

## 1. Advance Contract Award Notice (ACAN)

An ACAN is a public notice indicating to the supplier community that a department or agency intends to award a contract for goods, services or construction to a pre-identified supplier, thereby allowing other suppliers to signal their interest in bidding, by submitting a statement of capabilities. If no supplier submits a statement of capabilities that meets the requirements set out in the ACAN, on or before the closing date stated in the ACAN, the contracting officer may then proceed with the award to the pre-identified supplier.

## 2. Definition of the requirement

The Department of Public Services and Procurement Canada on behalf of the Department of National Defence (DND) has a requirement for the supply and delivery of a Watertight Pressure Vessel System for the Victoria Class submarines.

The Watertight Pressure Vessel (WTPV) System is intended to contain the submarine's Outboard Motors (OBM) for use with the submarine's inflatable boats. The WTPV System will protect the embarked outboard motors against sea pressure and water ingress during diving operations. When the submarine dives, the Small Boats Stowage Well is flooded and any components inside are subjected to sea pressure proportional to the depth of the submarine.

- a. The WTPV System must be comprised of:
  - i. a WTPV capsule capable of securely containing one (1) DND 25 HP or 30 HP outboard motor
  - ii. an interchangeable restraining arrangement configuration, capable of restraining the outboard motor, whichever is operationally required; and
  - iii. the WTPV capsule Mounting Arrangements attaching the capsule to the submarine.
- b. The requirement is for:
  - i. Quantity four (4) WTPV System shipsets. Note, one shipset includes quantity two (2) WTPV Systems;
  - ii. any related Special Purpose Tools and Test Equipment, Spares and Repair Parts; and
  - iii. all accompanying Design, Test, Integrated Logistics Support Data.

## 3. Criteria for assessment of the Statement of Capabilities (Minimum Essential Requirements)

Any interested supplier must demonstrate by way of a statement of capabilities that its system meets the following requirements:

### 3.1 Water Tight Pressure Vessel (WTPV)

#### 3.1.1 Function

The function of the WTPV is to securely hold the Out Board Motor (OBM) and its associated Restraining Arrangements (RA) for use with the selected small boat.

##### 3.1.1.1 Opening Cover Opening/Closing

The WTPV Opening Cover must be easily operated (open or closed) and secured by a team of not more than two people.

##### 3.1.1.2 OBM Removal/Replacement

The removal/replacement of an OBM and its associated RA from the WTPV must be able to be safely and easily accomplished by a team of not more than four personnel.

#### 3.1.2 Interfaces

### 3.1.2.1 External Interfaces

The WTPV must externally interface with the WTPV Mounting Arrangements.

### 3.1.2.2 Internal Interfaces

The WTPV must internally interface with the OBM RAs.

### 3.1.3 Design and Construction

#### 3.1.3.1 Size

The WTPV must be sized such that it is capable of securely stowing, without disassembly the largest of the following OBMs, or motors of a similar size, identified for intended stowage in the WTPV:

- a. 30 Horsepower (HP) Multi-Fuel Engine (MFE) Evinrude and
- b. 25 HP Yamaha.

#### 3.1.3.2 Fit

The WTPV must fit on its MA within the Small Boat Stowage (SBS) well (as defined by the Sketches found at Attachment 1 to the System Requirements Document) under the SBS Well hatches, leaving sufficient room for:

- a. A second WTPV and associated Mounting Arrangements;
- b. Removal and replacement, without disassembly of either of the OBMs; and
- c. Stowage of the two (2) deflated six (6) or ten (10) man small boats and four (4) filled 18 US Gallon fuel bladders.

#### 3.1.3.3 Opening with Opening Cover

##### 3.1.3.3.1 Opening and Opening Cover Size

The WTPV must have a watertight and pressure tight opening with cover through which either of the OBMs may be removed or replaced.

##### 3.1.3.3.2 Opening Cover Location

The location of this opening with cover must be on the end of the WTPV which faces the small boat and fuel bladder stowage space in the SBS well.

##### 3.1.3.3.3 Opening Cover Interference

When opened, the WTPV's opening cover must not impede the removal of an OBM and its associated RA from the opened WTPV.

##### 3.1.3.3.4 Opening Cover Securing Arrangements - Location

The WTPV Opening Cover Securing Arrangements must be located such that they are easily accessible from the working end of the SBS well.

##### 3.1.3.3.5 Opening Cover Securing Arrangements-Size

The WTPV Opening Cover Securing Arrangements must be sized such that they can be operated by personnel with or without gloves.

#### 3.1.3.4 Pressure Equalizing

The WTPV must have an easily accessible pressure equalizing capability

#### 3.1.3.5 Vacuum Test Capability

The WTPV must have an easily assessable vacuum test capability.

#### 3.1.3.6 Drainage

The WTPV must have an easily accessible capability to drain any accumulated water.

### 3.1.4 Material

#### 3.1.4.1 Material Safety

The WTPV must be comprised of non-hazardous materials.

#### 3.1.4.2 Material Suitability

The WTPV must be comprised of materials that are suitable for use in the submerged marine environment.

#### 3.1.4.3 Material Life

The WTPV must have a material life of at least nine (9) years.

#### 3.1.4.4 Colour

The WTPV must have a black non-reflective colour.

### 3.1.5 Environmental

#### 3.1.5.1 Temperature

The WTPV must operate in temperatures between -40 degrees C to + 48 degrees C.

#### 3.1.5.2 Design Pressure

The WTPV must, as an empty unit, be capable of withstanding a seawater design pressure of 35 Bar.

#### 3.1.5.3 Fatigue Limits

The WTPV must survive at least 15 cycles to 35 Bar.

#### 3.1.5.4 Not Used

#### 3.1.5.5 Vacuum

The WTPV must be able to hold a 90mbar vacuum for 15 minutes.

#### 3.1.5.6 Shock

The WTPV, when containing either OBM, and when mounted in the WTPV Mounting Arrangements must meet the Grade 3 shock resistance requirements

#### 3.1.5.7 Vibration

The WTPV, when containing either OBM, and when mounted in the WTPV Mounting Arrangements must be vibration resistant and meet the vibration resistance requirements

### 3.1.6 Maintenance

WTPV maintenance must be defined.

#### 3.1.6.1 Preventive Maintenance

WTPV Preventive Maintenance must consist of those Preventive Maintenance Routines that can be carried out on a periodic basis by ship's staff. These routines must include, for any preventive maintenance activities impacting the water/pressure tight integrity for the WTPV, a vacuum test on completion of these preventive maintenance activities.

### 3.2 Out Board Motor (OBM) Restraining Arrangements (RA)

#### 3.2.1 Function

The function of the OBM RA are to secure and protect the OBMs within the WTPV and minimize any noise and vibration resulting from contact between the OBM and WTPV due to motion of the WTPV.

#### 3.2.2 Interfaces

### 3.2.2.1 External Interfaces to the WTPV

The OBM RA must be externally interfaced to the WTPV.

### 3.2.2.2 External Interfaces to the OBM

The OBM RA must be externally interfaced to the OBM.

### 3.2.2.3 Securing Arrangements

The OBM RA must be tethered to the WTPV such that when being removed or replaced, they are not lost during this evolution.

## 3.2.3 Design and Construction

### 3.2.3.1 Size

The OBM RA must accommodate, within the WTPV, the following out board motors (OBM):

- a. 30 HP MFE Evinrude; and
- b. 25 HP Yamaha

Separate sets of OBM RA are acceptable.

### 3.2.3.2 Removal/Replacement

The OBM RA must be easily removed from or replaced on the OBM by not more than two people.

### 3.2.3.3 Noise Level Removal/Replacement OBM

The OBM RA must minimize the noise level associated with the removal/replacement of OBM from the WTPV.

## 3.2.4 Material

### 3.2.4.1 Material Safety

The OBM RA must be comprised of non-hazardous material.

### 3.2.4.2 Material Permeability

The OBM RA material must be non-permeable.

### 3.2.4.3 Material Susceptibility

The OBM RA material must not lose their integrity or mechanical capability when contact with salt water, grease or fuel.

### 3.2.4.4 Material Life

The OBM RA material must have a life of at least nine (9) years.

### 3.2.4.5 Colour

The OBM RA material must have a black, non-reflective colour.

## 3.2.5 Environmental

### 3.2.5.1 Operating Temperature

The OBM RA must operate in temperatures between -40 degrees C to + 48 degrees C.

### 3.2.5.2 Shock

The OBM RA, when containing either OBM, and when secured in the WTPV, with the WTPV in the WTPV Mounting Arrangements, must meet the Grade 3 shock resistance

### 3.2.5.3 Vibration

The OBM RA, when containing either OBM, and when secured in the WTPV, with the WTPV in the WTPV Mounting Arrangements, must be vibration resistant and meet the vibration resistance requirements

### 3.2.6 Maintenance

OMB RA maintenance requirements, if any, must be defined.

#### 3.2.6.1 Preventive Maintenance

OMB RA Preventive Maintenance must consist of those Preventive Maintenance Routines that can be carried out on a periodic basis by ship's staff.

### 3.3 WTPV Mounting Arrangements (MA)

#### 3.3.1 Function

The function of the WTPV MA is to secure the WTPV to the submarine within the SBS well.

#### 3.3.2 Interfaces

##### 3.3.2.1 External Interface to the WTPV

The WTPV MA must externally interface with the WTPV.

##### 3.3.2.2 External Interface to the Submarine

The WTPV MA must be externally interface with the submarine via the submarine's existing WTPV mounting plates.

#### 3.3.3 Design and Construction

##### 3.3.3.1 Size

A WTPV MA must be sized such that it is capable of securely mounting one (1) WTPV.

##### 3.3.3.2 Not Used

##### 3.3.3.3 Mounting/Dismounting

The WTPV MA must easily disassemble and reassemble to permit mounting and dismounting of WTPV System.

##### 3.3.3.4 WTPV/MA Interface Security

The WTPV's MA/WTPV Interface must hold the WTPV System securely in place independent of speed and depth.

##### 3.3.3.5 WTPV/MA Interface Noise and Vibration

The WTPV's MA/WTPV Interface must prevent noise and vibration between the WTPV and the WTPV MAs independent of speed and depth.

#### 3.3.4 Material

##### 3.3.4.1 Material Safety

The WTPV MA must be comprised of non-hazardous material.

##### 3.3.4.2 Material Suitability

The WTPV MA must be comprised of materials that are suitable for use in the submerged marine environment.

##### 3.3.4.3 Material Life

The WTPV MA must have a Material Life of at least nine (9) years.

##### 3.3.4.4 Colour

The WTPV MA must have a black and non-reflective colour.

### 3.3.5 Environmental

#### 3.3.5.1 Operating Temperature

The WTPV MA must operate in temperatures between -40 degrees C to + 48 degrees C.

#### 3.3.5.2 Shock

The WTPV MA, with a WTPV mounted containing either OBM must meet the Grade 3 shock resistance requirements

#### 3.3.5.3 Vibration

The WTPV MA, with a WTPV mounted containing either OBM, must be vibration resistant and meet the vibration resistance requirements

### 3.3.6 Maintenance

WTPV MA maintenance must be defined.

#### 3.3.6.1 Preventive Maintenance

WTPV MA Preventive Maintenance must consist of those Preventive Maintenance Routines that can be carried out on a periodic basis by ship's staff

### 3.3.7 Overall System Constraints

- a. The WTPV system must weigh 1000 kg or less. The WTPV system includes two WTPVs, the MAs and RAs. The OBM, boats and fuel bladders are excluded from the calculation of the weight.
- b. The WTPV system must be neutrally buoyant within +/- 200 kg of the weight of the WTPV system.

## 4. Applicability of the trade agreement(s) to the procurement

This procurement is subject to the following trade agreement:

- o Canadian Free Trade Agreement (CFTA)

## 5. Justification for the Pre-Identified Supplier

A Request for Proposal (RFP) was posted on buyandsell.gc.ca from 2018/07/03 to 2018/09/14 for which Canada received one response to build a Watertight Pressure Vessel system. The response identified a requirement deficiency in the original solicitation that is now captured above in the overall constraints at section 3.3.7. After evaluating the sole bid and requesting information on additional capabilities of the bidder, it is Canada's understanding that the proposed bidder is able to address all constraints of the requirement and is the only bidder that can meet the requirement. However because the requirements have changed, this ACAN is being posted with the belief that only one person is capable of performing the contract as allowed for under the Government Contract Regulations exceptions.

## 6. Government Contracts Regulations Exception(s)

The following exception to the *Government Contracts Regulations* is invoked for this procurement under subsection 6(d)

## 7. Exclusions and/or Limited Tendering Reasons

The following exclusion and/or limited tendering reasons are invoked under the Canadian Free Trade Agreement (CFTA) – Article 513

## 8. Period of the proposed contract or delivery date

The proposed contract is estimated for a period of 2 years, from December 1, 2018 to December 1 2020.

**9. Cost estimate of the proposed contract**

The estimated value of the contract is between \$2,000,000.00 and \$2,750,000.00, (GST/HST extra).

**10. Name and address of the pre-identified supplier**

Canadian Maritime Engineering Limited  
90 Thornhill Drive  
Dartmouth, NS B3B 1S3

**11. Suppliers' right to submit a statement of capabilities**

Suppliers who consider themselves fully qualified and available to provide the goods, services or construction services described in the ACAN may submit a statement of capabilities in writing to the contact person identified in this notice on or before the closing date of this notice. The statement of capabilities must clearly demonstrate how the supplier meets the advertised requirements.

**15. Closing date for a submission of a statement of capabilities**

The closing date and time for accepting statements of capabilities is December 7, 2018

**16. Inquiries and submission of statements of capabilities**

Inquiries and statements of capabilities are to be directed to:  
Ryan Gigliotti  
455 boulevard de la carrière  
Gatineau, Québec  
K1A 0S5  
Telephone: 819-939-5697  
E-mail: [ryan.gigliotti@tpsgc-pwgsc.gc.ca](mailto:ryan.gigliotti@tpsgc-pwgsc.gc.ca)