

RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:
Réception des soumissions - TPSGC / Bid
Receiving - PWGSC
601-1550, Avenue d'Estimauville
Québec
Québec
G1J 0C7

REQUEST FOR PROPOSAL
DEMANDE DE PROPOSITION

**Proposal To: Public Works and Government
Services Canada**

We hereby offer to sell to Her Majesty the Queen in right of Canada, in accordance with the terms and conditions set out herein, referred to herein or attached hereto, the goods, services, and construction listed herein and on any attached sheets at the price(s) set out therefor.

**Proposition aux: Travaux Publics et Services
Gouvernementaux Canada**

Nous offrons par la présente de vendre à Sa Majesté la Reine du chef du Canada, aux conditions énoncées ou incluses par référence dans la présente et aux annexes ci-jointes, les biens, services et construction énumérés ici sur toute feuille ci-annexée, au(x) prix indiqué(s).

Comments - Commentaires

Title - Sujet Personal armour plates	
Solicitation No. - N° de l'invitation W7701-135520/A	Date 2013-01-18
Client Reference No. - N° de référence du client W7701-13-5520	
GETS Reference No. - N° de référence de SEAG PW-\$QCL-026-15157	
File No. - N° de dossier QCL-2-35467 (026)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2013-02-19	Time Zone Fuseau horaire Heure Normale du l'Est HNE
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input checked="" type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Gallant, Julie	Buyer Id - Id de l'acheteur qcl026
Telephone No. - N° de téléphone (418) 649-2931 ()	FAX No. - N° de FAX (418) 648-2209
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: R & D POUR LA DÉFENSE CANADA VALCARTIER 2459 BLVD PIE XI NORD QUEBEC Québec G3J1X5 Canada	

Instructions: See Herein

Instructions: Voir aux présentes

Vendor/Firm Name and Address

**Raison sociale et adresse du
fournisseur/de l'entrepreneur**

Issuing Office - Bureau de distribution

TPSGC/PWGSC
601-1550, Avenue d'Estimauville
Québec
Québec
G1J 0C7

Delivery Required - Livraison exigée See Herein	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

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PART 1 - GENERAL INFORMATION

1. Introduction

The bid solicitation document is divided into seven parts plus attachments and annexes as follows:

- Part 1 General Information: provides a general description of the requirement;
- Part 2 Bidder Instructions: provides the instructions, clauses and conditions applicable to the bid solicitation;
- Part 3 Bid Preparation Instructions: provides bidders with instructions on how to prepare their bid;
- Part 4 Evaluation Procedures and Basis of Selection: indicates how the evaluation will be conducted, the evaluation criteria that must be addressed in the bid, and the basis of selection;
- Part 5 Certifications: includes the certifications to be provided;
- Part 6 Security, Financial and Other Requirements: includes specific requirements that must be addressed by bidders; and
- Part 7 Resulting Contract Clauses: includes the clauses and conditions that will apply to any resulting contract.

List of Annexes:

- Annex A Statement of Work
- Annex B Basis of Payment
- Annex C Contractor Disclosure of Foreground Information
- Annex D Non-disclosure Agreement
- Annex E Security Requirements Check List

2. Summary

The Statement of Work (SOW) describes the services required by Defence R&D Canada - Valcartier (DRDC Valcartier) aim at carrying out the following objectives :

This project includes two phases: Phase 1- development phase which explore and develop advanced material concept armour for personnel. Phase 2 (**Optional goods**)- Optional phase of supply and delivery of personal armour plates. Up to 2 bids may be recommended for award of contract. Details objectives are:

- 1- To support Canadian industries that have capabilities of developing, manufacturing and integrating armours to improve processing and manufacturing techniques that will result in a better quality of armour (new technologies and/or material almost ready to be put in service and improve ceramic base for AP threats)
- 2- To increase the performance of armours for personal protection NIJ threat level III and IV
- 3- To optimize integration to reduce weight of armour
- 4- To answer punctual needs in armour plate supplies

Client department

The organization for which the services are to be rendered is the Department of National Defence (the «client»).

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Period of the contract :

The period of the Contract is from date of Contract to **March 31, 2016** inclusively for phase 1 -development and phase 2 - supply and delivery (**Optional goods**), plus 5 years optionals periods of 1 year each for phase 2 - supply and delivery (**Optional goods**), only.

Optional goods: The Contracting Authority may exercise the option at any time before the expiry of the Contract by sending a written notice to the Contractor.

Contract funding

The maximum funding available for the contract resulting from the bid solicitation is **\$300 000.00 CAN for Phase 1 - Development** (Goods and Services Tax or the Harmonized Sales Tax extra, as appropriate). Bids valued in excess of this amount will be considered non-responsive. This disclosure does not commit Canada to pay the maximum funding available.

Security requirements (at the date of bid closing):

There is a security requirement associated with this requirement. For additional information, consult Part 6 - Security, Financial and Other Requirements, and Part 7 - Resulting Contract Clauses. Bidders should consult the "[Security Requirements for PWGSC Bid Solicitations - Instructions for Bidders](http://www.tpsgc-pwgsc.gc.ca/app-acq/lc-pl/lc-pl-eng.html#a31)" (<http://www.tpsgc-pwgsc.gc.ca/app-acq/lc-pl/lc-pl-eng.html#a31>) document on the Departmental Standard Procurement Documents Web site."

Other information :

- Pursuant to section 01 of Standard Instructions 2003 and 2004, Bidders must submit a complete list of names of all individuals who are currently directors of the Bidder. Furthermore, as determined by the Special Investigations Directorate, Departmental Oversight Branch, each individual named on the list may be requested to complete a Consent to a Criminal Record Verification form.

- The requirement is subject to the provisions of the Agreement on Internal Trade (AIT).

- The requirement is limited to Canadian goods and/or services.

- This requirement is subject to Controlled goods program.

3. Debriefings

After contract award, bidders may request a debriefing on the results of the bid solicitation process. Bidders should make the request to the Contracting Authority within 15 working days of receipt of the results of the bid solicitation process. The debriefing may be in writing, by telephone or in person.

PART 2 - BIDDER INSTRUCTIONS

1. Standard Instructions, Clauses and Conditions

All instructions, clauses and conditions identified in the bid solicitation by number, date and title are set out in the *Standard Acquisition Clauses and Conditions Manual* (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

Bidders who submit a bid agree to be bound by the instructions, clauses and conditions of the bid solicitation and accept the clauses and conditions of the resulting contract.

The 2003 (2012-11-19) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

Subsection 5.4 of 2003, Standard Instructions - Goods or Services - Competitive Requirements, is amended as follows:

Delete: sixty (60) days

Insert: One hundred twenty (120) days

1.1 SACC Manual Clauses

A7035T (2007-05-25), List of Proposed Subcontractors

2. Submission of Bids

Bids must be submitted only to Public Works and Government Services Canada (PWGSC) Bid Receiving Unit by the date, time and place indicated on page 1 of the bid solicitation.

Due to the nature of the bid solicitation, bids transmitted by facsimile and/or e-mail to PWGSC will not be accepted.

3. Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority at julie.gallant@tpsgc-pwgsc.gc.ca no later than seven (7) calendar days before the bid closing date. Enquiries received after that time may not be answered.

Bidders should reference as accurately as possible the numbered item of the bid solicitation to which the enquiry relates. Care should be taken by bidders to explain each question in sufficient detail in order to enable Canada to provide an accurate answer. Technical enquiries that are of a proprietary nature must be clearly marked "proprietary" at each relevant item. Items identified as proprietary will be treated as such except where Canada determines that the enquiry is not of a proprietary nature. Canada may edit the questions or may request that the Bidder do so, so that the proprietary nature of the question is eliminated, and the enquiry can be answered with copies to all bidders. Enquiries not submitted in a form that can be distributed to all bidders may not be answered by Canada.

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4. Applicable Laws

Any resulting contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Quebec.

Bidders may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of their bid, by deleting the name of the Canadian province or territory specified and inserting the name of the Canadian province or territory of their choice. If no change is made, it acknowledges that the applicable laws specified are acceptable to the bidders.

5. Maximum Funding

The maximum funding available for the contract resulting from the bid solicitation is **\$300 000.00 CAN for Phase 1 - Development** (Goods and Services Tax or the Harmonized Sales Tax extra, as appropriate). Bids valued in excess of this amount will be considered non-responsive. This disclosure does not commit Canada to pay the maximum funding available.

PART 3 - BID PREPARATION INSTRUCTIONS

1. Bid Preparation Instructions

Canada requests that bidders provide their bid in separately bound sections as follows:

Section I : Technical Bid (5 hard copies)

Section II : Financial Bid (2 hard copies)

Section III : Certifications (1hard copies)

Prices must appear in the financial bid only. No prices must be indicated in any other section of the bid.

Bidders can bid on more than one **THREAT LEVEL** specified in Annex A, but should submit one separate bid for each specified work. Canada requests that bidders clearly identify in the first pages of their bid which **THREAT LEVEL** of work they are bidding on, **which means, III or IV or both**.

Canada requests that bidders follow the format instructions described below in the preparation of their bid:

- (a) use 8.5 x 11 inch (216 mm x 279 mm) paper; and
- (b) use a numbering system that corresponds to the bid solicitation.

In April 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to incorporate environmental considerations into the procurement process [Policy on Green Procurement](http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html) (<http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html>). To assist Canada in reaching its objectives, bidders are encouraged to:

- (1) use 8.5 x 11 inch (216 mm x 279 mm) paper containing fibre certified as originating from a sustainably-managed forest and/or containing minimum 30% recycled content; and
- (2) use an environmentally-preferable format including black and white printing instead of colour printing, print double sided/duplex, using staples or clips instead of cerlox, duotangs or binders.

Section I : Technical Bid

In their technical bid, bidders should demonstrate their understanding of the requirements contained in the bid solicitation and explain how they will meet these requirements. Bidders should demonstrate their capability and describe their approach in a thorough, concise and clear manner for carrying out the work.

The technical bid should clearly address and in sufficient depth the points that are subject to the evaluation criteria against which the bid will be evaluated. Simply repeating the statement contained in the bid solicitation is not sufficient. In order to facilitate the evaluation of the bid, Canada requests that bidders address and present topics in the order of the evaluation criteria under the same headings. To avoid duplication, bidders may refer to different sections of their bids by identifying the specific paragraph and page number where the subject topic has already been addressed.

Section II: Financial Bid

1.1 Bidders must submit their financial bid in accordance with the following :

(a) *FOR PHASE 1 - DEVELOPMENT:*

A Total Cost to a Limitation of Expenditure, which must not exceed the maximum funding specified in Part 2. The total amount of Goods and Services Tax or Harmonized Sales Tax is to be shown separately, if applicable. The information should be provided in accordance with the **Financial Bid Presentation Sheet at Attachment 1.**

The estimated funding available for the Contract resulting from the bid solicitation is **\$300 000.00 CAD**, the Goods and Services Tax or the Harmonized Sales Tax excluded, FOB destination for goods, customs duties and excise taxes included. This disclosure does not commit Canada to pay the estimated funding available.

(b) *FOR PHASE 2 (Optional goods)- SUPPLY AND DELIVERY*

firm, all inclusive unit prices for the supply and delivery of personal armour plates, as developed in Phase 1 - development. The total amount of Goods and Services Tax or Harmonized Sales Tax is to be shown separately, if applicable. The information should be provided in accordance with the **Financial Bid Presentation Sheet at Attachment 1.**

(c) For Canadian-based bidders, prices must be in Canadian funds, Canadian customs duties and excise taxes included, and Goods and Services Tax (GST) or Harmonized Sales Tax (HST) excluded.

1.2 Exchange Rate Fluctuation

C3011T (2010-01-11), Exchange Rate Fluctuation

Section III : Certifications

Bidders must submit the certifications required under Part 5.

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

1. Evaluation Procedures

- (a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria.
- (b) An evaluation team composed of representatives of Canada will evaluate the bids.

1.1 Technical Evaluation

Except where expressly provided otherwise, the experience described in the bid must be the experience of the Bidder itself (which includes the experience of any companies that formed the Bidder by way of a merger but does not include any experience acquired through a purchase of assets or an assignment of contract). The experience of the Bidder's affiliates (i.e. parent, subsidiary or sister corporations), subcontractors, or suppliers will not be considered.

1.1.1 Mandatory Technical Criteria

Refer to Attachment 2, Mandatory and Point Rated Technical Criteria.

1.1.2 Point Rated Technical Criteria

Refer to Attachment 2, Mandatory and Point Rated Technical Criteria.

1.2 Financial Evaluation

1.2.2 Evaluation of Price

The price of the bid will be evaluated in Canadian dollars, the Goods and Services Tax or the Harmonized Sales Tax excluded, FOB destination, Canadian customs duties and excise taxes included.

For evaluation purposes only, the price of the bid will be determined as detailed in Attachment 3, Evaluation of Price.

2. Basis of Selection

2.1 Basis of Selection - Highest Combined Rating of Technical Merit and Price

1. To be declared responsive, a bid must:
 - (a) comply with all the requirements of the bid solicitation;
 - (b) meet all mandatory criteria; and
 - (c) obtain the required minimum points for each criterion and each group of criteria with a pass mark; and
 - (d) obtain the required minimum of 75 points overall for the technical evaluation criteria which are subject to point rating.

The rating is performed on a scale of 125 points.

2. Bids not meeting (a) or (b) or (c) or (d) will be declared non-responsive.

-
3. The evaluation will be based on the highest responsive combined rating of technical merit and price. The ratio will be 80 % for the technical merit and 20% for the price.
 4. To establish the technical merit score, the overall technical score for each responsive bid will be determined as follows: total number of points obtained / maximum number of points available multiplied by the ratio of 80%.
 5. To establish the pricing score, each responsive bid will be prorated against the lowest evaluated price and the ratio of 20%.
 6. For each responsive bid, the technical merit score and the pricing score will be added to determine its combined rating.
 7. Neither the responsive bid obtaining the highest technical score nor the one with the lowest evaluated price will necessarily be accepted. The responsive bid with the highest combined rating of technical merit and price will be recommended for award of a contract.

2.2 Up to 2 from admissible bids ranked by the highest combined score for technical merit and price as well as the threat level proposed will be recommended for award of a contract.

Among the submissions that meet all the criteria for evaluation;

- 1- Firstly, up to two contracts could be awarded, one contract per threat level, to the two Bidders offering the highest combined score among Bidders that offer the corresponding threat level.
- 2- Secondly, if a company is bidding for threat levels III and IV, it will be evaluated separately for each level and a contract for each threat level could be granted according to the highest combined rating.
- 3- If no company bids for threat level IV, then a maximum of two contracts could be awarded to companies that offer the threat level III rated the highest combined rating among Bidders that offer threat level III.
- 4- If no company bids for threat level III, then a maximum of two contracts could be awarded to companies that offer the threat level IV rated the highest combined rating among Bidders that offer threat level IV.

PART 5 - CERTIFICATIONS

Bidders must provide the required certifications to be awarded a contract. Canada will declare a bid non-responsive if the required certifications are not completed and submitted as requested.

Compliance with the certifications bidders provide to Canada is subject to verification by Canada during the bid evaluation period (before award of a contract) and after award of a contract. The Contracting Authority will have the right to ask for additional information to verify the bidders' compliance with the certifications before award of a contract. The bid will be declared non-responsive if any certification made by the Bidder is untrue, whether made knowingly or unknowingly. Failure to comply with the certifications or to comply with the request of the Contracting Authority for additional information will also render the bid non-responsive.

1. Code of Conduct Certifications - Certifications Required Precedent to Contract Award

1. Bidders should provide, with their bid or promptly thereafter, a complete list of names of all individuals who are currently directors of the Bidder. If such a list has not been received by the time the evaluation of bids is completed, the Contracting Authority will inform the Bidder of a time Frame within which to provide the information. Bidders must submit the list of directors before contract award, failure to provide such a list within the required time frame will render the bid non-responsive.
2. The Contracting Authority may, at any time, request that a Bidder provide properly completed and Signed Consent Forms (Consent to a Criminal Record Verification form - PWGSC-TPSGC 229) (<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/formulaires-forms-eng.html>) for any or all individuals named in the aforementioned list within a specified delay. Failure to provide such Consent Forms within the delay will result in the bid being declared non-responsive.

2. Certifications Precedent to Contract Award

The certifications listed below should be completed and submitted with the bid but may be submitted afterwards. If any of these required certifications is not completed and submitted as requested, the Contracting Authority will so inform the Bidder and provide the Bidder with a time frame within which to meet the requirement. Failure to comply with the request of the Contracting Authority and meet the requirement within that time period will render the bid non-responsive.

2.1 Federal Contractors Program for Employment Equity - Certification

2.1.1 Federal Contractors Program - \$200,000 or more

1. The Federal Contractors Program (FCP) requires that some suppliers, including a supplier who is a member of a joint venture, bidding for federal government contracts, valued at \$200,000 or more (including all applicable taxes), make a formal commitment to implement employment equity. This is a condition precedent to contract award. If the Bidder, or, if the Bidder is a joint venture and if any member of the joint venture, is subject to the FCP, evidence of its commitment must be provided before the award of the Contract.

Suppliers who have been declared ineligible contractors by Human Resources and Skills Development Canada (HRSDC) are no longer eligible to receive government contracts over the threshold for solicitation of bids as set out in the *Government Contracts Regulations*. Suppliers may be declared ineligible contractors either as a result of a finding of non-compliance by HRSDC, or following their voluntary withdrawal from the FCP for a reason other than the

reduction of their workforce to less than 100 employees. Any bids from ineligible contractors, including a bid from a joint venture that has a member who is an ineligible contractor, will be declared non-responsive.

2. If the Bidder does not fall within the exceptions enumerated in 3.(a) or (b) below, or does not have a valid certificate number confirming its adherence to the FCP, the Bidder must fax (819-953-8768) a copy of the signed form LAB 1168, Certificate of Commitment to Implement Employment Equity, to the Labour Branch of HRSDC.
3. The Bidder, or, if the Bidder is a joint venture the member of the joint venture, certifies its status with the FCP, as follows:

The Bidder or the member of the joint venture

- (a) is not subject to the FCP, having a workforce of less than 100 full-time or part-time permanent employees, and/or temporary employees having worked 12 weeks or more in Canada;
- (b) is not subject to the FCP, being a regulated employer under the *Employment Equity Act*, S.C. 1995, c. 44;
- (c) is subject to the requirements of the FCP, having a workforce of 100 or more full-time or part-time permanent employees, and/or temporary employees having worked 12 weeks or more in Canada, but has not previously obtained a certificate number from HRSDC (having not bid on requirements of \$200,000 or more), in which case a duly signed certificate of commitment is attached;
- (d) is subject to the FCP, and has a valid certificate number as follows: _____ (e.g. has not been declared an ineligible contractor by HRSDC.)

Further information on the FCP is available on the HRSDC Web site (<http://www.hrsdc.gc.ca/eng/labour/equality/fcp/index.shtml>).

2.2 Former Public Servant Certification

Contracts with former public servants (FPS) in receipt of a pension or of a lump sum payment must bear the closest public scrutiny, and reflect fairness in the spending of public funds. In order to comply with Treasury Board policies and directives on contracts with FPS, bidders must provide the information required below.

Definitions

For the purposes of this clause,

"former public servant" is any former member of a department as defined in the *Financial Administration Act*, R.S., 1985, c. F-11, a former member of the Canadian Armed Forces or a former member of the Royal Canadian Mounted Police. A former public servant may be:

- (a) an individual;
- (b) an individual who has incorporated;
- (c) a partnership made of former public servants; or

- (d) a sole proprietorship or entity where the affected individual has a controlling or major interest in the entity.

"lump sum payment period" means the period measured in weeks of salary, for which payment has been made to facilitate the transition to retirement or to other employment as a result of the implementation of various programs to reduce the size of the Public Service. The lump sum payment period does not include the period of severance pay, which is measured in a like manner.

"pension" means, in the context of the fee abatement formula, a pension or annual allowance paid under the *Public Service Superannuation Act* (PSSA), R.S., 1985, c. P-36, and any increases paid pursuant to the *Supplementary Retirement Benefits Act*, R.S., 1985, c. S-24 as it affects the PSSA. It does not include pensions payable pursuant to the *Canadian Forces Superannuation Act*, R.S., 1985, c. C-17, the *Defence Services Pension Continuation Act*, 1970, c. D-3, the *Royal Canadian Mounted Police Pension Continuation Act*, 1970, c. R-10, and the *Royal Canadian Mounted Police Superannuation Act*, R.S., 1985, c. R-11, the *Members of Parliament Retiring Allowances Act*, R.S., 1985, c. M-5, and that portion of pension payable to the *Canada Pension Plan Act*, R.S., 1985, c. C-8.

Former Public Servant in Receipt of a Pension

Is the Bidder a FPS in receipt of a pension as defined above? **YES () NO ()**

If so, the Bidder must provide the following information:

- (a) name of former public servant;
- (b) date of termination of employment or retirement from the Public Service.

Work Force Reduction Program

Is the Bidder a FPS who received a lump sum payment pursuant to the terms of a work force reduction program? **YES () NO ()**

If so, the Bidder must provide the following information:

- (a) name of former public servant;
- (b) conditions of the lump sum payment incentive;
- (c) date of termination of employment;
- (d) amount of lump sum payment;
- (e) rate of pay on which lump sum payment is based;
- (f) period of lump sum payment including start date, end date and number of weeks;
- (g) number and amount (professional fees) of other contracts subject to the restrictions of a work force reduction program.

For all contracts awarded during the lump sum payment period, the total amount of fees that may be paid to a FPS who received a lump sum payment is \$5,000, including the Goods and Services Tax or Harmonized Sales Tax.

Certification

By submitting a bid, the Bidder certifies that the information submitted by the Bidder in response to the above requirements is accurate and complete.

2.3 Canadian Content Certification

This procurement is limited to Canadian goods and Canadian services.

The Bidder certifies that:

- () a minimum of 80 percent of the total bid price consist of Canadian goods and Canadian services as defined in paragraph 5 of clause A3050T.

For more information on how to determine the Canadian content for a mix of goods, a mix of services or a mix of goods and services, consult Annex 3.6.(9), Example 2, of the Supply Manual. (<https://buyandsell.gc.ca/policy-and-guidelines/supply-manual/annex/3/6>)

2.3.1 SACC Manual clause

A3050T (2010-01-11), Canadian Content Definition

2.4 Status and Availability of Resources

The Bidder certifies that, should it be awarded a contract as a result of the bid solicitation, every individual proposed in its bid will be available to perform the Work as required by Canada's representatives and at the time specified in the bid solicitation or agreed to with Canada's representatives. If for reasons beyond its control, the Bidder is unable to provide the services of an individual named in its bid, the Bidder may propose a substitute with similar qualifications and experience. The Bidder must advise the Contracting Authority of the reason for the substitution and provide the name, qualifications and experience of the proposed replacement. For the purposes of this clause, only the following reasons will be considered as beyond the control of the Bidder: death, sickness, maternity and parental leave, retirement, resignation, dismissal for cause or termination of an agreement for default.

If the Bidder has proposed any individual who is not an employee of the Bidder, the Bidder certifies that it has the permission from that individual to propose his/her services in relation to the Work to be performed and to submit his/her résumé to Canada. The Bidder must, upon request from the Contracting Authority, provide a written confirmation, signed by the individual, of the permission given to the Bidder and of his/her availability. Failure to comply with the request may result in the bid being declared non-responsive.

2.5 Education and Experience

The Bidder certifies that all the information provided in the résumés and supporting material submitted with its bid, particularly the information pertaining to education, achievements, experience and work history, has been verified by the Bidder to be true and accurate. Furthermore, the Bidder warrants that every individual proposed by the Bidder for the requirement is capable of performing the Work described in the resulting contract.

2.6 Language Capability

The Bidder certifies that it has the language capability required to perform the Work, as stipulated in the Statement of Work.

Solicitation No. - N° de l'invitation

W7701-135520/A

Client Ref. No. - N° de réf. du client

W7701-13-5520

Amd. No. - N° de la modif.

File No. - N° du dossier

QCL-2-35467

Buyer ID - Id de l'acheteur

qc1026

CCC No./N° CCC - FMS No/ N° VME

PART 6 - SECURITY, FINANCIAL AND OTHER REQUIREMENTS

1. Security Requirement

1. **At the date of bid closing**, the following conditions must be met:

- (a) the Bidder must hold a valid organization security clearance as indicated in Part 7 - Resulting Contract Clauses;
- (b) the Bidder's proposed individuals requiring access to **classified or protected** information, assets or sensitive work site(s) must meet the security requirement as indicated in Part 7 - Resulting Contract Clauses;
- (c) the Bidder must provide the name of all individuals who will require access to **classified or protected** information, assets or sensitive work sites. This information must be submitted with the bid .

2. For additional information on security requirements, bidders should consult the "Security Requirements for PWGSC Bid Solicitations - Instructions for Bidders" (<http://www.tpsgc-pwgsc.gc.ca/app-acq/lc-pl/lc-pl-eng.html#a31>) document on the Departmental Standard Procurement Documents Web site.

2. Financial Capability

A9033T (2011-05-16), Financial Capability

1. Financial Capability Requirement: The Bidder must have the financial capability to fulfill this requirement. To determine the Bidder's financial capability, the Contracting Authority may, by written notice to the Bidder, require the submission of some or all of the financial information detailed below during the evaluation of bids. The Bidder must provide the following information to the Contracting Authority within fifteen (15) working days of the request or as specified by the Contracting Authority in the notice:

a. Audited financial statements, if available, or the unaudited financial statements (prepared by the Bidder's outside accounting firm, if available, or prepared in-house if no external statements have been prepared) for the Bidder's last three fiscal years, or for the years that the Bidder has been in business if this is less than three years (including, as a minimum, the Balance Sheet, the Statement of Retained Earnings, the Income Statement and any notes to the statements).

b. If the date of the financial statements in (a) above is more than five months before the date of the request for information by the Contracting Authority, the Bidder must also provide, unless this is prohibited by legislation for public companies, the last quarterly financial statements (consisting of a Balance Sheet and a year-to-date Income Statement), as of two months before the date on which the Contracting Authority requests this information.

c. If the Bidder has not been in business for at least one full fiscal year, the following must be provided:

i.the opening Balance Sheet on commencement of business (in the case of a corporation, the date of incorporation); and

ii.the last quarterly financial statements (consisting of a Balance Sheet and a year-to-date Income Statement) as of two months before the date on which the Contracting Authority requests this information.

d.A certification from the Chief Financial Officer or an authorized signing officer of the Bidder that the financial information provided is complete and accurate.

e.A confirmation letter from all of the financial institution(s) that have provided short-term financing to the Bidder outlining the total of lines of credit granted to the Bidder and the amount of credit that remains available and not drawn upon as of one month prior to the date on which the Contracting Authority requests this information.

f.A detailed monthly Cash Flow Statement covering all the Bidder's activities (including the requirement) for the first two years of the requirement that is the subject of the bid solicitation, unless this is prohibited by legislation. This statement must detail the Bidder's major sources and amounts of cash and the major items of cash expenditures on a monthly basis, for all the Bidder's activities. All assumptions made should be explained as well as details of how cash shortfalls will be financed.

g.A detailed monthly Project Cash Flow Statement covering the first two years of the requirement that is the subject of the bid solicitation, unless this is prohibited by legislation. This statement must detail the Bidder's major sources and amounts of cash and the major items of cash expenditures, for the requirement, on a monthly basis. All assumptions made should be explained as well as details of how cash shortfalls will be financed.

2. If the Bidder is a joint venture, the financial information required by the Contracting Authority must be provided by each member of the joint venture.

3. If the Bidder is a subsidiary of another company, then any financial information in 1. (a) to (f) above required by the Contracting Authority must be provided by the ultimate parent company. Provision of parent company financial information does not by itself satisfy the requirement for the provision of the financial information of the Bidder, and the financial capability of a parent cannot be substituted for the financial capability of the Bidder itself unless an agreement by the parent company to sign a Parental Guarantee, as drawn up by Public Works and Government Services Canada (PWGSC), is provided with the required information.

4. Financial Information Already Provided to PWGSC: The Bidder is not required to resubmit any financial information requested by the Contracting Authority that is already on file at PWGSC with the Contract Cost Analysis, Audit and Policy Directorate of the Policy, Risk, Integrity and Strategic Management Sector, provided that within the above-noted time frame:

a.the Bidder identifies to the Contracting Authority in writing the specific information that is on file and the requirement for which this information was provided; and

b.the Bidder authorizes the use of the information for this requirement.

It is the Bidder's responsibility to confirm with the Contracting Authority that this information is still on file with PWGSC.

5. **Other Information:** Canada reserves the right to request from the Bidder any other information that Canada requires to conduct a complete financial capability assessment of the Bidder.
6. **Confidentiality:** If the Bidder provides the information required above to Canada in confidence while indicating that the disclosed information is confidential, then Canada will treat the information in a confidential manner as permitted by the Access to Information Act, R.S., 1985, c.c. A-1, Section 20(1) (b) and (c).
7. **Security:** In determining the Bidder's financial capability to fulfill this requirement, Canada may consider any security the Bidder is capable of providing, at the Bidder's sole expense (for example, an irrevocable letter of credit from a registered financial institution drawn in favour of Canada, a performance guarantee from a third party or some other form of security, as determined by Canada).

3. Controlled Goods Requirement

SACC Manual clause A9130T (2011-05-16), Controlled Goods Program

PART 7 - RESULTING CONTRACT CLAUSES

The following clauses and conditions apply to and form part of any contract resulting from the bid solicitation.

1. Statement of Work

(a) PHASE 1 - DEVELOPMENT :

The Contractor must perform the Work in accordance with the Statement of Work at Annex a and the Contractor's technical bid entitled _____, dated _____.

(b) PHASE 2 - SUPPLY AND DELIVERY (*Optional goods*):

The Contractor must provide and deliver armour plates in accordance with the Requirement at Annex A and the Contractor's technical bid entitled _____, dated _____.

(c) **Client:** Under the Contract, the "**Client**" is the Department of National Defense.

(d) **Reorganization of Client:** The Contractor's obligation to perform the Work will not be affected by (and no additional fees will be payable as a result of) the renaming, reorganization, reconfiguration, or restructuring of any Client. The reorganization, reconfiguration and restructuring of the Client includes the privatization of the Client, its merger with another entity, or its dissolution, where that dissolution is followed by the creation of another entity or entities with mandates similar to the original Client. In connection with any form of reorganization, Canada may designate another department or government body as the Contracting Authority or Technical Authority, as required to reflect the new roles and responsibilities associated with the reorganization.

1.1 Optional Goods

The Contractor grants to Canada the irrevocable option to acquire the goods described at Annex A of the Contract under the same conditions and at the prices and/or rates stated in the Contract. The option may only be exercised by the Contracting Authority and will be evidenced, for administrative purposes only, through a contract amendment.

The Contracting Authority may exercise the option at any time before the expiry of the Contract by sending a written notice to the Contractor.

2. Standard Clauses and Conditions

All clauses and conditions identified in the Contract by number, date and title are set out in the *Standard Acquisition Clauses and Conditions Manual* (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

2.1 General Conditions

(a) PHASE 1 - DEVELOPMENT :

2040 (2012-11-19), General Conditions - Research & Development, apply to and form part of the Contract.

(b) PHASE 2 - SUPPLY AND DELIVERY (*Optional goods*):

2030 (2012-11-19), General Conditions - Higher Complexity - Goods, apply to and form part of the Contract.

2.2 Non-disclosure Agreement

The Contractor must obtain from its employee(s) or subcontractor(s) the completed and signed non-disclosure agreement, attached at Annex D, and provide it to the Contracting Authority before they are given access to information by or on behalf of Canada in connection with the Work.

3. Security Requirement

1. The Contractor must, at all times during the performance of the Contract, hold a valid Facility Security Clearance at the level of SECRET, with approved: Document safeguarding at the level of SECRET, issued by the Canadian Industrial Security Directorate (CISD), Public Works and Government Services Canada (PWGSC).

2. The Contractor personnel requiring access to CLASSIFIED information, assets or sensitive work site(s) must EACH hold a valid personnel security screening at the level of SECRET, granted or approved by the CISD, PWGSC.

Until the security screening of the Contractor personnel required by this Contract has been completed satisfactorily by the Canadian Industrial Security Directorate, Public Works and Government Services Canada, the Contractor personnel MAY NOT HAVE ACCESS to (CLASSIFIED/PROTECTED) information or assets, and MAY NOT ENTER sites where such information or assets are kept, without an escort.

3. This contract includes access to controlled goods. Prior to access, the contractor must be registered in the Controlled Goods Program of Public Works and Government Services Canada.

4. Processing of CLASSIFIED information electronically at the Contractor's site is NOT permitted under this Contract.

5. Subcontracts which contain security requirements are NOT to be awarded without the prior written permission of CISD/PWGSC.

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6. The Contractor must comply with the provisions of the:
- (a) Security Requirements Check List and security guide, attached at Annex E;
 - (b) Industrial Security Manual (Latest Edition).

4. Contract period

- (a) **Contract Period:** The "**Contract Period**" is the entire period of time during which the Contractor is obliged to perform the Work, which includes:
- (i) The "**Initial Contract Period**", which begins on the date the Contract is awarded and on March 31 2016.
 - (ii) The period during which the Contract is extended, if Canada chooses to exercise any options set out in the Contract.
- (b) Orders for optional goods can be placed at any time within the contract period.
- (c) **Option to Extend the Contract:**
- (i) The Contractor grants to Canada the irrevocable option to extend the term of the Contract by up to 5 additional one-year period(s) under the same terms and conditions (**phase 2 of supply and delivery - Optional goods**). The Contractor agrees that, during the extended period of the Contract, it will be paid in accordance with the applicable provisions set out in the Basis of Payment.
 - (ii) Canada may exercise this option at any time by sending a written notice to the Contractor at least 30 calendar days before the expiry date of the Contract. The option may only be exercised by the Contracting Authority, and will be evidenced, for administrative purposes only, through a contract amendment.

5. Authorities

5.1 Contracting Authority

The Contracting Authority for the Contract is:

Julie Gallant
Public Works and Government Services Canada
Acquisitions Branch
1550, D'Estimauville avenue, Quebec, Canada, G1J 0C7
Telephone: 418-649-2931
Facsimile: 418-648-2209
E-mail address: julie.gallant@tpsgc-pwgsc.gc.ca

The Contracting Authority is responsible for the management of the Contract and any changes to the Contract must be authorized in writing by the Contracting Authority. The Contractor must not perform work in excess of or outside the scope of the Contract based on verbal or written requests or instructions from anybody other than the Contracting Authority.

5.2 Technical Authority (to be completed at Contract award)

The Technical Authority for the Contract is:

Name : _____

Title : _____

Organization : _____

Address : _____

Telephone: _____

Facsimile: _____

E-mail address: _____

The Technical Authority is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Technical Authority; however, the Technical Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

5.3 Contractor's Representative (to be completed at Contract award)

Name: _____

Telephone: _____

Facsimile: _____

E-mail address: _____

6. Payment

6.1 Basis of Payment

(a) PHASE 1 - DEVELOPMENT :

For the Work of Phase 1 - development, described in the Statement of Work in Annex A:.

The Contractor will be reimbursed for the costs reasonably and properly incurred in the performance of the Work, as determined in accordance with the Basis of Payment in Annex B, to a limitation of expenditure of \$ _____ (**insert the amount at contract award**). Customs duties are included and Goods and Services Tax or Harmonized Sales Tax is extra, if applicable.

For the limitation of expenditure portion of the Work only, _____ Canada's total liability to the Contractor under the Contract must not exceed \$ _____ (**amount to be inserted at contract award**). Customs duties are included and Goods and Services Tax or Harmonized Sales Tax is extra, if applicable.

No increase in the total liability of Canada or in the price of the Work resulting from any design changes, modifications or interpretations of the Work, will be authorized or paid to the Contractor unless these design changes, modifications or interpretations have been approved, in writing, by the Contracting Authority before their incorporation into the Work. The Contractor must not perform any work or provide any service that would result in Canada's total liability being exceeded before obtaining the written approval of the Contracting Authority. The Contractor must notify the Contracting Authority in writing as to the adequacy of this sum:

(a) when it is 75 percent committed, or

- (b) four (4) months before the Contract expiry date, or
 - (c) as soon as the Contractor considers that the contract funds provided are inadequate for the completion of the Work,
- whichever comes first.

If the notification is for inadequate contract funds, the Contractor must provide to the Contracting Authority a written estimate for the additional funds required. Provision of such information by the Contractor does not increase Canada's liability.

(b) **PHASE 2 - SUPPLY AND DELIVERY (Optional goods):**

For the Work of Phase 2 - supply and delivery (optional goods), described in the Statement of Work in Annex A:

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a firm price of \$ _____ **(the amount will be insert when article 1.1 - Optional goods is exercised)**. Customs duties are included and Goods and Services Tax or Harmonized Sales Tax is extra, if applicable.

For the firm price portion of the Work only, Canada will not pay the Contractor for any design changes, modifications or interpretations of the Work, unless they have been approved, in writing, by the Contracting Authority before their incorporation into the Work.

6.2 Method of Payment

(a) **PHASE 1 - DEVELOPMENT :**

Progress Payments

Canada will make progress payments in accordance with the payment provisions of the Contract, no more than once a month, for cost incurred in the performance of the Work up to 90 percent of the amount claimed and approved by Canada if:

- (a) an accurate and complete claim for payment using form PWGSC-TPSGC 1111 (<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/documents/1111.pdf>) and any other document required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract;
- (b) the amount claimed is in accordance with the Basis of payment;
- (c) the total amount for all progress payments paid by Canada does not exceed 90 percent of the total amount to be paid under the Contract;
- (d) all certificates appearing on form PWGSC-TPSGC 1111 have been signed by the respective authorized representatives.

The balance of the amount payable will be paid in accordance with the payment provisions of the Contract upon completion and delivery of all work required under the Contract if the Work has been accepted by Canada and a final claim for the payment is submitted.

Progress payments are interim payments only. Canada may conduct a government audit and interim time and cost verifications and reserves the right to make adjustments to the Contract from time to time during the performance of the Work. Any overpayment resulting from progress payments or otherwise must be refunded promptly to Canada.

(b) **PHASE 2 - SUPPLY AND DELIVERY (Optional goods):**

Canada will pay the Contractor upon completion and delivery of units in accordance with the payment provisions of the Contract if:

- (a) an accurate and complete invoice and any other documents required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract;
- (b) all such documents have been verified by Canada;
- (c) the Work delivered has been accepted by Canada.

6.3 SACC Manual Clause

A9117C (2007-11-30), T1204 - Direct Request by Customer Department
C0305C (2008-05-12), Cost Submission
C0705C (2010-01-11), Discretionary Audit
C0711C (2008-05-12), Time Verification

6.4 Funding by Fiscal Year

(a) **PHASE 1 - DEVELOPMENT :**

Despite the Total Estimated Cost (Limitation of expenditure) specified in the Contract, and unless otherwise authorized in writing by the Contracting Authority, the maximum amount which may be paid for work completed in Government fiscal year period ending 31 March of the year specified is as follows:

Period of 1st April 2013 to 31 March 2014:	\$100 000
Period of 1st April 2014 to 31 March 2015:	\$100 000
Period of 1st April 2015 to 31 March 2016:	\$100 000

7. Invoicing Instructions

1. The Contractor must submit a claim for progress payment using form PWGSC-TPSGC 1111 (<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/documents/1111.pdf>).

Each claim must show:

- (a) all information required on form PWGSC-TPSGC 1111;
 - (b) all applicable information detailed under the section entitled "Invoice Submission" of the general conditions;
 - (c) a list of all expenses;
 - (d) expenditures plus pro-rated profit or fee;
2. For Phase 1 - Development with a limitation of expenditure, each claim must be supported by:
 - (a) a copy of time sheets to support the time claimed;
 - (b) a copy of the invoices, receipts, vouchers for all direct expenses, and all travel and living expenses;
 - (c) **a copy of the monthly progress report.**
 3. Goods and Services Tax (GST) or Harmonized Sales Tax (HST), as applicable, must be calculated on the total amount of the claim before the holdback is applied. At the time the holdback is claimed, there will be no GST/HST payable as it was claimed and payable under the previous claims for progress payments.
 4. The Contractor must prepare and certify one original and two (2) copies of the claim on form PWGSC-TPSGC 1111, and forward it to the following address for certification.

ATTN : Mrs Suzanne Larrivée

Supply Support Clerk

Public Works and Government Services Canada

601-1550 Avenue D'Estimauville

Québec, Québec

G1J 0C7

E-mail address : suzanne.larrivee@tpsgc-pwgsc.gc.ca

The Contracting Authority will then forward the original and two (2) copies of the claim to the Technical Authority for certification and onward submission to the Payment Office for the remaining certification and payment action.

5. The Contractor must not submit claims until all work identified in the claim is completed.

8. Certifications

Compliance with the certifications provided by the Contractor in its bid is a condition of the Contract and subject to verification by Canada during the entire contract period. If the Contractor does not comply with any certification or it is determined that any certification made by the Contractor in its bid is untrue, whether made knowingly or unknowingly, Canada has the right, pursuant to the default provision of the Contract, to terminate the Contract for default.

8.1 SACC Manual Clauses

A3060C (2008-05-12), Canadian Content Certification

9. Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in _____ **(to be inserted at contract award)**.

10. Priority of Documents

If there is a discrepancy between the wording of any documents that appear on the list, the wording of the document that first appears on the list has priority over the wording of any document that subsequently appears on the list.

- (a) the Articles of Agreement;
- (b) 2040 (2012-11-19), General Conditions - Research & Development (PHASE 1);
2030 (2012-11-19), General Conditions - Higher Complexity - Goods (PHASE 2);
- (c) Annex A, Statement of Work;
- (d) Annex B, Basis of Payment;
- (e) Annex C, Contractor Disclosure of Foreground Information;
- (f) Annex D, Non-disclosure Agreement;
- (g) Annex E, Security Requirements Check List;
- (h) the Contractor's bid dated _____ (insert date of bid).

11. Defence Contract

SACC Manual clause A9006C (2008-05-12), Defence Contract

12. Foreign Nationals (Canadian Contractor)

SACC Manual clause A2000C (2006-06-16), Foreign Nationals (Canadian Contractor)

13. Insurance

SACC Manual clause G1005C (2008-05-12), Insurance

14. Controlled Goods Program

14.1 SACC Manual clause A9131C (2011-05-16), Controlled Goods Program

14.2 SACC Manual clause B4060C (2011-05-16), Controlled Goods

15. Progress Reports

(a) PHASE 1 - DEVELOPMENT :

1. The Contractor must submit monthly reports, in electronic format, on the progress of the Work, to both the Technical Authority and the Contracting Authority.
2. The progress report must contain three parts:
 - (a) PART 1: The Contractor must answer the following three questions:

-
- (i) Is the project on schedule?
 - (ii) Is the project within budget?
 - (iii) Is the project free of any areas of concern in which the assistance or guidance of Canada may be required?

Each negative response must be supported with an explanation.

- (b) PART 2: A narrative report, brief, yet sufficiently detailed to enable the Technical Authority to evaluate the progress of the Work, containing as a minimum:
 - (i) A description of the progress of each task and of the Work as a whole during the period of the report. Sufficient sketches, diagrams, photographs, etc., must be included, if necessary, to describe the progress accomplished.
 - (ii) An explanation of any variation from the work plan.
 - (iii) A description of trips or conferences connected with the Contract during the period of the report.
 - (iv) A description of any major equipment purchased or constructed during the period of the report.

16. Shipping Instructions - Delivery at Destination

Goods must be consigned to the destination specified in the Contract and delivered:

Delivered Duty Paid (DDP) _____ (insert the named place of destination) Incoterms 2000 for shipments from a commercial contractor.

ANNEX A

STATEMENT OF WORK

Personal Armour Plate: Alternative Exploration

1.0 OBJECTIVES:

This project includes two phases: Phase 1- development which explore and develop advanced material concept armour for personnel and phase 2- armour plates supply and delivery, which is optional and discretionary. Details objectives are:

- 1- To support Canadian industries that have capabilities of developing, manufacturing and integrating armours to improve processing and manufacturing techniques that will result in a better quality of armour (new technologies and/or material almost ready to be put in service and improve ceramic base for AP threats)
- 2- To increase the performance of armours for personal protection NIJ threat level III and IV
- 3- To optimize integration to reduce weight of armour
- 4- To answer punctual needs in armour plate supplies

2.0 BACKGROUND:

2.1 For NIJ Threat level III

A large variety of material can be used to defeat NIJ threat level III. Materials such as ultrahigh molecular weight polyethylene (UHMWPE), metal plate, ceramic plates are among the most commonly used. The preferred material of choice might depend on the nature of the mission, the weight or price, the threat definition, especially when it is more severe round than the one defined in NIJ for a level III (often referred to as level threat III+), but excluding AP rounds that correspond to a level IV, etc.

R&D is constantly contributing to material improvement. A good example is the integration of nanotubes with other materials that have the potential to change material properties and influence the development of armour material in the near future. As such, recent experiments report a significant enhanced toughness in the UHMWPE films due to the addition of 1 wt% multiwalled carbon nanotubes (MWCNTs) (S. L. Ruan et al., Polymer, Vol 44, Issue 19, Sept. 2003). In comparison with the pure UHMWPE fiber at the same draw ratio, adding 5 wt% MWCNT has increased by 18.8% the tensile strength and by 15.4% the ductility. Also, a 44.2% increase in energy to fracture has been observed (S. L. Ruan et al., Polymer, Vol 47, Issue 5, Sept. 2006). Based on these results, it is expected that multiwalled carbon nanotubes might contribute to build a better protection in the near future, especially for threat level III.

Other options might also exist using other varieties of materials and are all of interest if they can contribute to improve performance or reduce weight burden of armour.

2.2 Threat level IV

Ceramics have been used in armour applications for more than half a century. They are attractive as armour materials for personal protection because compared with steel, they are capable of resisting the same armour piercing ammunitions with a significant lower mass. In fact,

their low areal density but high compressive strength and hardness overmatch the loading produced by a penetrator at impact, which fractures and breaks on the surface of the ceramic. The advances in processing techniques of these materials over the past few decades have resulted in lower areal density and a variety of these types of materials is now available (Al₂O₃, SiC, B₄C, TiB₂, combining SiC and B₄C, integrated nanofibers in ceramic, etc.). Many manufacturing processes exist (slip casting, reaction bonded, pressure casting, hot pressing, hot isostatic pressing (HIP), sintering, rapid carbothermal reduction process, etc.), but they are the major cause of internal defects (pores, inclusions, twin/grain boundary intersection, etc.) that influence significantly the performance of the armour because they are crack initiators during impact process. It is therefore of prime importance to continuously develop and improve manufacturing techniques that will result in improving quality and performance of ceramic armours.

The development of new ceramics for armours is limited by the understanding of the mechanisms involved and their ability to perform well under ballistic conditions. To date, armour performance has not been successfully correlated to a specific material characteristic or a static material property. Therefore, what the characteristics of an ideal ceramic should be is not clearly known. However, the positive influence of some of the ceramic properties in resisting ballistic impact has been established. Over such properties, the compressive strength of the ceramic affects the initial resistance to penetration. The bulk, shear and Young's moduli are responsible for resisting the deformation until failure. The yield stress is related to the failure resistance. The density defines the weight of the armour. The hardness influences the capability of destroying the projectile tip. The toughness is the resistance to fracture and defines the amount of energy per volume that material can absorb before rupturing. The foregoing key material properties that may be used to guide the development of new ceramics for light armours are density, hardness, and toughness. As a rule-of-thumb, hardness higher than that of the projectile is desirable for armour ceramics. High fracture toughness is also desirable to minimize the shattering of the ceramic on impact which may improve the ability of the material to resist multiple hits. Unfortunately, hardness and toughness tend to follow an inverse relationship in most materials, which means that an increase in hardness is generally accompanied by a decrease in fracture toughness.

The armour backing material also has its importance in the global armour performance. Backing is usually made of rigid composite materials using different fibers such as Aramid and UHMWPE that is bonded to the ceramic layer. It supports the ceramic in preventing excessive local and global deformation and spreads the highly localized projectile/ceramic interaction over a wide area to limit loading on the person standing behind the armour. The backing also absorbs part of the residual projectile and ceramic debris energy through delamination and debris penetration processes. Material selection and integration process with the ceramic are key parameters in the quality of the armour.

3.0 APPROACH:

Following the development phase, presuming success has been achieved in developing a product, supply for armour plates (between few hundreds up to a thousand) could be considered according to our discretion (optional goods). Canada could decide to exercise an option if two or more armours meet the conditions in Section 5.0, the performance of candidate armours from each contractor would be rated using the ballistic tests results in Section 6.0. During this optional Supply and delivery phase, quality control tests made at DND ballistics laboratories would support the acquisition. Quality control tests would meet the conditions described in Subsection 6.1, below. A minimum of 20 armour systems would be required from each batch. This disclosure does not commit Canada to exercise an option.

Innovation should focus on maintaining existing level of protection while trading off technology advances for weight and burden reduction.

At any moment during the execution of the contract, should a situation develop that requires the protection to be adjusted to meet a different threat, this new threat will be disclosed to the contractor and the contract will be amended to meet the new needs.

4.0 PHASE I: ARMOUR DEVELOPMENT PHASE

In this phase, the contractors will execute the development plan proposed during the bidding and approved by DND. Two main improvement paths are available:

- a) Improved ballistic performance.
- b) Reduced weight.

Any approach or new concept that will improve one or both of the above is acceptable.

4.1 For NIJ threat level III / III+

4.1.1 *Material performance improvement*

- Any solution that has the potential to improve armour performance (new fiber/material for composite combination, new metal or metal matrix composite, integration of nanofibers with UHMWPE, new ceramic base material, etc.) is acceptable.
- For ceramic base armour, approach as per NIJ threat level IV is suggested (Section 4.2).
- If any material characterization is needed, it is the sole responsibility of the contractor.

4.1.2 *Integration*

- Depending on material use, integration might or might not be required. This is an important part because parameters such as transient deformation, rigidity, buckling, etc could be affected. The integration part is the sole responsibility of the contractor.
- To monitor the improvements of the armour, ballistic limit tests (V50) as per NIJ 0101.06 for threat level III can be used. Contractor has the option to use its 2 control ballistic tests at DRDC Valcartier ballistics laboratory allowed per year. However, only results from mandatory requirements as defined in Section 5.1 will be used to consider the supply option.
- The dimensions of the ballistic armour plate system shall not be smaller or bigger than the specified dimensions in drawing #1 (appendix 1). It should also be multicurved, as shown in picture #1 to better fit a typical human body.

4.2 For NIJ threat level IV

4.2.1 *Ceramic material performance improvement*

- Any solution that has potential to improve armour performance (new powder combination, integration of nanofibers in ceramic, for example) is acceptable.
- Improved ceramics can be compared with the reference ceramic material by using quasi-static tests, high strain rate or Depth of Penetration (DoP) tests. When significant improvement in performance (considering V50 vs Areal Density, for example) is achieved, full size plates could be manufactured and integration study could start.

4.2.2 *Material characterization*

- Different ceramic material characterization techniques exist. The following are possible ways to characterize these materials. More exotic techniques can be provided by DRDC Valcartier while others are more standard and will be done uniquely by the contractor.
 - a) Quasi-static (Contractor)
 - Material characterization using quasi-static tests (including measurements of fracture toughness, flexural strength, Vicker's hardness, Young's modulus, etc.) is the responsibility of the contractor.
 - b) High strain rate tests (DRDC Valcartier)

Compression and/or torsion (depending on personnel and laboratories availability)

 - DRDC Valcartier has the equipment to evaluate ceramic under high strain rate loading using Hopkinson test in shear or compression. During the armour development phase, these tests could be a key research tool to find a ceramic formula that will make a difference in ballistic performance. However, High Strain Rate specimens need to be manufactured to the final dimensions. If needed, the availability of the personnel and laboratories will be evaluated.
 - c) Depth of Penetration DoP Tests (Contractor and/or DRDC Valcartier)
 - The evaluation and comparison of ceramic materials performances for ballistic applications are performed using DoP tests. DoP test requires flat ceramic samples of 10 cm x 10 cm with a thickness roughly equal to the bullet diameter. For example, for the 7.62 calibre, the thickness would be rounded to 8 mm. The ceramic samples are fixed on a cylinder (aluminum 6061-T6 or clear polycarbonate). The reference DoP will be obtained using the ceramic material in which the armour plate given for qualification is made. If an aluminum cylinder is preferred, DoP is obtained by cutting the cylinder and measuring the inside crater depth or by using x-rays. The clear polycarbonate cylinder is more expensive but facilitates measurements by avoiding machine shop cutting time or x-ray requirements. The DND DoP ballistic tests contribution is cumulated with the two control ballistic tests offered per year/company.
 - For both types of cylinders (aluminum 6061-T6 or clear polycarbonate), minimum adjustment testing will be required to find the best approach to fix samples to the cylinder (type of glue, sample fixation on top of cylinder, in a cylinder hole or in a frame, etc.).

4.2.3 Integration

- When the ceramic development will be considered completed, the integration could begin. The weight of armour system is dependent of backing material. A full Polyethylene backing will produce a lighter armour than aramid, but parameters such as transient deformation, rigidity, buckling, etc. could be affected.
- Dimensions of the ballistic armour plate system shall not be smaller or bigger than the specified dimensions in drawing #1 (Annex 1). It should also be multicurved, as shown in picture #1 to better fit a typical human body.
- During this process, a contractor can monitor the improvements by using ballistic limit tests (V50) as per NIJ 0101.06 for threat level 4. However, only results from mandatory requirements as defined in Section 5.1 will be used to consider the supply option.

5.0 FINAL ARMOUR SYSTEM TESTING

When material improvement and integration is completed (Section 4.0), final testing will be performed at DRDC Valcartier using the NIJ 0101.06 standard set-up with the block of plastilina calibrated as specified

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in the NIJ 010.06 standard. Only tests from requirements as defined in Section 5.1 will be performed. This will complete the armour development phase.

5.1 REQUIREMENTS

- If the candidate armour provided fails the requirements specified in this section, it will be disqualified from the armour plates supply and delivery phase (optional goods)

5.1.1 **Threat definition:**

- Threat definition is for a scenario based on NIJ 0101.06 threat level III/III+ or IV.
- Specific threat detailed charts including calibres, ammunition weights, weapons and impact velocities will be provided to the qualified contractor companies only.

5.1.2 **Armour Drop Test:**

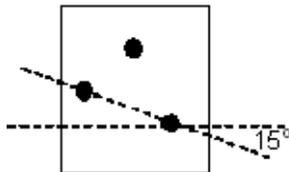
- Armour drop test will be performed on all armour plates before the penetration resistance tests, as defined in 5.1.3. Tests will be conducted as per NIJ 0101.06 using the proposed mechanical durability testing apparatus.

5.1.3 **Required armour penetration resistance performance:**

- Using a series of 20 armours, each one will need to sustain the impact of three shots. The following criteria will apply:
 - 1st shot stop 100% of the time,
 - 2nd shot stop 75% of the time,
 - 3rd shot stop 50% of the time.

5.1.4 **Shot pattern definition:**

- Minimum distance of 120 mm between shot with a three-shot displaced triangle.
- All shots will be at a minimum distance of 25 mm from any edges.
- For at least two samples taken randomly in the lot, 1st shot will be at 25 mm from one edge.
- A minimum angle of 15° between shot will be maintained.



6.0 PHASE 2: ARMOUR PLATES SUPPLY AND DELIVERY (OPTIONAL GOODS)

If Canada decides to exercise an option, DND will use the results of the final plate system testing (Section 5.0) to evaluate improvements on armours. For considering the armour supply option, the requirements described in Section 5.1 must be achieved. Should a plate system be developed before the end of the development phase, the procurement option could be exercised without prejudice to the completion of the development phase. If two or more developed armours meet the conditions as per Section 5.0, the performance of candidate armours from each contractor will be rated using the criteria described in Sections 6.1 and 6.2. However, the disclosure supplied does not commit Canada to exercise an option.

During this procurement phase, quality control tests made at DND ballistics laboratories will support the acquisition. Quality control tests should meet the conditions described in section 5. A minimum of 20 armour systems will be required from each batch.

At any moment during the execution of the contract, should a situation develop that requires the protection to be adjusted to meet a different threat, this new threat will be disclosed to the contractor and the contract will be amended to meet the new needs.

Note: armour system means the ceramic and backing package

6.1 Rating

6.1.2 For NIJ threat level III/III+

- a) Stand-alone armour system weight
Maximum weight: 2.3 kg
- | | |
|------------|--------|
| 2.0-2.3 kg | 20 pts |
| 1.7-2.0 kg | 30 pts |
| ≤1.7 kg | 40 pts |
- b) Stand-alone armour system transient deformation
Maximum transient deformation: 40 mm
- | | |
|----------|--------|
| 30-40 mm | 15 pts |
| 20-30 mm | 25 pts |
| ≤ 20 mm | 35 pts |
- c) Stand-alone armour system thickness
Maximum thickness: 24 mm
- | | |
|----------|--------|
| 22-24 mm | 10 pts |
| 20-22 mm | 20pts |
| ≤ 20 mm | 25 pts |

6.1.3 For NIJ threat level IV

- a) Stand-alone armour system weight
Maximum weight: 2.7kg
- | | |
|------------|--------|
| 2.5-2.7 kg | 20 pts |
| 2.3-2.5 kg | 30 pts |
| ≤ 2.3 kg | 40 pts |
- b) Stand-alone armour system transient deformation
Maximum transient deformation: 40 mm
- | | |
|----------|--------|
| 30-40 mm | 15 pts |
| 20-30 mm | 25 pts |
| ≤ 20 mm | 35 pts |
- c) Stand-alone armour system thickness
Maximum thickness: 24 mm
- | | |
|----------|--------|
| 22-24 mm | 10 pts |
| 20-22 mm | 20pts |
| ≤ 20 mm | 25 pts |

6.2 Rating priority order

- From 6.1, if an equal rating is obtained, the following priority order will apply

- a) lower weight (relative rating of 2)

- b) smallest transient backface deformation (relative rating of 1)
- c) smallest thickness (relative rating of 0.75)

- Based on this classification, for two equivalent weights, the smallest transient backface will win. For two equivalent weights with equivalent transient backface deformation, the smallest thickness will win.

At the end of the armour development phase (Section 4.0)

- if no armour system obtained the minimum requirement, as evaluated in Section 5.0, the phase 2 - supply and delivery (Optional goods), will not apply.
- based upon DND needs, the possibility of applying phase 2 - supply and delivery (Optional goods), or not, will be decided. DND has no obligation to apply the phase 2 - supply and delivery (Optional goods), even if all minimal requirements are achieved.
- If the phase 2 - supply and delivery (Optional goods) is applied, quantity will be determined at the moment of the order and batches will be subjected to controlled tests at DRDC Valcartier.

7.0 SECURITY CLASSIFICATION

All information provided by contractors will be classified industry confidential. Information, data, test results obtained from a company or performed under this contract will circulate only between DND and the concerned company to whom it belongs.

8.0 MATERIAL/SUPPORT TO BE SUPPLIED BY DND PARTNERS

DND will provide control tests at DND ballistics laboratories. A maximum of two tests series per year will be allowed per company (DoP or Ballistic). The sender is responsible for all transportation fees.

Upon request and availability of personnel and equipment, access to High Strain Rate laboratories is possible. Sample preparation is the company's responsibility and has to be made in accordance with DRDC Valcartier sample design (given on request).

9.0 MEETINGS

Meetings will be held approximately every 6 months or as required to advance the work and to meet the schedule. Meetings will alternate between the contractor and DRDC Valcartier facilities. At DRDC Valcartier, visits will take place with escort. The meetings will be classified industry confidential.

10.0 DELIVERABLE:

10.1 Reports/deliverable -Development Phase

- All deliverable and/or material must be received through DRDC Valcartier supply section

10.1.1 Progress Report:

Short progress reports will be provided every three months for the full duration of the contract. The short progress report will describe the work accomplished during the two

months and providing new results available. Sufficient sketches, diagrams, photographs, etc., shall be included if necessary to describe the progress accomplished.

10.1.2 Phase Report:

A report will be provided at the end of every year as a minimum frequency. The phase report will describe in detail the work accomplished during the full duration of the phase relative to the main objectives of the program. The technical specifications and technical data should be included as well as physical and performance characteristic. A meeting will be held at the end of every year to evaluate the pertinence of continuing the program based on the progress with respect to main objectives.

10.1.3 Final Report:

- a) At the end of the phase 1 - development and independently of the phase 2 - supply and delivery (Optional goods), the contractor will provide DRDC Valcartier with 10 copies (printed and bound) of a detailed final report, which includes
 - Analysis and results from material characterization (sub-points 4.1.1, 4.2.1 and 4.2.2 of statement of work),
 - Integration process and mass efficiency compared with reference armour system (sub-points 4.1.2 and 4.2.3 of statement of work).
- b) A PDF version of the final report must also be provided. Reports must be formatted in accordance with DRDC standard. The standard can be obtained through the project's scientific authority.

10.1.4 Publications:

All publications including manuscripts, presentation summaries or any other publications must be submitted to the scientific authority for revision and approbation 90 days before the due date. An explicit reference to financial support by the federal government must be included and must clearly state the sole responsibility of authors on the content. The scientific authority will provide a written justification if the government's interests are not well served, which will also be sent to the publication responsible (journal or conference).

10.2 Armour Plates supply and delivery Phase

10.2.1 Control Plates sent to DRDC Valcartier

Quality control armour plates should meet the test conditions detailed in Section 5.0. The threat detail charts including caliber, ammunition weight, weapon and impact velocities is the same as per the development phase and will be provided to the qualified companies only. A minimum of 20 armour systems will be taken randomly from each batch and sent to DRDC Valcartier for testing.

10.2.2 Plates delivery to DND

After control tests will be completed and batches accepted, all plates of the batch will be sent to the user located in Ottawa

DELIVERABLES

In addition to the disclosure obligation under Section 28 of the general conditions 2040, any Foreground Information must be fully disclosed and documented by the Contractor in the technical reports delivered by the Contractor to the Technical Authority under this Contract.

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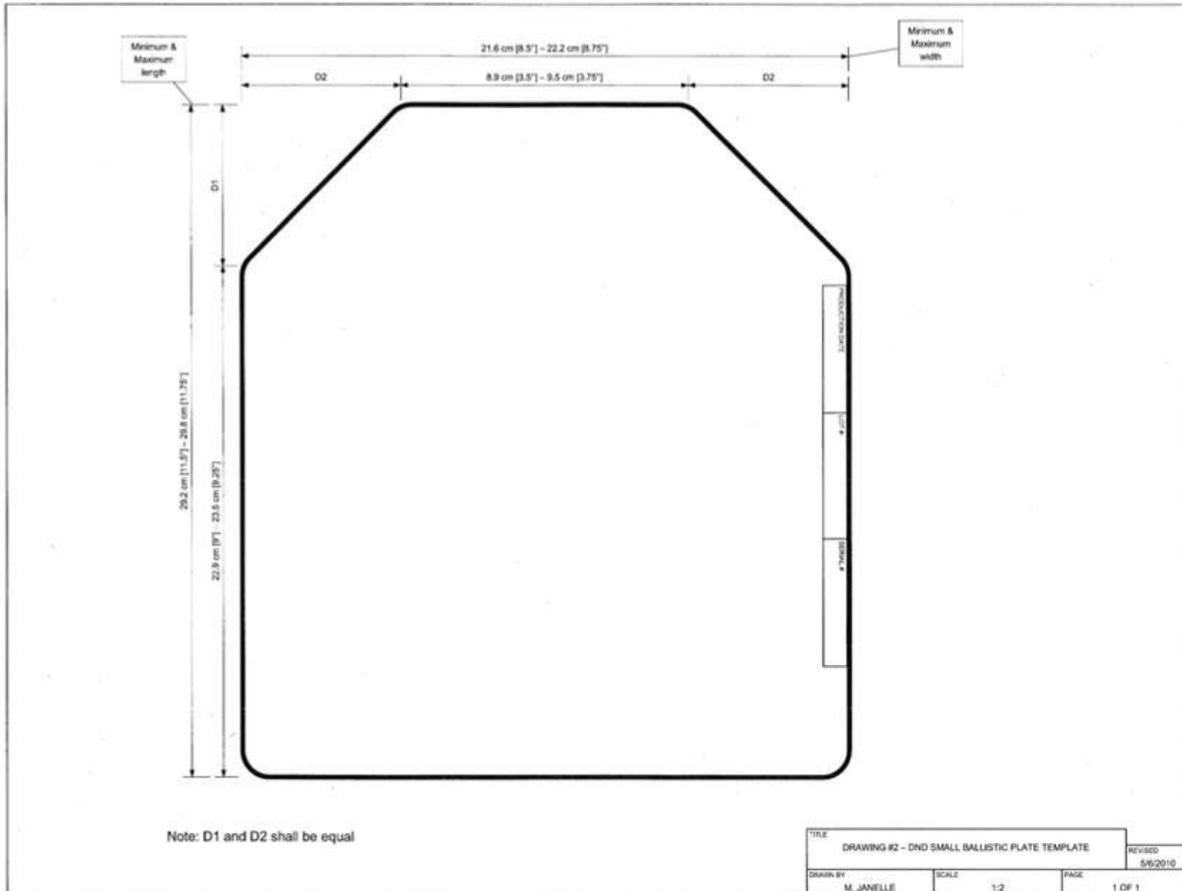
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ANNEX 2

ABBREVIATIONS

AD = Areal Density
 Al₂O₃ = Aluminum Oxide
 AP = Armour Piercing
 B₄C = Boron Carbide
 DND = **Department of National Defence**
 DoP = Depth of Penetration
 DRDC = Defence Research and Development Canada
 FY = Fiscal Year
 HIP = Hot Isostatic Pressing
 MWCNT = multiwalled carbon nanotubes
 NIJ = National Institute of Justice
 R&D = Research and Development
 SiC = Silicon Carbon
 TiB₂ = titanium diboride
 UHMWPE = ultra-molecular weight polyethylene
 V50 : Ballistic limit
 wt = weight

DEFINITIONS

For the purposes of the test methods and procedures, the following definitions apply:

Areal Density [kg/m²]: a measure of the weight of armour material per unit area, expressed in kilograms per square metre) of the surface area.

Armour : a shielding material provided for protection against ballistic threats.

Ballistic Resistance : a measure of the capability of a material or component to absorb some of the kinetic energy of an impacting projectile.

Ballistic Resistance : the measure of the potential of a protection system component to defeat an impacting projectile or fragment.

Ballistic Test Method : a method used to assess, in a scientific manner, the resistance to perforation provided by a material against a ballistic projectile.

Ballistic Threat : any projectile that may be launched at a target with the potential to perforate it.

Barrel : a tube used to launch the projectile at the target.

Bullet : a specific projectile type that is fired from a cartridge case in a small arm, e.g. handgun sub-machine gun, rifle.

Complete Penetration (CP) : a complete penetration has occurred when an impacting projectile caused the projectile, a piece of the projectile or target debris to pass through the witness system, i.e., there is at least one perforation through which light is visible through the witness system.

Complete Penetration : this phrase is often used interchangeably with 'perforation'. STANAG 2920 requires that the term 'perforation' be used.

Composite Armour : an armour system consisting of two or more different armour materials assembled together to form a protective unit. Not to be confused with composite materials such as GFRP that may form one armour element.

Delamination : Mode of failure develops inside a composite materials that separate a laminate into layers with significant loss of mechanical toughness.

Density: Weight (mass) per unit of volume used as a measure of the compactness of a substance. It is commonly expressed in kilograms per cubic metre (kg/m³).

Ductility : A metal's ability to be drawn, stretched, or formed without breaking.

Flexural strength: Also known as modulus of rupture, it is defined as a material's ability to resist deformation under load. For a homogeneous material, the flexural strength would be the same as the direct tensile strength.

Hopkinson test: Tests method to evaluate the dynamic stress-strain response of materials.

Impact Point : the designated point on the target that the projectile hits. Ideally, this should be identical to the aim point.

Impact Location : the impact location is defined to be at the centre point of impact.

Impact Velocity [m/s] : the velocity of a projectile at the instant of impact (see also strike velocity).

Kevlar: Kevlar® is the registered trademark from DuPont for a para-aramid synthetic fibre (aromatic polyamide) that combines high strength with light weight.

L/D Ratio : the ratio of the length to the diameter of a specific projectile.

Muzzle Velocity [m/s] : the projectile velocity at the moment which the projectile ceases to be acted upon by propelling forces. This velocity is expressed in metres per second. This velocity is a function of the projectile weight, firing charge of the projectile, barrel characteristics, etc.

Non-Perforation : the incomplete or non-penetration of a material by the projectile being used to test it. A non-perforation has occurred when the witness system has indicated that no perforation has occurred.

Partial Penetration : this phrase is often used interchangeably with 'non-perforation'. STANAG 2920 requires that the term 'non-perforation' be used.

Partial Penetration (PP) : A projectile impact that does not result in light being visible through the WP.

Perforation : the complete penetration of a material, by a projectile being used to test it. 'Perforation' is the required term to be used according to STANAG 2920. A perforation has occurred when the witness system has indicated a perforation to have occurred.

Personal Armour : an item of armour that is worn or carried by the user.

Projectile : any item that is launched at a target. Projectiles include bullets, fragment simulating projectiles (primary and secondary), and flechettes.

Shear Stress : stress which is applied parallel or tangential to a face of a material.

Small arms : all gas-propelled, tube-type weapons firing a ballistic projectile with a diameter (calibre) up to and including 20 mm.

Small Arms Ammunition : all ammunition up to and including a calibre of 20 mm. A round of small arms ammunition includes a ballistic projectile, propellant charge, primer, and a charge case.

Strength : A material's ability to resist outside forces that are trying to break or deform it.

Strike Face : the surface of a test target designed to face the attack of a ballistic threat.

Striking or Impact Velocity (V_s) [m/s] : the velocity of the projectile upon impact with the target face.

Target : the item of personal armour or combat clothing being tested.

Target distance [m]: the distance between the muzzle of the test launcher barrel and the strike face of the target (see Figure 5).

Tensile Strength : The ability of a metal to resist forces that attempt to pull apart or stretch it.

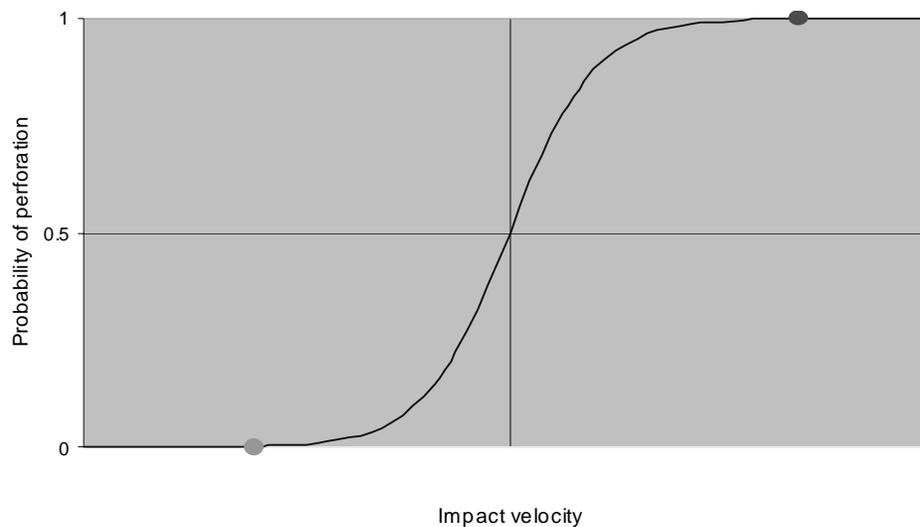
Test piece : a material or fabricated item of clothing or armour which is to be ballistically tested for evaluation of ballistic protection properties.

Test Series : all the impacts required to assess the ballistic performance of one component / threat combination.

Toughness : energy per volume that a material can absorb before rupturing. It can be determined by measuring the area (i.e., by taking the integral) underneath the stress-strain curve

V_0 [m/s] : the theoretical maximum velocity at which, using the named projectile and target material, no perforation will occur. Hence the V_0 is the theoretical maximum velocity at which the probability of perforation is zero.

V_{50} [m/s] : the velocity at which, using the named projectile and target material the estimated probability of perforation 0.5.



V_{50} ballistic limit [m/s] : the striking velocity at which 50% of the impacts of a projectile will result in complete penetration of a given armour on specified attack conditions.

V_{proof} [m/s] : the minimum nominal velocity specified for a particular projectile for a pass / fail or acceptance test where a given number of rounds are fired at a test specimen and where no complete penetration is allowed in the initial qualification test series. An increase in the number of V_{proof} rounds fired will improve the statistical confidence in the result.

Witness System : a method of determining that the test piece has suffered a perforation.

Witness plate : a material sheet placed parallel to the ballistic test sample and behind a target impact area to indicate the effects of debris caused by the projectile's impact. It is also use to detect penetrating projectiles or spall.

Yaw : projectile yaw is the angular deviation of the longitudinal axis of the projectile from the line of flight. Acceptable yaw is no greater than 5° for fragment simulating projectiles or 3° for bullets and flechettes.

Yield Strength or Yield Point: stress at which a material begins to deform plastically. Because there is no definite point on the stress-strain curve where elastic strain ends and plastic strain begins, the yield strength is generally chosen to be the strength when a 0,02 % plastic strain has occurred.

Yield stress : the stress level at which a material ceases to behave elastically. The stress divided by the strain is no longer constant. The point at which this occurs is known as the yield point

Young Moduli: the ratio of the tensile stress to the corresponding tensile strain in an isotropic material

ANNEX B**BASIS OF PAYMENT**

(to be completed at Contract award)
**(Bidders must submit their financial bid in accordance with
the Financial Bid Presentation Sheet at Attachment 1)**

THREAT LEVEL III OR IV**A. FIRM PART: PHASE 1 - DEVELOPMENT**

1. **LABOUR:** at firm all-inclusive rates, GST/HST extra, in accordance with the following:

Resources proposed	Firm Hourly Rate		
	Proposed Contract Period		
	Date of Award to March 31 2014	1 April 2014 to March 31 2015	1 April 2015 to March 31 2016
	_____ \$	_____ \$	_____ \$
	_____ \$	_____ \$	_____ \$
	_____ \$	_____ \$	_____ \$
	_____ \$	_____ \$	_____ \$
	_____ \$	_____ \$	_____ \$

Est.: \$ _____

2. **EQUIPMENT:** at laid down cost without markup

Est.: \$ _____

3. **RENTALS:** at actual cost without markup

Est.: \$ _____

4. **MATERIALS AND SUPPLIES:** at laid down cost without

Est.: \$

_____ markup

5. **TRAVEL AND LIVING EXPENSES:**

Est.: \$ _____

The Contractor will be reimbursed its authorized travel and living expenses reasonably and properly incurred in the performance of the Work, at cost, without any allowance for profit and/or administrative overhead, in accordance with the meal, private vehicle and incidental expenses provided in Appendices B, C and D of the Treasury Board Travel Directive (http://www.tbs-sct.gc.ca/pubs_pol/hrpubs/TBM_113/td-dv_e.asp), and with the other provisions of the directive referring to "travellers", rather than those referring to "employees" are applicable.

All travel must have prior authorization of the Technical Authority. All payments are subject to government audit.

6. **SUBCONTRACTS:** at actual cost without markup **Est.: \$ _____**

7. **OTHER DIRECT CHARGES:** at actual cost without markup **Est.: \$ _____**

**Estimated Cost to a Limitation of Expenditure-
Phase 1 - development : \$_____ (GST/HST extra)**

With the exception of the firm rate(s) and price(s), the amounts shown in the various items specified above are estimates only. Minor changes to these estimates will be accepted for billing purposes as the Work proceeds, provided that these changes have the prior approval of the Technical Authority, and provided that the estimated cost does not exceed the aforementioned Limitation of Expenditure.

B. OPTIONAL PART: PHASE 2 - SUPPLY AND DELIVERY (Optional goods)

From date of award to March 31 2016:

Firm unit prices, all inclusive, for the supply and delivery of armor plates, as developed in Phase 1 will apply for each quantity group, as follows:

	Date of award to March 31 2016
Total quantity by Order	Firm Unit prices
0-100	_____ \$
101-200	_____ \$
201 and more	_____ \$

Additional periods (possibility of 5 period of one-year each):

A percentage increase is provided for all prices in the Table above, for the 5 optional years.

Price increase (% 1st optional year) _____%

Price increase (% 2nd optional year) _____%

Price increase (% 3rd optional year) _____%

Price increase (% 4th optional year) _____%

Price increase (% 5th optional year) _____%

ANNEX C

CONTRACTOR DISCLOSURE OF FOREGROUND INFORMATION

Please see reference applicable in your contract to look into **Article 1 - Interpretation of 2040 General Conditions** to obtain the complete definition of the term Foreground Information and thus to help you to determine the information which must be revealed. <http://sacc.pwgsc.gc.ca/sacc/query-e.jsp>.

The Contractor shall respond to the following questions:

1. Contract No.:
2. What is the descriptive title of the FIP (Foreground Intellectual Property)?
3. Abbreviated description of the FIP and, if applicable, of the different systems and sub-systems.
4. What is or was the objective of the project?
5. Explain how the FIP meets the objective of the project (for example: the advantage of the new solution, what problem did the FIP resolve or what benefits did the FIP deliver).
6. Under which category (ies) would you best describe the FIP and why: Patents, Inventions, Trade Secrets, Copyright, Industrial Designs, Rights in Integrated Circuit Topography, Know-how, Other?
7. Describe the features or aspects of the FIP that are novel, useful and not obvious.
8. Has the FIP been tested or demonstrated? If yes, please summarise the results.
9. Has any publication or disclosure to others been made? If so, to whom, when, where and how?
10. Provide names and addresses of the inventors.
11. Provide an explicit and detailed description of the FIP developed during the contract (Refer to pertinent section of the technical report, if necessary).

Please specify name and position of person approving / authorizing this disclosure. This person is to sign and date the disclosure.

Signature

Date

Name

Title

(Internal DRDC Valcartier)

Signature

Date

Name

Title (Technical authority)

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ANNEX D

NON-DISCLOSURE AGREEMENT

I, _____, recognize that in the course of my work as an employee or subcontractor of _____, I may be given access to information by or on behalf of Canada in connection with the Work, pursuant to Contract Serial No _____ between Her Majesty the Queen in right of Canada, represented by the Minister of Public Works and Government Services and _____, including any information that is confidential or proprietary to third parties, and information conceived, developed or produced by the Contractor as part of the Work. For the purposes of this agreement, information includes but not limited to: any documents, instructions, guidelines, data, material, advice or any other information whether received orally, in printed form, recorded electronically, or otherwise and whether or not labeled as proprietary or sensitive, that is disclosed to a person or that a person becomes aware of during the performance of the Contract.

I agree that I will not reproduce, copy, use, divulge, release or disclose, in whole or in part, in whatever way or form any information described above to any person other than a person employed by Canada on a need to know basis. I undertake to safeguard the same and take all necessary and appropriate measures, including those set out in any written or oral instructions issued by Canada, to prevent the disclosure of or access to such information in contravention of this agreement.

I also acknowledge that any information provided to the Contractor by or on behalf of Canada must be used solely for the purpose of the Contract and must remain the property of Canada or a third party, as the case may be.

I agree that the obligation of this agreement will survive the completion of the Contract Serial No: _____

Signature

Date

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ANNEX E

SECURITY REQUIREMENTS CHECK LIST

The Security Requirements Check List (SRCL) appended to the bid solicitation package is to be inserted at this point and forms part of this document

ATTACHMENT 1**FINANCIAL BID PRESENTATION SHEET*****THREAT LEVEL () (III OR IV - THE BIDDER MUST INDICATE A THREAT LEVEL)*****A. FIRM PART: PHASE 1 - DEVELOPMENT****1. LABOUR:** at firm all-inclusive rates, GST/HST extra, in accordance with the following:**BIDDERS ARE REQUESTED TO QUOTE ONE RATE PER RESOURCE PROPOSED, PER PERIOD.**

Resources proposed	Firm Hourly Rate						Total per category
	Proposed Contract Period						
	Date of award To March 31 2014	Total Estimated Hours	1 April 2014 to March 31 2015	Total Estimated Hours	1 April 2015 To March 31 2016	Total Estimated Hours	
	\$		\$		\$		\$
	\$		\$		\$		\$
	\$		\$		\$		\$
	\$		\$		\$		\$
	\$		\$		\$		\$
	\$		\$		\$		\$
	\$		\$		\$		\$

TOTAL ESTIMATED LABOUR: \$ _____

*Items 2 through 7 shall be completed if the Bidder's rates in 1. above do not include the following:***2. EQUIPMENT:** at laid down cost without markup

Description

Price

TOTAL ESTIMATED EQUIPMENT: _____ \$

3. RENTALS: at actual cost without markup

Description	Price
_____	_____
_____	_____

TOTAL ESTIMATED RENTALS : _____ \$

4. MATERIALS AND SUPPLIES: at laid down cost without markup

Description	Price
_____	_____
_____	_____

TOTAL ESTIMATED MATERIALS AND SUPPLIES: _____ \$

5. TRAVEL & LIVING: at actual cost without markup but not to exceed the limits of the Treasury Board Travel Directive. With respect to the TB Travel Directive, only the meal, private vehicle and incidental allowances specified in Appendices B, C and D of the TB Travel Directive <http://www.tbs-sct.gc.ca/hr-rh/gtla-vgcl/> and the other provisions of the directive referring to "travellers" rather than those referring to "employees", are applicable. *Details are to be provided on a separate sheet.*

TOTAL ESTIMATED TRAVEL & LIVING: _____ \$

6. SUBCONTRACTS: at actual cost without markup

Support for the proposed subcontractor's price is required in the same details as that required for the Bidder's price. The estimated price for subcontracts should include all direct charges and travel & living expenses which would be to the account of the subcontractor.

TOTAL ESTIMATED SUBCONTRACTS: _____ \$

7. OTHER DIRECT CHARGES: at actual cost without markup

TOTAL ESTIMATED OTHER DIRECT CHARGES : _____ \$

TOTAL ESTIMATED COST TO A LIMITATION OF EXPENDITURE: \$300 000.00 (GST/HST extra)

B. OPTIONAL PART: PHASE 2 - SUPPLY AND DELIVERY (Optional goods)**From date of award to March 31 2016:**

Firm unit prices, all inclusive, for the supply and delivery of armor plates, as developed in Phase 1 will apply for each quantity group, as follows:

THE BIDDER MUST SUBMIT A FIRM UNIT PRICE FOR EACH QUANTITY GROUP OF ARMOUR PLATES FOR THE INITIAL CONTRACT PERIOD, WHICH IS FROM DATE OF AWARD TO MARCH 31 2016.

	Date of award to March 31 2016
Total quantity by Order	Firm Unit prices
0-100	_____ \$
101-200	_____ \$
201 and more	_____ \$

Additional periods (possibility of 5 period of one-year each):

A percentage increase is provided for all prices in the Table above, for the 5 optional years.

THE BIDDER MUST SUBMIT AN INCREASE PERCENTAGE FOR ALL PRICES IN THE TABLE ABOVE, FOR EACH OPTIONAL YEARS

Price increase (% 1st optional year) _____%

Price increase (% 2nd optional year) _____%

Price increase (% 3rd optional year) _____%

Price increase (% 4th optional year) _____%

Price increase (% 5th optional year) _____%

ATTACHMENT 2

MANDATORY AND POINT RATED TECHNICAL CRITERIA

1. Mandatory Technical Criteria

At bid closing time, the Bidder must comply with the following mandatory technical criteria and provide the necessary documentation to support compliance. Any bid which fails to meet the following mandatory technical criteria will be declared non-responsive. Each criterion should be addressed separately.

1.1 Armour Plates

Bidder is requested to provide, at his own expenses, its best armour plates to qualify for a ballistic limit test (the V50) threat level III and/or IV as per NIJ-101.06. The bidder must provide plates for qualification that correspond to the same threat level of the submitted plates. The bidder must provide data sheet record of the given plates and detail the manufacturing technology used. The ballistic limit qualification tests (V50) will be done at DRDC Valcartier laboratory according to NIJ-101.06 standard, the submersion test is not required. Number of plates required is as specified by NIJ-101.06 standard. A failed test will result in disqualification.

Plates must be sent along with its proposal on the same date and time than expected for its submission.

1.2 Key Resources proposed

1.2.1 Only the key resources identified as such are evaluated. To be considered a key resource, an individual must contribute for at least 20% of allocated time for the firm part (phase 1 - development) of this requirement.

1.2.2 For the purpose of this evaluation, a minimum of 2 key resources must be proposed and a maximum of 4 key resources are evaluated. If more than 4 key resources are identified as such, only the first four resources presented in the labour table at Attachment 1 - Financial bid presentation sheet, will be evaluated.

1.2.3 At least one key resource must hold a PhD or a Master of applied sciences specialised in material with a specific orientation in ceramic supported by 2 report projects on ceramic R&D. The diploma must be from a recognized Canadian university or the equivalent as established by a credential evaluation service recognized in Canada*, if the diploma or certificate was issued abroad.

* The list recognized organizations is available on the Web site of the Canadian Information Centre for International Credentials (CICIC) at <http://cicic.ca/2/home.canada>.

1.2.4 The Bidder must provide the names of key resources who will be assigned to this requirement

2. Point Rated Technical Criteria

Criteria 1.1 to 1.4, 2.2 and 3.3 will be scored out of 10 based on the table "Guidelines for evaluating proposals" provided at the end of this section and then weighted as a function of the maximum scores indicated in the table below.

Criteria 2.1, 3.1 and 3.2 will be scored in terms of the indications accompanying each criterion in the following table.

EVALUATION CRITERIA	MAX	MIN
1. TECHNICAL PROPOSAL	75	10
<p>1.1 Understanding of scope and objectives</p> <p>The Bidder should clearly demonstrate that it understands the project objectives and /or sub-objectives(s) of the proposed Work to improve armour and provide a brief rational for each.</p>	10	5
<p>1.2 Proposed methodology: Technology/Innovation</p> <p>The Bidder should clearly outline its approach and proposed methodology for the following elements:</p> <p>1.2.1 Provide detailed background information on the current state-of-the-art technology used for the manufacturing of the armour plate provided for the qualification testing.</p> <p>1.2.2 Explain the technology, process or method that this proposal intends to provide to improve armour which will fill an existing technology gap, provide a superior product or method, and could lead to a competitive, marketable product. Explain how it differs from current existing armour.</p> <p>1.2.3 Since innovative concepts will be preferred, descriptive detail to obtain new approaches/new concepts/ new techniques etc is required. Include information (references, etc.) that highlights the relevant technologies and reference material.</p> <p>1.2.4 Describe how the innovative or novel approaches may secure an advantage comparing to competing approaches.</p>	5 10 10 5	
<p>1.3 Performance Objectives</p> <p>The Bidder should clearly identify the technical features and performance characteristics and should include milestones, together with benchmark goals at key points in the project.</p>	10	

<p>1.4 Methodology: Armour Plates</p> <p>The Bidder should explain and demonstrate how he proposes to address the following:</p> <p>1.4.1 Identify and describe the specific steps to be undertaken during the course of the intended work (material selection, manufacturing, tests, armour plate system material and assembling, etc). Provide sufficient detail for a scientific evaluation.</p> <p>1.4.2 Describe the product, technology, device, method, process, systems, etc that are expected at the end of the project.</p> <p>1.4.3 Describe the significant advantages the developed armour system is expected to have over its competitors.</p> <p>1.4.4 Explain the uniqueness of the armour system.</p> <p>1.4.5 Identify and describe technical risks or challenges and contingency plans to overcome them during the course of the intended work.</p>	<p>5</p> <p>5</p> <p>5</p> <p>5</p> <p>5</p>	
<p>2. QUALIFICATIONS OF KEY RESOURCES</p>	<p>35</p>	<p>5</p>
<p>2.1 KEY RESOURCES - qualifications and relevant experience proven by similar and/or related work (Material and armour development).</p> <p>The curriculum vitae of each key resource should be included.</p> <p>Points are allocated for each key resource proposed that has participated in projects pertaining to the required fields of expertise. Each key resource is evaluated individually and points are added up to the maximum available.</p> <p><i><u>For all the criteria pertaining to the qualification of the key resources, points will be given for qualifications sufficiently demonstrated. The Bidder should therefore provide sufficient information to allow for a complete evaluation of each stated qualification. If the information provided is insufficient to confirm the relevance of the qualification with the requirement of the criteria, points will not be given to the Bidder.</u></i></p> <p>2.1.1 Experience</p> <p><i>Note for the experience criteria:</i></p> <p><i>Examples of relevant information allowing for a complete evaluation of experience are as follows:</i></p> <ul style="list-style-type: none"> - Topic of the project or the experience; - Nature of the project of experience; - name of client, including name and telephone number of a point of contact able to confirm the information; - Exact dates of the project or the experience (month and year of start/end); - Exact dates of the involvement of the resource (month and year of start/end); - Tasks conducted by the resource during the project or the experience. 	<p>10</p>	

Note that concurrent experiences will be considered only once.

10 points - 10 years of relevant work on ceramic R&D pertinent to defence needs **and** 10 projects or more involving R&D, conception on ceramic

8 points - 10 years of relevant work on ceramic R&D pertinent to defence needs **and** 5 projects or more involving R&D, conception on ceramic

6 points - 5 years of relevant work on ceramic R&D pertinent to defence needs **and** 5 projects or more involving R&D, conception on ceramic

4 points - 5 years of relevant work on ceramic R&D pertinent to defence needs **and** 2 projects or more involving R&D, conception on ceramic

3 points - 2 years of relevant work on ceramic R&D pertinent to defence needs **and** 2 projects or more involving R&D, conception on ceramic

2 points - 2 years of relevant work on ceramic R&D pertinent to defence needs **and** 1 projects or more involving R&D, conception on ceramic

1 points - 1 years of relevant work on ceramic R&D pertinent to defence needs **or** 1 projects or more involving R&D, conception on ceramic

2.1.2 Expertise

Note for the expertise criteria:

Research publication is meant to be a book chapter or a paper that has been published (or submitted) in a journal or conference proceedings subject to peer review. PhD and Master thesis are also considered as scientific publication.

Examples of relevant information allowing for a complete evaluation of expertise are as follows:

- Topic, scope and contribution of the research publication;
- Source and complete reference (journal, conference, etc.);
- Level of involvement of the proposed resource in the research publication

Education: Points will be given for certificate or diploma from a recognized Canadian university or college, or the equivalent as established by a recognized Canadian academic credentials assessment service, if obtained outside Canada.*

**The list of recognized organizations can be found under the Canadian Information Centre for International Credentials website, at the following internet link: <http://www.cicic.ca/indexe.stm>*

10 points - PhD (employee or consultant) specialise in material with a specific orientation in ceramic supported by at least: 5 peer reviewed publications or 5 report projects on ceramic R&D

9 points - PhD (employee or consultant) specialise in material with a specific orientation in ceramic supported by at least: 5 publications in open literature or 5 report projects on ceramic R&D

8 points - PhD (employee or consultant) specialise in material with a specific orientation in ceramic supported by at least: 2 report projects on ceramic R&D, no publication

10

5

Solicitation No. - N° de l'invitation

W7701-135520/A

Amd. No. - N° de la modif.

File No. - N° du dossier

QCL-2-35467

Buyer ID - Id de l'acheteur

qcl026

CCC No./N° CCC - FMS No/ N° VME

Client Ref. No. - N° de réf. du client

W7701-13-5520

Canada, with reference to any specialized equipment, techniques and accomplishments.		
TOTAL	125	75

GUIDELINES FOR EVALUATING PROPOSALS:

NON RESPONSIVE	INADEQUATE	POOR	WEAK	JUST ACCEPTABLE	ACCEPTABLE	GOOD	VERY GOOD	EXCELLENT
0 point	1 point	2 - 3 points	4 points	5 -6 points	7 points	8 points	9 points	10 points
Did not submit information which could be evaluated	Absolutely inadequate	Substantially below the desirable minimum	Below the desirable minimum	Barely meets the desirable minimum	Meets the desirable minimum	Slightly exceeds the desirable minimum	Well over desirable minimum	Exceptionally strong proposal
No explanation, description	Very poor explanation, description,	Poor explanation, description	Limited and unclear explanation, description	Explanation, description not all clear	Limited but clear explanation, description	Good explanation, description	Very good explanation, description	Exceptional explanation, description
No evidence	Very poor evidences, do not support requirements	Poor evidences that poorly support requirements	Minimum evidences that barely support requirements	Limited but acceptable evidences to support requirements	Acceptable evidences to support requirements	Good evidences to support requirements	Very good evidences to support requirements	Exceptional evidences to support requirements
No vision, no understanding	Very poor vision, impossible to evaluate understanding	Poor vision and understanding barely demonstrate	Limited vision and limited understanding	vision and understanding just acceptable	vision and understanding are acceptable	Good vision and good understanding	Very good vision and very good understanding	Exceptional vision and Exceptional understanding

ATTACHMENT 3

EVALUATION OF PRICE

For evaluation purposes only, the price of the bid will be determined as follows:

TOTAL EVALUATION AMOUNT:

Limitation of expenditure price for phase 1 - development - obtained from the total estimated cost to a limitation of expenditure price in the Financial bid presentation sheet ;

Plus

Firm total price for phase 2 - supply and delivery (optional goods) obtained by the following method:

FIRM TOTAL PRICE calculated by adding up the evaluation amounts for the initial contract period (date of Contract to March 31, 2016) and for each of the five (5) optional periods of one-year.

a) The evaluation amount for the initial period of contract will be calculated as follows:

Maximum quantity for each quantity group of armour plates multiplied by the firm unit price quoted;

X3 (initial contract period of 3 years approx.)

= **Evaluation amount for the initial contract period**

b) The evaluation amount for the first optional period of the contract will be calculated as follows:

Evaluation amount for the initial contract period (calculated above)

/ 3 (initial contract period of 3 years approx.)

X ___% increase in costs (first optional year)

= **Evaluation amount for the first optional period of the contract**

c) The evaluation amount of each following optional period of the contract will be calculated as follows:

Evaluation amount for the previous optional period of the contract

X ___% increase in costs (applicable optional year)

= **Evaluation amount for the applicable optional period of the contract**

Please refer to the following table for a sample calculation of the evaluation amount for the initial contract period (date of Contract to March 31, 2016). Note that the data entered in the table are fictitious prices provided solely as examples.

Sample Financial Evaluation Table

A Maximum Qty.	B Bid 1	C Total bid 1	D Bid 2	E Total bid 2
Armour Plates				
100	\$1 000	\$100 000 C=AxB	\$1 500	\$150 000 E=AxD
200	\$900	\$180 000 C=AxB	\$1 000	\$200 000 E=AxD
300*	\$800	\$240 000 C=AxB	\$500.00	\$150 000 E=AxD
SUB TOTAL		\$520 000		\$500 000
TOTAL (x3)		\$1 560 000		\$1 500 000

* Estimated quantity for evaluation purpose, as this quantity group has no maximum

The evaluation amount for the initial period will be added to the amount for each optional period in order to calculate the firm total price for phase 2, then added to the total estimated cost to a limitation of expenditure price to determine the lowest bid.

Bid 1

Initial contract period (see table above):	1 560 000\$	
Optional period 1 (submitted increase = 0%):	+ 520 000\$	
Optional period 2 (submitted increase = 0%):	+ 520 000\$	
Optional period 3 (submitted increase = 0%):	+ 520 000\$	
Optional period 4 (submitted increase = 0%):	+ 520 000\$	
Optional period 5 (submitted increase = 0%):	+ 520 000\$	
estimated cost to a limitation of expenditure:	+ 300 000\$	
	4 460 000\$	(1)

and

Bid 2

Initial contract period (see table above):	1 500 000\$	
Optional period 1 (submitted increase = 0%):	+ 515 000\$	
Optional period 2 (submitted increase = 0%):	+ 530 450\$	
Optional period 3 (submitted increase = 0%):	+ 546 364\$	
Optional period 4 (submitted increase = 0%):	+ 562 754\$	
Optional period 5 (submitted increase = 0%):	+ 579 637\$	
Estimated cost to a limitation of expenditure:	+ 300 000\$	
	4 534 205\$	(2)

In the above example, Bidder No. 1 submitted a lower total evaluation amount than Bidder No. 2.
EVALUATION: 80% TECHNIC, 20% PRICE

EXAMPLE

	BIDDER 1	BIDDER 2
Overall technical score	81/100	85/100
Bid evaluated price	\$4 460 000	\$4 534 205
Calculations		
Technical merit score	$81/100 \times 80 = 64$	$85/100 \times 80 = 68$
Pricing score	$4\,460\,000 / 4\,460\,000 \times 20 = 20$	$4\,460\,000 / 4\,534\,205 \times 20 = 19.67$
Combined rating	84	87.67
Overall rating	2	1

The estimated level of effort specified is only an approximation of requirements given in good faith and is provided for financial bid evaluation purposes only. It does not represent a commitment by Canada.



Contract Number / Numéro du contrat W7701-135520
Security Classification / Classification de sécurité Unclassified

**SECURITY REQUIREMENTS CHECK LIST (SRCL)
LISTE DE VÉRIFICATION DES EXIGENCES RELATIVES À LA SÉCURITÉ (LVERS)**

PART A - CONTRACT INFORMATION / PARTIE A - INFORMATION CONTRACTUELLE		
1. Originating Government Department or Organization / Ministère ou organisme gouvernemental d'origine DND	2. Branch or Directorate / Direction générale ou Direction RDDC	
3. a) Subcontract Number / Numéro du contrat de sous-traitance	3. b) Name and Address of Subcontractor / Nom et adresse du sous-traitant	
4. Brief Description of Work / Brève description du travail This project includes 2 phases: Phase 1- development phase of 3 years which explore and develop advanced material concept armour for personnel and phase 2- procurement phase of 1 to 5 years maximum, which is optional and depends on needs and results of phase 1.		
5. a) Will the supplier require access to Controlled Goods? / Le fournisseur aura-t-il accès à des marchandises contrôlées?		<input type="checkbox"/> No / Non <input checked="" type="checkbox"/> Yes / Oui
5. b) Will the supplier require access to unclassified military technical data subject to the provisions of the Technical Data Control Regulations? / Le fournisseur aura-t-il accès à des données techniques militaires non classifiées qui sont assujetties aux dispositions du Règlement sur le contrôle des données techniques?		<input type="checkbox"/> No / Non <input checked="" type="checkbox"/> Yes / Oui
6. Indicate the type of access required / Indiquer le type d'accès requis		
6. a) Will the supplier and its employees require access to PROTECTED and/or CLASSIFIED information or assets? / Le fournisseur ainsi que les employés auront-ils accès à des renseignements ou à des biens PROTÉGÉS et/ou CLASSIFIÉS? (Specify the level of access using the chart in Question 7. c) / (Préciser le niveau d'accès en utilisant le tableau qui se trouve à la question 7. c)		<input type="checkbox"/> No / Non <input checked="" type="checkbox"/> Yes / Oui
6. b) Will the supplier and its employees (e.g. cleaners, maintenance personnel) require access to restricted access areas? No access to PROTECTED and/or CLASSIFIED information or assets is permitted. / Le fournisseur et ses employés (p. ex. nettoyeurs, personnel d'entretien) auront-ils accès à des zones d'accès restreintes? L'accès à des renseignements ou à des biens PROTÉGÉS et/ou CLASSIFIÉS n'est pas autorisé.		<input checked="" type="checkbox"/> No / Non <input type="checkbox"/> Yes / Oui
6. c) Is this a commercial courier or delivery requirement with no overnight storage? / S'agit-il d'un contrat de messagerie ou de livraison commerciale sans entreposage de nuit?		<input checked="" type="checkbox"/> No / Non <input type="checkbox"/> Yes / Oui
7. a) Indicate the type of information that the supplier will be required to access / Indiquer le type d'information auquel le fournisseur devra avoir accès		
Canada <input checked="" type="checkbox"/>	NATO / OTAN <input type="checkbox"/>	Foreign / Étranger <input type="checkbox"/>
7. b) Release restrictions / Restrictions relatives à la diffusion		
No release restrictions / Aucune restriction relative à la diffusion <input checked="" type="checkbox"/>	All NATO countries / Tous les pays de l'OTAN <input type="checkbox"/>	No release restrictions / Aucune restriction relative à la diffusion <input type="checkbox"/>
Not releasable / À ne pas diffuser <input type="checkbox"/>		
Restricted to: / Limité à: Specify country(ies): / Préciser le(s) pays: <input type="checkbox"/>	Restricted to: / Limité à: Specify country(ies): / Préciser le(s) pays: <input type="checkbox"/>	Restricted to: / Limité à: Specify country(ies): / Préciser le(s) pays: <input type="checkbox"/>
7. c) Level of information / Niveau d'information		
PROTECTED A / PROTÉGÉ A <input type="checkbox"/>	NATO UNCLASSIFIED / NATO NON CLASSIFIÉ <input type="checkbox"/>	PROTECTED A / PROTÉGÉ A <input type="checkbox"/>
PROTECTED B / PROTÉGÉ B <input type="checkbox"/>	NATO RESTRICTED / NATO DIFFUSION RESTREINTE <input type="checkbox"/>	PROTECTED B / PROTÉGÉ B <input type="checkbox"/>
PROTECTED C / PROTÉGÉ C <input type="checkbox"/>	NATO CONFIDENTIAL / NATO CONFIDENTIEL <input type="checkbox"/>	PROTECTED C / PROTÉGÉ C <input type="checkbox"/>
CONFIDENTIAL / CONFIDENTIEL <input type="checkbox"/>	NATO SECRET / NATO SECRET <input type="checkbox"/>	CONFIDENTIAL / CONFIDENTIEL <input type="checkbox"/>
SECRET / SECRET <input checked="" type="checkbox"/>	COSMIC TOP SECRET / COSMIC TRÈS SECRET <input type="checkbox"/>	SECRET / SECRET <input type="checkbox"/>
TOP SECRET / TRÈS SECRET <input type="checkbox"/>		TOP SECRET / TRÈS SECRET <input type="checkbox"/>
TOP SECRET (SIGINT) / TRÈS SECRET (SIGINT) <input type="checkbox"/>		TOP SECRET (SIGINT) / TRÈS SECRET (SIGINT) <input type="checkbox"/>



PART A (continued) / PARTIE A (suite)

8. Will the supplier require access to PROTECTED and/or CLASSIFIED COMSEC information or assets?
 Le fournisseur aura-t-il accès à des renseignements ou à des biens COMSEC désignés PROTÉGÉS et/ou CLASSIFIÉS? No / Non Yes / Oui
 If Yes, indicate the level of sensitivity:
 Dans l'affirmative, indiquer le niveau de sensibilité :

9. Will the supplier require access to extremely sensitive INFOSEC information or assets?
 Le fournisseur aura-t-il accès à des renseignements ou à des biens INFOSEC de nature extrêmement délicate? No / Non Yes / Oui

Short Title(s) of material / Titre(s) abrégé(s) du matériel :
 Document Number / Numéro du document :

PART B - PERSONNEL (SUPPLIER) / PARTIE B - PERSONNEL (FOURNISSEUR)

10. a) Personnel security screening level required / Niveau de contrôle de la sécurité du personnel requis

- | | | | |
|--|---|--|--|
| <input type="checkbox"/> RELIABILITY STATUS
COTE DE FIABILITÉ | <input type="checkbox"/> CONFIDENTIAL
CONFIDENTIEL | <input checked="" type="checkbox"/> SECRET
SECRET | <input type="checkbox"/> TOP SECRET
TRÈS SECRET |
| <input type="checkbox"/> TOP SECRET-SIGINT
TRÈS SECRET - SIGINT | <input type="checkbox"/> NATO CONFIDENTIAL
NATO CONFIDENTIEL | <input type="checkbox"/> NATO SECRET
NATO SECRET | <input type="checkbox"/> COSMIC TOP SECRET
COSMIC TRÈS SECRET |
| <input type="checkbox"/> SITE ACCESS
ACCÈS AUX EMPLACEMENTS | | | |

Special comments:
 Commentaires spéciaux :

NOTE: If multiple levels of screening are identified, a Security Classification Guide must be provided.
 REMARQUE: Si plusieurs niveaux de contrôle de sécurité sont requis, un guide de classification de la sécurité doit être fourni.

10. b) May unscreened personnel be used for portions of the work?
 Du personnel sans autorisation sécuritaire peut-il se voir confier des parties du travail? No / Non Yes / Oui
 If Yes, will unscreened personnel be escorted?
 Dans l'affirmative, le personnel en question sera-t-il escorté? No / Non Yes / Oui

PART C - SAFEGUARDS (SUPPLIER) / PARTIE C - MESURES DE PROTECTION (FOURNISSEUR)

INFORMATION / ASSETS / RENSEIGNEMENTS / BIENS

11. a) Will the supplier be required to receive and store PROTECTED and/or CLASSIFIED information or assets on its site or premises?
 Le fournisseur sera-t-il tenu de recevoir et d'entreposer sur place des renseignements ou des biens PROTÉGÉS et/ou CLASSIFIÉS? No / Non Yes / Oui

11. b) Will the supplier be required to safeguard COMSEC information or assets?
 Le fournisseur sera-t-il tenu de protéger des renseignements ou des biens COMSEC? No / Non Yes / Oui

PRODUCTION

11. c) Will the production (manufacture, and/or repair and/or modification) of PROTECTED and/or CLASSIFIED material or equipment occur at the supplier's site or premises?
 Les installations du fournisseur serviront-elles à la production (fabrication et/ou réparation et/ou modification) de matériel PROTÉGÉ et/ou CLASSIFIÉ? No / Non Yes / Oui

INFORMATION TECHNOLOGY (IT) MEDIA / SUPPORT RELATIF À LA TECHNOLOGIE DE L'INFORMATION (TI)

11. d) Will the supplier be required to use its IT systems to electronically process, produce or store PROTECTED and/or CLASSIFIED information or data?
 Le fournisseur sera-t-il tenu d'utiliser ses propres systèmes informatiques pour traiter, produire ou stocker électroniquement des renseignements ou des données PROTÉGÉS et/ou CLASSIFIÉS? No / Non Yes / Oui

11. e) Will there be an electronic link between the supplier's IT systems and the government department or agency?
 Disposera-t-on d'un lien électronique entre le système informatique du fournisseur et celui du ministère ou de l'agence gouvernementale? No / Non Yes / Oui



PART C - (continued) / PARTIE C - (suite)

For users completing the form **manually** use the summary chart below to indicate the category(ies) and level(s) of safeguarding required at the supplier's site(s) or premises.
 Les utilisateurs qui remplissent le formulaire **manuellement** doivent utiliser le tableau récapitulatif ci-dessous pour indiquer, pour chaque catégorie, les niveaux de sauvegarde requis aux installations du fournisseur.

For users completing the form **online** (via the Internet), the summary chart is automatically populated by your responses to previous questions.
 Dans le cas des utilisateurs qui remplissent le formulaire **en ligne** (par Internet), les réponses aux questions précédentes sont automatiquement saisies dans le tableau récapitulatif.

SUMMARY CHART / TABLEAU RÉCAPITULATIF

Category / Catégorie	PROTECTED / PROTÉGÉ			CLASSIFIED / CLASSIFIÉ			NATO				COMSEC					
	A	B	C	CONFIDENTIAL	SECRET	TOP SECRET	NATO RESTRICTED	NATO CONFIDENTIAL	NATO SECRET	COSMIC TOP SECRET	PROTECTED / PROTÉGÉ			CONFIDENTIAL	SECRET	TOP SECRET
				CONFIDENTIEL		TRES SECRET	NATO DIFFUSION RESTREINTE	NATO CONFIDENTIEL			COSMIC TRES SECRET	A	B			
Information / Assets / Renseignements / Biens	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Production	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
IT Media / Support TI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
IT Link / Lien électronique	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				

12. a) Is the description of the work contained within this SRCL PROTECTED and/or CLASSIFIED?
 La description du travail visé par la présente LVERS est-elle de nature PROTÉGÉE et/ou CLASSIFIÉE? No / Non Yes / Oui

If Yes, classify this form by annotating the top and bottom in the area entitled "Security Classification".
 Dans l'affirmative, classifiez le présent formulaire en indiquant le niveau de sécurité dans la case intitulée « Classification de sécurité » au haut et au bas du formulaire.

12. b) Will the documentation attached to this SRCL be PROTECTED and/or CLASSIFIED?
 La documentation associée à la présente LVERS sera-t-elle PROTÉGÉE et/ou CLASSIFIÉE? No / Non Yes / Oui

If Yes, classify this form by annotating the top and bottom in the area entitled "Security Classification" and indicate with attachments (e.g. SECRET with Attachments).
 Dans l'affirmative, classifiez le présent formulaire en indiquant le niveau de sécurité dans la case intitulée « Classification de sécurité » au haut et au bas du formulaire et indiquez qu'il y a des pièces jointes (p. ex. SECRET avec des pièces jointes).