

## **Advance Contract Award Notice**

**ACAN 14-22063**

### **Armoured Vehicle Protection Systems Support for SMT Program Roll-Out**

*An Advance Contract Award Notice (ACAN) allows departments and agencies to post a notice, for no less than fifteen calendar days, indicating to the supplier community that it intends to award a good, service or construction contract to a pre-identified contractor. If no other supplier submits, on or before the closing date, a statement of capabilities that meets the requirements set out in the ACAN, the competitive requirements of the government's contracting policy have been met. Following notification to suppliers not successful in demonstrating that their statement of capabilities meets the requirements set out in the ACAN, the contract may then be awarded using the Treasury Board's electronic bidding authorities.*

*If other potential suppliers submit statements of capabilities during the fifteen calendar day posting period, and meet the requirements set out in the ACAN, the department or agency must proceed to a full tendering process on either the government's electronic tendering service or through traditional means, in order to award the contract.*

*Suppliers who consider themselves fully qualified and available to provide the services/goods described herein, 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.*

**Closing date: 17:00 Eastern Standard Time, December 3, 2014**

**Please submit a statement of capabilities to:**

**Jesse Arsenault  
Procurement Officer  
1200 Montreal Road, M-22 Room 100  
Phone: (613) 993-0569 Fax: (613) 993-6867  
[Jesse.Arsenault@nrc-cnrc.gc.ca](mailto:Jesse.Arsenault@nrc-cnrc.gc.ca)**

## **1. Definition of requirements and expected results**

### **Background**

The National Research Council Canada (NRC) is an agency of the Government of Canada that has a mandate to pursue scientific research, and to conduct projects that develop and apply new knowledge relating to that scientific research.

The last decade has seen an increase in the requirement for a high level of protection both for Armored Vehicles (AV) and personnel. This requirement has led to an expansion in the number of companies competing for market share. The trend now, both domestically and internationally, is to reduce the number of deployed troops. Although there will still be a market for both AV and personal protection, the market will become increasingly competitive as the number and size of procurements are reduced. One factor that will increase a company's competitiveness is having a product that effectively incorporates advanced materials technology.

NRC's Security Materials Technology (SMT) program, administered by the NRC Security and Disruptive Technology (SDT) portfolio, will integrate NRC's capabilities with those of its key defence science partner, DRDC, and its other partners across the security materials value chain to develop, demonstrate and transfer to Canadian industry transformational materials, structural concepts and manufacturing technologies which will substantially improve the performance-to-weight ratio (mass efficiency) of AV protection systems. Work to be completed in the first full year of the SMT program includes, among others, the development of an armoured vehicle technology roadmap, the definition of scope and structure for short and long-term projects, the execution of defined projects, an assessment of the feasibility of developing a third-party, government-sanctioned facility to assist government and industry in the maturation of armour products, and the development of technical terms of reference for the SMT program advisory group.

### **Objectives**

To obtain expert advice and consulting services to define an armoured vehicle technology roadmap, define a range of projects that will advance the state of the art of armour for vehicles, define the terms of reference for a Program Advisory Group in a manner that optimizes collaboration among individuals, and perform other similar tasks as specified.

### **Description of Work**

The contractor is expected to provide deliverables and support to NRC staff in the following SMT program activities:

- A. Armoured Vehicle Technology Roadmap. Make use of the background in the design and employment of armoured vehicles coupled with a knowledge and understanding of survivability concepts and technologies to guide the development of the roadmap culminating in a concrete plan for the development of vehicle armour products. A draft plan(deliverable) is to be produced within six months that identifies gaps between the required future and current capabilities and identifies the development of a technology demonstrator with the SMT program partners.
- B. Short Term Projects. Following on from the identification of partners and clients for short term projects, assist NRC staff in the definition of projects specifically regarding

scope, time and cost. This will require the consultant to build upon his knowledge of NRC and industry capabilities and defence and security requirements (support).

- C. Project Work. Bring his military background to the team to develop requirement documents, product specifications and project and test plans. This includes a project under definition with a client in the area of transparent vehicle armour (support).
- D. Long Term Projects. Develop the project scope and assist in the structuring of long-term, multi-client projects in the field of armour for vehicles. A minimum of two concept projects will be defined (deliverables).
- E. "Technical" Consultant to Project Staff. The consultant will leverage his military and industry expertise to provide guidance to the project staff to focus the short and long term work towards the delivery of products suited for the market (support).
- F. Infrastructure for Ballistic and Blast Testing. Assess the feasibility of developing a third party, government sanctioned facility to assist both government and industry in the maturation of armour products. If approved, produce a plan to realize the facility taking into account existing infrastructure (deliverable).
- G. Program Advisory Group. (i) Act as Program Advisory Group (PAG) Technical Leader by producing the Technical Terms of Reference for the group, including identification of the number of members and observers, organizations that need to be represented, individuals that need to be involved, and ways to optimize collaboration among participants (deliverable). (ii) Support DRDC and NRC staff when they finalize the PAG Terms of Reference, and when they set up appropriate administrative and communication processes to establish the PAG. Assist in the organization and conduct of the initial PAG meeting (support).
- H. Communications. Collaborate with NRC and DRDC staff to develop and deliver the client and partner outreach strategy (support).

## **2. Time Frame**

It is expected that the work will be performed between December 8, 2014 and September 21, 2015.

## **3. Estimated contract value**

\$57,901.00

## **4. Name and address of the proposed contractor:**

Alan Bolster Consulting  
35 Wedgewood Cres.  
Gloucester, ON  
K1B 4B5

## 5. Rationale for Contract Award:

Pursuant to the *Government Contracts Regulations of the Financial Administration Act*, the contract is being awarded because it has been determined that only one person is capable of performing the contract.

NRC requires the services of a highly qualified and respected contractor with a comprehensive, current understanding of DND's requirements for armoured vehicle protection systems, DRDC's R&D capabilities and programs in armoured vehicle technology development, and the manufacturing and technology development capabilities of manufacturers in Canada who supply armoured vehicle systems and components and who can potentially benefit from technology developed in the SMT program. To ensure this, the contractor must have the following essential qualifications:

- A. at least 10 years of experience working in DND on armoured vehicle (AV) protection systems;
- B. extensive experience in weapon system development to defeat AV protection systems;
- C. extensive experience collaborating with DRDC in the development and fielding of armour systems for DND's heavy armoured vehicle fleet; and
- D. at least 2 years of experience in the last 10 years as the individual responsible for defining DND's requirements for armoured fighting vehicles.

Mr. Bolster has over 20 years experience working on armoured vehicles in DND's Directorate of Land Requirements (DLR), the DND directorate that is responsible for the development and definition of all weapon system requirements for the army. For 9 years (1991-2000) Mr. Bolster was the Army's Subject Matter Expert on large calibre munitions to defeat armour and protection for heavy tracked vehicles including tanks. He has worked continually with DRDC on lethality and protection projects from 1991-2000, and he worked with DRDC for a further 8 years (2003-2011) on vehicle survivability projects and programs. He was also the Section Head of DLR 3 (DLR's Armoured Fighting Vehicles section) from Sept 2009 to Dec 2011.

Mr Bolster served in the Canadian Army for more than 37 years, and was responsible for projects ranging from in-service fleet management to new capital procurement and work with DRDC to establish the R&D priorities for future AFV systems. He initiated and led a NATO project team culminating in a document that established future technologies to address long term capability requirements for AFV. This work facilitated the establishment of a network of international contacts in the user and research communities. He is recognized as an expert in Defence Management Systems.

Given the specificities of the context and strict qualifications mentioned above, Mr Bolster is the only known consultant holding the unique combined profile of expertise, knowledge and experience who can deliver this mandate.