

# Request for Information – Main Gun System Ammunition 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.

## **Purpose**

The purpose of this RFI is to notify industry that Canada requires various performance, environmental specifications and software that relate to 127mm ammunition that will allow for design work and procurement to proceed for the CSC project for up to 15 ships. Related RFP's will be issued in the future and this RFI is requesting that industry answer the questions identified in Annex A to 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 serving 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 a 127mm Main Gun which was selected by Irving Shipbuilding Inc. (ISI), Lockheed Martin Canada (LMCa) and the Government of Canada. This RFI is for information pertaining to all 127mm types of ammunition produced which includes all guided and extended range variants including ammunition of this caliber that can be fired safely and effectively that pertains to STANAG 1287 – 5 INCH 54 CALIBRE GUN AMMUNITION INTERCHANGEABLE WITHIN NATO NAVAL FORCES and STANAG 4110 – DEFINITION OF PRESSURE TERMS AND THEIR INTERRELATIONSHIP FOR USE UN THE DESIGN AND PROOF OF CANNONS OR MORTARS AND AMMUNITION. This RFI was jointly prepared by ISI, LMCa and the Government of Canada.

### **Munitions Supply Program**

While not required for bid purposes, Canada will be working with industry towards licensing approved 127mm ammunition for final assembly through Canada's Munition Supply Program by Canadian Industry with assistance from Public Services and Procurement Canada (PSPC).

Canada realizes that this may not be possible for all variants of 127mm munitions that Canada is interested in procuring.

**Point of Contact**

Prospective bidder are asked to submit their written response to the questions identified in Annex A via email directly to:

Jon de Ste Croix  
Procurement and Finance Officer,  
Canadian Surface Combatant Project (CSC)  
Department of National Defence  
[jonathan.destecroix@forces.gc.ca](mailto:jonathan.destecroix@forces.gc.ca)  
CEL: 902-441-1252

**Closing date for the RFI:**

Responses to this RFI are to be submitted to the CSC Procurement Authority identified above, on or before, the close of business on 31 March 2022.

## Annex A – 127mm Main Gun System Standard List of Questions

The RFI Responses should address the following questions. If this information can be provided in support of any of these questions then it can be supplied in raw format including document references where appropriate:

1. Would your company be interested in partnering with PSPC, DND, and Canadian Industry to produce some, or all components and assemble 127mm ammunition types under the Munitions Supply Program (MSP)?
2. If awarded the acquisition contract, does your company believe that this would be a Government to Government transaction or a direct commercial sale?
3. Canada will require all pre-qualified 127mm ammunition type variants, quantities, weights, munitions dimensions (length, width, height, and center of gravity), the physical mounting interface required to secure each ammunition case, NATO Stock Number (NSN), and Net Explosive Quantity (NEQ). If these can be delivered then please provide these as part of this RFI.
4. Will your company supply information for the packaging of rounds (quantity, dimensions, material), shore based storage conditions/requirements, transportation requirements and maintenance requirements for storage? If these can be delivered then please provide these as part of this RFI.
5. Canada will require the ship's services that are required (power, cooling, etc.), blast pressure and temperatures, exhaust gas/materials analysis, embarkation procedures (RAS, dockside, etc.), onboard storage requirements, qualification/testing requirements, on-ship test procedures, interface information (ICD, CD, etc.) and the required special tools and test equipment? If these can be delivered then please provide these as part of this RFI.

6. Canada will require any existing certifications (NATO, MILSTD, Canadian S3/ASSB Certification Process, etc.) along with explosive sensitivity, EMI/EMC, vibration limits, shock limits, susceptibility and related sensitivities. Also required are operator manuals, technical manuals, explosive hazards, environmental hazards, hazard action procedures, Control of Substances Hazardous to Health (COSHH) requirements, disposal procedures, Hazard ID's (HAZ ID) and mitigation (misfire, etc.) If these can be delivered then please provide these as part of this RFI.
  
7. Canada will require the lethality, dispersion, muzzle velocity, ballistic curves and probability of kill (Pk) tables and ballistic information for all pre-qualified 127mm ammunition variants. Can this information be transferred to the Government of Canada?
  
8. Are there any special software considerations/information required for the weapons systems to function to full capacity? This includes the datalink between the variants of rounds and the main gun/combat management systems, their associated sensors and software. Can these details be provided to the Government of Canada?