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Title - Sujet MSMM Project RFI-B Mid-Shore Multi-Mission (MSMM)	
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F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input checked="" type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Owen, Alison	Buyer Id - Id de l'acheteur 010mb
Telephone No. - N° de téléphone (343) 573-3671 ()	FAX No. - N° de FAX () -
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: DEPARTMENT OF FISHERIES AND OCEANS CCG Vessel Procurement,MSMM Project 200 KENT ST and 3-200 ELGIN ST OTTAWA Ontario K1A0E6 Canada	

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**REQUEST FOR INFORMATION (RFI)
MID-SHORE MULTI-MISSION (MSMM) VESSELS
FOR
THE CANADIAN COAST GUARD (CCG)**

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Acronyms

AToN	Aids to Navigation
CCG	Canadian Coast Guard
C&P	Conservation and Protection
CSA	Canada Shipping Act
DFO	Department of Fisheries and Oceans
DSIP	Delegated Statutory Inspection Program
ER	Environmental Response
ESDC	Employment and Social Development Canada
FM	Fairness Monitor
GHG	Greenhouse Gas
HVAC	Heating, Ventilation and Air Conditioning
IACS	International Association of Classification Societies
ILS	Integrated Logistics Systems
IMO	International Maritime Organization
IPC	Indigenous Participation Component
ISC	Indigenous Services Canada
ISED	Innovation, Science and Economic Development Canada
ITQ	Invitation to Qualify
LOA	Length Overall
MMCS	Major Marine Construction Sector
MSMM	Mid-Shore Multi-Mission
NOx	Nitrogen Oxide
NSS	National Shipbuilding Strategy
PSIB	Procurement Strategy for Indigenous Businesses
PSPC	Public Services and Procurement Canada
RFI	Request for Information
RFP	Request for Proposal
RHIB	Rigid-Hulled Inflatable Boats
SAR	Search and Rescue
SOx	Sulphur Oxide
TBD	To be determined
TDP	Technical Data Package
URN	Underwater Radiated Noise
VFI	Vendor Furnished Information
WMO	World Meteorological Organization

REQUEST FOR INFORMATION (RFI)

Note to Respondents:

There are no security requirements associated with responding to this RFI. However, any future procurement may include a security requirement as mandatory criteria at time of bid submission.

For more information about security requirements governing contracts, visit the Canadian Industrial Security Directorate website at <http://www.tpsqc-pwgsc.gc.ca/esc-src/index-eng.html>.

1. Objective of this Request for Information

Canada, as represented by the Canadian Coast Guard (CCG), a Special Operating Agency of Fisheries and Oceans Canada (DFO), with the assistance of Public Services and Procurement Canada (PSPC), intends to use this RFI to consult and update the industry on the following:

- a) To provide Industry with an update regarding the MSMM vessels procurement and provide industry with an early opportunity to assess and comment on the attached revised documents (i.e. Annex A, B, C, D, E and F);
- b) To solicit industry knowledge and expertise regarding best practices towards a successful outcome for this procurement project;
- c) To gauge the feasibility of the proposed Indigenous Participation Component (IPC) as part of the MSMM procurement in order to meet the Government of Canada's commitments of advancing Indigenous socio-economic development through federal contracting opportunities; and
- d) To gauge how the solutions proposed by industry will provide opportunities that would allow Canada to improve conditions for investment, enhance Canada's innovation performance, and build a fair, efficient and competitive marketplace.

2. Nature of Request for Information

This is not a bid solicitation. This RFI will not result in the award of any contract. As a result, potential suppliers of any goods or services described in this RFI should not reserve stock or facilities, nor allocate resources, as a result of any information contained in this RFI. Nor will this RFI result in the creation of any source list. Therefore, whether or not any potential supplier responds to this RFI will not preclude that supplier from participating in any future procurement. Also, the procurement of any of the goods and services described in this RFI will not necessarily follow this RFI. This RFI is merely intended to solicit feedback from industry with respect to the matters described in this RFI.

3. Contents of this RFI

Some of the documents referred to in this RFI remain in development and respondents should not assume that new clauses or requirements will not be added to any bid solicitation that may ultimately be published by Canada. Nor should respondents assume that none of the clauses or requirements will be deleted or revised. Comments regarding any aspect of the documents are welcome.

4. Nature of Responses Requested

The following attached Annexes provide further context on CCG's requirement:

Annex A Key Capabilities and Constraints

Annex B Proposed Procurement Strategy

Annex C CCG Question and Response Table

Annex D PSPC Question and Response Table

Annex E ISED Question and Response Table

Annex F ISC General Information – Question and Response Table

The above documents contain specific questions addressed to Industry. Responses to any and all of these questions are welcome and encouraged, as they will help Canada with the procurement of the MSMM vessels. Furthermore, comments regarding any aspect of the documents are welcome.

5. Response Costs

Canada will not reimburse any respondent for expenses incurred in responding to this RFI. Respondents will have no claim for damages, compensation, loss of profit, or allowance arising out of providing answers and comments to this RFI.

6. Enquiries

This is not a bid solicitation, therefore Canada will not necessarily respond directly to enquiries in writing or by circulating answers to all potential suppliers. However, respondents with questions regarding this RFI may direct their enquiries to the following Contracting Officer no less than 5 days prior to the RFI closing date:

Contracting Officer: **Alison Owen**
Supply Team Leader
Major Marine Construction Sector (MMCS)
Public Services and Procurement Canada
E-mail Address: alison.owen@tpsgc-pwgsc.gc.ca

Canada may summarize the feedback received and inform industry on Canada Buys <https://canadabuys.canada.ca/en> regarding how industry's questions, ideas, solutions, etc., have been considered.

7. Treatment of Responses

Canada will review all responses received pursuant to this RFI.

- a) **Use of Responses:** Responses will not be formally evaluated. However, the responses received may be used by Canada to develop or modify procurement strategies or the requirements contained in this RFI. Canada will review all responses received by the RFI closing date. Canada may, in its discretion, review responses received after the RFI closing date.
- b) **Review Team:** A review team composed of representatives of Canada will review the responses. Canada reserves the right to hire any independent consultant or use any Government resources that it considers necessary to review any response. Not all members of the review team will necessarily review all responses.
- c) **Confidentiality:** Respondents are encouraged to identify, in the information they share with Canada, any information that they consider to be proprietary or confidential. Canada will handle the responses in accordance with the Access to Information Act and the Privacy Act. Canada will not disclose proprietary or commercially sensitive information concerning respondents or third parties, except and only to the extent required by law. For more information, please see <http://laws-lois.justice.gc.ca/eng/acts/a-1/>.
- d) **Follow-up Activity:** Canada may, in its discretion, contact any respondent(s) to follow up with additional questions or for clarification of any aspect of their response. This follow-up may take place as a teleconferences, web conference or an email.

-
- e) **Fairness Monitor:** A fairness monitor will oversee the procurement process and may review all responses received to the RFI.

8. Format of Responses

- a) **Cover Page:** Respondents are requested to indicate on the front cover page of each volume or volumes the title of the response, the solicitation number, the volume number and the full legal name of the respondent.
- b) **Title Page:** The first page of each volume of the response, after the cover page, should be the title page, which should contain:
- the title of the respondent's response;
 - the name and address of the respondent;
 - the name, address, e-mail address (primary and secondary) and telephone number of the respondent's contact;
 - the date; and
 - the RFI number.
- c) **Numbering System:** Respondents are requested to prepare their response using a numbering system corresponding to the one in this RFI. All references to descriptive material, technical manuals and brochures included as part of the response should be referenced accordingly.
- d) **Number of Copies:** Canada requests that respondents submit one electronic copy of their response in PDF.

9. Fairness Monitor

Canada has engaged RFP Solutions Inc. to act as an independent third-party Fairness Monitor (FM) for this procurement. The Fairness Monitor will, for example, observe the procurement process to ensure that PSPC has acted in a fair and consistent manner during the entire process. The Fairness Monitor is under obligations pursuant to its contract with Canada to maintain the confidentiality of all information received as a result of its participation in this procurement process. For the purpose of carrying out its FM-related obligations, the FM will be granted access to documentation generated and received by Canada pursuant to this RFI and any subsequent procurement activities undertaken during the procurement process.

10. Submission of Responses

- a) **Time and Place for Submission of Responses:** Respondents should send responses via e-mail to alison.owen@pwgsc-tpsgc.gc.ca by the RFI closing date indicated on the front page: or

b) **Epost Connect**

The epost Connect system has a limit of 1GB per single message posted and a limit of 20GB per conversation.

The only acceptable email address to use with epost Connect for responses to this RFI is: TPSGC.PAReceptiondesSoumissions-APBidReceiving.PWGSC@tpsgc-pwgsc.gc.ca.

To submit a response using the epost Connect service, the respondent must send directly its response only to the specified email address, using its own licensing agreement for epost Connect provided by Canada Post Corporation: [Connect: share secure digital files | Business | Canada Post \(canadapost-postescanada.ca\)](https://connect.share.secure.digital.files|Business|CanadaPost|canadapost-postescanada.ca)

It should be noted that the use of epost Connect service requires a Canadian mailing address. Should a respondent not have a Canadian mailing address, they may use the following address in order to register for the epost Connect service:

11 Laurier St.
Place du Portage, Phase III,
Gatineau, Quebec
K1A 0S5

The respondent must keep the epost Connect conversation open until at least 30 business days after the RFI closing date and time.

The solicitation no. (F7013-190110/B) should be identified in the epost Connect message field of all electronic transfers.

For responses transmitted by epost Connect service, Canada will not be responsible for any failure attributable to the transmission or receipt of the response including, but not limited to, the following:

- i. receipt of a garbled, corrupted or incomplete response;
- ii. availability or condition of the epost Connect service;
- iii. incompatibility between the sending and receiving equipment;
- iv. delay in transmission or receipt of the response;
- v. failure of the respondent to properly identify the response;
- vi. illegibility of the response;
- vii. security of the response data; or,
- viii. inability to create an electronic conversation through the epost Connect service.

Annex A – Key Capabilities and Constraints

1. Overview

In order to deliver its core mandate, the Canadian Coast Guard (CCG) intends to procure up to six vessels, of an estimated 900-950 MT lightship weight, as part of a new class of Mid-Shore Multi-Mission (MSMM) vessels. The current intention would be to build two MSMM vessels for each of the three areas of operation further described in Section 4.0 of this Annex. One of the vessels is intended to be assigned part time to the Canadian Coast Guard College as a training vessel.

These vessels will be designed and built with the intention of being managed as national assets of a single, common CCG fleet of vessels. The goal of CCG class management is to achieve commonality across vessels for maintenance, training, and sparing purposes. Further benefits include operational compatibility when personnel and assets are reassigned between the regions. As such, the MSMM vessels will be designed and built to meet the needs of the various programs on a national level.

The MSMM vessels will provide a wide range of program delivery capabilities while maximizing mission modularity, innovation, green technologies, and an effective return on investment to Canadians. Mission modularity capacity, refers to the method of employing various modules, containers, or portable deck mounted equipment which can be stored on board or in the regions, to support the primary and secondary missions as required. The new class of vessels is intended to function primarily as a platform for the following:

- Ecosystem and marine science
- Hydrographic surveys
- Aids to Navigation (AToN)
- Search and Rescue services
- Icebreaking in the form of shallow harbour breakouts, flood control, and commercial track maintenance within its capabilities.

2. Primary Missions

For the purpose of this document, the primary missions are those missions to which the MSMM vessels will devote the majority of their time.

- **Ecosystem and Marine Science:** The MSMM vessels will provide a platform to conduct scientific research, development, monitoring, and observation on behalf of Canada. The Science Program will have a principal focus on, but is not limited to, marine and environmental science activities.
- **Hydrographic Surveys:** The MSMM vessels will have an inherent capability to deliver various services in support of the waterways management program.

The MSMM vessels will support hydrographic data collection missions in support of maritime safety by undertaking field surveys to measure water depth, bottom morphology, tides, water levels, currents, and sound velocity. The MSMM vessels will accomplish

these missions through the use of either ship fitted equipment, such as sensors integral to the ship hull, or external equipment deployed from modules.

- **Aids to Navigation:** The MSMM vessels will conduct the year-round or seasonal deployment, recovery, and maintenance of fixed and floating navigation aids under CCG's Aids to Navigation (AtoN) Program and must be capable of lifting, deploying, and servicing the small and medium floating aids within its area of operation. The design of the vessel will integrate a modern marine-rated buoy-handling knuckle crane capable of lifting small and medium-sized buoys, as defined in the mission profiles, onto the working deck to achieve this requirement.

The placement of the aids to navigation, in positions close to shoals, rocks and reefs, will require the MSMM vessels to be able to maintain its position while deploying and retrieving floating aids.

The MSMM vessels may also be tasked with transportation of specialized technical personnel to service and construct remote fixed aids systems, their components, and safety and marine communications systems.

The MSMM vessels will have an inherent capability to deliver various services in support of the waterways management program, which ensures accessibility of waterways and contributes to their safe.

- **Search and Rescue (SAR):** CCG is responsible for the maritime component of Canada's SAR program which requires its vessels to conduct searches on the water, respond to marine distress calls, rescue marine incident survivors, provide emergency towing to disabled and stricken vessels, and provide a platform for on scene command and control capacity and capability.

All CCG vessels are multi-tasked to provide SAR response in addition to their other departmental programs. A SAR response will always take priority over any other departmental programs and all CCG vessels are equipped with trained crew members and rescue equipment to enhance the vessel's capability of supporting the lifesaving program.

3. Secondary Missions

A portion of the MSMM vessels operational schedule will be allotted to secondary missions, which can be recurrent, driven by emergency situations, or discrete maritime primary missions. These missions do not have the same influence on the vessel design as primary missions, however the inherent capabilities through the design of the vessel can support some of the secondary missions' activities. Secondary missions are largely supported via training, additional personnel, and equipment brought on board via the mission modularity fit concept.

- **Icebreaking:** Canada's icebreaking program benefits industries and communities by providing icebreaking and related services to facilitate the movement of maritime traffic

through and around ice-covered Canadian waters. This program includes conducting harbour breakouts, and track maintenance supporting environmental protection by minimizing damage to vessels navigating in ice, providing advice and ice information, and performing flood control in order to reduce the risk of property damage through monitoring, prevention, and breaking up ice jams.

The MSMM will support light icebreaking activities. It will assist in the delivery of track maintenance during the winter months. During the spring months, the MSMM will support flood control activities and shallow harbour breakouts within its capabilities.

- **Maritime Security:** CCG's involvement in maritime security is based on its obligation under the Oceans Act to provide ships, aircraft, and other maritime services in support of federal maritime priorities. Canada uses its vessel fleet, on-water expertise and extensive vessel monitoring systems to support this program.

The MSMM vessels will support this program within the limits of its inherent capability as a platform, or by means of mission modularity capacity such as loading and carrying of extra Rigid-Hulled Inflatable Boat (RHIB) as required.

- **Conservation and Protection:** The MSMM vessels will assist the Conservation and Protection (C&P) Program, which manages and protects fish stocks in Canadian fisheries waters, in a fitted and mission modularity fit capacity.

CCG fleet personnel will provide support to dedicated fisheries officers boarding the vessels in a variety of capacities, including special operations, such as the recovery and re-setting of fishing gear.

- **Environmental Response:** CCG vessels support the CCG Environmental Response (ER) Program by providing support for lead agency services upon request. These services can include: initial spill assessments, emergency towing to prevent oil spills, verification and initial response operations, conducting on-water sampling and On-Scene Commander or Federal Monitoring Officer functions, and site safety.

The MSMM vessels will support this program within the limits of its inherent capability, as a platform or by means of mission modularity capacity through the use of environmental response containers.

- **Vessels of Concern:** The MSMM vessels will support the Vessels of Concern program within the limits of its inherent capability with the use of fixed emergency tow points, or by means of mission modularity capacity when required.
- **Support of Other Government of Canada Agencies:** The MSMM vessel will support other departments, boards or agencies to the extent of its inherent capabilities as a platform, or by means of mission modularity capacity in the form of mission specific

containers or extra RHIBs.

- **Humanitarian Assistance and Disaster Relief:** The MSMM vessels will assist within its inherent capabilities, or by means of mission modularity capacity offer humanitarian and material aid to communities affected by emergency situations and natural disasters.

4. Areas of Operation

The MSMM vessels will operate year round within the Canadian waters of the Atlantic and Pacific Oceans, the Gulf of St. Lawrence, the Great Lakes, and the St. Lawrence Seaway. On the Atlantic Coast it will be limited to as far as 60° North latitude during the summer months. The majority of the missions will be carried out in the Mid-Shore range.

The MSMM vessels will also be required to transit to-and-from the Great Lakes area via the Seaway. In order to deliver the missions, it is imperative that the vessels can access all the ports of call, fueling facilities, and CCG facilities.



Figure 1. Western Region Area of Operation



Figure 2. Central & Arctic Area of Operation

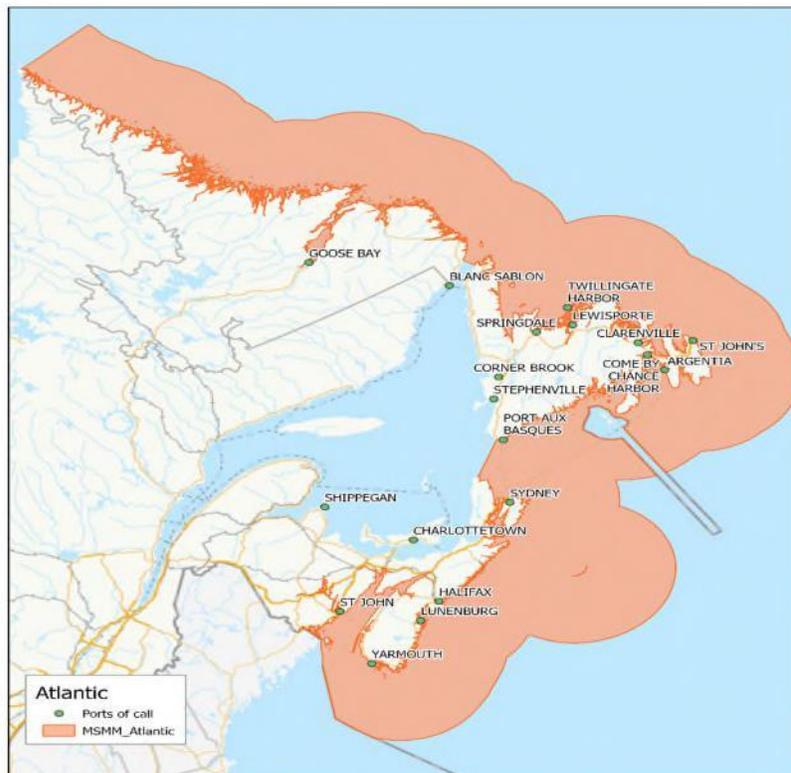


Figure 3. Atlantic Region Area of Operation

There are several design challenges resulting from such broad areas of operation. The vessels must be able to operate in both fresh and sea waters, open seas to shallow inland water systems, and various sea ice conditions and fresh water ice-infested waters.

The vessel must be capable of operating safely and effectively in air temperatures between – 30°C to +35°C, and conducting sustained operations in water temperatures in its area of operations.

The vessel will be capable to heave-to in severe wind and associated sea states up to and including World Meteorological Organization (WMO) Sea State 8.

5. Design Objectives

The MSMM vessel class has many competing design drivers and will require thorough engineering evaluations and trade-off analyses throughout the development phases. These activities will focus on optimizing energy efficiency, innovation against life cycle costs and weight to deliver the most efficient and capable platform possible . The following sections provide a high level description of the MSMM vessel class main design drivers as dictated by the primary operational missions in Section 2.0.

The design objectives and considerations for the MSMM vessel class include the following:

- Green technologies and energy efficiency
- Innovation and leading edge technologies
- Life-Cycle Management

5.1 Weight Management: CCG envisions that the management of the weight may entail the following:

The weight and associated margins will need to be carefully tracked throughout the design and construction. This may be a challenge, considering many of the design goals tend towards increasing the vessel weight though the addition of green technologies, innovative solutions, and the need to support multiple stakeholders and operational capabilities. Canada plans to focus on two key areas to manage weight for the MSMM vessels:

5.1.1 Weight Margins:

When monitoring the weight throughout the design and construction of the MSMM vessels, it is essential that weight margins be established, tracked and managed. This will ensure that there is sufficient latitude for margins during the design, construction process, and for throughout the life of the vessel. Through consultation, such as this RFI, Canada anticipates working closely with industry to ensure that these margins are sufficient and achievable for MSMM vessels.

To ensure that the MSMM vessels remains flexible for future needs and to help minimize weight impact of fitted equipment, the vessel will reflect a mission modularity payload approach. The MSMM vessels must have the capability to

accommodate programs currently mandated by the CCG, as well as support potential future programs.

5.1.2 Mission Modularity:

The intent is to make future mission payloads conform to a standard, applicable to all new CCG assets, eliminating the need for extensive ship modifications due to program changes. Such an approach permits any conforming mission payload to be embarked and deployed in a safe, certified, and efficient manner, while also standardizing equipment handling at shore based CCG facilities. Canada intends to apply the modular approach in its vessel designs by working with industry to identify where mission modularity might be an appropriate solution for other ship systems

5.2 Energy Efficiency and Green Technology

The CCG is committed to reducing the environmental impacts of its operations and taking initiative on climate change. The specific objectives that are to be considered for the MSMM vessels include:

- Minimizing the carbon footprint and reducing greenhouse gas (GHG) emissions in accordance with maritime industry best practices and International Maritime Organization (IMO) guidelines.
- Considering the use of alternate fuels where feasible; and
- Using more energy-efficient systems, including propulsion, heating, ventilation and air conditioning (HVAC), hull coatings, etc.

Green technology broadly refers to the initiatives taken to reduce GHG, nitrogen oxide (NOx) and sulphur oxide (SOx) emissions. CCG seeks not only to meet these targets, but to become a marine industry leader in the use of Green Technologies.

5.3 Innovation and Leading Edge Technologies

'Leading edge' refers to innovations that are new, but have been tested and proven reliable on previous projects, and thus, the cost of ownership, maintenance implications, and obsolescence factors have been demonstrated. 'Bleeding edge' innovations refer to those which are so new that they have not yet been tested and proven reliable, and thus, carry greater cost and maintenance risks. Leading edge technologies are industry proven and come with a wider availability of information, and are thus, of lower risk to the project than bleeding edge technologies, which have higher levels of unknowns. CCG intends to incorporate proven technologies in the MSMM vessels design.

Any proposed innovations will require analyses of the total cost of ownership (acquisition plus lifecycle), human factors, and the in-service support requirements of implementing these innovations (maintenance, training, sparing, etc.).

5.4 Life Cycle Management

The anticipated operational life of the MSMM vessels is 30 years. The MSMM vessels should have ample margins to allow the vessel to remain capable of delivering on all of its missions throughout its full lifecycle. The design and construction of the vessels would emphasize the ease of maintenance and repair cycles of the ship, system, and equipment complexity as key factors in all decision-making as it relates to equipment selection and integration. Ideally, parts and services should be readily available from equipment suppliers to all parts of Canada. The ecological footprint of the vessel must also be considered in the selection of equipment and overall design.

Additional information regarding the Integrated Logistics Systems (ILS) deliverables for each phase can be found in Annex B.

5.5 Noise

Reducing underwater radiated noise (URN) is important for the protection of marine life and reducing airborne noise interior to the ship is key for crew habitability and comfort.

6. Principal Particulars

The MSMM vessels is in the final stage of internal requirements validation and as a result, the principal particulars below are in a draft form. By sharing the key parameters at this stage, Canada aims to enable industry to better position themselves and prepare for the work anticipated during the detailed design and construction phases.

6.1 Applicable Regulations and Classifications

The MSMM vessels will be designed and constructed in accordance with, but not limited to, the following regulations and classifications:

- Built and maintained to International Association of Classification Societies (IACS) Classification Society with Delegated Statutory Inspection Program (DSIP) registration with Transport Canada
- Transport Canada Near Coastal Voyage Class I
- Canada Shipping Act (CSA) 2001 – Marine Machinery Regulations (SOR/90-264)
- Canada Shipping Act (CSA) 2001 – Vessel Pollution and Dangerous Chemicals Regulations, Division 6 – Air
- Transport Canada TP-127 – Ships Electrical Standards

6.2 Estimated MSMM Vessels Particulars

Length Overall (LOA)	45-50 m
Beam	11-14 m
Draft or Draught	3.5-4.0 m
Economical Speed	10 kn
Maximum Speed	12 kn
Sea State	WMO Sea State 7 (heave to and ride out to WMO Sea State 8)
Ice Notation	DNV-GL Ice Class-1C (or equivalent)
Endurance	17 days
Range	3000 NM
Crew	12
Total Compliment	20
Lightship Weight	900-950 MT
Dynamic Positioning	Expected to be a minimum of DP1
Working Deck Area	150-175 m ²
Main Crane	6-8 MT lift capacity
Helicopter Capabilities	Limited to communications, loading and unloading cargo while station keeping

6.3 Environmental Conditions

The MSMM vessels will operate in the following environmental conditions:

- Months of operation: full year operation
- Maximum ambient air temperature = 35°C
- Minimum ambient air temperature = -30°C
- Minimum water temperature = -2°C
- Maximum water temperature = 30°C
- Ice capability: minimum of 0.3 m of first-year ice at 3 knots

Annex B - Proposed Procurement Strategy

1. Introduction

Canada currently has approved funding for the definition and design of the Mid-Shore Multi Mission (MSMM) vessels procurement Project. It is intended that the Project will seek further approval for the Vessel Construction Phase in due course. The intended procurement strategy is described further below.

The Buy-in-Canada Policy Framework for the Canadian Shipbuilding and Industrial Marine Industry states that “the federal government will continue to procure, repair and refit vessels in Canada subject to operational requirements and the continued existence of a competitive domestic marketplace. Accordingly, the Vessel Construction Phase is intended to be competed to a Canadian entity under the second pillar of the National Shipbuilding Strategy (NSS) which provides the provisions necessary to procure vessels under 1000 MT lightship weight.

The intent is to build up to six vessels, with two vessels delivered to CCG Atlantic Region, two vessels delivered to CCG Western Region, and two vessels delivered to CCG Central Region (Great Lakes, St. Lawrence Seaway).

2. MSMM Vessels Procurement Project Schedule

The intention of this Request for Information (RFI) is to obtain industry feedback with consideration to the presented procurement Project schedule for the design and construction of up to six MSMM vessels. The feedback and comments received should pertain to the overall feasibility, ability to respond, as well as capacity to achieve the schedule scenario.

The following target dates and activities are estimates and subject to change at Canada’s sole discretion:

Procurement Project Stages	Milestone	Target
Phase 1 - Contract Design	RFP for Contract Design	Summer 2024
	Contract Awarded	Fall 2024
Phase 2 – Invitation to Qualify	ITQ Pre-qualification	Fall 2024
	ITQ Results Announced	Winter 2025
Phase 3 - Vessel Construction	RFP for Vessel Construction	2025-2026
	Contract Awarded	2026
	Cut Steel - Ship 1	TBD
	Delivery – Ship 1	TBD

3. Updated Procurement Strategy

Although the procurement strategy is subject to change, Canada currently intends on proceeding with the following. Please note that it is also our intention to share drafts with more details for each of these phases in order to allow input from the industry for Phases 1-2 or the pre-qualified respondents for Phase 3:

Phase 1 - Contract Design

The intended procurement strategy for the Contract Design would be to release a Request for Proposal (RFP) to acquire the services of a Contractor that has the capabilities to successfully deliver on CCG's Contract Design requirements. The resulting contract may use a combination of basis of payments and may incorporate the use of a task authorizations process with fixed per diem rates.

The main intent of the Contract Design Phase is to take the conceptual CCG-developed Technical Data Package (TDP) and advance the engineering work to create a Classification Society appraised drawing package and technical specification to the level of maturity required for Bidders in Phase 3 to compete for the construction of the vessels. The winning Bidder for Phase 1- Contract Design will advance the design by reviewing, and validating the Concept Design TDP and developing the Contract Design. In addition to the drawing package and specifications, this phase may also include trade-off studies, options analyses, and supporting reports and calculations.

Phase 2 - Invitation to Qualify (ITQ) for the Vessel Construction

An Invitation to Qualify would be released in order to pre-qualify respondents having the capabilities to successfully deliver on CCG's Vessel Construction requirements. Only pre-qualified respondents would have the ability to participate in Phase 3 – Vessel Construction Phase RFP. It is anticipated that the qualified ITQ respondents may be asked to provide a buildability review of the Contract Design from Phase 1, prior to the end of this phase.

Phase 3 – Vessel Construction

The intended Vessel Construction Phase would be for a RFP to only be sent to Phase 2 ITQ pre-qualified respondents in order to select a Contractor having the capabilities to successfully deliver up to 6 MSMM vessels to the CCG. Different basis of payments are being explored for the resulting contract(s), including firm fixed price.

Once the Contract Design package has been approved and accepted by Canada, the next step of the procurement will be to initiate a competitive process for the construction of the vessels (as explained in the paragraph above). The Vessel Construction phase is typically subdivided into an engineering phase and a construction phase. The engineering phase is generally broken into 3 phases: basic design, functional design, and production design. The engineering advances through the phases and equipment selection is completed to incorporate Vendor Furnished Information (VFI) into the design to allow for the creation of production level drawings. Upon

completion of the engineering phases, the Project will enter the construction phase, or the start of physical vessel construction.

The contract Statement of Work for the construction of CCG vessels is typically divided into four categories of deliverables; governance, quality, ILS, and technical. These deliverables are necessary to provide the necessary tracking, oversight and quality control for the Project.

The governance deliverables typically include Project plans and schedules to demonstrate to the Project team that the construction is on track to meet the established milestones. These deliverables include, but are not limited to, the following:

- Project Management Plan (PMP)
- Master Schedule, Design Schedule and construction schedules including major milestones and key events
- Drawing and material schedules
- Test and Trials schedule including Harbour Acceptance Tests (HAT), Sea Acceptance Tests (SAT), etc.
- Factory Acceptance Tests (FAT) schedule
- Technical Data Management Plan (TDMP)
- Configuration and Change Management Plan
- Issues Management Plan and Technical Risk Register
- Required certificates

The quality deliverables ensure to Canada that the quality is managed and maintained throughout the design and construction. These deliverables include:

- Quality Plan
- Inspection Plan
- Test and Trials Plans, schedules and reports

The ILS and technical deliverables ensure that CCG fleet personnel are properly trained and have the information and materials available to support the vessel through its life. These deliverables typically include, but are not limited to:

- Technical Manuals and Maintenance Plans
- Trim and stability booklet, reflecting Transport Canada Marine Safety (TCMS) and Classification Society requirements.
- Final engineering drawing package reflecting the design that meets all the CCG requirements; and the as-built documents confirming the final configuration of the vessel, including all drawings submitted to the Classification Society for information and approval.
- 3D models representing the final as-configured presentation of the vessels.
- Vessel class manuals which explain the function and general arrangement of the Vessel and its major systems and equipment.

Annex C - CCG Question and Response Table

Item	Questions	Responses
1	What technical benefits/risks do you see to the proposed scope and schedule?	
2	Do you have any comments or recommendations regarding the information presented in this RFI that would assist Canada in the delivery of this project?	
3	What would you think are the key factors to be considered during the design and construction procurement to satisfy the constraints and deliver on the capabilities as stated in Annex A of this RFI. What challenges or risks would you foresee?	
4	Given the schedule information outlined in Annex B, how long do you anticipate that it would take to deliver a Contract Design (i.e. Classification Society appraised Technical Data Package)? What challenges would you foresee?	
5	Do you foresee any existing or upcoming long term commitments that could impact the planned start and end dates of the work period on this procurement project?	
6	Do you have any comments on the approximate engineering/build durations for a vessel of these notional particulars?	

Annex D - PSPC Question and Response Table

Item	Question	Response
1	Does the procurement strategy listed in Annex B prevent your future involvement in the MSMM vessels procurement project? If so, please elaborate on the reasons why.	
2	Do you see any issues with the procurement strategy detailed? If so, please explain.	
3	Is the proposed procurement strategy easily understood? If not, what additional explanation or clarification would be required?	
4	Do you have any other comments to provide regarding the procurement strategy?	
5	In Annex B, there are different basis of payments mentioned for the anticipated contracts for the two phases of the procurement. Do you see any issues with them ? If so please explain.	

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File No. - N° du dossier
010mb. F7013-190110/

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010mb
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Annex E - ISED Question and Response Table

Canada is consulting with industry as part of the development of industrial and economic considerations for the overall MSMM project as well as with the intent to apply the Industrial and Technological Benefits (ITB) Policy under the Vessel Construction phase. For more information regarding the ITB Policy, please visit: https://www.ic.gc.ca/eic/site/086.nsf/eng/h_00005.html.

Item	Question	Response
1	Broadly, are there any important and/or strategic linkages or considerations between vessel design and vessel construction in regards to maximizing supply chain opportunities for Canadian content that Canada should be made aware of?	
2	How best should Canada look to maximize the use of Canadian developed systems for the MSMM? Please provide suggestions on how this maximization can be balanced between schedule and technical considerations	
3	More than 90 percent of firms in the Canada's defence industry are small and medium businesses (SMBs) employing under 250 personnel. As such, Canada will continue to encourage the participation of Canadian SMBs in Canada's marine supply chain. Can you offer any recommendations on how to promote the participation of small and medium businesses under the overall MSMM scope of work?	
4	<p>Research and Development (R&D) and Innovation continue to play a critical role in promoting both growth and opportunity in Canada's economy and marine sector. With this in mind, Canada is interested in exploring direct and indirect R&D investments that could support the MSMM project, the Canadian Coast Guard and the broader Canadian economy. Based on your capabilities of your company:</p> <ul style="list-style-type: none"> i. What new R&D opportunities or new investments could be brought to Canada as part of fulfilling Canada's stated interest? ii. Would your firm be interested in collaboration with Canada on the identification of potential R&D opportunities to undertake? 	

5	<p>Canada maintains a very strong interest to ensure that its domestic marine industry has the capacity and capability to meet federal shipbuilding requirements.</p> <ul style="list-style-type: none">i. Given your experience and the MSMM proposed scope of work, do you foresee any workforce skills and knowledge gaps that currently exist which could impact the MSMM vessel design and/or Vessel Construction phases? Please explain your answer.ii. Recognizing the role that post-secondary institutions play in skills and training development in Canada, to what extent do you think you could work with these institutions to support your current / future workforce needs?	
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Annex F - ISC General Information - Question and Response Table

Information Related to the Indigenous Participation

Canada is considering incorporating Indigenous participation as part of the MSMM in order to meet the Government of Canada's commitments of advancing Indigenous socio-economic development through federal contracting opportunities.

Indigenous participation can be achieved through direct means of participation, or indirect means of participation.

Direct and Indirect Forms of Indigenous Participation

(a) Direct Participation

Can be any one of the following:

Indigenous Business Development: The Supplier must demonstrate it builds and develops viable Indigenous business capacity. The supplier must contribute and invest in the development and viability of Indigenous businesses by procuring goods and services from eligible Indigenous firms. The supplier is also encouraged to demonstrate how it intends to maximize the use of Indigenous businesses, such as identifying the work intended to be carried out by Indigenous businesses, including contract and supply chain management.

Indigenous Employment: The Supplier must demonstrate its employment of Indigenous peoples, which may include details pertaining to Indigenous recruitment and retention strategies and related job activities such as the work to be carried out by each position.

Indigenous Training and Skills Development: The Supplier must demonstrate the training opportunities and skills development for its Indigenous employees, such as on-the-job training, in-house training, as well as succession plans.

(b) Indirect Participation

Indirect participation may include career development, scholarships, grants, and community outreach to support Indigenous communities in meeting their economic development goals.

For more information about ISC: <https://www.sac-isc.gc.ca/eng/1639748667069/1639748703555>

Questions to Industry related to Indigenous Participation

Item	Question	Response
1	<p>How can your company maximize Indigenous participation in the MSMM vessels procurement project?</p> <p>For instance:</p> <ul style="list-style-type: none"> • Incorporating Indigenous businesses within your supply chain; • Hiring Indigenous employees; • Training and skills development opportunities for Indigenous people; • Other relevant measures intended to support Indigenous socio-economic development including, but not limited to scholarships, grants and bursaries. 	
2	<p>Where does your company see an opportunity for Indigenous participation within the MSMM vessels procurement project?</p>	
3	<p>What percentage of the value of the contract (or of a specific project deliverable) do you see as attainable and achievable for the Indigenous Participation Component (IPC)? Within the value of the IPC, is there an optimal percentage for direct versus indirect benefits?</p>	
4	<p>Does your business have a history of employing Indigenous persons or sub-contracting with Indigenous businesses?</p>	
5	<p>What incentive strategies have you encountered in previous contracts to encourage Indigenous engagement resulting in skills development, industrial capacity, and economic benefit to Indigenous groups?</p>	
6	<p>Is your business located within an Indigenous Community or modern treaty? If yes, please specify?</p>	
7	<p>Is your business an Indigenous business eligible under the Government of Canada's Procurement Strategy for Indigenous Business? If so, are you registered in the Indigenous Business Directory" Link: https://services.sac-isc.gc.ca/REA-IBD</p>	

Identifying Indigenous Business Capacity

The [federal Indigenous Business Directory](#), managed by Indigenous Services Canada, can be leveraged to help determine Indigenous business capacity for a particular commodity. For the purposes of this project, Indigenous businesses are required to be verified and registered in the federal Directory.

Other Indigenous business directories can be used to assist in assessing capacity, such as, but not limited to:

- Canadian Council for Aboriginal Business: <https://www.ccab.com/>
- Union Gas: <https://www.uniongas.com/about-us/community/indigenous/business-list>
- Kativik Regional Government www.krg.ca
- Indigenous Business and Investment Council: <https://www.bcibic.ca/>
- Canadian Aboriginal and Minority Supplier Council: www.camsc.ca
- Province of Manitoba: <https://www.gov.mb.ca/inr/>
- Province of Ontario: <https://www.ontario.ca/page/indigenous-businesses-bidding-government-contracts>
- Native Women's Association of Canada: <https://www.nwac.ca/womens-business-directory/>
- Cando: www.edo.ca
- First Nations of Quebec and Labrador Economic Development Commission: <https://entreprises.cdepnql.org/#/search/>

Early Engagement with Indigenous Businesses

Early engagement with Indigenous communities and businesses is beneficial for suppliers to:

- enhance relationships;
- ensure a common understanding of the project requirements;
- determine Indigenous business capacity for the procurement of goods and services; and
- identify skills and training gaps for employment of Indigenous peoples.

Identifying Indigenous Employment Opportunities

Industry respondents may wish to contact Employment and Social Development Canada (ESDC) to learn more about their Indigenous Labour Programs that may help support Indigenous businesses with subcontracting opportunities. ESDC's Indigenous Skills and Employment Training Program is designed to help Indigenous people improve their skills and find employment, visit their website for more information: <https://www.canada.ca/en/employment-social-development/programs/indigenous-skills-employment-training.html>.

In addition to ESDC, there are numerous provincial and non-profit Indigenous employment and skills development programs. For more information contact: indigenousprocurement@sac-isc.gc.ca.

Definitions related the Indigenous Participation

Incorporating Indigenous participation into federal contracting complements the objectives of the [Procurement Strategy for Indigenous Businesses \(PSIB\)](#) and the [mandatory requirement for federal departments and agencies to ensure a minimum of 5% of the total value of contracts are held by Indigenous businesses](#). PSIB is a federal policy that reserves, or 'sets aside' certain contracts exclusively for competition among Indigenous businesses where capacity exists.

For definitions of 'Indigenous business,' 'Indigenous Person' and 'Indigenous Content,' visit: <https://www.sac-isc.gc.ca/eng/1100100032802/1610723869356>.

Further Information and Assistance

Indigenous Services Canada is available to provide assistance to respondents with:

- Providing resources to identify Indigenous business capacity
- Participate in events and workshops
- Provide advice on diversifying supply chains

Email: IndigenousProcurement@canada.ca

Phone: 1-800-400-7677

Website: <https://www.isc-sac.gc.ca/eng/1100100032802/1610723869356>