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K1A 0S5

Bid Fax: (819) 997-9776

LETTER OF INTEREST

LETTRE D'INTÉRÊT

Comments - Commentaires

Vendor/Firm Name and Address

Raison sociale et adresse du

fournisseur/de l'entrepreneur

Issuing Office - Bureau de distribution

Armoured Vehicles Support/Soutien des véhicules blindés

11 Laurier St./11, rue Laurier

Place du Portage Phase III 6C1

Gatineau

Québec

K1A 0S5

Title - Sujet Next Generation Fighting Vehicle	
Solicitation No. - N° de l'invitation W6399-19KH53/A	Date 2019-07-17
Client Reference No. - N° de référence du client W6399-19KH53	GETS Ref. No. - N° de réf. de SEAG PW-\$\$BL-319-27400
File No. - N° de dossier 319bl.W6399-19KH53	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2019-08-23	
Time Zone Fuseau horaire Eastern Daylight Saving Time EDT	
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Ferron, Nathalie	Buyer Id - Id de l'acheteur 319bl
Telephone No. - N° de téléphone (819) 420-0840 ()	FAX No. - N° de FAX () -
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: N/A	

Instructions: See Herein

Instructions: Voir aux présentes

Delivery Required - Livraison exigée	Delivery Offered - Livraison proposée
Vendor/Firm Name and Address Raison sociale et adresse du fournisseur/de l'entrepreneur	
Telephone No. - N° de téléphone Facsimile No. - N° de télécopieur	
Name and title of person authorized to sign on behalf of Vendor/Firm (type or print) Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)	
Signature	Date



Next Generation Fighting Vehicle (NGFV) Project Request for Information (RFI)

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Annex C – Financial Information
Annex D – Application to Attend NGFV Vehicle Demonstration



Next Generation Fighting Vehicle (NGFV) project Request for Information (RFI)

1.0 Purpose and Nature of the Request for information (RFI)

1.1. Public Services and Procurement Canada (PSPC) is requesting Industry feedback regarding the Next Generation Fighting Vehicle (NGFV) project for the Department of National Defence (DND) for use by the Canadian Armed Forces (CAF).

1.2. The objectives of this RFI are to:

- a) Provide information to Industry about the NGFV requirements;
- b) Seek initial input from Industry on potential options and availability of technology to meet NGFV project requirements including those related to operational requirements, sustainment, cost, Industrial and Technological Benefits (ITB) policy and schedule;
- c) This RFI step one of the Industry Engagement process. The intent, following receipt of RFI responses from Industry, is to continue interactive engagement with Industry throughout the project phases leading to the RFP in accordance with the Defence Procurement Strategy.

1.3. 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 GC, 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 a contract for the work described herein.

1.4. Although the information collected may be provided as commercial-in-confidence (and, if identified as such, will be treated accordingly by Canada), Canada may use the information to assist in drafting performance specifications (which are subject to change) and for budgetary purposes.

1.5. Respondents are encouraged to identify, in the information they share with Canada, any information that they feel is proprietary, third party or personal information. Please note that Canada may be obligated by law (e.g. in response to a request under the Access of Information and Privacy Act) to disclose proprietary or commercially-sensitive information concerning a respondent (for more information: <http://laws-lois.justice.gc.ca/eng/acts/a-1/>).

1.6. Respondents are asked to identify if their response, or any part of their response, is subject to the Controlled Goods Regulations.

1.7. 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.

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

1.9. The RFI closing date published herein is not the deadline for comments or input. Comments and input will be accepted any time up to the time when/if a follow-on solicitation is published

2.0 Background Information

2.1 The Department of National Defence (DND) intends to procure approximately 55 to 75 Next Generation Fighting Vehicles (NGFV) for use by the Canadian Armed Forces (CAF) worldwide.

2.2 The NGFVs are required to provide critical integral tactical maneuver to Canadian Armed Forces deployed out of area in support of Counter Terrorism and High Value Task operations. The key mission of the NGFV is Direct Action (DA). The DA mission is to transport personnel and equipment into operational zones including directly onto objectives and to support the exit of other assets. To accomplish this mission, the NGFV must have a high level of protection and robustness. The NGFV must have the ability for the crew to engage various adversaries without dismounting from the protection of the vehicle, and also be protected from kinetic attacks from adversaries. The NGFV must be able to travel cross country in order to approach and depart from the objective, and also have the capability to adjust courses of action when approaching or departing from an objective.

2.3 The NGFV will replace the existing fleet of High Mobility Multipurpose Wheeled Vehicles (HMMWV). This fleet will soon exceed its life expectancy and is currently unable to address the capability gaps of the CAF.

3.0 Potential Work Scope and Constraints

3.1 Please refer to Annex A for High Level Mandatory Requirements (HLMR) and Concept of Support.

3.2 Please refer to Annex B for Application of the Industrial and Technological Benefits (ITB) Policy.

4.0 Legislation, Trade Agreements, and Government Policies

4.1 The following is indicative of some of the legislation and government policies that could impact any follow-on solicitation(s):

- a) A National Security Exception may apply.
- b) [Canadian Free Trade Agreement \(CFTA\)](#) may apply.



- c) North American Free Trade Agreement (NAFTA) and World Trade Organization – Agreements on Government Procurement (WTO-AGP) do not apply.
- d) Industrial and Technological Benefits (ITB) Policy including Value Proposition will apply.
- e) Defence Production Act will apply.
- f) Controlled Goods Program (CGP) may apply.
- g) Federal Contractors Program for Employment Equity (FCP-EE) will apply.

4.2 The above is not an exhaustive list.

5.0 Schedule

5.1 In providing responses, the following schedule should be utilized as a baseline:

- a) RFI Responses Due: See the RFI cover page (Part 1 of 2 – Page 1 of 1);
- b) Vehicle Demonstration: between 21 October to 1 November 2019 (Tentative);
- c) Possible other engagement sessions with Industry may include a RFI, One-on-One sessions, Working Groups sessions and/or Industry Day(s) – during project phases leading to the RFP (Year 2020) ;
- d) RFP Release – Spring 2021;
- e) Contract Award – Industry should assume that contract award will be no earlier than Spring 2022;
- f) Initial Delivery – 2025; and
- g) Final Delivery – 2027.

6.0 Vehicle Demonstration

To augment the information being requested in this RFI, there will be an Industry Vehicle Demonstration to provide an opportunity for DND to view the vehicles and allow industry to present its vehicle in an interactive environment. Participation in this activity is voluntary and non-participation will not prejudice the follow-on procurement. Whether or not any potential supplier is invited to the Vehicle Demonstration, it will not preclude that supplier from participating in any future procurement. The Vehicle Demonstration is simply to solicit feedback from industry with respect to the matters described in this RFI.

6.1 Respondents interested in participating in this specific engagement must complete Annex D and return it the PSPC Contract Authority along with their submission responses no later than the RFI closing date.

6.2 Participation at the Vehicle Demonstration will be limited to five (5) respondents and preference will be given to those vehicles that best meet the High Level Mandatory Requirements (HLMRs) and that are mature and at the highest Technology Readiness Levels (TRLs). Canada reserves the right to invite more than five (5) respondents if it's deemed to be in the best interest of the project.



6.3 The Vehicle Demonstration will allow DND operators to assess the mobility and performance characteristics of the vehicle and allow DND maintainers to examine the maintainability of the vehicle. If the vehicle is equipped with a Remote Weapon System, it would be useful to include it with the vehicle, however, there is no intention to conduct live weapons testing at this stage. The feedback from DND personnel and Industry will assist the Project Team to further define the NGFV performance requirements.

6.4 The Vehicle Demonstration will take place within the period of 21 October to 1 November 2019 (tentative). The Vehicle Demonstration will be held at Canadian Forces Base Petawawa, Ontario. Respondents who wish to be selected for participation in this engagement will do so at their own expense and will not be reimbursed for any of their expenses including but not limited to travel, vehicle shipping, fuel, insurance or damages to the vehicle(s).

6.5 Each of the selected participants will be required to provide up to two (2) vehicles for demonstration on the date assigned by the CAF. Each participant will have one complete day to demonstrate their two (2) vehicles. The schedule and specific details of the demonstration will be provided to the selected participants in advance of the demonstrations. Upon receipt of the RFI responses and completed Annex D, Canada will conduct an assessment of the respondent's conformance to the HLMRs and an invitation to attend the Vehicle Demonstration will be issued to the selected respondents.

6.6 Each vehicle demonstration session will involve representatives of Canada, a fairness monitor and one supplier at a time.

6.7 Any new information provided by Canada during the vehicle demonstrations will be posted on the Government Electronic Tendering System (GETS) for all suppliers.

7.0 Response Preparation Instructions

7.1 This RFI is aimed at engaging industry to refine the CAF requirements and support concepts. Respondents are encouraged to be innovative in their proposed method(s) of capability delivery and support options.

7.2 To facilitate the review of responses to this RFI, Respondents are strongly encouraged to follow the response format described below and to provide requested information if available. As well, Respondents may include any additional information they believe to be relevant to the Project.

7.3 Response Format and Content

- a) Executive Summary: Respondents are requested to provide a high level description of their NGFV solution and their experience with manufacturing and/or sustaining such a capability;
- b) Respondents are requested to respond to the questions in the following Annexes:
 - I. Annex A – High Level Mandatory Requirements (HLMR) and Concept of Support
 - II. Annex B – Application of the Industrial and Technological Benefits (ITB) Policy
 - III. Annex C – Financial Information
 - IV. Annex D – Application to Attend NGFV Vehicle Demonstration, if applicable



- c) Provide the earliest date the Respondent can deliver the first vehicle following a contract award and a schedule for follow on deliveries including any production/delivery constraints.
- d) A point of contact for the Respondent should be included in the package.

8.0 Enquiries and Submission of Responses

8.1 All enquiries and other communications related to this RFI and associated Industry Engagement activities must be directed exclusively to the PSPC Contracting Authority. Since this is not a bid solicitation, Canada will not necessarily respond to enquiries in writing or by circulating answers to all Respondents.

8.2 Respondents are requested to submit their responses to the PSPC Contracting Authority identified below, preferably via e-mail.

Nathalie Ferron
Public Services and Procurement Canada
11 Laurier Street, Gatineau, QC K1A 0S5
Place du Portage, Phase III, 9C2-14/15
Telephone: 819-420-0840
Email: nathalie.ferron@tpsgc-pwgsc.gc.ca

9.0 Changes to the RFI and the Closing Date

9.1 Changes to this RFI may occur and will be advertised on GETS. Canada asks Respondents to visit Buyandsell.gc.ca regularly to check for changes, if any.

9.2 Responses to this RFI are to be submitted to the PSPC Contracting Authority identified above, on or before the time and date indicated on the cover page of the RFI document.

10.0 Clarification of Responses

Canada may, in its discretion, contact any Respondents at any time to clarify any aspect of a response.



11.0 Fairness Monitor

11.1 Canada has engaged the services of an organization to act as an independent third party Fairness Monitor (FM) for the NGFV procurement process. The role of the FM is to provide an attestation of assurance on the fairness, openness, and transparency of the monitored activities.

11.2 The Fairness Monitor's duties will include, but will not be limited to:

- a) observing the procurement process;
- b) providing feedback to Canada on fairness issues; and
- c) attesting to the fairness of the procurement process.

11.3 Please note, for the purpose of carrying out its Fairness Monitor related obligations, the Fairness Monitor will be granted access to industry responses and related correspondence received by Canada pursuant to this RFI and may act as an observer at the subsequent follow-up activities.

ANNEX A
HIGH LEVEL MANDATORY REQUIREMENTS (HLMR) AND
CONCEPT OF SUPPORT

1 SCOPE

1.1 Prior to finalizing its requirements, Canada would like to determine what solutions exist to meet their needs for the NGFVs.

1.2 Compliance with High Level Mandatory Requirements.

To assist industry in their assessment if their vehicle can meet the essential requirements of the NGFV, the following table details the High Level Mandatory Requirements (HLMR) that must be met.

- 1.2.1 Under the *Compliant* column the Respondents are to indicate if their product is able to meet the requirement, either yes or no.
- 1.2.2 Under the *Discuss Compliance* the Respondents are requested to indicate how their proposed vehicle can meet the HLMRs. If the requirement is exceeded, the Respondent should indicate to what level. If the requirement cannot be met, the Respondent should indicate to what level or degree its product could comply. DND is open to suggestions on alternative requirements.
- 1.2.3 Under the *Applicable Reference* the Respondent is to indicate references, such as test reports, to show the proposed vehicle meets the stated *Requirements*. Where possible, Respondents are requested to provide reference material to support claims.

TABLE 1 – HIGH LEVEL MANDATORY REQUIREMENTS

Number	Description	<i>Compliant?</i> Yes/No	<i>Discuss Compliance</i>	<i>Applicable Reference</i>
HLMR 1 – Survivability	The ability to enhance crew protection in the crew capsule from STANAG 4569 – Protection Levels for Occupants of Armoured Vehicles, level 1 against ballistic threats to Level 3 while achieving a base of STANAG 4569 level 2a/2b against blast.			
HLMR 2 – Lethality	The ability to mount a Remote Weapon Station (RWS) on the roof of the armoured capsule. Provide a scalable solution for a fully stabilized remote weapon station and vehicle mount that is able to accept a variety of weapon systems. The range of weapon configurations must encompass systems capable of achieving an			

Number	Description	Compliant? Yes/No	Discuss Compliance	Applicable Reference
	<p>effective range against armoured vehicles of 600m to at least 2000m at the lightest configuration possible. Armoured vehicles are those likely possessed by near peer forces with ballistic protection levels at STANAG 4569 level 3.</p> <p>The RWS must have an optical system compatible with the ballistic capabilities of the weapon system and be able to operate in day/night and all weather conditions while static and moving.</p>			
HLMR 3 – Mobility	<p>The NGFV must operate at a GVWR in a wide range of geographical regions around the globe, while traversing diverse terrain. This terrain shall include complex urban terrain, cross-country terrain as well as paved and unpaved roads.</p> <p>Achieve at least 450 km range on level hard surfaced roads at gross vehicle weight without refuelling.</p> <p>The ability to transport a minimum of 4 personnel in the armoured compartment and simultaneously provide sufficient payload capacity for 3 days of supply for a crew (3000 kg) at STANAG 4569 level 1.</p>			
HLMR 4 – Electrical Architecture	Will have a NATO Generic Vehicle Architecture as per STANAG 4754 in order to integrate multiple electronic sub-systems which are controllable from multifunctional crew display			

Number	Description	Compliant? Yes/No	Discuss Compliance	Applicable Reference
	units. Must provide a minimum of 2 KWs exportable power to power and charge existing equipment while allowing for integration of future electronic sub-systems.			
HLMR 5 – Durability and Sustainability	The NGFV will have the ability to perform its intended function throughout its expected lifecycle in the required range of climatic conditions and geographical terrain without requiring excessive maintenance or repair. The NGFV shall be sustainable throughout its lifecycle.			
HLMR 6 – Transportability	The NGFV must be capable of being transported by road, rail, ship and on the following air platforms: CC-177, CC-130 and sling loadable by CH-147F.			
HLMR 7 – Interoperability	The NGFV must be able to operate on the NATO common fuel and regular commercial diesel. The NGFV will comply with the identified NATO STANAG 4478 Emergency Towing and Recovery Facilities for Land Tactical Vehicles.			
HLMR 8 – Reliability	The proposed NGFV must be currently in service by another NATO nation's military, police force or Australian Defence Forces.			

2 SECURITY

- 2.1 The NGFV Project will involve security issues and a Security Requirements Check List (SRCL) will be submitted with the Request for Proposal. Respondents are requested to provide certifications regarding their capabilities, to include:
- 2.1.1 access to and the capability to store and safeguard Classified information. This will include classified Annexes to the RFP and Contract as well as classified test results.
 - 2.1.2 access to and the ability to store and safeguard Classified assets. This will include GFE crypto controlled items and weapons.
 - 2.1.3 access to and the ability to store and safeguard Controlled Items and information

3 EMPLOYMENT CONCEPT OF NGFV

- 3.1 The NGFV fleet will be used in all operations from responding to a major terrorist attack to participating in the conduct of a major international operation for an extended period of time. Accordingly, the NGFV fleet will provide critical integral tactical maneuver to forces deployed worldwide in support Counter Terrorism and High Value Task Operations. The NGFV fleet will provide high survivability, tactical maneuver, speed, functionality and agility at the lowest weight possible. All operational equipment such as weapon systems, personal protective equipment, tactical radios, low profile antennas and observation devices must be able to be employed without compromising their use to the extent possible. The NGFV fleet shall be able to operate in diverse environments as detailed in this document, while carrying out multiple tasks and roles. The NGFV must be capable of being deployed by a variety of in-service aircraft as specified in the listed HLMRs.
- 3.2 The mission profile requires 10,000km for garrison and training and 5,000km for operations per NGFV per year.
- 3.3 Additional Considerations. The following parameters are to be included in the requirement for the NGFV:
- 3.3.1 Terrain: The NGFV will operate on roads of varying quality ranging from paved highways, dirt trails, and in most cases broken and/or uneven ground.
 - 3.3.2 Environmental: The NGFV is expected to operate in a wide variety of temperatures (-32 C to + 49 C) and climates, from temperate to the extremes found in desert or tropical climates (humidity ranging from 0 to 100 %).
 - 3.3.3 Physical: The NGFV will be operated by personnel who will be experiencing the effects of battle fatigue, therefore it must be capable of continuous operation with minimum breakdown, damage or operator maintenance.
 - 3.3.4 Capacity: The NGFV must have a maximum GVWR of 10,000 Kg and a minimum cargo capacity of 3000 kg.
 - 3.3.5 Integration: The integration of user supplied communication equipment and weapons systems will be required on the NGFV.
 - 3.3.6 Future Growth: The NGFV shall have growth potential to accommodate future technological and system capability improvements in numerous areas such as:

maneuver, firepower/weapon systems, protection/survivability, human systems and communications/sensors.

4 CONCEPT OF SUPPORT

- 4.1 The procurement of the NGFV will include a comprehensive support solution for a minimum of the first two years of the vehicle to its expected life of 15 years. Support solutions request for information is located at Table 2. The feedback from Industry will allow DND to develop support solution options for the NGFV for further industry consultation.
- 4.2 The maintenance and repair of the NGFV will follow the fundamental tenets and level of Combat Service Support (CSS) detailed in the Army sustainment doctrine B-GL-300-004/FP-001. CAF personnel with OEM support, as required, will be responsible to sustain the NGFV fleet in a manner that is similar to the other vehicles within the CAF. Failure reporting will be required during the implementation and operation phases. The Defence Resource Management Information System (DRMIS) will be utilized by CSS personal to document the support activities of the NGFV. The NGFV will be housed in designated infrastructure. Additional support concepts are detailed as follows:
- 4.2.1 Maintenance Support. Operators will conduct operator level maintenance tasks. Maintenance support will be conducted on the NGFV by CAF maintenance personnel for first and second level repairs. Repairs at the third and fourth level will be conducted by the OEM or ISS provider. The OEM may be required to augment CAF personnel for the first and second level repairs on occasion.
- 4.2.2 Supply and Repair Parts Support. The project scope will require that the NGFV be delivered with sufficient spare parts to sustain the vehicle for an initial period of two years. A support solution will include spare parts support for the life of the NGFV. To facilitate support to deployed operations, the support solution will incorporate the Ready Pack concept where an established scale of first and second line spares as well as some consumables be provided in a configuration that will permit rapid deployment to support a fleet of 12 NGFVs for a 30 day period.
- 4.2.3 Special Tools and Test Equipment. It is envisioned that a minimum of three sets of special tools and test equipment will be required for the NGFV fleet.
- 4.2.4 Training. The NGFV operators will require training on the safe operation of the vehicle, including operator maintenance tasks. The maintenance personnel will only require training on the NGFV specific tasks as they will already be qualified on the fundamental technician principles in vehicle mechanics and electrical systems.
- 4.2.5 Technical Publications. Technical publications to support the NGFV will be provided in both Official Languages, English and French.
- 4.2.6 Technical Documentation. Technical documentation on the NGFV will be provided to support the cataloging of the vehicle components necessary to support the vehicle fleet by CAF personnel.
- 4.2.7 Specific Industry Responses to Support Solution. The support solution metrics assesses the function of critical mission systems. A critical system is a system that enables the NGFV to be able to move, observe, fire and communicate at all

times. Table 2 details the information DND is seeking related to support solutions for the NGFV.

TABLE 2 – SUPPORT SOLUTIONS

Number	Description	Industry Response
Support Solution – 1 Scope of Support	<p>A comprehensive support solution that includes the following:</p> <ol style="list-style-type: none"> 1. maintenance and repair support and augmentation to the CAF; 2. repair parts supply and management; 3. engineering technical support; 4. technical document and publication support; 5. operator and maintainer training; 6. technical failure investigations; 7. Field Service Representatives; 8. repair and overhaul; 9. special tools and test equipment; and 10. IT support (Tech data compatibility with DRMIS). 	
Support Solution - 2	As a follow on to the Support Solution 1 answer, what duration (in years after delivery) is Industry willing to provide the support solution for each item?	
Support Solution 3 – Support Infrastructure located in Canada	Is the bidder willing to establish local support and supplier facilities in Canada near the user (two locations in Ontario)?	
Support Solution 4 – Performance Targets on Vehicle System Reliability (metrics to be used)	<p>Is Industry willing to commit to vehicle system reliability metrics as follows, given an average annual vehicle usage of 15,000 kms:</p> <p>Vehicle inherent availability of 95 % (Ao).</p> <p>Vehicle scheduled preventative maintenance shall be less than once every 5,000 kms or twice a year.</p> <p>Maximum operator maintenance duration is 15 minutes per vehicle per</p>	

Number	Description	Industry Response
	<p>day.</p> <p>Mean kms Between Critical Failure (MKBCF) of not less than 4,000 km for the vehicle.</p> <p>Mean Hours Between Critical Failure (MHBCF) for the RWS of not less than 1,500 hours.</p> <p>Is there another metric used to track the reliability you would recommend?</p>	
Support Solution 5 – Performance Targets on Repair Parts Availability, (metrics to be used)	<p>Is Industry willing to commit to availability metrics on the delivery of repair parts as follows:</p> <p>The availability of spares to be delivered to the Supply Depot must be 95 % of demands for critical spares and 90 % for non-critical spares.</p> <p>For spares that are not available at the time of demand, the Mean Time to Deliver Spare Parts (MTTDSP) must not be more than 30 days for critical spares and 45 days for non-critical spares.</p> <p>Is there another metric used to track the delivery of repair parts you would recommend?</p>	
Support Solution 6 – Completion of technical investigations metric.	<p>Is Industry willing to commit to a metric for the completion of technical investigations?</p> <p>What metric would you recommend?</p>	
Support Solution 7 – Completion of NGFV System Modifications metric.	<p>Is Industry willing to commit to a metric for the completion of NGFV system modifications?</p> <p>What metric would you recommend?</p>	
Support Solution 8 – Intellectual Property rights.	<p>Is Industry willing to allow Canada to acquire the rights to the NGFV IP as necessary to support this vehicle in the event that the OEM has decided to end its support to the NGFV?</p>	

ANNEX B

**APPLICATION OF THE INDUSTRIAL AND TECHNOLOGICAL
BENEFITS (ITB) POLICY**

Application of the Industrial and Technological Benefits (ITB) Policy

The Industrial and Technological Benefits (ITB) Policy, including Value Proposition, will apply to the Next Generation Fighting Vehicle (NGFV) project. Engagement through the Request for Information (RFI) will help determine the ITB Policy's application and how Canada could leverage opportunities for economic benefit through this procurement.

The ITB Policy including Value Proposition

The ITB Policy is a powerful investment attraction tool and companies awarded defence procurement contracts are required to undertake business activities in Canada equal to the value of the contract. The ITB Policy encourages companies to establish or grow their presence in Canada, strengthen Canada's supply chains, and develop Canadian industrial capabilities. The goal of the ITB Policy is to support the long-term sustainability and growth of Canada's defence sector, including small and medium-sized enterprises in all regions of the country, to enhance innovation through Research and Development (R&D) in Canada, to support skills development and training, and to increase the export potential of Canadian-based firms. The ITB Policy includes the Value Proposition (VP), which requires bidders to compete on the basis of the economic benefits to Canada associated with its bid. Winning bidders are selected on the basis of price, technical merit and their VP. VP commitments made by the winning bidder become contractual obligations in the ensuing contract.

For more information about the ITB Policy, please visit www.canada.ca/itb.

Key Industrial Capabilities:

To maximize the economic impact that can be leveraged through the VP, Canada will look to use the ITB Policy to motivate defence contractors to invest in [Key Industrial Capabilities](#) (KICs). KICs align with Canada's defence policy, [Strong, Secure, Engaged](#), and the [Innovation and Skills Plan](#) by supporting the development of skills and fostering innovation in Canada's defence sector. The KICs represent areas of emerging technology with the potential for rapid growth and significant opportunities, established capabilities where Canada is globally competitive, and areas where domestic capacity is essential to national security.

Based on initial analysis of the NGFV project, this procurement encompasses the KICs of **Armour, Ground Vehicle Solutions, Electro-Optical/Infrared (EO/IR) and In-Service-Support**, where Canada has world leading capabilities. Canada will be seeking to motivate high value economic opportunities and partnerships to support the growth of Canada's defence sector, as well as enhance supply chain participation and skills development and training for Canadian industry.

The definitions for the relevant KICs for this project are:

Armour

Metal, ceramic, composite, or other material solutions used for both vehicle and individual soldier protection. This includes both the development and manufacture of underlying materials, and the design and manufacture of armour solutions for specific military, security, and law enforcement applications.

Ground Vehicle Solutions

Design, engineering, advanced manufacturing, integration, and testing of sophisticated combat and combat support vehicles.

Electro-Optical / Infrared (EO/IR) Systems

Design, manufacture and integration of electro-optical and infrared systems for surveillance, reconnaissance, night vision, and targeting. This category also includes

components and assemblies that significantly drive system capability, as well as software that enhances system performance or contributes to superior exploitation of collected sensor information. Applications for these systems are either military or civil, and feature in multiple media, including airborne platforms, satellites, ground vehicles, ships and submarines, or in fixed infrastructure.

In-Service Support

This represents a set of capabilities needed to operate and sustain a range of military platforms and systems operating in all domains across their lifespans. In this context, the phrase "operate and sustain" includes a wide array of activities, including maintenance, repair and overhaul; diagnostic, prognostic and health management; spares and supply chain management; configuration management; system and software modification and upgrade for both capability enhancement and life extension; and overall product support integration (PSI).

NGFV ITB/VP Industry Engagement Questions

Defence Sector:

The ITB Policy seeks to promote economic development and long-term sustainment of Canadian businesses engaged in the manufacturing and delivery of products and services used in government defence and security applications.

1. Based on the high level requirements put forward by the Department of National Defence, describe what Direct Work activities your company would foresee undertaking in Canada for the production and sustainment of the NGFV fleet?
 - a. What percentage of the Direct Work could be completed in Canada in the KICs identified above?

Supplier Development:

The ITB Policy seeks to improve the competitiveness of Canadian industry by encouraging Canadian industrial participation and the scaling up of Canadian companies including small and medium-sized businesses (SMB).

2. The ITB Policy requires that at least 15 percent of the contractor's ITB obligation (equal to the value of the contract) be represented by work with Canadian SMB with less than 250 employees. To what extent can you commit to a SMB requirement of over 15 percent in order to nurture the development of Canadian SMB within the defence sector (includes both direct work on this procurement and work in other business areas)?
3. What new supply chain opportunities could be made available to Canadian suppliers within the KICs identified above? For the supplier development opportunities identified, please specify the Direct and Indirect activities that could be performed with Canadian SMBs?

Skills Development and Training:

The ITB Policy fosters the development and sustainment of a diverse, talented, and innovative Canadian workforce through access to training, education, opportunities and programs.

4. What types of Skills Development and Training investments would produce the maximum benefit for Canadians (defence or commercial sector)?

- a. Examples:
 - i. Work integrated learning programs (e.g., co-operative education; work placements);
 - ii. Apprenticeship programs;
 - iii. A new or existing skills development program at or through a post-secondary institution;
 - iv. Support for security certifications (e.g.: Top Secret, ITAR) or cybersecurity compliance certifications for Canadian companies, especially small and medium-sized businesses;
- b. What Skills Development and Training opportunities are available in the KICs identified above?

Research and Development (R&D):

The ITB Policy promotes scientific investigation that explores the development of new goods and services, new inputs into production, new methods of producing goods and services, or new ways of operating and managing organizations.

- 5. What Direct or Indirect R&D investments could Canada motivate bidders to make as a result of this procurement?
- 6. Is there potential to develop research partnerships with Canadian post-secondary institutions, publicly-funded research institutions or Canadian companies (such as consortia or centres of excellence)? If so, what research areas might your company pursue?
 - a. If not, what other research or development partnerships could be formed to support technology development in the KICs identified above?
- 7. What should the minimum R&D requirement be (as a percentage of anticipated bid price) in order to motivate bidders to invest in high-value innovation within Canada?
 - a. Please identify to what extent R&D investments could be performed in KICs identified above?
- 8. To what extent are you able to support the licencing or transfer of IP to Canada related to your platform?

Export:

The ITB Policy promotes the ability of Canadian companies, including SMBs, to successfully tap into export markets, thereby increasing their productivity, and competitiveness in the global market.

- 9. Please describe any export opportunities from Canada directly related to this procurement.
 - a. To what extent do export opportunities exist in the KICs identified above?
- 10. Is it feasible to secure sufficient intellectual property rights and an exclusive global product mandate to export from your Canadian-based operations, including subsidiaries and supply chain partners?
- 11. Please describe any other high value export opportunities from Canada, whether commercial or defence sector, which could be leveraged as a result of this procurement.

Other questions:

12. Are there other relevant KICs which align with the work to be conducted for the NGFV project? If yes, please indicate which KICs should be considered and why. As part of your response, please describe how the proposed KICs would enhance the opportunities that could be leveraged through the Value Proposition for Canadian industry.
13. Comparatively to price and technical merit, Value Proposition typically has a minimum weighting of 10% of the overall bid evaluation. What is your view on the weighting of the Value Proposition for the NGFV project?
14. Within the Value Proposition, what are your recommended minimum percentages of weighting for each of the Value Proposition pillars (i.e. Defence Sector, Supplier Development, Skills and Training, R&D, and Exports)?

Please provide your written feedback to these questions and any other comments regarding Industrial and Technological Benefits/Value Proposition to the PSPC Contracting Authority by the RFI deadline.

ANNEX C
FINANCIAL INFORMATION

1 FINANCIAL INFORMATION

1.1 The Government of Canada requires costing data to support the procurement process. Respondents are requested to provide ROM costing data on the list of equipment and deliverables details below. To allow Canada to evaluate the financial information, respondents are encouraged to identify the risk factors that were taken into account in the development of their costing information.

1.2 NGFV including RWS - Quantity 55 to 75

1.3 Integrated Logistics Support comprising of:

- 1.3.1 Initial Training;
- 1.3.2 Initial Provisioning;
- 1.3.3 Two (2) years spares procurement;
- 1.3.4 Ready pack of first and second line spares for 30 days for 12 NGFVs;
- 1.3.5 Special tools and test equipment (three (3) sets)
- 1.3.6 Technical manuals (operation, maintenance, illustrated parts, installation instructions for kitting etc.)

1.4 In-Service Support (estimated annual costs and/or labour rates)

- 1.4.1 Configuration Management
- 1.4.2 Management and Update of Technical Data
- 1.4.3 Package/Publications/Service Bulletins
- 1.4.4 Spare Parts Re-Supply
- 1.4.5 Repair and Overhaul of Major Assemblies
- 1.4.6 Mid-Life Repair and Overhaul of Vehicle
- 1.4.7 Engineering Support for upgrades, integration of new GFE and rectification of obsolescence issues

1.5 Optional In-Service Support

- 1.5.1 Field Service Representative x 1 – Part-Time at CFB Petawawa
- 1.5.2 Field Service Representative x 1 – Two (2) months per year out of country
- 1.5.3 Optional equipment availability:
 - 1.5.3.1 Air compressor
 - 1.5.3.2 Crew heater
 - 1.5.3.3 Snorkel kit
 - 1.5.3.4 Cargo netting
 - 1.5.3.5 Vehicle storage tarp
 - 1.5.3.6 Vehicle tow bar
 - 1.5.3.7 Vehicle tow rope

2 OPTION TO LEASE

2.1 In support of DND's analysis of the options for the NGFV procurement, the option of leasing as opposed to a traditional procurement is to be examined. Industry feedback on the leasing arrangement being requested is to include the cost for leasing arrangement to include the entire fleet of 55 to 75 NGFV and the associated In-Service Support as described above on an annual basis for the period of 15 years. Any limitations or restrictions associated with a leasing arrangement is to be provided.

ANNEX D
APPLICATION TO ATTEND NGFV VEHICLE DEMONSTRATION

APPLICATION TO ATTEND NEXT GENERATION FIGHTING VEHICLE DEMONSTRATION

All selected participants will attend at their own expense. No reimbursement of expenses will be provided from Canada.

Responses to this Annex must be received no later than the RFI closing date.

Responses to this Annex must be certified by an authorized representative of the company.

Responses will be verified by Director Special Forces Requirements prior to final selection of the respondent for participation.

Requirements

- 1 Available to attend at the participant's expense within the period of 21 October to 1 November 2019 (tentative) at CFB Petawawa, Ontario. The actual duration by each Industry participant is anticipated to be one day.
- 2 Able to provide up to two (2) fully functional operating vehicles.
 - 2.1 Vehicles must operate using diesel fuel.
 - 2.2 Vehicles must have a minimum range of 450 km on internal fuel, operating on level hard surfaced roads at gross vehicle weight without refuelling.
 - 2.3 Vehicles must demonstrate their off-road capability include complex urban terrain, cross-country terrain as well as paved and unpaved roads.
- 3 Able to demonstrate the Remote Weapons System if available.
 - 3.1 Although there is no requirement to bring the weapon system as there will not be any live fire demonstration, participants must be prepared to discuss their proposed weapons systems that will be integrated with their RWS and provide relevant performance and technical specifications.
 - 3.2 The RWS must have an optical system compatible with the ballistic capabilities of the weapon system and be able to operate in day/night and all weather conditions while static and moving.
- 4 Able to demonstrate a mock up communications equipment and antenna brackets.
- 5 Able to be loaded with a minimum of four personnel wearing full fighting equipment and all mission essential equipment.
- 6 Able to be serviced and repaired with a minimum of effort and time.
 - 6.1 Participants can bring a small supply of consumables and basic tooling to maintain their vehicles.
- 7 Please note that Canadian Armed Forces personnel will want to be permitted the opportunity to operate the vehicles with limited familiarization training from the participant.
 - 7.1 Participant personnel will be permitted in the vehicle whenever the vehicle is moving.

Certified by an authorized representative of the Company

Name	Title	Signature	Date
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Contact Person

Please provide the name, title, phone number, e-mail address of the Respondent representative to contact to finalize the logistics for the demonstration.

Company: _____

Representative Name: _____

Title: _____

Phone Number: _____

E-mail Address: _____