitor the network components for a large SAP system, including, but not limited to, Cisco switches and Load-balancers, Virtual Private Networks (VPN), Intrusion Detection Systems (IDS), and Firewalls;
- b. Conduct 24/7 daily operations support for network components of a large SAP system, including, but not limited to, the Intrusion Detection Systems (IDS), Firewalls, SAP Service-Oriented Architecture (SOA), SAP OSS network, and Cisco switches and Load-balancers, Virtual Private Networks (VPN);
- c. Assess proposed changes to network infrastructure and document any recommendations for adoption and implementation of changes;
- d. Manage and maintain the network components;
- e. Monitor and investigate Network performance and problems then perform corrective action as required;
- f. Configure and customize the network components;
- g. Implement changes to network infrastructure as approved by the Technical Authority;
- h. Analyze, plan, log and monitor application changes as required by CRs that are submitted and approved;
- i. Conduct bandwidth assessments for changes to a large SAP solution or network infrastructure;
- j. Establish communications tests plans and conduct communications testing as required to support network operations;
- k. Document, develop and/or maintain Standard Operating Procedures and Concept of Operations based on network configuration as required; and
- l. Provide knowledge transfer to departmental personnel on an on-going basis.

3.2.25 Application Administrator

The required services may include, but are not limited to, the following:

- a. Install, configure, and administer application software, including, but not limited to, Quality Center, uPerform, RedWood Central Processing Scheduling (CPS), OmegaPS, IBM

Rational suite, InfoSphere Information Server, SAP, Oracle, DB2, Webservers, Perception, BMC Service Desk, MSFT, MQSeries, Informatica, Guardium ;

- b. Configure and customize SAP application software as required;
- c. Upgrades and patching of SAP system or other application software as required;
- d. Analyze, plan, log and monitor SAP or other application problems and changes;
- e. Backup and restore SAP applications as needed;
- f. Document Standard Operating Procedures and Concept of Operations for SAP applications as required; and
- g. Support Web Sphere Data Power SOA appliance, including but not limited to, technical administration, configuration enhancements, installation of new releases and updates, and keep up to date documentation;
- h. Perform configuration change management and version control; and
- i. Provide knowledge transfer to departmental personnel on an on-going basis

3.2.26 SAP Archiving Specialist

The required services may include, but are not limited to, the following:

- a. Analyze requirements to archive SAP data;
- b. Develop plans to implement SAP data archiving;
- c. Coordinate efforts to archive SAP data;
- d. Validate archived data integrity and availability;
- e. Review, develop and/or amend SAP archiving strategy;
- f. Assist Technical team in monitoring data volumetric issues that could be addressed through archiving; and
- g. Provide knowledge transfer to departmental personnel on an on-going basis.

3.2.27 Business Analyst

The required services may include, but are not limited to, the following:

- a. Develop and document statements of requirements;
- b. Develop, document and maintain detailed design of business processes ;
- c. Perform business analyses of functional requirements to identify information, procedures, and decision flows;
- d. Identify candidate processes for re-design; prototype potential solutions provide trade-off information and suggest a recommended course of action. Identify the modifications to the automated processes.
- e. Provide expert advice in defining new requirements and opportunities for applying efficient and effective solutions; identify and provide preliminary costs of potential options.
- f. Evaluate existing business processes, procedures and methods, identify business processes improvement and document as required;

- g. Identify and evaluate critical success parameters, factors and performance measurements.
- h. Facilitate and participate in workshops to gather and document requirements; and
- i. Use of documentation tools (e.g. IBM Rational Suite and SAPSoIMan) for the system development and life cycle management of solutions.
- j. Provide knowledge transfer to departmental personnel on an on-going basis.

3.2.28 Business Support Specialist

The required services may include, but are not limited to, the following:

- a. Perform a variety of SAP-related problem analysis and monitoring tasks, monitor SAP application management systems and respond appropriately to user requests and problems.
- b. Perform initial problem analysis and triage problem to other appropriate staff when appropriate.
- c. Maintain liaison with end users and technical staff to communicate the status of problem resolution to end users; log and track requests for assistance.
- d. Develop, implement, and/or participate in the preparation of procedure manuals and documentation for service desk use; conduct periodic user satisfaction surveys and track user problem trends; make recommendations for improvements to the SAP systems and create reports based on information provided from user surveys and trends.
- e. Develop, implement, and/or participate in the distribution of system related information to users to include information such as service desk procedures and handbooks.
- f. Participate in the development of a comprehensive training plan for service desk procedures; assist in training personnel providing backup coverage.
- g. Participate in on-site support of SAP systems to end users.
- h. Perform other related duties incidental to the work described herein.
- i. Support Master Data Management activities.
- j. Provide knowledge transfer to departmental personnel on an on-going basis.

3.2.29 Business Transition Analyst

The required services may include, but are not limited to, the following:

- a. Participate in defining business strategy and processes in support of transformation and change management activities;
- b. Participate in change impact analysis and change management activities;
- c. Create presentations and present to various stakeholders, and facilitate meetings and discussions related to change management.
- d. Liaise with user organizations to identify and document both benefits and negative impacts associated with rollout and use of large information management systems;
- e. Assist with the development of business case proposals for extensions expansions to meet new business requirements or for rollout to new users;
- f. Develop and deliver the communication plan;

- g. Prepare, review and align communications material for the targeted audiences, as per the approved communication plan or strategy;
- h. Assist with preparation of training materials to address change management issues; and
- i. Provide knowledge transfer to departmental personnel on an on-going basis.

3.2.29 Training Development, Delivery and Support

The required services may include, but are not limited to, the following:

- a. Perform needs assessment and analysis for training purposes;
- b. Plan and monitor training projects;
- c. Perform job, task, and/or content analysis;
- d. Recommend instructional media and strategies;
- e. Develop and maintain training materials;
- f. Prepare end-users for implementation of courseware materials; and
- g. Deliver visual, oral, and written form with individuals, small group, and in front of large audiences.
- h. Provide knowledge transfer to departmental personnel on an on-going basis.

3.2.30 Technical Writer

The required services may include, but are not limited to, the following:

- a. Document help text, user manuals, technical documentation, web page content, etc;
- b. Review and establish documentation standards and the existing project documentation;
- c. Determine documentation requirements and make plans for meeting them;
- d. Gather information concerning the features and functions provided by the developers;
- e. Assess the audience for the documents and/or manuals which are required and prepare a statement of purpose and scope for each;
- f. Develop a table of contents for each document and/or manual and write or edit the required content;
- g. Investigate the accuracy of the information collected by making direct use of the material being documented;
- h. Prepare or coordinate the preparation of any required illustrations and diagrams;
- i. Design the layout of the documents and/or manuals; and
- j. Use word-processing, desk-top publishing and graphics software packages to produce final products.
- k. Provide knowledge transfer to departmental personnel on an on-going basis.

3.2.31 Transport Coordinator

The required services may include, but are not limited to, the following:

- a. Track and manage versions of multiple SAP environments;
- b. Set, track and control strategy and timing of movement of transports between multiple SAP environments;
- c. Identify, communicate and coordinate transport problem resolution;
- d. Communicate with team members to ensure that releases and all required instructions have been properly packaged and tested for action; and
- e. Provide knowledge transfer to departmental personnel on an on-going basis.

3.2.32 Configuration Management Specialist

The required services may include, but are not limited to, the following:

- a. Coordinate all efforts to maintain and manage the configuration items of all components of a large SAP system;
- b. Develop and maintain configuration management plans
- c. Maintain application & source code versions and promotes approved applications to test and production environments.
- d. Perform support duties control boards and other working groups to include agenda and minute preparation, coordinate with board member, write appropriate board directives, and track action item status
- e. Create, maintain and revise documentation in support of configuration items and configuration management plans using Configuration Management Tools such as Rational ClearCase, SAP SolMan, HP Quality Center, ClearQuest, DataPower-DPBuddy, and scripting languages such as PERL and SQL;
- f. Add or import new configuration items as required
- g. Prepare reports for Project Managers on all activities and the status of various projects; and
- h. Provide knowledge transfer to departmental personnel on an on-going basis.

3.2.33 Incident Management Coordinator

The required services may include, but are not limited to, the following:

- a. Analyze, review, coordinate and make recommendations for the approval of problem resolution;
- b. Assist with the definition and assessment of information systems service levels; gather and review service level agreement performance data, and prepare results;
- c. Initiate and monitor activities to restore systems to normal operations;
- d. Monitor information technology asset discrepancies and initiate further investigation as needed;
- e. Apply Information Technology Infrastructure Library (ITIL) framework principles where applicable;
- f. Communicate with all stakeholder as needed to ensure that actions and changes that may affect them are known and understood; and

- g. Provide knowledge transfer to departmental personnel on an on-going basis.

3.2.34 Change Coordinator

The required services may include, but are not limited to, the following:

- a. Review, maintain and suggest improvements to SAP change processes, models and standards and monitor compliance;
- b. Identify and initiate improvements to change management software and automated processes;
- c. Support a Request for Change process by reviewing, scheduling and monitoring applications for information systems changes;
- d. Monitor and report on the status of changes;
- e. Liaise with stakeholders and technical staff for changes;
- f. Develop and present training related to change management processes; and
- g. Provide knowledge transfer to departmental personnel on an on-going basis.

3.2.35 Test Manager

The required services may include, but are not limited to, the following:

- a. Provide advice, guidance and coordination efforts for test strategies and plans, and identification of resources required for testing;
- b. Plan, organize, and schedule testing efforts for large systems (internal and/or external), including the execution of systems unit tests, integration tests, specialized tests, and user acceptance testing (e.g., stress tests), including use of test defect tracking and reporting systems such as ClearQuest, HP Quality Center, and Rational Performance Tester (RPT) for Services Oriented Architecture;
- c. Develop the work plan for the creation of additional automated test scripts;and
- d. Provide knowledge transfer to departmental personnel on an on-going basis.

3.2.36 Quality Controller

The required services may include, but are not limited to, the following:

- a. Organize and take action of all aspects of quality management including contribution to the development and implementation of an integrated approach to quality, risk and performance management;
- b. Develop, deploy and evaluate existing internal policies, procedures, standards, initiatives, metrics, forms and tools for the quality management system;
- c. Verify if the quality management system's process assets (policies, procedures and standards) are being adhered to;
- d. Lead process improvement initiatives, and facilitate and/or coach teams which are performing process improvement initiatives;
- e. Manage, monitor and conduct conformance audits of a Quality Management System, reporting results including recommendations, tracking , reporting and implementation of appropriate corrective actions to deal with the non-conformances; and

- f. Prepare reports concerning the capabilities, strengths and weaknesses of Quality Management Systems.
- g. Provide knowledge transfer to departmental personnel on an on-going basis.

3.2.37 Tester

The required services may include, but are not limited to, the following:

- a. Test planning and coordination;
- b. Supervise testing in accordance with the plan;
- c. Manage and monitor of test plans for all levels of testing;
- d. Manage walkthroughs and reviews related to testing and implementation readiness;
- e. Develop test scenarios and test scripts;
- f. Establish and maintain source and object code libraries for a multi-platform, multi-operating system environment;
- g. Establish and execute software testing procedures for unit test, integration testing and regression testing with emphasis on automating the testing procedures;
- h. Establish and operate "interoperability" testing procedures to ensure that the interaction and co-existence of various software elements, which are proposed to be distributed on the common infrastructure, conform to appropriate departmental standards (e.g. For performance, compatibility, etc.) and have no unforeseen detrimental effects on the shared infrastructure;
- i. Establish validation and verification capability which assumes functional and performance compliance; and
- j. Provide knowledge transfer to departmental personnel on an on-going basis

3.2.38 Subject Matter Expert

The required services may include, but are not limited to the following:

- Provide orientation on their field of expertise to a range of target groups (e.g. program managers, evaluators, corporate planners) including details on key issues in the field and details on best practices in terms of technology and/or SAP solutions;
- Advise on the design and/or implementation of new or adequacy of existing technology and/or SAP solutions in support of meeting technical or business requirements in accordance with departmental and Treasury Board policies and Treasury Board Secretariat guidance and directives;
- Advise on the capacities, skills and resources needed in federal organizations to create, implement and maintain on-going technology and/or SAP solutions at the level of the organization as a whole or at the program, initiative or project level;
- Provide field-specific technology and/or SAP solutions advice (e.g. support managers to identify, track and report on results throughout the life cycle of projects, programs, services, policies or initiatives), including providing training or information sessions to build capacity within

organization and assist program management with new or existing technology and/or SAP solutions;

- Analyze existing technology and/or SAP solutions and making recommendations;
- Research field-specific technology and/or SAP solutions uses and practices in other jurisdictions (includes provincial and international jurisdictions);
- Provide subject-matter advice to assist and provide support in the:
 - Assessment of the readiness of a policy, program or initiative to be evaluated;
 - Scoping and planning of specific technology and/or SAP solutions;
 - Preparation of logic models, program theories, literature reviews or assessment tools;
 - Constructing of work plans, and associated methodologies;
 - Developing, testing and implementing of technology and/or SAP solutions;
 - Full engagement in implementation activities providing technical assistance and guidance;
 - Collection and analysis of relevant data;
 - Assessment of relevance and/or performance, including impacts, efficiency and cost-effectiveness of technology and/or SAP solutions;
 - Developing reports containing findings, conclusions and recommendations, and undertake report validation and consultations where appropriate and requested;
 - Compilation, analysis and dissemination of findings, lessons learned and best practices;
 - Briefing of program and senior management on major results and findings, including preparation of presentations;
 - Development of other materials, documents, tools and instruments related to the work; and
- Validate implementation approaches, methodologies, findings, conclusions and recommendations;
- Participate on peer review or similar panels for technology and/or SAP solutions or act as an third- party reviewer;
- Facilitate connection to other key experts in the field as required for technology and/or SAP solutions;
- Participate in the troubleshooting of high-impact technology and/or SAP solutions issues, including the analysis, recommendation and implementation of permanent solutions.