

1 Chapter 1 - Introduction

1.1 Purpose

The purpose of this Performance Work Statement (PWS) is to describe the outcomes required by Canada for the provision of services by the Contractor in support of the Royal Canadian Navy's (RCN) Arctic/Offshore Patrol Ship (AOPS) and the Joint Support Ship (JSS).

This PWS describes the work to be accomplished by the Contractor and is tied to a series of performance measures that indicate the level of performance required by the Contractor to meet Canada's outcomes.

The contract arising as a result of this PWS will collectively be referred to as the AOPS and JSS In-Service Support (AJISS) Contract.

1.2 PWS Management Concept

This AJISS contracting approach signifies a philosophical change to the way Canada contracts for In-Service Support (ISS). It adopts a flexible, continual improvement, long-term, relational, incentivized, performance-based approach with clear accountability for contract outcomes, and represents the work that the Contractor is expected to perform to support the through-life of both the AOPS & JSS classes to end of life and contract close-out (for approximately 35 years).

1.2.1 Contract Phases

The Contract will be structured and implemented in a phased approach:

Start-Up Phase:

The purpose of the Start-Up Phase is to ramp up both client and supplier organizations to execute ISS activities as required, aligned to the Ship delivery schedule.

The Start-Up Phase starts at contract award, and ends when acceptable readiness to execute the Transition Plan has been demonstrated by the Contractor through delivery of a Support Readiness Verification Preliminary (SRVP) report to support the 1st ship delivered from the build contractor to Canada. Ship delivery is achieved upon completion of an Operational Status Transfer after a recommendation from a Materiel State Disclosure Conference, to be attended by the Contractor.

Transition Phase:

The purpose of the Transition Phase is to establish appropriate organization, resources, processes and infrastructure to support AOPS and JSS ships and to establish Performance Management Framework metrics. The outcome of the transition phase will be the establishment of a baseline for the scope of work expected throughout the remainder of the contract.

The Transition Phase starts at the achievement of a successful SRVP. The Transition Phase ends when all ships have been delivered to Canada and a Support Readiness Verification Final (SRVF) is completed.

Steady-State Phase:

The purpose of the Steady-State Phase is to conduct In-Service Support under a Performance Management Framework in order to deliver affordable and sustainable in-service support to meet RCN operational requirements.

The Steady-State Phase starts upon completion of all technical and contractual obligations in the Transition Phase, and ends when all ships are decommissioned.

Close-out Phase:

The Close-out phase starts at ship decommissioning and ends when all ships and all related disposal activities have been completed.

A graphical representation of the contract phases and their approximated length is included in the Appendix A in Chapter 13.

1.3 PWS Structure and Organization

The PWS content and structure is organized based upon the Future In-Service Support (FISS) Functional Model and accompanying FISS Statement of Requirements Document. The sections of this PWS are as follows:

Chapter 1 - Introduction;

Chapter 2 - General Requirements;

Chapter 3 - Program Management;

Chapter 4 - Life Cycle Materiel Management (LCMM);

Chapter 5 - Technical Schedule Management;

Chapter 6 - Service Delivery;

Chapter 7 - Training Support Services;

Chapter 8 - is unallocated;

Chapter 9 - Integrated Data Environment (IDE);

Chapter 10 - is unallocated;

Chapter 11 - The Performance Measurement System (PfMS);

Chapter 12 - Disposal Services; and

Chapter 13 - List of Appendices, DIDs, DSDs, Glossary and References.

The Detailed Service Descriptions (DSDs) are the specifications for the services identified within the PWS. Not all chapters will refer to DSDs.

Data Item Descriptions (DIDs) define the format and structure of the Contractor's deliverables for Canada.

The Contract Data Requirements List (CDRL) defines the delivery schedule for the Data Items.

1.4 Canada's Future In-Service Support System

The Future In-Service Support (FISS) System defines high-level functions necessary to deliver in-service support to naval assets over their life cycle as described in the FISS System Requirements Document (SRD) referenced in Chapter 13, Appendix V - FISS Key Principles Letter.

The Contractor is required to manage and deliver services in the FISS system functional areas of Program Management, Life Cycle Materiel Management (LCMM), Technical Schedule Management and Service Delivery. While the work associated with the in-service support for AOPs and JSS will be done predominantly by the Contractor, the Contractor will interact collaboratively with Canada in each of the functional areas. Training support services falls under the LCMM and Service Delivery functional areas.

1.5 Excluded and Hybrid Systems

The Contractor will perform all the management and services necessary to support AOPS and JSS. Maintenance work is to be allocated based upon its categorization as an Excluded System or Hybrid System. All AOPS and JSS systems, sub-systems and equipment will be included in the Contract unless specifically identified as an excluded system.

1.5.1 Excluded Systems

The Contractor will not be responsible for any ISS of Excluded Systems unless negotiated post Contract Award. If ISS services are required for any Excluded System, they will be addressed as Emergent Work. The list of Excluded Systems (Appendix B) may be amended by Canada at any time during the contract. Canada will inform the Contractor of the addition of any system to the list of Excluded Systems so that this may be accounted for in the development of the Contractor's respective Service Delivery Annual Operating Plans (SDAOPs).

The Contractor will be responsible for ISS of interfaces, ancillary and support equipment to the Excluded Systems to ensure their operation.

1.5.2 Hybrid Systems

The Level Two Maintenance for AOPS and JSS will be a shared effort between FMFs and the Contractor. The Contractor will be responsible for ISS of all Hybrid Systems except for Level Two Maintenance that can be conducted by FMFs. The FMFs will determine their capacity to coordinate and conduct Level Two Maintenance of Hybrid systems and Canada will inform the Contractor for the development of the Contractor's respective Service Delivery Annual Operating Plans (SDAOPs). Level Two Maintenance for Hybrid Systems may be added to the Contract as Emergent Work or included within Core Work.

The Contractor will have the responsibility of coordinating with the FMFs to develop and keep current a responsibility matrix for the Primary Maintenance Service Provider (PMSP) for each Hybrid System for each coast. The PMSP is either the FMF or Contractor who is best suited at that phase of the AJISS program to coordinate and conduct Level Two Maintenance of the Hybrid System. The Secondary Maintenance Service Provider (SMSP) will support Level Two Maintenance as required and identified in the responsibility matrix. Hybrid systems with FMF as PMSP will be regularly evaluated for potential transfer of PMSP status to the Contractor during the transition phase.

Hybrid Systems will initially be determined in conjunction with supporting Appendix J - FMF Strategic Capabilities Letter.

1.5.3 ILS Products

For both AOPS and JSS, Integrated Logistic Support (ILS) products will be developed by the respective Design and Build (DAB) Shipyards. A list of the ILS products to be delivered is included for AOPS (Appendix C) and for JSS (Appendix D).

1.5.4 AOPS and JSS Equipment Family Trees (EFT)

AOPS and JSS have Equipment Family Trees (Appendix E and Appendix F, respectively) that groups and outlines the various operational systems that are contained within each class in a hierarchical format. Each EFT is included within this PWS as a reference and should be taken as an indication of the number of systems for each ship class at Start Up Phase, but will change throughout the life of each class.

1.6 Concept of Operations

1.6.1 AOPS

The AOPS will require support in its origin of the vessel of Esquimalt, British Columbia (BC) and Halifax, Nova Scotia (NS).

The anticipated number of AOPS stationed in Halifax is 4 (four) and the number anticipated for Esquimalt is 2 (two). Canada reserves the right to change this allocation between coasts. AOPS

will operate in Canada's waters, including the Arctic, and from time to time, operate in the waters contiguous to continental North America.

Canada reserves the right to change the AOPS or JSS allocation between coasts. Canada will consult with the Contractor regarding the impact of any change.

Each AOPS is expected to have an operational availability up to 250 days per year and be capable of successfully completing a 120 day Arctic deployment.

Canada reserves the right to change the operational availability requirements to meet operational requirements. Canada will consult with the Contractor regarding the impact of any change.

The AOPS is expected to fulfill the following key roles:

- a. To conduct armed seaborne surveillance of Canada's waters, including the Arctic, to provide government departments situation awareness of activities and events in these regions; and
- b. To cooperate with other elements of the Canadian Armed Forces and other federal government departments to assert and enforce Canadian sovereignty when and where necessary.

1.6.2 JSS

There will be one JSS per coast and the class will require support in its origin of the vessel of Esquimalt, BC and Halifax, NS.

JSS will operate in Canada's waters, as well as deploy for global operations. JSS is expected to have an operational availability of up to 290 days per year and be capable of successfully completing a 180 day deployment.

Canada reserves the right to change the operational availability requirements to meet operational requirements. Canada will consult with the Contractor regarding the impact of any change.

The JSS is expected to fulfill the following key roles:

- a. Worldwide naval task group logistic support and strategic sealift capability; and
- b. Sustain operations for joint command & control of forces ashore.

1.6.3 Ship Employment Profile

A detailed Ship Employment Profile will be developed for AOPS (Appendix G) and for JSS (Appendix H). These profiles will define the typical roles for the ships, the typical time spent in each role, and the ship availability for maintenance in order to guide the development of the Program Annual Operational Plan (PAOP) and align the approach to ISS. These profiles also form the basis for the Availability, Reliability and Maintainability (AR&M) modelling, the ILS analyses and the metrics to be used for establishing the ISS performance based measures.

2 Chapter 2 - General Requirements

2.1 Scope of Work

The purpose of this chapter is to describe the scope of work for the Contractor. This scope includes the services of Program Management, Technical Schedule Management, Life Cycle Materiel Management (LCMM), Service Delivery (Production, Engineering and Materiel Management), Training Support, Information and Data Management, Performance Management and Disposal Management for both the AOPS and JSS classes of ships.

2.2 AOPS and JSS ISS Organization

The ISS organization will consist of a collaboration of Canada's organization and the ISS Contractor's organization. A breakdown of Canada's key responsibilities and the Contractor's key responsibilities are detailed in the sections that follow. Canada's allocated technical roles and responsibilities are detailed in accordance with the Naval Materiel Management System (NaMMS) manual C-03-005-012/AM/001. Canada has designated a Design Authority (DA), System Authority (SA), Delegated Technical Authority (DTA), Quality Assurance (QA) Manager and an Operational Authority (OA). See below for a description of each position:

- a. Design Authority (DA) - The DA resides within the organization of the Director Maritime Equipment Program Management (Minor War Vessels & Auxiliaries) - DMEPM (MWVA) within the organization of the Director General Maritime Equipment Program Management (DGMEPM) in National Defence Headquarters (NDHQ). The DA is responsible for the establishment and maintenance of the design intent. The DA is also the Class Program Manager (CPM) for the In-Service Support Program (ISSP) and may therefore be referred to as the DA/CPM. Canada reserves the right to final authority for all design changes;
- b. System Authority (SA) - The SA resides within the Director Naval Platform Systems/Director Naval Combat Systems (DNPS/DNCS) - DGMEPM DNPS/DNCS in NDHQ. The SA is charged with the safety of a ships system or equipment and its subsequent maintenance throughout the life cycle;
- c. Delegated Technical Authority (DTA) - The DTA will function as the Contractor's coastal points of contact for the local day-to-day maintenance and support of the ships. The DTAs for AOPS and JSS will reside in Halifax NS, and in Esquimalt BC;
- d. Quality Assurance Management (QA) - The QA resides within the organization of the Director Quality Assurance (DQA) within the organization of the Director General Materiel Systems and Supply Chain (DGMSSC), and will be responsible for the quality assurance inspection and audit aspects of the Contract;
- e. Operational Authority (OA) - Resides within the organization of the Maritime Commander; and
- f. Naval Materiel Regulatory Authority (NMRA) - The NMRA is accountable to DGMEPM to regulate the materiel safety of surface ships and is independent of DA/CPMs and OA. For surface ships, the NMRA is DNPS IAW NaMMS, Part 2.

2.3 Key Canada Responsibilities

The Department of National Defence (DND) Class Program Manager (CPM) will be the Design Authority for both the AOPS and JSS.

Canada may provide any Government Furnished Resources (GFR) which could include Government Furnished Equipment (GFE), Government Supplied Material (GSM), Government

Furnished Facilities (GFF) and Government Furnished Information (GFI). Canada will provide a process for obtaining GFE (Appendix I).

Canada will allow access to Her Majesty's Canadian (HMC) Dockyards to security screened Contractor and Subcontractor personnel with appropriate Visit Clearance Requests.

Canada will allow Contractor access to FMF Operations and HMC Dockyard authorities to facilitate use of HMC Dockyard services as they are identified or required by the Contractor and approved by Canada. Further guidance on ISSC operations within HMC Dockyards can be found in Appendices T and X which are currently dynamic documents.

Canada will conduct the evaluation of the Contractor's performance.

Canada will load AOPS and JSS Master Data into DRMIS, Canada's Enterprise Resource Planning Tool to effect maintenance, supply and other key business transactions.

2.4 Key Contractor Responsibilities

The Contractor must ensure systems under their cognizance meet the underway material availability requirements as dictated by the operational requirements, including domestic and international deployments. Unless otherwise ordered or approved, the operational requirements must be maintained in accordance with ship tasking promulgated in the Operational Schedule.

The Contractor is relieved from these responsibilities if the operational availability is not met due solely to the failure of an Excluded system or Hybrid system maintained by FMF. However, the Contractor must achieve operational availability for the systems for which they are responsible for as PMSP.

The Contractor must address urgent support requirements to meet the ship's applicable operational schedule in a manner and time frame acceptable to Canada.

The Contractor is delegated the responsibility to maintain and manage the design intent equipment baseline and ship level baseline for the AOPS and JSS classes. Approval for changes from the design intent equipment baseline rest with the Design Authority.

The Contractor must schedule and perform ship maintenance and trial activities within the maintenance availability schedule as defined by Canada.

The Contractor will prioritize, schedule, and coordinate the work in collaboration with DND utilizing an Integrated Project Team approach in accordance with the joint governance structures identified in the Relationship Charter in order to optimally ensure that ship operational requirements are achieved.

The Contractor will be the Design Agent upon recommendation of a Materiel State Disclosure Conference (MSDC) and the subsequent Operational Status Transfer (OST) of each ship.

The Contractor must provide all support infrastructure and resources to perform the required services unless otherwise specified within this PWS.

The Contractor must abide by the terms and condition outlined in the Loan of Defence Materiel Agreement for the GFE (Appendix I).

The Contractor must prepare and submit a Government Furnished Equipment Report in accordance with CDRL Item SD-001.

The Contractor must ensure that:

- a. all ISS services are delivered to ensure that the Operational Schedule readiness requirements are met;
- b. all work under the Contract is performed by Suitably Qualified and Experienced Personnel (SQEP);

- c. all engineering work under the Contract is performed or certified by an Authorized Engineering Organization (AEO) as determined by Canada in order to comply with NMR;
- d. the personnel performing work under the Contract satisfy the security requirements of the Contract;
- e. Technical Assistance Agreements (TAAs) are established for any International Traffic in Arms Regulations/Controlled Technology Access and Transfer (ITAR/CTAT) controlled information for the Technical Data Package (TDP) and ensure Canada's authorization is received;
- f. as a minimum, there is at least one bilingual (French and English) Contractor representative accessible to Canada 24 hours per day, 365 days per year who is able to respond with an action plan within 1 hour of being requested commensurate with a ship's urgent operational needs; and
- g. the ships are supported in a manner that maximizes quality and performance while respecting Canada's budget for the work.

The Contractor must support the Materiel Certification of the ships in accordance with NaMMS.

2.5 Management Functions, Core Work and Emergent Work

The work performed by the Contractor will be divided into one of three categories: Management Functions, Core Work and Emergent Work. Initially, the majority of work will be conducted as Emergent Work. As the contract progresses and actual performance and cost data become available, Canada and the Contractor will negotiate the movement of work that is both recurring and quantifiable from Emergent Work to Management Functions and Core Work.

2.5.1 Management Functions

Management Functions are the management level work necessary to execute the Contract.

2.5.2 Core Work

Core work is defined as non-management known work that is identified within the approved Program Annual Operating Plan (PAOP).

The Core work for each ship must be identified by the Contractor in the applicable Service Delivery Annual Operating Plan (SDAOP).

The scope and cost of the Core work, identified in the Contractor's PAOP will be negotiated and agreed to between Canada and the Contractor.

2.5.3 Emergent Work

Emergent Work is defined as work that was neither anticipated, planned, nor quantifiable and as a result was not identified within the PAOP.

Emergent Work must be conducted by the Contractor on an “as and when requested” basis in accordance with the Basis of Payment of the contract.

Emergent Work will be assigned to the Contractor through a Task Authorization form (DND 626).

2.6 Performance Management Framework (PMF)

The objective of a Performance Management Framework is to measure and assess the performance of the Contractor to sustain AOPS and JSS capability. The PMF will have performance measures to include:

- a. Strategic Performance Measures (SPMs);
- b. Key Performance Indicators (KPIs); and,

c. Systems Health Indicators (SHIs).

The PMF has the following PWS interdependencies:

- a. Chap 3.3.6 - Performance Management Plan (PfMP): provides the details for the Contractor performance management activities;
- b. Chap 9 - Integrated Data Environment: provides the details for the performance data collection, analysis and reporting, including the electronic dashboard software application;
- c. Chap 11 - Performance Measurement System (PfMS): provides the details to develop the PfMS software tool; and
- d. Appendix R - Performance Requirements Specifications (PRS): provides the details of each performance measures (SPMs, KPIs, SHIs).

2.7 Relationship Management Framework

The AJISS Contract will be managed as a relational contract, which represents a collaborative approach to meeting the operational requirements of the RCN.

Canada and the Contractor will jointly develop a Relationship Charter (RC) that will outline common goals, desired behaviours, joint governance, and collaborative processes. The purpose of the Relationship Charter is to ensure that Canada and the Contractor remain in an aligned relationship that delivers sustained value to both parties over the long term.

The Contractor will also prepare and submit a Relationship Management Plan that will describe how the Contractor proposes to enhance collaboration with Canada and to streamline key processes that involve interaction with Canada.

The Relationship Management Plan is a transitional document that is intended to facilitate the joint development of the Relationship Charter. The actions, tools, and processes proposed in this Plan will inform the content of the Charter.

Throughout the duration of the contract and through mutual agreement between Canada and the Contractor, the Relationship Charter is expected to evolve to better achieve the AJISS objectives.

2.8 Integrated Project Team (IPT)

The program management approach to the AJISS Contract will utilize two coastal Integrated Project Teams (IPTs) (Esquimalt BC and Halifax NS) in which both Canada and the Contractor will work collaboratively to manage support for the AOPS and JSS equipment systems.

The program management approach to the AJISS Contract will utilize a central IPT in the National Capital Region in which both Canada and the Contractor will work collaboratively to support Class Program Management for the AOPS and JSS.

Canada and the Contractor will work together to meet the annual Operational Availability of each AOPS and JSS as identified in the PAOP.

The IPT membership and its functions will be jointly developed by Canada and the Contractor in the RC during the Start-Up Phase.

2.9 Applicable Specifications, Standards, Documents and Precedence

The Contractor must ensure the work performed is in accordance with the standards and specifications identified within the PWS.

Additional standards and specifications may be called up for specific tasks to the extent required to complete the activities.

The Contractor must maintain currency with the standards and specifications as they are updated throughout the Contract.

In the event of any inconsistency within this PWS, the Contractor must consult the Contracting Authority for clarification. The documents will be given precedence in the following order:

- a. Articles of the PWS;
- b. DSDs;
- c. DIDs;
- d. Annexes;
- e. All other Appendices to the PWS; and
- f. Specifications, standards, technical documents, and other related documents referenced in the PWS.

2.10 Equivalent Standards

The Contractor may propose an equivalent standard alternative by preparing and submitting an Equivalent Standards Justification Report in accordance with CDRL Item GR-001.

2.11 Operational Usage and Activity Rates

The details of the required annual Operational Availability of each AOPS and JSS will be provided by Canada.

The expected annual usage of ship, the expected roles of the equipment system and the environment in which it is expected to operate will be defined by Canada. This will be done in consultation with the Contractor and will be interactive and iterative in nature.

The assignment of individual ships to specific readiness levels will not follow one single and identical rhythm across all units. By necessity, a measure of flexibility is required to account for differences in requirements, scheduling conflicts, operational deployment patterns and other considerations.

The Contractor must be flexible to adjust schedules to accommodate readiness status demands of individual ships.

3 Chapter 3 - Program Management

3.1 General Requirements for Program Management

The purpose of this chapter is to define the Program Management requirements for the Contractor. The expected outcome is a Program Management Capability that provides the oversight to manage all aspects of the AJISS Contract.

The Contractor's Program Management must be aligned with the principles of DND's Future In-Service Support program (FISS), in that it addresses all FISS functional elements:

- a. ISS Program Management;
- b. Life Cycle Materiel Management;
- c. Technical Schedule Management;
- d. Service Delivery; and
- e. Ships.

The Contractor must perform Program Management that is based on program management best practices, backed by extensive experience in the engineering management by qualified personnel, demonstrated by the following:

- a. an understanding of key schedule cost drivers;
- b. an understanding of the value/benefit derived from expenditures;
- c. an understanding of AJISS requirements;
- d. an understanding of the cost of capability and the total cost of ownership;
- e. a commitment to continual improvement;
- f. an understanding of performance and optimizations across the entire ISS system; and
- g. the ability to substantiate resource demands.

3.2 Plans Update and Currency

The Contractor must ensure that all plans are reviewed and updated in accordance with the CDRL.

The Contractor must ensure that Canada is consulted and informed on all AJISS plan changes before implementation.

3.3 Program Management Plan (PMP)

The PMP describes the Contractor's plan for integrating all management, planning and control activities for the contract. The PMP includes all the processes and structures necessary for the Contractor to manage the overall program and perform all the work described in this PWS for the life of the contract.

The Contractor must develop, submit, implement and maintain a PMP in accordance with CDRL Item PM-001.

The PMP must include the following subordinate plans:

- a. Start-Up Plan;
- b. Transition Plan;
- c. Data Management Support Plan;
- d. Risk Management Plan;
- e. Configuration Management Plan;
- f. Performance Management Plan;
- g. Relationship Management Plan;

- h. Disposal Management Plan; and
- i. Contract Close-Out Plan.

The Contractor must perform all Program Management activities in accordance with the PMP and its subordinate plans.

3.3.1 Start-Up Plan

The Start-Up Plan describes how the Contractor plans to ramp up their initial capability in preparation for delivery of the first AOPS ship.

The Start-Up Plan must include all activities necessary to ensure the Contractor is ready in all aspects for maintaining the first AOPS and its associated equipment and systems.

The Contractor must develop and submit a Start-Up Plan in accordance with CDRL Item PM-002.

The Contractor must execute the Start-up Phase activities in accordance with the approved Start-Up Plan.

3.3.2 Transition Plan

The Transition Plan describes how the Contractor plans to increase their capability and capacity so that they can provide support from first ship delivery and until the end of the transition phase.

The Transition Plan must include all activities necessary to ensure that the Contractor provides support for all AOPS and JSS and their equipment and systems as described in the SRV processes contained in paragraph 3.17.

The Contractor must prepare and submit a Transition Plan in accordance with CDRL Item PM-003.

The Contractor must execute the Transition Phase activities in accordance with the approved Transition Plan.

3.3.3 Data Management Support Plan (DMSP)

The Data Management Support Plan describes how the Contractor plans on providing system architecture, data quality, master data management, back up management and business continuity and disaster recovery.

The Contractor must prepare and submit a DMSP in accordance with CDRL Item PM-004.

The Contractor must maintain and execute the DMSP.

3.3.4 Risk Management Plan

The Risk Management Plan describes how the Contractor plans on managing risk and issues.

The Contractor must outline the intended risk management process and data flows for individual project activities and overall program level activities.

The Contractor must submit and maintain a Risk Register that summarizes the risks, assigns responsibility for the management of each risk, identifies risk mitigation strategies and outlines contingency plans for each risk.

The Contractor must prepare and submit a Risk Management Plan in accordance with CDRL Item PM-006.

The Contractor must perform risk management on an ongoing basis and at all levels within the Contract.

The Contractor must make sound risk management decisions by evaluating key programmatic, technical, and commercial considerations.

The Contractor must execute the Risk Management Plan.

3.3.5 Configuration Management Plan

The Contractor's Configuration Management Plan describes the Contractor's Configuration Management program, how it is organized, how it will be conducted, and the methods, procedures and controls used to assure effective configuration identification, change control, status accounting. Audits of the total configuration must include hardware, software and firmware for onboard systems, trainers, simulators and models. The main purpose is to provide Canada a basis for review, evaluation, and monitoring of the Configuration Management program and its proposed components.

The Contractor must prepare and submit a Configuration Management Plan in accordance with CDRL Item PM-007.

The Contractor must conduct configuration management in accordance with the Configuration Management Plan.

3.3.6 Performance Management Plan (PfMP)

The PfMP describes how the Contractor will effectively manage their performance for the duration of the contract. The plan describes how the Contractor will conduct Performance Measurement System (PfMS) Design, PfMS Data Sources, PfMS electronic Dashboard, PfMS Testing, Validation and Acceptance and PfMS Maintainability.

The Contractor must prepare and submit a Performance Management Plan in accordance with CDRL Item PM-008.

The Contractor must conduct performance management in accordance with the Performance Management Plan.

3.3.7 Relationship Management Plan (RMP)

The RMP describes how the Contractor plans on enhancing collaboration with Canada and streamlining the processes that involve interaction with Canada.

The Relationship Charter describes common goals, desired behaviours, and joint governance. It will include a series of mutually agreed upon processes to increase collaboration. The Relationship Management Plan describes how the Contractor plans to align its goals, promote desired behaviours, and participate in joint governance, including managing Subcontractor involvement in governance, as well as collaboratively making updates to the Relationship Charter.

The Information and Data Management Plan describes how the Contractor plans to manage data and information. The Relationship Management Plan describes how the Contractor plans to collaboratively share information with Canada, and how it plans to streamline the processes for information sharing.

The Risk Management Plan describes how the Contractor plans on managing risk and issues.

The Relationship Management Plan describes how the Contractor plans to collaborate with Canada in the management of risk and issues, and how it plans to streamline the processes for risk and issue management.

The Contract describes how engineering changes and contract changes are managed. The Relationship Management Plan describes how the Contractor plans to collaborate with Canada in the management of change, and how it plans to streamline the processes for change management.

The Integrated Management System and Continual Improvement describes how the Contractor plans on setting objectives and achieving improvements in value delivered to Canada through the duration of the Contract. The Relationship Management Plan describes how the Contractor plans to promote and manage innovation and continual improvement.

The Contractor must prepare and submit a Relationship Management Plan in accordance with CDRL Item PM-009.

3.3.8 Disposal Management Plan (DisMP)

The DisMP describes how the Contractor will conduct disposal activities and carry out procedures required for any AJISS systems, equipment, platforms, and related Integrated Logistic Support (ILS) documentation that require disposal over the life of the Contract in accordance with NaMMS.

The Contractor must prepare and submit a DisMP in accordance with CDRL Item PM-010.

The Contractor must carry out the disposal activities in accordance with the approved DisMP.

3.3.9 Contract Close-Out Plan

The Contract Close-Out Plan describes how the Contractor will transfer support from the Contractor to Canada and/or a third party and will detail all activities necessary to transfer all services and goods specified in the contract to DND in the event that there is a requirement to do so or upon contract close-out.

The Contractor must prepare and submit a Contract Close Out Plan in accordance with CDRL Item PM-011.

The Contractor must, when requested by Canada, carry out the activities required to transfer the responsibilities to Canada or a third party in accordance with the Contract Close-Out Plan.

Should the contract be terminated for any reason, title to the spares and support material, parts and equipment used in support of the AOPS and JSS must be transferred to Canada.

3.4 Program Annual Operating Plan (PAOP)

The PAOP describes the business plan for the Contractor. The PAOP must detail all management and core work that the Contractor plans on performing during the fiscal year but also includes a forecasted five year plan. Canada will provide to the Contractor, the forecasted annual budget to aid in the development of the PAOP. Canada will also provide the Contractor information to allow for a prioritization of known work when developing the PAOP.

The Contractor must prepare and submit a PAOP in accordance with CDRL Item TSM-001.

The PAOP must contain two subordinate plans:

- a. MARLANT SDAOP; and
- b. MARPAC SDAOP.

The Contractor must execute the approved PAOP.

3.5 Service Delivery Annual Operating Plans

Each SDAOP describes the specific Service Delivery activities that the Contractor plans on performing on each coast.

The SDAOP must contain ship specific subordinate Service Delivery Project Plans (SDPP).

The Contractor must develop, in coordination with the FMFs, and keep current a coastal responsibility matrix for the Primary Maintenance Service Provider (PMSP) for each Hybrid System and include as part of their respective SDAOPs.

The Contractor must prepare and submit a SDAOP for the MARLANT (East Coast) in accordance with CDRL Item TSM-002.

The Contractor must prepare and submit a SDAOP for the MARPAC (West Coast) in accordance with CDRL Item TSM-002.

The Contractor must execute both approved SDAOPs.

3.6 Service Delivery Project Plans (SDPP)

Each Docking Work Period (DWP), Short Work Period (SWP) or other significant service activities must be managed as a project. The Service Delivery Project Plan (SDPP) must include all services and activities to be performed by the Contractor during the project and include an Integrated Master Schedule.

The Contractor must prepare and submit an SDPP per ship in accordance with CDRL Item TSM-003.

The Contractor must ensure that any other schedules developed internally are aligned with the SDPP. Canada's milestones, including activities, services, and availability of fleet assets to facilitate and enable the implementation of the Contractor's support services must form part of the SDPP.

The Contractor must execute each approved SDPP.

3.7 Meetings

The Contractor must fully leverage available technology to reduce the cost of hosting and holding meetings.

3.7.1 Initial Kick-Off Meeting

The Contractor must organize a kick-off meeting within 30 days of contract award at a time mutually convenient. The purpose of the kick-off meeting is to review and clarify program requirements.

3.7.2 Progress Review Meetings (PRMs)

Regular PRMs must be held between Canada and the Contractor. Locations and frequency will be determined collaboratively between Canada and the Contractor.

3.7.3 Other Service Review Meetings or Ad Hoc Meetings

The Contractor or Canada may schedule other meetings as required to aid in achieving the requirements of the Contract.

3.8 Class Program Management

The Contractor must provide engineering, technical, logistical and program management support to the CPM in development and implementation of Class Program Plans (CPP) for AOPS and JSS.

3.9 Equipment Program Management

The Contractor must provide engineering, technical, logistical and program management support to the Equipment Group Program Managers in the development and implementation of Equipment Group Program Plans applicable to AOPS and JSS.

3.10 Integrated Management System and Continual Improvement

The Contractor must have an Integrated Management System.

The Contractor must apply Continual Improvement processes to all aspects of the Contract.

The Contractor must use an Integrated Management System to ensure compliance with customer, environmental and Occupational Health & Safety (OH&S) requirements.

The Contractor may use an existing Integrated Management System or develop a separate Integrated Management System for management of compliance of Contractor work.

The Contractor's Integrated Management System must be compliant to:

- a. ISO 9001 Quality Management Systems - Requirements;
- b. ISO 10005 Quality Management Systems - Guidelines for Quality Plans;
- c. ISO 14001 Environmental Management Systems - Requirements with Guidance for Use; and

d. OHSAS 18001 Occupational Health & Safety.

The Contractor's Integrated Management System must be applicable to all Contractor and Subcontractor activities performed under the Contract.

The Contractor's Integrated Management System must demonstrate how the Contractor will set objectives and achieve measurable improvements in value delivered to Canada through the duration of the Contract.

The Contractor must update the Integrated Management System as new OH&S or environmental legislation, regulations or other requirements are introduced by regulatory agencies external to DND.

Changes to the Integrated Management System due to changes in Canada's internal regulations alone (not mandated by regulatory agencies outside of Canada), the updating of onboard safety documentation, Subcontractor participation in any safety or environmental drills, and the training of DND staff due to changes in the Integrated Management System & Continual Improvement may be considered as Emergent Work.

The Contractor must advise Canada prior to changing the Integrated Management System.

Canada will have the right to conduct or have conducted by an independent third party of Canada's choosing, audits of any part of the Contractor's Integrated Management System.

The Contractor must provide assistance if required by Canada for the evaluation, verification, or validation of any part of the Contractor's Integrated Management System.

The Contractor must prepare and submit a Quality Plan (QP) in accordance with CDRL Item IMS-001.

The Contractor must prepare and submit a Process Improvement Plan in accordance with CDRL Item IMS-002.

The Contractor must prepare and submit an Improvement Implementation Plan in accordance with CDRL Item IMS-003.

The Contractor must prepare and submit Contract Status Reports for Continual Improvement in accordance with CDRL Item IMS-004.

3.11 Security Management

The Contractor must employ security considerations in the policies, processes, procedures, and safeguards of the work that are required to ensure the protection of personnel, facilities, data, communications, Information Management/Information Technology (IM/IT) assets, and other Support System elements.

The Contractor must establish an Information Technology Security (ITSEC) and Security Assessment and Authorization (SA&A) lead for the Contract separate from the Company Security Officer.

The Contractor must comply with the Government of Canada (GoC) ITSEC Policy and the Canadian Security Establishment (CSE) Information Technology Security Guidance ITSG-22. The Contractor must conduct Technical COMSEC Inspections (TCI) as required to support GoC Security Policy.

The Contractor must ensure the security, custody, storage and retrieval of all Technical Data complies with National Defence Security Orders and Directives (NDSOD) and DAOD 2006-0 Defence Security.

In all aspects of its involvement, the Contractor must ensure the IT Security compliance of the ships and its systems, sub-systems and equipment are maintained throughout their life. Canada will have the right to conduct or have conducted by an independent third party of Canada's choosing, audits of any part of the IT Security compliance and certification framework.

3.12 Contractor Training

There may be a requirement for the Contractor to be trained on DND Policies and Procedures.

There may be a requirement for the Contractor to be trained on DND's Information Systems.

Canada will provide initial training to the Contractor, if required.

Once a core group of Contractor staff have received the initial training, the Contractor will be responsible for maintaining relevant training materials and providing subsequent training in order to ensure that resources have the knowledge, skills, and qualifications necessary to perform the work.

3.13 Subcontractors Management

The Contractor is responsible for the selection, engagement, management and quality of all subcontracted work including all vendors, suppliers and service providers.

The Contractor must ensure that the Subcontractors have capability and capacity to do the work for which they are responsible, and in accordance with the safety, security and environmental requirements.

Canada may direct the Contractor to use a particular Original Equipment Manufacturer (OEM), Field Service Representative (FSR) or other Supplier. Alternate solutions may be proposed by the Contractor for DND approval.

The Contractor must include Subcontractor tasks in their plans and schedules.

3.14 Government Property Management

Canada may provide the Contractor with Government Property, including Government Furnished Equipment (GFE), Government Supplied Material (GSM), Government Furnished Facilities (GFF), and Government Furnished Information (GFI) in order for the Contractor to perform the services under the Contract.

The Contractor must make a request to Canada, in writing, for the provision of any Government property. Canada will consider the Contractor's request on a case by case basis.

The Contractor must care for, maintain and use all issued government property in accordance with Part 1 - para 8, Part 3 - para 8 and Part 9 of A-LM-184-001/JS-001 Special Instructions Repair and Overhaul Contractors.

3.15 Support Resources

Support Resources encompasses all of the resources required by the Contractor to provide the Support Services described in this PWS. The required outcome for the Work under this Section is the provision and maintenance of sufficient Support Resources to enable the timely and accurate delivery of the Support Services, as required by this PWS.

3.15.1 Scope

The Contractor must provide all resources necessary, with the exception of Government Furnished Resources, to perform the Support Services of this PWS.

3.15.2 Contractor Responsibilities

The Contractor must undertake all necessary recruitment, training, security clearance preparation and other Human Resource Management functions to ensure personnel have the requisite skills, experience and qualifications to meet the requirements of the PWS. The contractor will utilise personnel categories and descriptions in accordance with Appendix U - Personnel Categories.

3.16 Naval Materiel Regulation

Director General Maritime Equipment Program Management (DGMEPM) has a system of Naval Materiel Regulation using the Naval Ship Code (ANEP77) as a framework to achieve self-regulation. The Canada Shipping Act does not apply to DND, however, akin to Transport Canada's role in regulating marine safety, the NMRA is the statutory authority for all DND vessels.

The Contractor must ensure, to the satisfaction of Canada or a Canada supplied 3rd party such as a Classification Society, that the ships are maintained in class in accordance with each ship's NMRA approved certification plan through the naval materiel regulatory process described in Naval Materiel Regulation for Surface Ships (NMRSS) C-23-005-000/AG-001.

A Classification Society, which will be an NMRA delegated Recognized Organization (RO) as defined in NMRSS, will be engaged by the CPM for AOPS and JSS. Organizations other than the Classification Society may be granted RO status at the discretion of NMRA.

NMRA has adopted the Naval Ship Code framework. DND will establish standards for AOPS and JSS to manage key risks in accordance with Regulation 0 (zero) of each Naval Ship Code Chapter in eight key safety areas:

- a. Structure;
- b. Buoyancy, Stability and Controllability;
- c. Engineering Systems;
- d. Fire Safety;
- e. Escape, Evacuation and Rescue;
- f. Communications;
- g. Navigation and Seamanship; and
- h. Dangerous Goods.

The Contractor must provide assurances to the NMRA that AOPS and JSS assets comply with NMRA certification standards.

NMRA or an RO will issue certificates of compliance or certificates of conformance, as applicable, for these safety areas.

Each certificate will be issued by the NMRA, or delegated authority, based on materiel state evidence chosen to meet Design Intent and the goals and performance parameters detailed in the Naval Ship Code deemed appropriate for the vessel.

The Contractor must work with the DA/CPM, NMRA, the Classification Society and RO to ensure that Design Intent, Classification and Certification are maintained throughout the ship's life.

Any deviations from Classification, Certification or both that occur must be in accordance with Naval Materiel Risk Management (NMRM) C-23-005-000/AG-002 and approved by Canada to ensure that risks are mitigated.

The Contractor must support through the Electronic Data Exchange (EDE), the Defence Resource Management Information System (DRMIS) problem reports to identify any deviations from the design intent to support the DND Naval Materiel Risk Management process and provide materiel state evidence to the DA/CPM to support the DND Naval Materiel Certification process.

The Contractor must report on the status of Materiel Certification of the ships in accordance with NaMMS.

The Contractors must comply with the policy of the NMRSS and the provisions of the safety management systems for AOPS and JSS.

3.16.1 Classification and Certification

The Contractor, DA/CPM, NMRA and Classification Society will create a safety management/governance body with the purpose of managing classification and certification issues to ensure vessels are maintained in classification and other safety area certificates are maintained.

The Classification Society has the final determination on issues affecting classification of vessels.

NMRA has the final determination on issues affecting Naval Ship Code safety certification and environmental certification outside of Classification requirements.

The Classification Society may be delegated authority as an RO to act on behalf of NMRA.

The Classification Society may require the Contractor to validate personnel qualifications and processes that affect the classification and certification of the vessels.

The Classification Society may require the use of approved parts, equipment, materiel and/or Subcontractors to support maintenance, repair and change/configuration management to maintain the vessels in Classification and Certification.

3.17 Support Readiness Verification (SRV)

The Contractor must conduct SRVs to demonstrate to Canada its capability and capacity in place to support all AOPS and JSS delivered to Canada, including Contractor-provided organization, infrastructure, personnel, processes and resources.

3.17.1 Support Readiness Verification Preliminary (SRVP)

The aim of the SRVP is to ensure that the Contractor-provided support services are in place to support the first ship on the East and West coast.

The Contractor must demonstrate the preliminary capability, capacity and the support services in place to support the AOPS and JSS.

The Contractor must demonstrate the preliminary capability and capacity of the support services through a SRVP - East Coast and a SRVP - West Coast.

The Contractor must conduct a Verification and Validation (V&V) to demonstrate onboard spares, STTE and publications and safety certificates are in place prior to SRVP.

The necessary capability and capacity to support the ships will be determined based on the approved Transition Plan.

The Contractor must have completed two SWPs per coast prior to conducting the SRVP.

3.17.2 Support Readiness Verification Preliminary (SRVP) Report

The Contractor must prepare and submit a SRVP report to demonstrate conformity to the approved plans as evidence for completion of all activities to achieve SRVP capabilities for acceptance in accordance with CDRL Item SVC-001.

3.17.3 Support Readiness Verification Final (SRVF)

The aim of the SRVF is to ensure that the Contractor-provided support services are in place to move into the Steady State Phase.

The Contractor must demonstrate that it has the required capability, capacity, and support services in place to fully support all AOPS and JSS at their respective origin of the vessel and internationally.

The Contractor must have completed two DWPs per coast (total four DWPs independent of classes) and one international SWP prior to conducting the SRVF.

3.17.4 Support Readiness Verification Final (SRVF) Report

The Contractor must prepare and submit a SRVF report, which includes the scenarios, procedures and the results that can be submitted as evidence for successful completion of the work in accordance with CDRL Item SVC-002.

4 Chapter 4 - Life Cycle Materiel Management (LCMM)

The purpose of this chapter is to describe the services that the Contractor must perform for Life Cycle Materiel Management (LCMM) functions for all AOPS and JSS platforms, systems, sub-systems and equipment. Under NMR, further requirements will be developed for certification purposes, therefore the Contractor must be flexible to adjust and adopt new certification methodologies and practices as instructed by Canada.

The Contractor must provide LCMM Services in accordance with DSD-AJISS-LCMM-001.

The Contractor must provide Configuration Management Services in accordance with DSD-AJISS-LCMM-002.

The Contractor must provide Management of Maintenance Program Documentation in accordance with DSD-AJISS-LCMM-003.

The Contractor must prepare and submit Engineering Change Proposals in accordance with CDRL Item LCMM-001.

The Contractor must prepare and submit Software Engineering Change Proposals in accordance with CDRL Item LCMM-001.

The Contractor must prepare and submit a Configuration Management Plan in accordance with CDRL Item PM-007.

The Contractor must prepare and submit a Technical Problem Report in accordance with CDRL Item LCMM-002.

The Contractor must prepare and submit a Ship Configuration Audit Report in accordance with CDRL Item LCMM-003.

The Contractor must prepare and submit an Equipment Condition and Performance Report in accordance with CDRL Item LCMM-004.

The Contractor must prepare and submit a Lifting Appliance Certification Status Report in accordance with CDRL Item LCMM-005.

The Contractor must prepare and submit a Summary of Structural Survey Reports in accordance with CDRL Item LCMM-006.

4.1 General Requirements for Life Cycle Materiel Management

The goals of Life Cycle Materiel Management (LCMM) are to:

- a. Maintain explicit assurance that ships are performing in accordance with Design Intent (DI);
- b. Maintain explicit assurance that ships are maintained in accordance with DI;
- c. Maintain accurate and quantitative understanding of Contractor costs (labour, material, time) to support operation and maintenance of ships in accordance with DI;
- d. Provide the optimal in-service support program based on available resources; and
- e. Continuously strive to achieve Contract outcomes through performance management, continual improvement, and innovation.

The Contractor must manage LCMM activities for AOPS and JSS at the class, ship and equipment levels in accordance with the objectives and priorities established in the CPP and Equipment Group Program Plans supplied by DND.

All AOPS and JSS must be managed in accordance with DND's baseline structure for the Life Cycle Materiel Management of the ships.

The Contractor must ensure that innovation and continual improvement are applied to LCMM activities.

The Contractor must maintain the AOPS and JSS Logistics Support Analysis Records (LSAR) supplied by DND.

The Contractor must conduct Life Cycle Cost (LCC) analysis.

The Contractor must track and report through life costs of maintenance.

4.2 Management of Design Intent (DI)

The goals of Management of Design Intent are to:

- a. ensure DI in terms of fit-for purpose, safety, and environmental compliance is being achieved to the greatest extent practicable;
- b. resolve deficiencies; and
- c. continuously improve performance.

The Contractor must evaluate the actual performance of ships as compared with the performance specified in the DI.

The Contractor must make recommendations to DND for alignment of the DI with actual ship performance.

The Contractor must manage deviations from Design Intent through a formal, structured risk management process ensuring appropriate visibility to DND.

The Contractor must assess the degree to which the ship is operated in accordance with the DI and the impact, if any, of deviations from operating within DI on ships' equipment and systems.

The Contractor must manage the deviation and waivers process against the DI.

The Contractor must make recommendations to the RCN regarding ship-level margins and manage approved margin changes.

4.3 Maintenance Program Management (MPM)

MPM is the continual improvement and optimization of the Class Maintenance Profile for a ship or system based on the Class materiel state and maintenance outcomes.

Canada's goals for MPM are to:

- a. achieve required availability and reliability targets;
- b. limit maintenance to planned occasions;
- c. minimize overall support costs;
- d. reduce Corrective Maintenance (CM) to as low as reasonably practical (ALARP) in order to minimize impacts (e.g. due to down-time) and through-life costs;
- e. minimize the need to provide deployed support;
- f. minimize the complexity of repair; and
- g. support continual improvement.

The AOPS and JSS Maintenance Program will consist of the Corrective Maintenance (CM), ECs, tests and trials, instructions and schedules for inspections and Preventive Maintenance (PM). Additional documentation may be added through the life of the Classes.

The Contractor must maintain all Maintenance Program Management Documentation (MPMD) current with ship configuration and DI in accordance with DSD-AJISS-LCMM-003.

The Contractor must:

- a. evaluate the effectiveness of each Class Maintenance Profile by comparing actual performance with the availability/maintainability targets specified in the DI;
- b. evaluate the actual costs of the maintenance program as per the LCC analysis;
- c. evaluate the degree to which the ship is maintained in accordance with the DI;
- d. evaluate the risks of departures from the DI;

e. identify and leverage opportunities to continuously improve and optimize materiel performance and support costs;
f. validate, rationalize, and optimize maintenance requirements within the DI with the actual operational system usage; and

g. prioritize all Maintenance Management activities based on the DND supplied CPPs and Equipment Group Program Plans.

The Contractor must propose and identify changes to the Maintenance Program that contribute to Canada's goals for MPM. Proposals must include a Business Case Analysis.

The Contractor must perform maintenance in accordance with the regulatory requirements.

4.4 Management of Engineering Changes

4.4.1 Engineering Changes (ECs)

Engineering Change (EC) Management includes the management of engineering changes as a result of the introduction of new capability or the sustainment of existing capability. EC Management includes management of equipment modifications.

The EC Management process spans from the specification of requirement through to the installation and acceptance of the change in the Class. EC Management also includes the establishment of the necessary logistic and training support.

DND may propose ECs to the Contractor to address operational deficiencies.

The Contractor may propose to DND requirements for ECs to sustain existing capabilities where this is indicated by the Contractor's analysis.

The Contractor must manage ECs from approval of the Statement Of Requirement (SOR) by DND to Full Operational Capability (FOC) of the new or sustained capability in the Class.

In managing Engineering Changes from SOR to FOC the Contractor must:

- a. ensure that ECs are compliant with the Design Intent;
- b. verify that adequate margins are available and reserved;
- c. verify that ECs are appropriately integrated into the platform, trainers and shore facilities using systems engineering best practices;
- d. complete development and installations of ECs within the scope, schedule and cost approved by Canada; and
- e. conduct a security impact assessment of the EC on the existing Security Assessment and Authorization (SA&A) baseline.

4.4.2 Value Engineering Change Proposals (VECPs)

Value Engineering is a systematic and creative way of analyzing a work requirement to reduce costs while maintaining or improving performance.

The Contractor is encouraged to voluntarily undertake Value Engineering in the performance of the Work by investing its own resources to develop and submit Value Engineering Change Proposals (VECPs) for Canada's approval.

VECPs offer cost reduction initiatives. The Contractor is encouraged to present business cases supporting VECPs to Canada. Proposals may be prepared in Contractor formats and may address any work across the full scope of the PWS. It is Canada's intent to share realized savings with the Contractor.

In order to qualify as a VECP under this Contract, and to ensure that savings can be shared, the

proposed change must:

- a. be accepted by Canada;
- b. result in savings to Canada; and
- c. not degrade overall performance, quality, maintainability, reliability or interchangeability of the AOPS and JSS.

Each VECP must be submitted as a complete business case and, as a minimum, must include the following:

- a. a discussion of the difference between the existing situation and the VECP, the comparative advantages and disadvantages of each, a justification when an item's function or characteristics are being altered, the effect of the change on the end item's performance and any pertinent objective test data;
- b. a description of the requirements that must be changed if the VECP is accepted, including any suggested specification revisions;
- c. the following financial data, including, but not limited to:
 - i. a detailed price breakdown of the existing requirement;
 - ii. a revised price breakdown of the requirement showing the impact of the VECP;
- iii. an estimate of the savings associated with the VECP; and
- iv. a detailed breakdown of the Development and Implementation Costs associated with the VECP.
- d. The identification of any previous submissions of the VECP, including the dates submitted and previous action taken by Canada.

The Contractor must submit the VECP to Canada's Contracting Authority.

The Contractor must prepare and submit a Value Engineering Change Proposal Process Implementation Plan in accordance with CDRL Item LCMM-007.

4.5 Configuration Management

The Contractor's Configuration Management program must include the configuration management of: ship systems, equipment, hardware, firmware, software and training within each ship's baseline configuration.

The Contractor must perform requisite configuration management processes in support of the implementation of ECs to the ship and support solution.

The Contractor must provide DND with on-going assurances of alignment between ships' configurations and the corresponding DI.

4.6 Spares and Asset Inventory Management

The concept of Supply Support for the Contract will be determined by Canada at contract award. The Contractor will provide in accordance with CDRL Item PM-012, a Spare Parts Management Plan to provide a fully outsourced supply solution for Canada's chosen sparing model. In this solution, the Contractor will conduct all supply support functions and will be custodially responsible for all spares for which they have been assigned responsibility. The technical data required to initiate spares procurement will be provided to the Contractor as it becomes available during the Start-Up phase. All materiel identification and codification functions will be conducted by Canada.

The Electronic Data Environment found in Appendix L of this PWS assumes a Contractor Owned Contractor Operated model of supply support. The Contractor is not to assume that Appendix L is the expected supply model or endstate required. CDRL Item PM-012 will be collaboratively developed with Canada after contract award to determine the Spare Parts Management model.

The Contractor must analyze, prioritize and validate the Shipbuilder's recommended spare parts list and advise DND on any changes.

The Contractor must manage the spares from the recommended spare parts list at which time the Contractor must assume custodial responsibility for all provisioned spares.

The Contractor must maintain suitable levels of spares to meet the ship operational requirements. In support of the requirement in this PWS to ensure that Operational Schedule (OPSKED) readiness requirements are met, the Contractor must:

- a. ensure the delivery of the right spares and assets, at the right time, to the right location at the optimal cost;
- b. optimize the levels of spares and assets held in inventory; and
- c. ensure that the delivered spares and assets are fit for purpose.

The Contractor must:

- a. manage AOPS and JSS spares and asset inventory in an Enterprise Resource Planning (ERP) system;
- b. have an ERP system that integrates spares and asset inventory management with maintenance and ECs; and
- c. provide a timely and accurate understanding of the spares and asset utilization by Class and equipment class based on standard operational profiles, which must be available to Canada through the Electronic Information Environment.

The Contractor must:

- a. ensure Original Equipment Manufacturer (OEM) approved spares are used in support of AOPS and JSS Classes; and
- b. institute and maintain procedures to ensure no counterfeit or non-compliant parts of assemblies of any kind are used.

The Contractor must determine with Canada an appropriate approach to inventory and storage of Contractor identified "long lead items" that could have severe impact to operational availability.

The Contractor may make Material Substitutions with the approval of Canada. A material substitution must not impact the performance, reliability, security or maintainability of the parent system.

The Contractor must maintain, and make available to Canada through the Electronic Data Exchange (EDE) or Collaborative Environment (CE), a record of all details related to Material Substitutions including supporting engineering and business case analyses.

4.7 Supply Chain Management

The Contractor must set up, operate, maintain and manage all elements of the Supply Chain to enable the AOPS and JSS operational availability requirements to be met while minimizing Life Cycle Cost and maximizing best value to Canada for Hybrid Systems.

The Contractor must provide Supply Chain Management in support of RCN operations within Canada and abroad during international deployments.

The Contractor must perform Supply Chain Management in accordance with commercial best practices such as the Supply Chain Operations Reference (SCOR) process.

4.8 Technical Data Management

The Contractor must implement a technical data management program that incorporates industry best practices and is compliant with the Contractors' Integrated Management System.

The Contractor must ensure that the Technical Data Package (TDP) is maintained in accordance with DSD-AJISS-LCMM-002.

The Contractor must ensure the TDP is current with the Class Design Intent and the technical data for each AOPS and JSS ship reflects the current configuration of the ship.

The Contractor must ensure that all technical data provided by DND and generated by the Contractor for AOPS and JSS is made available to Canada through the EIE (EDE and CE).

The Contractor must ensure that AOPS and JSS ships' staffs have access to complete, current technical data for their ship 24 hours per day, 365 days per year.

The Contractor must ensure that the ship's TDP is updated upon completion of each work period.

The Contractor must provide DND with red-lined drawings, mark-ups or other interim technical data while the TDP is being finalized.

The Contractor must ensure that Technical Assistance Agreements (TAAs) are established for any International Traffic in Arms Regulations/Controlled Technology Access and Transfer (ITAR/CTAT) controlled information for the TDP and ensure Canada's authorization is received.

4.8.1 Technical Data

The Contractor must provide Technical Data and Technical Data Support as required to enable the provision of Support Services under this PWS. Technical Data Support includes those activities and associated functions required to store, control, maintain, manage and distribute Technical Data in support of the contract.

Technical Data Support must consist of the following:

- a. Technical Data Maintenance and Control;
- b. In-Service Technical Data Update; and
- c. Additional Technical Data Support.

Technical Data held by the Contractor will remain the property of Canada. This includes Configuration Controlled Technical Data and Managed Technical Data and any other documentation and/or data developed or supplied in support of the Work.

4.8.2 Technical Data Maintenance and Control

The Contractor must utilize a Management Information System (MIS), for the management of all Technical Data.

The Contractor must maintain the In-Service Technical Data and Ship's TDP to represent the configuration of the AOPS and JSS platforms.

The Contractor must track revisions to the In-Service Technical Data and Ship's TDP such that revision level and any other pertinent status indicators are recorded in the Contractor's MIS.

The Contractor must implement a Technical Data management program that incorporates industry best practices and is compliant with the Contractors' Integrated Management System.

The Contractor must store and control the Baseline Technical Data and obtain, catalogue and store any pertinent technical reference information, studies and research information, pertaining to the operation and maintenance of the ships, as Reference Information.

4.8.3 In-Service Technical Data Update

The Contractor must maintain current In-Service Technical Data elements.

The Contractor must produce all new or revised In-Service Technical Data elements in the same format and languages used to develop the In-Service Technical Data.

The Contractor must carry out the Translation Accuracy Check process in accordance with Part 6 Section 4 and Part 12 section 2 of C-01-100-100/AG-006, “Specification: Writing, Format and Production of Technical Publications” for all translated material.

The Contractor must deliver the Translation Accuracy Check Certificates for all translated technical publications.

The Contractor must advise Canada when a different data format needs to be used or translation is required.

4.8.4 Additional Technical Data Support

The Contractor may be required to provide additional delivery services, reproduction and distribution or translation of Technical Data.

4.9 Obsolescence Management

The Contractor must perform obsolescence management functions to sustain the AOPS and JSS capabilities and operations through their service life.

The Contractor must conduct obsolescence management for all equipment fitted on AOPS and JSS ships, all software and firmware fitted on AOPS and JSS ships, materiel, spares, Special Tools and Test Equipment (STTE), Technical Data Packages including publications and drawings and the IDE.

The Contractor must prepare and submit an Obsolescence Report in accordance with CDRL Item DISP-001 and related DID-AJISS-DISP-001.

4.10 Disposal Management

The Contractor must dispose of repairable spares, consumables and other equipment that are no longer repairable or required. This will include disposing of all HazMat and demilitarization of Controlled Goods in accordance with the applicable local, provincial, federal and international regulations.

Where Canada owns the materiel, the Contractor must obtain Canada's authorization prior to engaging in disposal activities.

5 Chapter 5 - Technical Schedule Management

The purpose of this chapter is to describe the Technical Schedule Management services the Contractor must perform.

Technical Schedule Management includes the collaboration between the local (Formation) materiel support program and the operational program. Through Technical Schedule Management a Technical Schedule is developed that aligns maintenance and work period requirements with ship availability. Technical Schedule Management also ensures that limited local materiel support resources are prioritized and assigned to ships based on the needs of the operational program.

The goals of Technical Schedule Management are to ensure that ships are maintained in accordance with DI and to ensure that service delivery is optimized across the RCN in support of the operational program.

5.1 RCN Managed Readiness Plan

The RCN Managed Readiness Plan (MRP) assigns each HMC ship to one of four readiness levels:

- a. Extended Readiness (ER) is assigned to assets that are removed from operational status for the purposes of undergoing extended Level Two and Level Three Maintenance such as a Docking Work Period (DWP);
- b. Restricted Readiness (RR) is assigned to assets when transitioning between readiness levels and subject to restrictions placed on their operational employment. RR applies predominantly to ships where deficiencies in personnel, materiel and/or training may severely limit a ship's employment;
- c. Normal Readiness (NR) represents the normal level of readiness for all maritime operational capability across the Navy, excluding high intensity, full spectrum combat; or
- d. High Readiness (HR) is assigned to ships that are capable of conducting the full-spectrum of combat operations.

The assignment of individual ships to specific readiness levels will not follow one single and identical rhythm across all ships. By necessity, a measure of flexibility is required to account for differences in requirements, scheduling conflicts, operational deployment patterns and other considerations. Accordingly, Formation Commanders and Fleet Commanders have the authority to modify the readiness assignments and periods within a ship's operational cycle.

5.2 Formation Planning

The two Formations, Maritime Forces Atlantic (MARLANT) and Maritime Forces Pacific (MARPAF), each produce an annual (fiscal year) Operations Schedule (OPSKED), which is the principal document for scheduling and setting readiness levels for the operational fleet, shore establishments and supporting maintenance facilities. The Formations' Operations and Readiness Schedule Management processes are found in MARLANTORD 45-1 and MARPAFCORD 045-1. OPSKEDs are classified documents.

Each OPSKED will be developed while considering the requirements of in-service support providers, which includes the Contractor, to ensure that sufficient dedicated work periods of appropriate duration are scheduled to ensure the continuing readiness of ships and their ability to meet assigned tasks. This is an iterative process.

The Contractor must contribute to Technical Schedule/Fleet Support Plan development by:

- a. providing DND with in-service support requirements for each supported AOPS and JSS ship for input into OPSKED planning;

- b. including priorities set by DND in AOPS and JSS CPPs and Equipment Group Program Plans in OPSKED planning input;
- c. participating in iterative development of the final OPSKED. The exact process for Contractor involvement in OPSKED planning will be determined by DND; and
- d. coordinating and creating a Responsibility Matrix of Level Two Maintenance for Hybrid Systems as a part of the SDAOP.

5.3 Service Delivery Annual Operating Plans (SDAOPs)

The Contractor must provide Service Delivery Annual Operating Plans for MARLANT (East Coast) and MARPAC (West Coast).

5.4 In-Year Management

The Contractor must manage SWPs in accordance with the SDAOPs through a structured process with the objective of ensuring that systems essential to the upcoming operational period are adequately maintained.

During available periods, AOPS and JSS will be available from 0745 to 1545, Monday through Friday as per Ship Staff's normal working hours or as alternatively arranged by the Contractor with DND on a case by case basis.

The Contractor may avail themselves of any alongside time where the ship is not in any work period for maintenance which can be conducted on a non-interference basis within the OPSKED.

The Contractor must manage and remain flexible to changes in ship availability due to events that will impact the work of the Contractor and its Subcontractors. Many of these events cannot be forecasted in advance such as interference from the work being carried out on adjacent ships, emergencies or emergency exercises within the dockyard, movements of ships by Queen's Harbour Master, or dockyard resources availability changes. Only Subcontractor work impacted by these changes is allowed to be an arising to the Emergent Work.

The Contractor must manage all unplanned, unscheduled and urgent operational requirements and their potential impacts to PAOP, AJISS PMP and Naval Materiel Assurance (NMA) certification.

The Contractor must provide Technical Schedule Management Services in accordance with DSD-AJISS-TSM-001.

6 Chapter 6 - Service Delivery

6.1 General Requirements for Service Delivery

The purpose of this chapter is to describe the Service Delivery function that the Contractor must perform. Service Delivery encompasses the management and provision of Preventive Maintenance, Corrective Maintenance, test/trials, Repair and Overhaul and any Engineering Changes (capability sustainment or insertion) to the ships as well as Materiel Management. When available, ILS packages will be provided which will contain the instructions and schedules for Preventive Maintenance that must be conducted by the Contractor and/or DND. DND's system of record for maintenance is the Defence Resource Management Information System (DRMIS).

Work demand will surge periodically due to unplanned urgent operational requirements not defined in the PAOP and must be managed through the Risk Management Plan (DID-AJISS-PM-006).

The Contractor must ensure that all maintenance, services and associated test and trials are completed such that the OPSKED readiness requirements are achieved.

On completion of the work, the Contractor must coordinate the use of Ship's staff to operate ship's systems conducive to set-to-work and completing trials when the vessel is in the care and custody of DND. When the vessel is in the care and custody of the Contractor, a request for Ship Staff assistance will be considered, however the Contractor must be prepared to operate the equipment safely, with suitably qualified and experienced personnel, if Ship Staff are not available. Where the equipment interacts with other systems, a wider trial is required to ensure the correct function of these systems.

The Contractor must coordinate the use of ship's staff to operate ship's systems conducive to completing trials.

The FMF Operations Departments will coordinate waterfront activities in the Dockyards. The Contractor must coordinate with the FMF Operations Department before conducting any maintenance activity that could affect safety, other ships or jetties in the Dockyard.

DND will provide limited accommodation within the FMF Operations Department for the Contractor to conduct and coordinate service delivery operations.

The Contractor must perform SWPs in the respective Naval Dockyards and DWPs in the origin of the vessel of each ship.

The Contractor must prepare, submit and maintain the SDPP in accordance with CDRL Item TSM-003 for all work conducted in and out of DWP and SWP.

The Contractor must communicate progress to DND representatives and other organizations as and when required.

The Contractor must subscribe to the common tenants of Appendix W - (30 Sep 2015) (Common) Logistics Statement of Work for Repair and Overhaul Contracts Including In and Out of Country Repair Major Equipment Accountable Advance Spares.

6.2 Production Services

The Contractor must provide all Production Services necessary to support AOPS and JSS, which include:

- a. Capability Insertion or Capability Sustainment including:
 - i. removal of existing systems and equipment including appropriate disposal;
 - ii. installation and set to work of new systems and equipment;

- iii. modifications to existing systems and equipment; and
- iv. conduct set-to-work, tests, trials and acceptance of new or modified systems and equipment.
- b. Capability Support as PMSP and as required while SMSP:
 - i. conduct all Level Two and Level Three Preventive Maintenance;
 - ii. conduct all Level Two and Level Three Corrective Maintenance;
 - iii. conduct Level One Preventive Maintenance as an Emergent Work task; and
 - iv. conduct Level One Corrective Maintenance as an Emergent Work task.
- c. Equipment Transfer Requirements;
- d. Repair and Overhaul (R&O) of equipment:
 - i. determining the level of effort and frequency of R&O services required for equipment;
 - ii. ensuring an adequate supply of spares to ensure operational availability of equipment and systems;
 - iii. ensuring that R&O programs balance availability of spares and cost effectiveness; and
 - iv. determining which components can be re-used after restoration and/or refurbishment.
- e. conduct periodic and unscheduled tests, trials, inspections and surveys, including testing of pressure vessels, testing of lifting appliances, periodic hull surveys and NMRA Certificate of Compliance requirements;
- f. support to periodic trials conducted by Ship's Staff including but not limited to: propulsion system trials, annual sea trials, load bank trials and basin trials;
- g. production and delivery of all test, trial, inspection and survey reports or certificates; and
- h. support to ships on deployment.

The majority of Level Two and Level Three Maintenance will be conducted within scheduled SWPs or DWPs. Any work required outside of the designated work periods must occur on a non-interference basis with the ship's operational requirements.

All Production Services work must be recorded in the Contractor's Maintenance Management Information System within two working days from the date the maintenance action has been accepted by SS as completed, or 5 days after the completion of SWP or DWP.

6.3 Engineering Services

The Contractor must provide all Engineering Services necessary to support AOPS and JSS, which include:

- a. troubleshooting services to ships and the operational community (RCN);
- b. Corrective Maintenance Instructions and other technical documentation development to support service delivery activities;
- c. engineering analysis and design to support service delivery activities;
- d. technical risk assessments for RCN Operational Authorities;
- e. Business Case Analysis (BCA) or assistance to the development of BCAs in support of the decision making process;
- f. Subject Matter Expertise on AOPS and JSS;
- g. engineering support and coordination to installations, tests and trials;
- h. certification and maintenance of certification records of specified systems in accordance with DID-AJISS-LCMM-005 and DID-AJISS-LCMM-006 as applicable;
- i. Red Line Standard Ship Maintenance and Repair Specification, OEM Manuals and System Schematic Drawings; and
- j. security impact assessments for RCN Operational Authorities.

6.4 Materiel Management Services

The Contractor must execute all Materiel Management Services necessary to support AOPS and JSS, which include:

- a. 120 days of onboard spares for each AOPS;
- b. 180 days of onboard spares for each JSS; and
- c. sufficient quantities of Level Two Maintenance and Level Three Maintenance spares for AOPS & JSS.

The Contractor must store, inventory control, maintain, calibrate, certify and repair and modify all special tools and test equipment (STTE) that are the property of DND. The replacement of lost or damaged equipment, due to negligence by the Contractor or its Subcontractors, is the responsibility of the Contractor, including all associated cost.

The Contractor must ensure that all STTE are maintained and calibrated in accordance with the applicable specifications. Usage of idle STTE held by FMFs will be coordinated by the appropriate PMSP.

The Contractor must maintain a calibration register to track the calibration status of all STTE. The Contractor must ensure that the STTE required for ship's staff maintenance activities are either held onboard or available when required.

6.5 Maintenance Support to Ships on Deployment

The Contractor must provide maintenance and logistics support to the ships on deployment including, but not limited to:

- a. the planning to deploy Contractor Staff and/or Field Services Representatives (FSRs) as well as parts, tools and equipment to any Canadian or international ports of call;
- b. the ability to support the ships wherever they are deployed; and

Travel and living expenses must be authorized for the Contractor's personnel through an Emergent Work task for work conducted outside of Halifax and Esquimalt.

All maintenance and logistics support to ships on deployment will be considered to be Emergent Work.

7 Chapter 7 - Training Support Services

The purpose of this chapter is to describe the Training Support Services that the Contractor must perform. The Contractor is responsible for maintaining all training devices and simulators and changes to training documentation and courseware. Throughout the life of the platforms, there may be requirements to deliver training services.

AOPS and JSS Projects will provide training systems, simulators, courseware, training documentation, infrastructure and Initial Cadre Training.

7.1 Training Material Amendments

The Contractor must provide training recommendations to DND for any significant changes made to the AOPS and JSS platforms, systems, sub-systems, equipment and their associated trainers and simulators.

The Contractor must prepare and provide a Training Material Amendment Proposal Plan in accordance with CDRL Item TRG-001.

7.1.1 Training Material Support

The Contractor must provide Training Materials Support services including:

a. amendment of Training Documentation:

- i. The Contractor must amend Training Documentation to include all changes required to the Qualifications, Standards and Plans (QSPs) including editorial corrections, updates of references, changes resulting from Engineering Configuration Changes to each ship platform and the addition of training materials for any acquisition related to the specific ship platform; and
- ii. The Contractor must employ the Defence Learning Network (DLN) to maintain and store all training documentation.

b. amendment of Training Courseware:

- i. the Contractor must amend Training Courseware to include all changes required to the QSPs including editorial corrections, updates of references, changes resulting from Engineering Configuration Changes to each ship platform and the addition of training materials for any acquisition related to the specific ship platform;
 - ii. the Contractor must employ the DLN to maintain and store all courseware;
 - iii. the Contractor must employ configuration management and continuous improvement of all AOPS and JSS courseware;
 - iv. the Contractor must maintain and develop new courseware in accordance with DND approved Shareable Content Object Reference Model (SCORM) standards and specifications; and
 - v. the Contractor must maintain and provide all AJISS courseware and reference materials in both Official Languages.
- c. maintenance and operation of Training Devices and Simulators in accordance with Class Design intent:
- i. the Contractor must maintain all associated AJISS Training Devices and Simulators; and
 - ii. the Contractor must ensure configuration management and continuous improvement of all AJISS Training Devices and Simulators.

7.1.2 Training Management

The Contractor may provide Training Management services including:

- a. Training Program Management;
- b. scheduling of training;

- c. coordination with DND agencies;
- d. provision of training venue;
- e. provision of training delivery materials; and
- f. facilitation of courses and training device usage.

7.1.3 Training Delivery

The Contractor may provide Training Delivery services including:

- a. conduct of courses;
- b. assessment of students; and
- c. course administration.

8 Chapter 8

This chapter intentionally left blank.

9 Chapter 9 - Integrated Data Environment (IDE)

9.1 Introduction

The purpose of this chapter is to describe the requirement for information and data management services to support the Integrated Data Environment (IDE). The Contractor will be responsible for managing transactional data and technical information to support AOPS and JSS platforms throughout their respective life cycles.

9.2 Scope

The Contractor must design, build and maintain its own requisite IT infrastructure and associated plans, policies and processes to enable interoperability with Canada's Enterprise Resource Planning (ERP) system of record also referred to as Defence Resources Management Information System (DRMIS). The functionality of the Contractor's Information Systems must meet the business requirements outlined in this PWS. Further, the IT infrastructure to be developed and maintained by the Contractor must be configured to meet the data exchange requirements outlined in this chapter. The Contractor must subscribe to Appendix S - DRMIS MAster Data Guidelines for the RCN Fleet to support IT interoperability effort.

9.3 AJISS Integrated Data Environment (IDE) Description

The IDE is comprised of all the supporting data systems and IT infrastructure to meet the program management requirements of the AOPS and JSS ship classes. The supporting data and infrastructure will be managed by both the Contractor and Canada. A schematic of the IDE is provided in Figure 1.

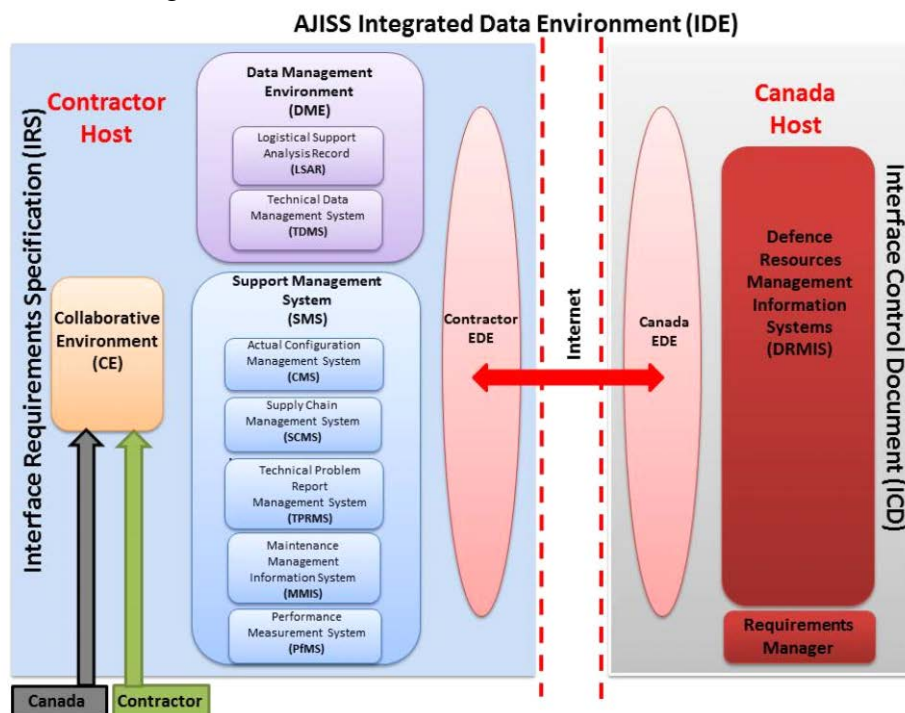


Figure 1 - AJISS Integrated Data Environment (IDE) Schematic

The Contractor must prepare, submit and maintain a System Architecture Description in accordance with CDRL Item IDE-001.

The Contractor must prepare, submit and maintain an IDE Interface Specification in accordance with CDRL Item IDE-002.

The Contractor must prepare, submit and maintain an IDE Test Plan in accordance with CDRL Item IDE-003.

The Contractor must conduct Joint Integration Testing (JIT) with Canada in accordance with the IDE Test Plan (DID-AJISS-IDE-003) in order to verify the implementation of the design in accordance with Contractor's IDE Interface Specification (DID-AJISS-IDE-002).

The Contractor must conduct DRMIS Master Data Validation in accordance with DSD-AJISS-IDE-001.

9.4 Contractor Hosted IDE Components

The Contractor must host the following IDE components:

- a. Data Management Environment (DME);
- b. Support Management System (SMS); and
- c. Electronic Information Environment (EIE); which consist of:
 - i. an Electronic Data Exchange (EDE) system; and
 - ii. a Collaborative Environment (CE).

9.4.1 Data Management Environment (DME)

The Contractor must design, develop, manage and maintain the DME in accordance with S1000D Issue 4.1 Business Rules and Functionalities.

The Contractor and Canada will collaboratively define the requisite S1000D business rules and functionalities to support the DME via a Working Group.

A schematic of the DME is provided in Figure 2.

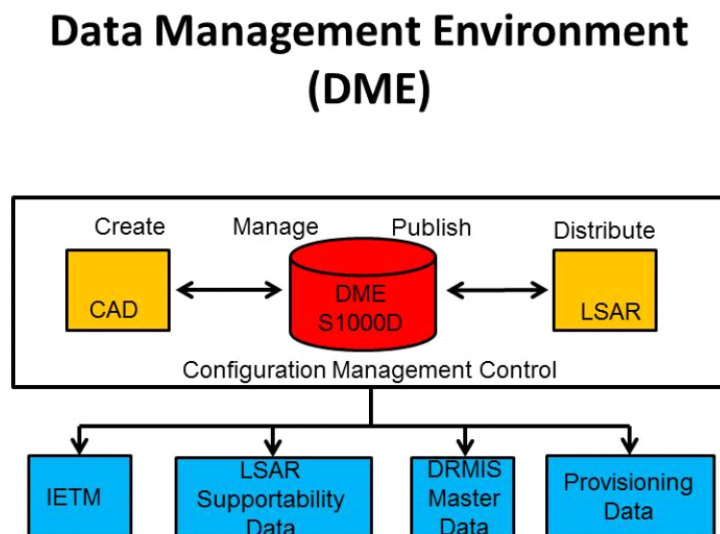


Figure 2 - Data Management Environment Schematic

The DME is the environment in which the class baseline will be managed. The DME is composed of :

- a. the Logistical Support Analysis Record (LSAR); and
- b. the Technical Data Management System (TDMS).

9.4.1.1 Logistical Support Analysis Record (LSAR)

The Contractor must maintain the LSAR System and the supporting LSAR data set as provided by Canada.

The LSAR data set must conform to the GEIA-STD-0007 data standard.

The LSAR will form the supportability baseline and the source of the Master Data.

9.4.1.2 Technical Data Management System (TDMS)

The Contractor must maintain a complete Technical Data Package (TDP) such as Engineering drawing management 3D/2D drawings and associated publications for each ship class.

9.4.2 Support Management System (SMS)

The Contractor must design, maintain and manage the SMS to support the business and Contractor performance systems in accordance with this PWS.

9.4.2.1 Platform Configuration Management System (CMS)

The Contractor must host the as-fitted ship configurations based on the business processes in accordance with the Electronic Data Exchange Interface Control Document (EDE-ICD) Package (Appendix L).

The CMS identifies all of the related configuration items and associated structure for AOPS and JSS.

9.4.2.2 Supply Chain Management System (SCMS)

The Contractor must provide and maintain a SCMS.

The SCMS must contain the following information:

- a. Inventory/Sparing level; and
- b. Supplementary Provisioning Technical Documentation (SPTD).

9.4.2.3 Maintenance Management Information System (MMIS)

The Contractor must provide and maintain a MMIS.

The MMIS must include and capture all work requests and work order information.

9.4.2.4 Technical Problem Management System (TPMS)

The Contractor must provide and maintain a TPMS that includes the following elements:

- a. the issue;
- b. time to resolution;
- c. urgency;
- d. OPI; and
- e. the capability to attach and manage photos and other objects.

9.4.2.5 Performance Measurement System (PfMS)

The Contractor must provide and maintain a PfMS in accordance with Chapter 11.

9.4.3 Electronic Information Environment (EIE)

The EIE will be used to support the sharing of transactional data and Technical Information, capture requisite Performance data and facilitate the collaborative Program Management of the contract in accordance with the Navy EIE Concept of Operations (Appendix M).

The EIE provides a shared IT architecture to enable information exchange between Canada and the Contractor.

The EIE consists of two components:

- a. an Electronic Data Exchange (EDE) system; and
- b. a Collaborative Environment (CE).

9.4.3.1 Electronic Data Exchange (EDE)

Canada has developed the EDE to facilitate data exchange with its Contractors.

The Contractor must design, develop, manage and maintain the approved by Canada Contractor-EDE in accordance with the Data Management Support Plan (DMSP) and the EDE ICDs.

The EDE system will enable real-time data exchange between Canada's ERP and the Contractor's Information Management systems.

EDE technical specification and associated ICD will be developed by Canada and provided as GFI. A description of the ICD documentation may be found in the Navy Electronic Information Environment (EIE) Guideline Document (Appendix L).

9.4.3.2 EDE Business Processes

The EDE must enable the execution of the business processes in accordance with the ICD.

9.4.3.3 Collaborative Environment (CE)

The CE is described as a virtual environment which facilitates program management between the Contractor and Canada.

The Contractor must design, develop, manage and maintain the CE in accordance with the DMSP and the CE Requirement Specification (RS) (Appendix K) approved by Canada.

9.4.3.4 CE Business Services

The CE will be implemented in two phases (see Figure 3):

Phase 1: The Contractor must design, develop, maintain and manage an Interim CE during the transition phase. The interim CE is essentially a shared environment where program documents will be shared with Canada and also provides access to the Contractor Management Information System. The purpose of the interim CE is to ensure a rudimentary level of information sharing during the transition phase. The functional business requirements that describes the initial CE Requirement Specification (RS) are located in Appendix O.

Phase 2: The Contractor must design, develop, maintain and manage a final CE during the steady state phase which includes additional functionality and business requirements identified in the Final CE Requirement Specification located in Appendix O.

AJISS Collaborative Environment (CE)

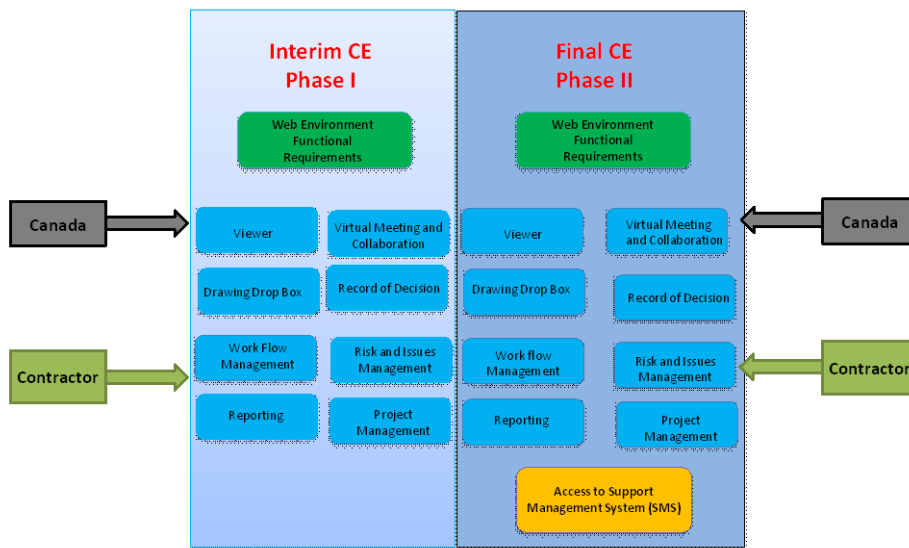


Figure 3 - AJISS Collaborative Environment Schematic

9.4.3.5 Reporting

The Contractor must make available all reports, plans, schedules and other required deliverables in the CE in accordance with this PWS.

9.5 Canada Hosted IDE Components

Canada will host the following IDE components:

- Defence Resources Management Information System (DRMIS);
- IBM Rational Dynamic Object Oriented Requirements System (DOORS); and
- Canada's Electronic Data Exchange.

9.5.1 Defence Resources Management Information System (DRMIS)

DRMIS is a departmental ERP tool based on the SAP enterprise application software.

Canada uses DRMIS to manage master data, maintenance activities, technical problem reporting, engineering changes, and supply management in accordance with the Navy's DRMIS Description located in Appendix Q. Materiel held in DND custody is visible in DRMIS.

9.5.2 IBM DOORS Requirements Management

Canada will manage AOPS and JSS operational requirements baseline in a requirements management database (IBM Rational DOORS).

9.5.3 Electronic Data Exchange Management

Canada will manage its own components of the EDE interface.

9.6 Security

The Contractor must conform to the Public Services and Procurement Canada (PSPC) Industrial Security Manual baseline security requirements for the safeguarding of DND information and assets for all information systems that are owned by the Contractor that have/will have Canada owned data on it.

The Contractor must comply with the Communications Security Establishment Canada Information Technology Security Guidance (CSEC ITSG-06), dated 01 Jul 06, Clearing and Declassifying Electronic Data Storage Devices for all magnetic storage media provided by the Contractor which become Canada property, and for all magnetic storage media that are owned by the Contractor that have/will have Canada owned data on it.

The Contractor must comply with the Communications Security Establishment Canada Information Technology Security Bulletin (CSEC ITSB-112), dated 15 Aug 14, Security Considerations for the Use of Removable Media Devices for Protected C and Classified Information for assets provided by the Contractor which become the property of Canada, and for all information and information technology (IT) assets that are owned by the Contractor that have/will have Canada owned data on it.

The Contractor must comply with the Communications Security Establishment Canada Information Technology Security Guidance (CSEC ITSG-22) Baseline Security Requirements for Network Security Zones in the Government of Canada for all information and information technology (IT) assets provided by the Contractor which become the property of Canada, and for all information and information technology (IT) assets that are owned by the Contractor that have/will have Canada owned data on it.

The Contractor must comply with the requirements in the Treasury Board Secretariat - Policy on Government Security, dated 01 Jul 09, and its associated Operational Security Standards, including the Operational Standard for the Management of Information Technology Security (MITS) and the Operational Security Standard for Physical Security for all information and information technology (IT) assets provided by the Contractor which become the property of Canada, and for all information and information technology (IT) assets that are owned by the Contractor that have/will have Canada owned data on it.

The Contractor must adhere to the requirements of Communications Security Establishment Canada Information Technology Security Guidance (CSEC ITSG-33) IT Security Risk Management: A Lifecycle Approach for the Security Assessment and Authorization (SA&A) of Information Systems for any information system provided by the Contractor which becomes the property of Canada.

The Contractor must prepare and submit a Statement of Sensitivity (SoS) in accordance with CDRL Item IDE-004.

10 Chapter 10

This chapter intentionally left blank.

11 Chapter 11 - The Performance Measurement System (PfMS)

The purpose of this chapter is to describe the requirements for the Contractor to develop, test, implement and update a Performance Measurement System (PfMS) that will be used by the Contractor and Canada.

The intended output of the PfMS is a mean to measure the achieved levels of performance for each performance measures (SPM, KPI, SHI) defined in the Performance Requirement Specification (PRS) in accordance with Appendix R.

The Contractor must develop a PfMS with the capability to accomplish performance calculations, forecasting and reporting to comply with the Collaborative Environment Requirement Specifications (CE-RS) in accordance with Appendix K.

In turn, the measurement of achieved levels of performance are dependent on having access to a reliable set of source data, which when processed in a prescribed way provides a measurement value that is verifiable and traceable.

The source data required for performance measurement will be captured in various Canada and Contractor IT systems and performance measurements will be accomplished through the Contractor-developed PfMS as detailed below.

11.1 PfMS Design Development Plan

The Contractor must design, develop, test and implement a PfMS in accordance with Appendix K.

The Contractor must prepare and submit a PfMS Design Development Plan in accordance with CDRL Item PfMS-001 and related DID-AJISS-PfMS-001.

11.2 PfMS Design Requirements

11.2.1 General

The Contractor must design and develop a PfMS that comply with the requirements and conditions specified in the CE-RS at Appendix K for the performance measures defined in the PRS at Appendix R.

The Contractor must develop a PfMS Interface Requirements Specification (IRS) for the PfMS capability and submit a report in accordance with CDRL Item PfMS-002 and related DID-AJISS-PfMS-002.

The Contractor must develop a PfMS Configuration Description and submit a report in accordance with CDRL Item PfMS-003 and related DID-AJISS-PfMS-003.

The Contractor must design an automated process to determine the SPM, KPI and SHI scores, the value of the potential Composite Performance Score (CPS), performance trends, and forecast in accordance with the PRS at Appendix R.

11.3 PfMS Testing, Verification and Validation Plan and Report

The Contractor must prepare and submit a PfMS Testing, Verification and Validation Plan for the acceptance of the PfMS capability in accordance with CDRL Item PfMS-004 and related DID-AJISS-PfMS-004.

The Contractor must develop the PfMS Testing, Verification and Validation Plan using the approved data sources in accordance with Chapter 9 of this PWS.

The Contractor must submit all Testing Plans and Procedures for approval by Canada.

The Contractor must conduct the work in accordance with the accepted PfMS Testing, Verification and Validation Plan.

The Contractor must prepare and submit a PfMS Testing, Verification and Validation Report for the acceptance of the PfMS capability in accordance with CDRL Item PfMS-005 and related DID-AJISS-PfMS-005.

11.4 PfMS Roll-out

The Contractor must roll-out the PfMS capability as part of the Support Readiness Verification Preliminary (SRVP) process.

In the absence of full PfMS functionalities, the Contractor must develop an interim solution to record, track and calculate the performance measure scores.

At SRVP, the Contractor must start collecting PfMS data.

The Contractor will roll-out the full PfMS functionalities as defined in the PfMP no later than twenty-four (24) months after SRVP.

11.5 PfMS Reporting

The Contractor must prepare and submit an annual Performance Reconciliation Report (PfRR) in accordance with CDRL Item PfMS-006 and related DID-AJISS-PfMS-006.

The Contractor must review the annual PfRR with Canada as part of the AJISS governance process as defined in the Relationship Charter and the Relational Management Plan.

11.6 PfMS Usage and Contract Extension Options

Canada will use the full PfMS functionalities to manage the Contractor's performance.

11.6.1 SPM Scoring and Option Years

Canada will use the five (5) SPMs as part of the consideration for exercising optional extensions. Tenure eligibility consists of an overall pass/fail rating that is a function of the pass/fail rating for each of the five (5) SPMs. Canada will consider withholding the exercise of an optional extension should the Contractor not receive a pass rating against any one (1) of the five (5) SPMs.

In the event an Option Year is withheld, the duration of the contract will not be extended. In the case of a withheld Option Year and to re-establish the five (5) year duration, the Contractor must earn an overall superior performance rating at the subsequent annual performance review. To receive an overall superior performance rating and to be eligible for the exercise of two (2) option years and reinstatement of a five (5) year contract duration, the Contractor must receive a superior rating against at least three (3) SPMs and a pass rating on the remainder.

11.7 PfMS Maintenance and Updates

The Contractor must maintain and update the PfMS throughout the contract. The Contractor must:

- a. Perform yearly verification and validation of the PfMS to identify changes that would impact the PfMS. These changes must be reported in the Technical Problem Management System (TPMS);
- b. Report PfMS changes in the Technical Problem Management System (TPMS);
- c. Update the data source to reflect the changes to the PfMS; and

d. Update the PfMS configuration control and its input data sources in accordance with Chapter 9 and Appendix K.

12 Chapter 12 - Ship Disposal Services

12.1 Scope of Work

The purpose of this Chapter is to describe the ship disposal services the Contractor must perform. The Contractor must dispose of all AOPS and JSS at their end of life as determined by DND. This includes all systems, associated equipment, spares, training equipment and any other related resources and infrastructure related to AOPS and JSS. This will include disposing of all Hazardous Materiel and demilitarization of Controlled Goods in accordance with the applicable local, provincial, federal and international regulations.

12.2 Planning

The Contractor must prepare and submit a Disposal Management Plan (DisMP) for equipment, systems and platform end of life disposition in accordance with CDRL Item PM-010 and related DID-AJISS-PM-010.

12.3 Contractor Requirements

The Contractor must:

- a. assess and make recommendations for the disposal of platforms and equipment/systems;
- b. develop disposal instructions which will include Controlled Goods;
- c. conduct environmental assessments as required for disposal;
- d. conduct the disposal of equipment and/or systems; and
- e. plan and coordinate ship end-of-life disposal services.

13 Chapter 13 - List of Appendices, DIDs, DSDs, Glossary and References

13.1 List of Appendices

Appendix A - AJISS Initial Contract Length, Rolling Wave and Performance Measurement Graphic
Appendix B - AJISS Excluded Systems
Appendix C - ILS Products for AOPS
Appendix D - ILS Products for JSS
Appendix E - Equipment Family Tree for AOPS
Appendix F - Equipment Family Tree for JSS
Appendix G - Ship Employment Profile for AOPS
Appendix H - Ship Employment Profile for JSS
Appendix I - Government Furnished Equipment (GFE)
Appendix J - FMF Strategic Capabilities Letter
Appendix K - Collaborative Environment Requirements Specification
Appendix L - Electronic Data Exchange Interface Control Document Package
Appendix M - Navy Electronic Information Environment Concept of Operations
Appendix N - Navy Electronic Information Environment Interface Control Document Guideline
Appendix O - Collaborative Environment Requirements Specification Phase 1 & Phase 2
Appendix P - Not Allocated
Appendix Q - Navy's DRMIS Description
Appendix R - Performance Requirements Specifications (PRS)
Appendix S - DRMIS Master Data Guidelines for the Royal Canadian Navy Fleet
Appendix T - Guide for In-Service Support Contracts in HMC Dockyards
Appendix U - Personnel Categories
Appendix V - FISS Key Principles Letter
Appendix W - Logistics Statement of Work for Repair and Overhaul Contracts Including In and Out of Country Repair Major Equipment Accountable Advance Spares
Appendix X - Waterfront Management and Naval Maintenance in RCN Shipyards

13.2 List of Data Item Descriptions (DIDs)

DID-AJISS-GR-001: Equivalent Standards Justification Report (ESJR)
DID-AJISS-PM-001: Program Management Plan (PMP)
DID-AJISS-PM-002: Start-Up Plan (SUP)
DID-AJISS-PM-003: Transition Plan
DID-AJISS-PM-004: Data Management Support Plan (DMSP)
DID-AJISS-PM-006: Risk Management Plan
DID-AJISS-PM-007: Configuration Management Plan
DID-AJISS-PM-008: Performance Management Plan (PfMP)
DID-AJISS-PM-009: Relationship Management Plan
DID-AJISS-PM-010: Disposal Management Plan (DisMP)
DID-AJISS-PM-011: Contract Close-Out Plan
DID-AJISS-PM-012: Spare Parts Management Plan (SPMP)
DID-AJISS-IMS-001: Quality Plan (QP)
DID-AJISS-IMS-002: Process Improvement Plan
DID-AJISS-IMS-003: Improvement Implementation Plan

DID-AJISS-IMS-004: Contract Status Reports for Continual Improvement
DID-AJISS-LCMM-001: Engineering Change Proposal (ECP)
DID-AJISS-LCMM-002: Technical Problem Report
DID-AJISS-LCMM-003: Ship Configuration Audit Report
DID-AJISS-LCMM-004: Equipment Condition and Performance Report
DID-AJISS-LCMM-005: Lifting Appliance Certification Status Report
DID-AJISS-LCMM-006: Summary of Structural Survey Reports
DID-AJISS-LCMM-007: Value Engineering Change Proposal Process Implementation Plan
DID-AJISS-TSM-001: Program Annual Operating Plan (PAOP)
DID-AJISS-TSM-002: Service Delivery Annual Operating Plan (SDAOP)
DID-AJISS-TSM-003: Service Delivery Project Plan (SDPP)
DID-AJISS-TSM-004: Technical Management Status Report
DID-AJISS-TSM-005: Docking Report
DID-AJISS-SVC-001: Support Readiness Verification Preliminary (SRVP) Report
DID-AJISS-SVC-002: Support Readiness Verification Final (SRVF) Report
DID-AJISS-TRG-001: Training Material Amendment Proposal Plan
DID-AJISS-IDE-001: System Architecture Description
DID-AJISS-IDE-002: Integrated Data Environment Interface Specification
DID-AJISS-IDE-003: Integrated Data Environment Test Plan
DID-AJISS-IDE-004: Statement of Sensitivity (SoS)
DID-AJISS-PfMS-001: Performance Measurement System (PfMS) Design Development Plan
DID-AJISS-PfMS-002: Performance Measurement System (PfMS) Interface Requirements Specification (IRS)
DID-AJISS-PfMS-003: Performance Measurement System (PfMS) Configuration Description
DID-AJISS-PfMS-004: Performance Measurement System (PfMS) Testing, Verification and Validation Plan
DID-AJISS-PfMS-005: Performance Measurement System (PfMS) Testing, Verification and Validation (V&V) Report
DID-AJISS-PfMS-006: Performance Reconciliation Report (PfRR)
DID-AJISS-DISP-001: Obsolescence Report
DID-AJISS-SD-001: Government Furnished Equipment Report

13.3 List of Detailed Service Descriptions (DSDs)

DSD-AJISS-LCMM-001: Life Cycle Materiel Management (LCMM) Services
DSD-AJISS-LCMM-002: Configuration Management Services
DSD-AJISS-LCMM-003: Management of Maintenance Program Documentation
DSD-AJISS-TSM-001: Technical Schedule Management Services (TSMS)
DSD-AJISS-IDE-001: DRMIS Master Data Validation

13.4 Glossary

See the AJISS Dictionary Module

13.5 References

See the AJISS Reference Documents Module