Canada

Request for Information – Flight Deck Motion System for the Canadian Surface Combatant

Disclaimer

This RFI is neither a call for tender nor a Request for Proposal (RFP). No agreement or contract will be entered into based on this RFI. The issuance of this RFI is not to be considered in any way a commitment by the Government of Canada, nor as authority to potential Respondents to undertake any work that could be charged to Canada. This RFI is not to be considered as a commitment to issue a subsequent solicitation or award contract(s) for the work described herein.

Participation in this RFI is encouraged, but is not mandatory. There will be no short-listing of potential Suppliers for the purposes of undertaking any future work as a result of this RFI. Similarly, participation in this RFI is not a condition or prerequisite for the participation in any potential subsequent solicitation.

Respondents will not be reimbursed for any costs incurred by participating in this RFI.

Background

Canada's defence policy, "*Strong, Secure, Engaged*" (SSE), has committed to investing in 15 Canadian Surface Combatant (CSC) ships. These ships will be Canada's major surface component of maritime combat power. With its effective warfare capability and versatility, it can be deployed rapidly anywhere in the world, either independently or as part of a Canadian or international coalition. The CSC will be able to deploy for many months with a limited logistic footprint.

The CSC will be able to conduct a broad range of tasks, including:

- Delivering decisive combat power at sea;
- Supporting the Canadian Armed Forces, and Canada's Allies ashore;
- Conducting counter-piracy, counter-terrorism, interdiction and embargo operations for medium intensity operations; and
- Delivering humanitarian aid, search and rescue, law and sovereignty enforcement for regional engagements.

The acquisition is for 15 ships to replace both the retired Iroquois-class Destroyers and the Halifax-class frigates. The construction of the first CSC vessel is expected to begin in 2023/2024.

As a core capability of this class of ship, the CSC will have the capability to embark the CH-148 helicopter. To achieve this, Defence Research and Development Canada (DRDC) developed a prototype Flight Deck Motion System (FDMS) that is now required for safe operations of the aircraft from the flight deck while at sea.

What is FDMS

The Flight Deck Motion System (FDMS) consists of sensors, data links to the ship, computers with custom software, and displays in various compartments such as the bridge, the Flight Deck Control Room (FDCR), and the Landing Signal Officer (LSO) compartment. The displays, which can be customized for the operators at each location on the ship, provide information on the real-time wind and ship motions with respect to established operational limits. They can also

provide information on best or best-compromise ship speed and heading for achieving minimal ship motions in a given sea state.

Purpose

The purpose of this RFI, is to notify prospective bidders that DND is interested in commercializing the FDMS prototype for inclusion into the CSC (up to 15 ships) and potentially included as part of the Artic and Offshore Patrol Ship (AOPS) (up to 3 ships) and the Joint Support Ship (JSS) (up to 2 ships). The department is also interested in having In-Service Support provisions, as well as training support for both east and west coast naval training schools. The RFP should be issued and available to be bid on by the 2nd quarter of 2022. This RFI is also requesting prospective bidders to answer a set of general questions identified in Annex A to this RFI.

Technology demonstration

While not required for bid purposes, DRDC Atlantic will be showcasing the technology and a working prototype at the DEFSEC Atlantic 2021 the week of October 5th to 8th 2021. For access and registration: DEFSEC Atlantic 2021 :: Oct 5-7, 2021 :: Halifax, Nova Scotia, Canada :: Register

Point of Contact

Prospective bidder are asked to submit their written response to the questions identified in Annex

A via email directly to:

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Material Acquisition and Support Specialist,
Canadian Surface Combatant Project (CSC)
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Closing date for the RFI:

Responses to this RFI are to be submitted to the CSC Procurement Authority identified above, on

or before, close of business on 29 October 2021.

Annex A – FDMS Standard List of Questions

The RFI Responses should address the following questions:

1. Is your company interested in participating in the Request for Proposal (RFP), currently scheduled for releases in Q2 of 2022 for the commercialization of FDMS.
2. Would your company be interested in using existing DRDC FDMS software (with appropriate licensing) as a basis for the development of a commercialized FDMS, or would your organization rather develop its own software based on the Technical System Requirement Document, to be made available during the RFP. Please include reasoning when choosing one approach.
3. Would your company be interested in partnering with Defence Research Development Canada (DRDC) Atlantic for continuing research and development of FDMS, including but not limited to, increased system performance, upgrades, additional features, through-life-support, and system updates. Please provide reasoning in your answer.
4. If awarded the contract, does your company see other opportunities to commercialize FDMS across Navies or other industries.