



RETURN BIDS TO:

RETOURNER LES SOUMISSIONS À:

Réception des soumissions - TPSGC / Bid Receiving
- PWGSC

Voir dans le document/
See herein

NA

Québec

NA

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

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

Title - Sujet Ballistic Protection Plate Lightweight Standalone Specific Threat Ballistic Protection Plate	
Solicitation No. - N° de l'invitation W7701-217392/A	Date 2022-06-09
Client Reference No. - N° de référence du client W7701-217392	
GETS Reference No. - N° de référence de SEAG PW-\$QCL-054-18322	
File No. - N° de dossier QCL-0-43244 (054)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM Eastern Daylight Saving Time EDT on - le 2022-07-14 Heure Avancée de l'Est HAE	
F.O.B. - F.A.B. Specified Herein - Précisé dans les présentes Plant-Usine: <input type="checkbox"/> Destination: <input type="checkbox"/> Other-Autre: <input checked="" type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Boisclair, Daniel	Buyer Id - Id de l'acheteur qcl054
Telephone No. - N° de téléphone (418) 571-8051 ()	FAX No. - N° de FAX () -
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: MINISTERE DE LA DEFENSE NATIONALE BATISSE 53 2459 ROUTE DE LA BRAVOURE QUEBEC Québec G3J1X5 Canada	

Instructions: See Herein

Instructions: Voir aux présentes

Delivery Required - Livraison exigée Voir doc.	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

1.1 Introduction

The bid solicitation 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 and Additional Information: includes the certifications and additional information 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.

The following Annexes:

Annex A Statement of Work - Phase 1
Annex B Basis of Payment & Schedule of Milestones - Phase 1
Annex C Security Requirement Check List (SRCL)
Annex D Contractor Disclosure of Foreground Information
Annex E COVID-19 Vaccination Requirement Certification Form
Annex F Certification Form - Inclusion of Resources Designated by the Employment Equity Act

The following Attachments:

Attachment 1 to Part 3 Financial Bid Presentation Sheet
Attachment 2 to Part 3 Electronic Payment Instructions
Attachment 1 to Part 4 Mandatory and Point Rated Evaluation Criteria - Phase 1
Attachment 1 to Part 5 Federal Contractors Program for Employment Equity – Certification
Attachment 2 to Part 5 Application for Registration (AFR) Form
Attachment 1 to Annex A Statement of Work - Phase 2
Attachment 2 to Annex A Mandatory and Point Rated Evaluation Criteria - Phase 2

1.2 Summary

Bidders are requested to carefully read the following information regarding this procurement process

Project Title

Lightweight Standalone Specific Threat Plate – Generation C3

Description

Public Services and Procurement Canada (PSPC) on behalf of Defense Research and Development Canada (DRDC) located in Valcartier, (Quebec), is seeking bids for the development of the Generation C3 of the Lightweight Standalone Specific Threat Plate (armour plate) to the Department of National Defence (DND). The objective is to develop a new standalone armour plates with significantly reduced mass compared to the Generation C2 armour system in order to decrease the weight burden of its soldiers, while maintaining the same ballistic performance.

This requirement consists of a two-year development phase project to support the research and development of the new armour plate. Up to two (2) bids may be recommended for contract award. During this development phase (Phase 1), DND may conduct up to four (4) ballistic control tests at DRDC facilities to monitor progress and provide feedback to the Contractors in a collaborative manner.

Any approach of new concepts such as new fiber/material for composite combination, new metal or metal matrix composite, integration of nanofibers with UHMWPE, new ceramic base material, etc., as well as optimization or new manufacturing processes can be explored. In addition, high curvature profile plate for women soldier must be investigated and developed.

At the end of Phase 1 - Development phase, and if considered relevant by DND based on previous control test results, the Contractors will be asked to provide armour plates (male profile only) for a final control test to be conducted at DRDC Valcartier ballistic laboratories. A limited Request for a Standing Offer (RFSO) will be sent to Contractors whose control test results of their final concept at Phase 1 are conclusive and who agree to proceed to Phase 2 - Production phase according to the statement of work defined in *Attachment 1 to Annex A* will be issued. The Offerors will be evaluated based on mandatory and point rated evaluation criteria defined in *Attachment 2 to Annex A* and ranked on the highest combined rating of technical merit and price. Up to two (2) National Individual Standing Offers (NISO) may be recommend for issuance.

Client department

The organization for which the services are to be rendered is Defence Research and Development Canada – Valcartier Research Center

Period of Contract and standing offers

Phase 1 - Development phase

The period of the Contracts is from date of Contract for up to twenty-four (24) months.

Phase 2 - Production phase

The Standing Offers will be valid from date of issuance for up to sixty (60) months.

Intellectual Property

Defence Research and Development Canada - Valcartier Research Center has determined that any intellectual property rights arising from the performance of the Work under the resulting contract will belong to the Contractor.

Security Requirements

There are security requirements associated with this requirement. For additional information, consult *Part 6 - Security, Financial and Other Requirements*, and *Part 7 - Resulting Contract Clauses*. For more information on personnel and organization security screening or security clauses, Bidders should refer to the [Contract Security Program](http://www.tpsgc-pwgsc.gc.ca/esc-src/introduction-eng.html) of Public Works and Government Services Canada (<http://www.tpsgc-pwgsc.gc.ca/esc-src/introduction-eng.html>) website

Trade Agreements

The requirement is subject to the provisions of the Canadian Free Trade Agreement (CFTA)

Optional Virtual Bidders' Conference

There is an optional bidder's conference associated with this requirement. Consult *Part 2 - Bidder Instructions*.

Multiple Contracts and Standing Offers

Phase 1 - Development phase

Canada plans to award up to two (2) Contracts against this Request for Proposals.

Phase 2 - Production phase

Canada plans to issue up to two (2) National and Individual Standing Offers (NISO) using the proportional basis as the model of ranking methodology.

Federal Contractors Program for Employment Equity

The Federal Contractors Program (FCP) for employment equity applies to this procurement; refer to *Part 5 - Certifications and Additional Information*, *Part 7 - Resulting Contract Clauses* and the attachment titled Federal Contractors Program for Employment Equity - Certification.

Controlled Goods Program

This procurement is subject to the Controlled Goods Program. The [Defence Production Act](#) defines Canadian Controlled Goods as certain goods listed in Canada's Export Control List, a regulation made pursuant to the Export and Import Permits Act (EIPA).

Canada Post Corporation's (CPC) Connect

This bid solicitation allows bidders to use the CPC Connect service provided by Canada Post Corporation to transmit their bid electronically. Bidders must refer to *Part 2 - Bidder Instructions*, and *Part 3 - Bid Preparation Instructions*, of the bid solicitation, for further information.

COVID-19 Vaccination Requirement

This requirement is subject to the COVID-19 Vaccination Policy for Supplier Personnel. Failure to complete and provide the COVID-19 Vaccination Requirement Certification as part of the bid will render the bid non-responsive.

Solicitation No. - N° de l'invitation
W7701-217392/A
Client Ref. No. - N° de réf. du client
W7701-217392

Amd. No. - N° de la modif.
File No. - N° du dossier
QCL-0-43244

Buyer ID - Id de l'acheteur
QCL054
CCC No./N° CCC - FMS No./N° VME

1.3 Debriefings

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 from receipt of the results of the bid solicitation process. The debriefing may be in writing, by telephone or in person.

PART 2 - BIDDER INSTRUCTIONS

2.1 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) (<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](#) (2020-05-28) 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: 60 days
Insert: 120 days

2.1.1 SACC Manual Clauses

[A7035T](#) (2007-05-25), List of Proposed Subcontractor

2.2 Submission of Bids and pre-award Samples

Bids, excluding the Armour plate Samples, must be submitted to Public Works and Government Services Canada (PWGSC) Quebec Region Bid Receiving Unit, as specified below, by the date, and time indicated on page 1 of the bid solicitation. If the Armour plate Samples are sent to this address, they will not be considered.

The armour plate samples as well as the supporting documents at section 1.2.2 at *Attachment 1 to Part 4 of the Bid solicitation* must only be submitted to DRDC location indicated below no later than thirty (30) calendar days after the bid closing date and time indicated in the solicitation document. If bids are sent to this address, they will not be considered.

2.2.1 CPC Connect

Bidders choosing to submit using Canada Post Corporation's (CPC) Connect service must send an email requesting to open an Connect conversation to the following address:

TPSGC.RQReceptionSoumissions-QRSupplyTendersReception.PWGSC@tpsgc-pwgsc.gc.ca

Note: Bids will not be accepted if emailed directly to this email address. This email address is to be used to open a CPC Connect conversation, as detailed in Standard Instructions [2003](#), or to send bids through a CPC Connect message if the bidder is using its own licensing agreement for CPC Connect service.

It is the Bidders responsibility to ensure the request for opening an CPC Connect conversation is sent to the email address above at least six (6) days before the bid solicitation closing date.

Steps to follow for the Bid Submission to Bid Receiving Unit (BRU) using CPC Connect
(<https://buyandsell.gc.ca/steps-to-follow-for-the-bid-submission-to-bid-receiving-unit-bru-using-connect>)

2.2.2 Facsimile

Facsimile number: 418-566-6168

2.2.3 Due to the nature of the bid solicitation, hard copy bids submitted to PWGSC will not be accepted.

2.2.4 As part of their technical and managerial bid, bidders must provide armour plate samples to Canada. The armour plate samples along with supporting documents and information must be provided according to *Attachment 1 to Part 4 of the Bid solicitation*.

2.3 Former Public Servant

Contracts awarded to 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 awarded to FPSs, bidders must provide the information required below before contract award. If the answer to the questions and, as applicable the information required have not been received by the time the evaluation of bids is completed, Canada will inform the Bidder of a time frame within which to provide the information. Failure to comply with Canada's request and meet the requirement within the prescribed time frame will render the bid non-responsive.

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 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

As per the above definitions, is the Bidder a FPS in receipt of a pension?

Yes () No ()

If so, the Bidder must provide the following information, for all FPSs in receipt of a pension, as applicable:

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

By providing this information, Bidders agree that the successful Bidder's status, with respect to being a former public servant in receipt of a pension, will be reported on departmental websites as part of the published proactive disclosure reports in accordance with [Contracting Policy Notice: 2019-01](#) and the [Guidelines on the Proactive Disclosure of Contracts](#).

Work Force Adjustment Directive

Is the Bidder a FPS who received a lump sum payment pursuant to the terms of the Work Force Adjustment Directive?

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 adjustment program.

2.4 Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority, Daniel.Boisclair@tpsgc-pwgsc.gc.ca, no later than five (5) 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 question(s) or may request that the Bidder do so, so that the proprietary nature of the question(s) is eliminated and the enquiry can be answered to all Bidders. Enquiries not submitted in a form that can be distributed to all Bidders may not be answered by Canada.

2.5 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.

2.6 Improvement of Requirement During Solicitation Period

Should Bidders consider that the specifications or Statement of Work contained in the bid solicitation could be improved technically or technologically, Bidders are invited to make suggestions, in writing, to the Contracting Authority, named in the bid solicitation. Bidders must clearly outline the suggested improvement as well as the reason for the suggestion. Suggestions that do not restrict the level of competition nor favour a particular Bidder will be given consideration provided they are submitted to the Contracting Authority at least ten (10) days before the bid closing date. Canada will have the right to accept or reject any or all suggestions.

2.7 Optional Virtual Bidders' Conference

The scope of the requirement outlined in the bid solicitation will be reviewed during the Bidders' Conference and questions will be answered. It is recommended that Bidders who intend to submit a bid attend or send a representative.

Bidders are requested to communicate by email with the Contracting Authority at Daniel.Boisclair@tpsgc-pwgsc.gc.ca before the conference to register the individuals who will be attending the Bidders' Conference. Bidders should also provide to the Contracting Authority a list of issues they wish to table at the Bidders' Conference. All that information should be provide by 2:00 p.m. (Eastern Daylight Time) on _____ (*will be confirmed by way of an amendment to the bid solicitation*).

The Bidders' Conference will be held online by Microsoft Teams and/or teleconference at _____ (*will be confirmed by way of an amendment to the bid solicitation*). Registered bidders will be sent details on how to access the meeting.

The Bidders' Conference will be cancelled if no Bidders register by 2:00 p.m. (Eastern Daylight Time) on _____ (*will be confirmed by way of an amendment to the bid solicitation*).

The Bidder is responsible for all of its expenses associated with participating in the Bidders' Conference.

Any clarifications or changes to the bid solicitation resulting from the Bidders' Conference will be included as an amendment to the bid solicitation. Bidders who do not attend will not be precluded from submitting a bid.

2.8 Maximum funding

The maximum funding available for each contract resulting from the bid solicitation is **\$600,000.00** Canadian Dollars (Applicable taxes 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.

2.9 Bid Challenge and Recourse Mechanisms

- (a) Several mechanisms are available to potential suppliers to challenge aspects of the procurement process up to and including contract award.
- (b) Canada encourages suppliers to first bring their concerns to the attention of the Contracting Authority. Canada's [Buy and Sell](#) website, under the heading "[Bid Challenge and Recourse Mechanisms](#)" contains information on potential complaint bodies such as:
 - Office of the Procurement Ombudsman (OPO)
 - Canadian International Trade Tribunal (CITT)
- (c) Suppliers should note that there are **strict deadlines** for filing complaints, and the time periods vary depending on the complaint body in question. Suppliers should therefore act quickly when they want to challenge any aspect of the procurement process.

PART 3 - BID PREPARATION INSTRUCTIONS

3.1 Bid Preparation Instructions

Canada requests that the Bidder submits its bid in accordance with section 08 of the [2003](#) standard instructions. The Connect system has a limit of 1GB per single message posted and a limit of 20GB per conversation.

The bid must be gathered per section and separated as follows:

- Section I: Technical and Managerial Bid
- Section II: Financial Bid
- Section III: Certifications
- Section IV: Additional Information

- (a) Due to the nature of the bid solicitation, hard copy bids submitted to PWGSC will not be accepted.
- (b) Prices must appear in the financial bid only. **No prices must be indicated in any other section of the bid.**
- (c) The total number of pages for *Section I: Technical and Managerial Bid* must not exceed 50 electronic pages including cover pages, but excluding resumes and letters of commitment. If the number of pages of Section I, as described herein, is exceeded, the evaluation will strictly be based on the first 50 pages submitted, resumes and letters of commitment.
- (d) The bid should use a numbering system that corresponds to the bid solicitation.

Section I: Technical and Managerial Bid

- (a) In their technical and managerial 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 and managerial bid should address clearly 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.

- (b) Bidders must provide the requested armour plate samples as part of their technical and managerial bid.
- (c) *Part 4 - Evaluation Procedures and Basis of Selection* contains additional instructions that Bidders should consider when preparing their technical and managerial bid.

Section II: Financial Bid

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

- (a) Firm, all-inclusive prices for the Work described at Annex A, which must not exceed the maximum funding specified in Part 2 of the bid solicitation.

The information should be provided in accordance with the Financial Bid Presentation Sheet at *Attachment 1 to Part 3 of the Bid solicitation*. Bidders must insert a single, firm, all-inclusive lot price in the Total Bid Price cell of Table 1 – Financial Bid Presentation Sheet.

- (b) Prices must be in Canadian dollars, Applicable Taxes excluded, and Canadian customs duties and excise taxes included.

3.1.1 Electronic Payment of Invoices – Bid

If you are willing to accept payment of invoices by Electronic Payment Instruments, complete *Attachment 2 to Part 3 of the Bid solicitation* to identify which ones are accepted.

If *Attachment 2 to Part 3 of the Bid solicitation* is not completed, it will be considered as if Electronic Payment Instruments are not being accepted for payment of invoices.

Acceptance of Electronic Payment Instruments will not be considered as an evaluation criterion.

3.1.2 Exchange Rate Fluctuation

C3011T (2013-11-16) Exchange Rate Fluctuation

Section III: Certifications

Bidders must submit the certifications and additional information required under Part 5.

Section IV: Additional Information

- (a) Bidders must provide a list of names, or other related information as needed, pursuant to section 01 of Standard Instructions 2003.
- (b) For services requirements, Bidders in receipt of a pension or a lump sum payment must provide the required information as detailed in article 2.3 of the bid solicitation.
- (c) Canada requests that bidders provide the following information:

Administrative representative : Name : Telephone : Facsimile : Email :	Technical representative : Name : Telephone : Facsimile : Email :
---	--

3.1.3 Bidder's Proposed Sites or Premises Requiring Safeguarding Measures

- 3.1.3.1** As indicated in Part 6 under Security Requirements, the Bidder must provide the full addresses of the Bidder's and proposed individuals' sites or premises for which safeguarding measures are required for Work Performance:

*Street Number / Street Name, Unit / Suite / Apartment Number
City, Province, Territory / State
Postal Code / Zip Code
Country*

- 3.1.3.2** The Company Security Officer must ensure through the [Contract Security Program](#) that the Bidder and proposed individuals hold a valid security clearance at the required level, as indicated in *Part 6 - Security, Financial and Other Requirements*.

ATTACHMENT 1 TO PART 3 OF THE BID SOLICITATION

FINANCIAL BID PRESENTATION SHEET

Bidders must provide their financial information in accordance with *Section II: Financial Bid of Part 3 - Bid Preparation Instructions* and with the following:

The firm price of each milestone will be determined as follows:

- 1) The Bidder must indicate a Total Bid Price in the appropriate cell of *Table 1 – Financial Bid Presentation Sheet*.

Applicable taxes must be indicated separately.

- 2) The column titled Percentage of Total Bid Price in the table below indicates the rates that will be used to calculate the firm price of each milestone. These rates are not subject to change.

Table 1 – Financial Bid Presentation Sheet			
Milestone number	Milestone name	Milestone deliverables	Percentage of Total Bid Price
1	Kick-off meeting (KOM)	<ul style="list-style-type: none">• Meeting agendas• Meeting presentation• Meeting minutes and action items	2%
2	Project Review Meeting (PRM) #1	<ul style="list-style-type: none">• Meeting agendas• Meeting presentation• Meeting minutes and action items	10%
3	Armour plate samples delivery at RDDC for control test #1	<ul style="list-style-type: none">• Bill of loading and tracking number• Male and Female armour plate samples for control tests• Description document of the armour plate samples	15%
4	Armour plate samples delivery at RDDC for control test #2	<ul style="list-style-type: none">• Bill of loading and tracking number• Male and Female armour plate samples for control tests• Description document of the armour plate samples	15%
5	Mid-Term Review Meeting <i>Decision to pursue or terminate the development program</i>	<ul style="list-style-type: none">• Meeting agendas• Meeting presentation• Meeting minutes and action items	5%

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Amd. No. - N° de la modif.

File No. - N° du dossier
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6	Armour plate samples delivery at RDDC for control test #3	<ul style="list-style-type: none"> • Bill of loading and tracking number • Male and Female armour plate samples for control tests • Description document of the armour plate samples 	15%
7	Armour plate samples delivery at RDDC for control test #4	<ul style="list-style-type: none"> • Bill of loading and tracking number • Male and Female armour plate samples for control tests • Description document of the armour plate samples 	15%
8	Armour plates delivery at RDDC for final control test	<ul style="list-style-type: none"> • Bill of loading and tracking number • Male armour plates for control tests • Description document of the armour plate samples 	20%
9	Final Review Meeting (FRM)	<ul style="list-style-type: none"> • Meeting agendas • Meeting presentation • Meeting minutes and action items • Proactive Disclosure of Foreground Information • Final Report 	3%
Total Bid Price			\$ _____

Price Breakdown

Without limitation, Bidders should include and detail the following elements in their firm, all-inclusive prices indicated in *Table 1* above, as applicable:

- (a) **Labour:** For each individual and (or) labour category to be assigned to the Work, indicate:
 - i) the hourly rate, inclusive of overhead and profit; and
 - ii) the estimated number of hours.
- (b) **Equipment and armour plate samples:** Specify each item required to complete the Work and provide the pricing basis of each one, Canadian customs duty and excise taxes included, as applicable.
- (c) **Materials and Supplies:** Identify each category of materials and supplies required to complete the Work and provide the pricing basis.
- (d) **Travel and Living Expenses:** Indicate the number of trips and the number of days for each trip, the cost, destination and purpose of each journey, together with the basis of these costs which must not exceed the limits of the Treasury Board (TB) Travel Directive. With respect to the TB Directive, only the meal, and private vehicle allowances specified in Appendices B, C and D of the [National Joint Council Travel Directive](#), and with the other provisions of the directive referring to "travellers", rather than those referring to "employees". Canada will not pay the Contractor any incidental expense allowance for authorized travel.
- (e) **Subcontract:** Identify any proposed subcontractor and provide for each one the same price breakdown information as contained in this article.
- (f) **Other Direct Charges:** Identify any other direct charges anticipated, such as long distance communications and rentals, and provide the pricing basis.
- (g) **Applicable Taxes:** Identify any Applicable Taxes separately.

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ATTACHMENT 2 TO PART 3 OF THE BID SOLICITATION

ELECTRONIC PAYMENT INSTRUMENTS

The Bidder accepts to be paid by any of the following Electronic Payment Instrument(s):

- () Direct Deposit (Domestic and International);
- () Electronic Data Interchange (EDI);
- () Wire Transfer (International Only).

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

4.1 Evaluation Procedures

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

4.1.1 Technical Evaluation

4.1.1.1 Mandatory Technical Criteria

The mandatory evaluation criteria are described at *Attachment 1 to Part 4 of the Bid solicitation*. Bids which fail to meet the mandatory evaluation criteria will be declared non-responsive.

4.1.1.1.1 Bidder Experience

Except where expressly provided otherwise, the experience described in the bid must be the experience of one or more of the following:

1. 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); or
2. The Bidder's affiliates (i.e. parent, subsidiary or sister corporations, maximum of 2), provided the Bidder identifies and demonstrates the transfer of know-how, the use of toolsets and the use of key personnel from the affiliate for the applicable criteria; or
3. The Bidder's subcontractors, provided the Bidder includes a copy of the teaming agreements and identifies the roles and responsibilities of all parties under the agreement and how their work will be integrated.

The experience of the Bidder's suppliers will not be considered.

4.1.1.1.2 Submission of a Sample

Instructions for the submission of armour plate samples are described at *Attachment 1 to Part 4 of the Bid solicitation*

4.1.1.2 Point Rated Technical and Management Criteria

Point Rated Technical Evaluation Criteria are described at *Attachment 1 to Part 4 of the Bid solicitation*. Criteria not addressed will be given a score of zero.

4.1.2 Financial Evaluation

4.1.2.1 Mandatory Financial Criteria

The Bidder must submit firm, all-inclusive prices for the Work, which must not exceed the maximum funding available for the contract resulting from the bid solicitation (Applicable Taxes excluded, as appropriate).

Bidders must adhere to the rates set out in the column titled Percentage of Total Bid price at *Table 1 – Financial Bid Presentation Sheet*.

Bids which fail to meet the mandatory financial criteria will be declared non-responsive.

4.1.2.2 Evaluation of Price - Bid

The price of the bid will be evaluated in Canadian dollars, the Applicable Taxes excluded, FOB destination, Canadian customs duties and excise taxes included.

4.2 Basis of Selection - Highest Rated Within Budget

4.2.1 To be declared responsive, each bid must:

- (a) comply with all the requirements of the bid solicitation;
- (b) meet all mandatory evaluation criteria;
- (c) obtain the minimum rating for each point rated criteria;
- (d) obtain the required minimum rating of 75 points for all categories of the point-rated evaluation criteria.

The rating is performed on a scale of 130 points, as indicated in *Attachment 1 to Part 4 of the Bid solicitation*

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

4.2.3 Responsive bids will be ranked according to their overall technical score, which is obtained by the sum of the scores for all point rated criterion (maximum 130 points). Bids will be ranked starting from the bid with the highest overall score down to the lowest overall score resulting in a Responsive Bid List.

4.2.4 The first two (2) responsive bids with the highest number of points will be recommended for award of a contract, provided that the total evaluated price for each bid does not exceed the maximum funding for this requirement.

In the event where there are multiple responsive bids that have the same overall technical score, the bid with the highest number of points for the combined rated Management Criteria (RT5 and RT6) will be ranked first. In the unlikely event where there are still multiple responsive bids that have the same overall score and the same combined rated Management Criteria, the bid with the lowest evaluated Total Bid Price will be ranked first.

If only one (1) bid is responsive, one contract may be awarded.

ATTACHMENT 1 TO PART 4 OF THE BID SOLICITATION

MANDATORY AND POINT RATED EVALUATION CRITERIA – PHASE 1

1. Mandatory Technical (MT) Criteria

1.1 Mandatory requirements are evaluated on a pass or fail basis. Therefore, no point rating is associated with them. Proposals not meeting all mandatory criteria will be deemed non-responsive.

1.2 Except where expressly provided otherwise, the armour plate samples evaluation will be performed as follow:

1.2.1 Bidder must provide, at his own expenses, twelve (12) NIJ Level III+ personal armour plates for size and areal density verification (criterion MT1), and for ballistic performance assessment (criterion MT2).

Each armour plate sample must have a unique serial number.

1.2.2 Bidders must provide the following documents along with the armour plate samples:

- (a) Armour plate specification sheets;
- (b) The list of provided armour plates serial numbers; and
- (c) A document containing sufficient details to allow Canada to understand the manufacturing technology used.

1.2.3 The armour plate samples as well as the supporting documents at section 1.2.2 must only be submitted to DRDC location indicated below no later than thirty (30) calendar days after the bid closing date and time indicated in the solicitation document. If bids are sent to this address, they will not be considered.

Deliver To:

Defense Research and Development Canada – Valcartier Research center
Building 53
2459 Route de la Bravoure
Québec, Qc
G3J1X5
Canada
Attn: Simon Ouellet
Solicitation Number W7701-217392/A

The above address is for the sole purpose of armour plate samples submissions. No other communications are to be forwarded to this address. No bids nor armour plate samples shall be sent directly to the PWGSC Contracting Authority.

- 1.2.4** The armour plate samples has to be delivered at the address mentioned at section 1.2.3 between 9:00 am and 3:30 pm Eastern Time and will be received by DRDC. Upon receipt, the delivery note will be signed and dated by DRDC to certify that the armour plate samples have been received before the deadline mentioned at section 1.2.3.
- 1.2.5** Bidders must take all necessary precautions to ensure that the armor plate samples are received undamaged at the point of delivery. The armour plate samples will be evaluated in the condition they are received by DRDC. All costs surrounding shipping including, but not limited to, delivery, customs and packing of the armour plate samples, are the responsibility of the Bidder.
- 1.2.6** Failure to submit the required armour plate samples and supporting documents with the bid before the deadline and place mentioned at section 1.2.3, will result in the bid being declared non-responsive. The armour plate samples submitted by the Bidders will remain the property of Canada.

Table 2 – Summary of the Mandatory Technical (MT) Criteria		
Evaluation Criteria	Ratings	Destination
MT1 – Armour Plate Samples - Size and Areal Density Verification	Pass or Fail	DRDC (See section 1.2.3)
MT2 – Armour Plate Samples - Ballistic Performance Assessment	Pass or Fail	DRDC (See section 1.2.3)
MT3 – Corporate Experience in R&D Projects	Pass of Fail	PWGSC Bid Receiving Unit

Table 3 – Mandatory Technical (MT) Criteria

MT1	<p><u>Armour Plate Sample - Size and Areal Density Verification</u></p> <p>All twelve (12) armour plate samples provided by the Bidder must:</p> <ul style="list-style-type: none"> (a) Have a minimum external dimensions of 215.0 mm (width) by 280.0 mm (height) (b) Have a maximum external dimensions of 285.0 mm (width) by 360.0 mm (height). (c) Have a maximum areal density of 29.0 kg/m² (d) Have a maximum thickness of 30.0 mm
MT2	<p><u>Armour Plate Sample - Ballistic Performance Assessment</u></p> <p>All Armour plate samples provided by the Bidder must pass the ballistic performance assessment.</p> <p>The ballistic performance assessment consists of conducting Perforation and Back Face Signature (P-BFS) test. Testing will be done at DRDC Valcartier laboratory according to the test procedure described in Appendix 3 to Annex A – Statement of Work of the resulting contract clauses, Section A3.3 to A3.5, but with the following deviations:</p> <ul style="list-style-type: none"> (a) Two threats will be used: <ul style="list-style-type: none"> 1) the 7.62x51 mm C21 NATO Ball, FMJ Lead Core with a specified mass of 9.5 ± 0.1 grams; and 2) the 5.56x45 mm C77 NATO Ball, steel penetrator of 50-56 Hardness Rockwell C (HRC), with a specified mass of 4.00 ± 0.08 grams; (b) Twenty-two (22) fair shots per threat will be done, for a total of forty-four (44) shots; (c) Four (4) shots per armour plate sample will be used for both threats; (d) The shot-to-shot distance will be 110 ± 15 mm for both threats. <p>To be declared PASS, no perforation and no Back Face Signature (BFS) measurements greater than 44.0 mm must be observed for both threats.</p>
MT3	<p><u>Corporate Experience</u></p> <p>The Bidder must provide three (3) corporate reference contracts:</p> <ul style="list-style-type: none"> (a) With individual billed values of \$CAD 200,000.00 or more (including applicable taxes) for services rendered; (b) Awarded within the last ten (10) years prior to the Bid closing date of this Request for Proposal. (c) For services in development, maturation, integration, and demonstration of concepts, architecture, and solutions for defense and security applications. The individual contracts are not required to cover all these activities, but all three (3) contracts together must cover all the above-stated activities. <p>Note: If more than three (3) reference contracts are provided, only the three most recent ones will be evaluated. To demonstrate compliance with this criterion, the Bidder must submit, for each of the reference contract, a Bidder Response Table in <i>Appendix A to Attachment 1 to Part 4</i>.</p>

2. Technical / Management Point Rated (RT) Criteria

Proposals meeting all the mandatory criteria will be evaluated and scored as specified in *Table 4 - List of Evaluation Criteria and Associated Ratings*.

The Bidder must demonstrate that they meet the following point-rated technical criteria and provide the necessary documentation to support compliance.

The Bidder must achieve the minimum score requirement as indicated in *Table 4*. Proposals that fail to obtain the required minimum number of points specified will be declared non-responsive.

Bids will be evaluated according to the point-rated criteria as specified in Section 2.1 of this document: "Evaluation Criteria and Benchmark Statements".

Each point rated technical criterion should be addressed separately.

The criteria are grouped under the following divisions: "Technical" and "Management".

2.1 Evaluation Criteria and Benchmark Statements

This document contains point rated (RT) criteria supported by a set of benchmark statements (Weak, Limited, Adequate, Very Good, and Excellent). Each of these statements has a corresponding relative value:

- (a) Weak = 0% of maximum point rating
- (b) Limited = 25% of maximum point rating
- (c) Adequate = 50% of maximum point rating
- (d) Very good = 75% of maximum point rating
- (e) Excellent = 100% of maximum point rating

As an example, the maximum point rating for the *RT2 - Understanding of the context, scope and objectives of the work* criterion is 10 points. If a Bid receives a "Very Good" for this criterion in the evaluation process, the score attributed will be:

75% of 10 points = 7.5 points (score)

Table 4 identifies:

- (a) The maximum and minimum point rating assigned to each criterion;
- (b) The maximum point rating possible for the overall score;
- (c) The minimum point rating required for the overall score.

Table 4 – List of Evaluation Criteria and Associated Ratings		
Evaluation Criteria	Maximum Rating	Minimum Rating
Technical Criteria		
RT1 – Armour Plate Production Capacity	20	10
RT2 – Understanding of the Context, Scope and Objectives of the Work	10	5
RT3 – Proposed Methodology – Technology and Innovation	25	12.5
RT4 – Proposed Methodology – Armour Plate Solution	25	12.5
Technical Score	80	50*
Management Criteria		
RT5 – Work Plan	20	10
RT6 – Team Expertise and Experience	20	10
RT7 – Employment Equity	10	0
Management Score	50	25*
Overall Score	130	75

* The minimum score does not represent the sum of the minimum rating of each RT criterion.

2.2 Cross-References to Evaluation Criteria in the Bid (Optional)

The Bidder should complete the following *Table 5* by indicating where in its Bid the information is found demonstrating how the proposal meets the evaluation criteria, in order to assist in the assessment of the Bid.

Table 5 – Cross-References to Evaluation Criteria in the Bid	
Evaluation Criterion	Section(s) in the Bidder's proposal where the criterion is addressed.
RT1	
RT2	
RT3	
RT4	
RT5	
RT6	
RT7	

Table 6 – Point-Rated Technical (RT) Criteria

Technical Criteria

RT1 Armour Plate Production Capacity

This criterion will assess the Bidder's capacity to produce armour plates in sufficient quantity and the typical turnaround time based on previous contracts.

The proposal is expected to clearly demonstrate the Bidder's production capacity and turnaround time by describing the following:

(a) List of major production contracts of armour plates awarded within the last ten (10) years prior to the original bid closing date of this Request for Proposal, whether completed or under way for over twelve (12) months. The Bidder should provide a summary of each contract, including:

- (i) The value of the contract
- (ii) The term of the contract (start and end dates; MM/YYYY format);
- (iii) A description of the work;
- (iv) The quantity delivered;
- (v) The production rate;
- (vi) The customer's contact information:

- Name of the organization
- Address
- Contact person
- Phone
- Email

The information provided for each contract may be subject to verification to certify the accuracy of the information. If the verification of information does not meet the above requirements, the contract will not be considered during the evaluation.

(b) Detailed list of Contractor's equipment available for armour plate production;

(c) List of available material suppliers;

(d) Number of employees with broken down list (technicians, engineers, scientists, managers, administrative, etc.).

Excellent:

The proposal fully and thoroughly demonstrates the Contractor's capacity to produce armour plates with an excellent production rate (Less than 6 months for a production of 1000 units) based on previous contracts; **AND**

The proposal instills confidence that novel armour plates developed in Phase 1 can be successfully produced in sufficient quantity.

Very good:

The proposal demonstrates the Contractor's capacity to produce armour plates with a good production rate (6 to 9 months for a production of 1000 units) based on previous contracts; **AND**
The likelihood of producing novel armour plates developed in Phase 1 in sufficient quantity is credible.

Adequate:

	<p>The proposal demonstrates the Contractor's capacity to produce armour plates with an adequate production rate (10 to 12 months for a production of 1000 units) based on previous contracts; <u>AND</u> Doubts remain regarding the likelihood of producing novel armour plates developed in Phase 1 in sufficient quantity.</p> <p><u>Limited:</u> The proposal demonstrates the Contractor's capacity to produce armour plates with an adequate production rate (More than 12 months for a production of 1000 units) based on previous contracts; <u>OR</u> The likelihood of producing novel armour plates developed in Phase 1 in sufficient quantity is marginal.</p> <p><u>Weak:</u> The proposal does not contain enough evidence to assess the Contractor's capacity to produce armour plates based on previous contracts; <u>OR</u> The production turnaround time based on previous contracts is not acceptable; <u>OR</u> The likelihood of producing novel armour plates developed in Phase 1 in sufficient quantity is extremely low.</p>
RT2	<p>Understanding of the Context, Scope and Objectives of the Work</p> <p>This criterion will assess the Bidder's understanding of the context, objectives, and scope of the project as described in the SOW.</p> <p>The proposal is expected to clearly demonstrate the Bidder's understanding of the context, objectives, scope of the work. The Bidder should provide a discussion to demonstrate an excellent and complete understanding of the fundamental objectives of the SOW for Phase 1 and how they define the scope of the work and contribute to its overall objective.</p> <p><u>Excellent:</u> Demonstrated understanding of the context, scope and objectives is complete, in depth and thorough; <u>AND</u> Discussion not limited to the content of the SOW; <u>AND</u> The Bidder uses his own words; <u>AND</u> The Bidder shows clearly an understanding of the direct and (potential) peripheral technical and scientific problems, their impact on the project, and the approaches to solve them.</p> <p><u>Very good:</u> Demonstrated understanding of the context, scope and objectives is complete and has acceptable depth; <u>AND</u> Discussion is a mix of own words and content of the SOW; <u>AND</u> Bidder uses his own words; <u>AND</u> Complete discussion of technical and scientific problems, but limited to direct problems only.</p> <p><u>Adequate:</u> Demonstrated understanding of the context, scope and objectives is acceptable with limited depth; <u>AND</u> Discussion is only a variation on the content of the SOW; <u>AND</u> Bidder mixes his own words and SOW wording; <u>AND</u></p>

	<p>Limited discussion of technical and scientific problems, but limited to direct problems only.</p> <p>Limited: Demonstrated understanding of the context, the scope and the objectives is limited in scope and depth; AND Discussion limited to the content of the SOW; AND Bidder only uses SOW wording; AND No discussion of direct technical and scientific problems.</p> <p>Weak: Not enough evidence in the proposal to assess acceptable understanding of the context, the scope and the objectives; AND Discussion limited to the content of the SOW; AND Bidder only uses SOW wording; AND No discussion of direct technical and scientific problems.</p>
RT3	<p>Proposed Methodology – Technology and Innovation</p> <p>This criterion evaluates the novelty associated with the proposed armour plate solution and how it advances the state-of-the-art over existing technologies. It also assesses the description of scientific and technological principles or concepts upon which the solution is based.</p> <p>The Bidder should explain the technology, process or method that this proposal intends to provide for improving armour which will fill an existing technology gap and explain how it differs from current technologies.</p> <p>Innovation can range from sustaining innovation that improves the performance of existing products, methods and/or know-how to disruptive innovation that offers a completely new approach.</p> <p>Excellent: The Bid demonstrates that the development of the proposed solution will lead to leading-edge products, methods and/or know-how; AND The Bid demonstrates that the proposed solution can be considered a new benchmark of state-of-the art that is clearly ahead of competitors, supported by a comprehensive review of literature; AND The Bid explains and provides detailed and convincing justification as to why the proposed solution will fully achieve the expected results.</p> <p>Very good: The Bid demonstrates that the development of the proposed solution will lead to leading-edge products, methods and/or know-how; AND The proposed solution clearly offers significant improvement(s) to existing solutions; AND The Bid identifies how the proposed solution advances the state-of-the-art over existing technologies, with sufficient and relevant supporting references; AND The Bid explains and provides detailed justification as to why the proposed solution will lead to the expected results.</p> <p>Adequate: The Bid demonstrates a limited degree of innovation that will lead to improved performance of</p>

	<p>existing products, methods and/or know-how; <u>AND</u> The Bid identifies how the proposed solution advances the state-of-the-art over existing technologies, with limited supporting references; <u>AND</u> The Bid explains and provides adequate justification as to why the proposed solution will lead to the expected results.</p> <p><u>Limited:</u> The Bid provides limited information on the innovation involved in the development of the proposed products, methods and/or know-how; <u>AND</u> The Bid identifies how the proposed solution advances the state-of-the-art over existing technologies.</p> <p><u>Weak:</u> The Bid provides no information on the innovation involved in the development of the proposed products, methods and/or know-how; <u>OR</u> The Bid does not demonstrate how the solution will improve existing technologies, including available competing solutions.</p>
RT4	<p>Proposed Methodology – Armour Plate Solution</p> <p>This criterion will assess the proposed methodology for the development of the armour plate solution. The Bidder should identify and describe the specific steps to be undertaken during the SOW for Phase 1 for material selection, manufacturing, tests, assembling, etc.</p> <p>The proposal is expected to describe Bidder's equipment/technology available or to be procured for producing a multi-curve armour plate (a horizontal-axis curve in the upper half and a vertical-axis curve in the lower half) that is anatomically designed for front and back torso. It should also describe strategies to address women specific armour plate profile for better protection and comfort.</p> <p>Finally, the proposal should describe the significant advantages the developed armour plate is expected to have over its competitors and explain the uniqueness of the armour plate solution.</p> <p><u>Excellent:</u> The Bid provides a complete, in depth and thorough description of the armour plate development methodology to be undertaken during the SOW for Phase 1; <u>AND</u> The Bid fully demonstrates that the multi-curve armour plate and women specific armour plate profile can be produced, and provides a complete and thorough description of the equipment/technology that will be used; <u>AND</u> The Bid explains and provides detailed and convincing justification as to why the proposed solution will offer exceptional potential compared to existing commercial technologies.</p> <p><u>Very good:</u> The Bid provides a complete and acceptable description depth of the armour plate development methodology to be undertaken during the SOW for Phase 1; <u>AND</u> The Bid demonstrates that the multi-curve armour plate and women specific armour plate profile can be produced with sufficient description of the equipment/technology that will be used; <u>AND</u> The Bid explains and provides detailed justification as to why the proposed solution will offer significant potential compared to existing commercial technologies.</p>

	<p><u>Adequate:</u> The Bid provides an acceptable and limited description depth of the armour plate development methodology to be undertaken during the SOW for Phase 1; <u>AND</u> The Bid reports that the multi-curve armour plate and women specific armour plate profile could be produced with a description of the equipment/technology that will be used; <u>AND</u> The Bid explains and provides justification as to why the proposed solution will offer good potential compared to existing commercial technologies.</p> <p><u>Limited:</u> The Bid provides limited description of the armour plate development methodology to be undertaken during the SOW for Phase 1; <u>AND</u> The Bid provided limited evidence that the multi-curve armour plate and women specific armour plate profile could be produced with limited description of the equipment/technology that will be used; <u>AND</u> The Bid provides limited justification as to why the proposed solution will offer potential to existing commercial technologies, <u>OR</u> The Bid provides complete justification but the proposed solution offers only marginal potential to existing commercial technologies.</p> <p><u>Weak:</u> The Bid provides not enough information of the description of the armour plate development methodology to be undertaken during the SOW for Phase 1; <u>OR</u> The Bid does not provide sufficient evidence that the multi-curve armour plate and women specific armour plate profile can be produced and no description of the equipment/technology that will be used is given; <u>OR</u> The Bid does not explain or provide justification as to why the proposed solution will offer potential compared to existing commercial technologies; <u>OR</u> The Bid provides justification but the proposed solution does not offer potential to existing commercial technologies.</p>
Managerial Criteria	
RT5	<p>Work Plan</p> <p>This criterion evaluates how the Bid identifies a work plan for the realization of the Phase 1 of the SOW that includes description of tasks and activities, estimated time and resources to complete all tasks and the linkages between them.</p> <p>The Bidder should present a work plan to deliver the proposed solution. Include the description of the following elements: tasks and activities, milestones, the estimated time and resources to complete these tasks, and the linkages between the tasks and the technical risks or challenges with contingency plans to overcome them.</p> <p>For planning purposes, use a project timeline from week 0 to week 104 and the Bidder should use Gantt chart.</p> <p><u>Excellent:</u> The Bid provides a coherent and comprehensive work plan with all elements covered; <u>AND</u></p>

	<p>Descriptions of the tasks and activities, and estimation of time and resources are detailed and substantiated, and the work plan instills confidence that the project will achieve successful completion; <u>AND</u></p> <p>The linkages between the tasks are clearly identified.</p> <p><u>Very good:</u></p> <p>The Bid provides a credible work plan with all elements covered; <u>AND</u></p> <p>Descriptions of the tasks and activities, and estimation of time and resources, are detailed and the likelihood of achieving successful completion of the proposed solution is credible; <u>AND</u></p> <p>The linkages between the tasks are identified.</p> <p><u>Adequate:</u></p> <p>The Bid provides an adequate work plan; <u>AND</u></p> <p>The description of the tasks and activities, and the estimated time and resources to complete these tasks, are identified but incomplete and doubts remain regarding the likelihood of the work plan to deliver the proposed solution.</p> <p><u>Limited:</u></p> <p>The Bid provides an incomplete work plan as more than one of the elements are missing or are improperly addressed; <u>OR</u></p> <p>The Bid shows significant gaps in time and/or resources and the likelihood of achieving successful completion of the solution is marginal.</p> <p><u>Weak:</u></p> <p>No work plan is proposed</p>
RT6	<p>Team Expertise and Experience</p> <p>This criterion will assess the capability of the Bidder's proposed team to carry out the work described in the SOW for PHASE 1.</p> <p>The proposal should, as a minimum, describe in detail the following elements of the team:</p> <p>Project Manager or Scientific lead: The Bidder should identify his Project Manager or Scientific Lead and outline his/her qualifications.</p> <p>The proposed Project Manager or Scientific Lead should have led the delivery of a minimum of 3 projects <u>AND</u> have a minimum of 18 months of demonstrated consecutive Project Management or R&D work.</p> <p>The demonstrated experience should be directly related to the development, integration, and demonstration of concepts, architecture, and/ solutions for defence and security applications. For allowing complete evaluation of experience, examples of relevant information are as follows:</p> <ul style="list-style-type: none"> • Topic of the project or the experience; • Description of the nature of the project; • Name of client, including name and telephone number of a point of contact for reference verification; • Exact dates of the project or the experience (month and year of start/end); • Tasks conducted by the resource during the project or the R&D work; <p>Technical and Scientific Team: The Bidder must also identify the key members of the project's</p>

technical and scientific team and describe their qualifications and experience and how they relate to the SOW for PHASE 1. The bidder should provide:

- Evidence that the proposed team has a combined experience and expertise in ceramic and ballistic material R&D pertinent to defence needs;
- Summary that describes qualification, experience of each member of the team. Detailed resumes, including experiences and education, must be provided in an Appendix to the bid for all resources, including the project manager.
- An organizational chart that illustrates the proposed team structure, including a description of the role and responsibilities of each member of the team.
- A list of research publication (book chapter, published or submitted paper in a journal or conference proceedings subject to peer review or PhD and Master Thesis with complete reference) along with the level of involvement of the proposed resource in the research publication.

Sub-Contractors: If sub-contracting is used, the same requirements apply to the resources of the prime and the sub-contractor(s).

Excellent:

The Project Manager or Scientific Lead is identified; **AND**

There is full and complete information concerning the expertise of the key team members and any external partners and/or sub-contractors in carrying out R&D projects; **AND**

The technical and scientific team hold a PhD (employee or consultant) specialised in ballistic material or in another relevant subject; **AND**

The roles and responsibilities of the key team members are fully identified and explained; **AND**

The resumes of all key team members are available.

Very good:

The Project Manager or Scientific Lead is identified; **AND**

There is sufficient information concerning the expertise of the key team members and any external partners and/or sub-contractors in carrying out R&D projects; **AND**

The technical and scientific team holds a Masters (employee or consultant) specialised in ballistic material or in another relevant subject; **AND**

The roles and responsibilities of the key team members are identified; **AND**

The resumes of all key team members are available.

Adequate:

The Project Manager or Scientific lead is identified; **AND**

There is sufficient information concerning the expertise of the key team members and any external partners; **AND**

The roles and responsibilities of the key team members are identified; **AND**

The resumes of all key team members are available.

Limited:

There is minimal or incomplete information concerning the expertise of the key team members or any external partners and/or sub-contractors

Weak:

There is no information regarding the expertise of the key team members or any associated

	external partners.
RT7	<p>Employment Equity</p> <p>The purpose of this social criterion is to increase the number of resources designated by the Employment Equity Act in key positions on the project team for the realization of the Phase 1 of the SOW. To be considered, these resources must be part of one or many of the following groups: women, indigenous peoples, persons with disabilities and members of visible minorities.</p> <p><u>Background</u></p> <p>As per their Mandate Letter, the Minister of Public Services and Procurement Canada (PSPC) is responsible for “continu[ing] the modernization of procurement practices so that they are simpler, less administratively burdensome, user-friendly, deploy modern comptrollership, encourage greater competition and include practices that support our economic policy goals, including innovation, as well as green and social procurement.”</p> <p>In order to modernize procurement processes, the Government of Canada uses government procurement to advance other environmental, social, economic or innovation objectives.</p> <p>The socio-economic pillar of procurement modernization is intended to develop initiatives to increase the diversity of bidders on government contracts and improve socio-economic outcomes, particularly for businesses owned or managed by Canadians from under-represented groups, such as women, indigenous peoples, persons with disabilities and members of visible minorities.</p> <p>This project aims to encourage the participation of resources designated by the Employment Equity Act in the project team in a company providing Research and Development (R&D) services.</p> <p><u>Information to be provided</u></p> <p>The Bidder should identify the resources designated by the Employment Equity Act who hold key positions among the ones on the project team of the Phase 1 of the SOW by providing the team member information in the <i>Annex F, Certification Form - Inclusion of Resources Designated by the Employment Equity Act</i>.</p> <p>Only the information that has been collected on a voluntary basis and provided at Annex F will be considered for the evaluation of this criterion.</p> <p><u>Evaluation scale</u></p> <p>2 resources: 10 points 1 resource: 5 points 0 resource: 0 point</p> <p>The score awarded per qualified resource and designated by the Employment Equity Act is 5 points per resource. A maximum of 10 points may be awarded to bidders who provide the information required for this criterion, i.e. a maximum of two resources.</p>

APPENDIX A TO ATTACHMENT 1 TO PART 4

BIDDER RESPONSE TABLE

Bidder Response Table MT3 – Corporate experience <i>The Bidder should replicate the table for each corporate reference project.</i>		
Description of the corporate reference project.		(To be completed by the Bidder)
Client details	Name of client organization	
	Address	
	Contract or order No.	
	Contract or project title	
	Client name and title	
	Client phone number	
	Client email	
<p>On one page, briefly describe the projects for services in development, maturation, integration, and demonstration of concepts, architecture, and/or solutions for defence and security applications. The individual contracts are not required to cover all these activities, but all three (3) contracts together must cover all the above-stated activities.</p> <p>Provide a summary of the scope, the list of categories of resources provided and the main responsibilities as part of the project.</p>		
Indicate the start and end dates for the project (mm/yyyy to mm/yyyy).		
Indicate the total value invoiced (Canadian dollars, including applicable taxes).		

The information provided for each corporate reference project may be subject to verification to certify the accuracy of the information. If the verification of information does not meet the above requirements, the bid will be declared non-responsive.

PART 5 - CERTIFICATIONS AND ADDITIONAL INFORMATION

Bidders must provide the required certifications and additional information to be awarded a contract.

The certifications provided by Bidders to Canada are subject to verification by Canada at all times. Unless specified otherwise, Canada will declare a bid non-responsive, or will declare a contractor in default if any certification made by the Bidder is found to be untrue, whether made knowingly or unknowingly, during the bid evaluation period or during the contract period.

The Contracting Authority will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply and to cooperate with any request or requirement imposed by the Contracting Authority will render the bid non-responsive or constitute a default under the Contract.

5.1 Certifications Required with the Bid

Bidders must submit the following duly completed certifications as part of their bid.

5.1.1 Integrity Provisions - Declaration of Convicted Offences

In accordance with the Integrity Provisions of the Standard Instructions, all bidders must provide with their bid, **if applicable**, the Integrity declaration form available on the [Forms for the Integrity Regime](http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html) website (<http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html>), to be given further consideration in the procurement process.

5.1.2 COVID-19 Vaccination Requirement Certification

In accordance with the COVID-19 Vaccination Policy for Supplier Personnel, all Bidders must provide with their bid, the COVID-19 Vaccination Requirement Certification attached to this bid solicitation, to be given further consideration in this procurement process. This Certification incorporated into the bid solicitation on its closing date is incorporated into, and forms a binding part of any resulting Contract.

5.2 Certifications Precedent to Contract Award and Additional Information

The certifications and additional information listed below should be submitted with the bid but may be submitted afterwards. If any of these required certifications or additional information is not completed and submitted as requested, the Contracting Authority will inform the Bidder of a time frame within which to provide the information. Failure to provide the certifications or the additional information listed below within the time frame specified will render the bid non-responsive.

5.2.1 Integrity Provisions – Required Documentation

In accordance with the section titled Information to be provided when bidding, contracting or entering into a real property agreement of the [Ineligibility and Suspension Policy](http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html) (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>), the Bidder must provide the required documentation, as applicable, to be given further consideration in the procurement process.

5.2.2 Security Requirements – Required Documentation

In accordance with the requirements of the Contract Security Program of Public Works and Government Services Canada (<http://www.tpsgc-pwgsc.gc.ca/esc-src/introduction-eng.html>), the Bidder must provide the Application for Registration (AFR) form at *Attachment 2 to Part 5 of the Bid solicitation* duly completed to be given further consideration in the procurement process.

Bidders are reminded to obtain the required security clearance and, as applicable, security capabilities promptly. As indicated above, bidders who do not provide all the required information at bid closing will be given the opportunity to complete any missing information from the AFR form within a period set by the Contracting Authority. If that information is not provided within the timeframe established by the Contracting Authority (including any extension granted by the Contracting Authority in its discretion), or if Canada requires further information from the Bidder in connection with assessing the request for security clearance (i.e., information not required by the AFR form), the Bidder will be required to submit that information within the time period established by the Contracting Authority, which will not be less than 48 hours. If, at any time, the Bidder fails to provide the required information within the timeframe established by the Contracting Authority, its bid will be declared non-compliant.

5.2.3 Federal Contractors Program for Employment Equity - Bid Certification

By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "FCP Limited Eligibility to Bid" list available at the bottom of the page of the [Employment and Social Development Canada \(ESDC\) - Labour's](https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html#) website (<https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html#>).

Canada will have the right to declare a bid non-responsive if the Bidder, or any member of the Bidder if the Bidder is a Joint Venture, appears on the "FCP Limited Eligibility to Bid list at the time of contract award.

Canada will also have the right to terminate the Contract for default if a Contractor, or any member of the Contractor if the Contractor is a Joint Venture, appears on the "[FCP Limited Eligibility to Bid](#)" list during the period of the Contract.

The Bidder must provide the Contracting Authority with a completed attachment titled Federal Contractors Program for Employment Equity - Certification, before contract award. If the Bidder is a Joint Venture, the Bidder must provide the Contracting Authority with a completed attachment titled Federal Contractors Program for Employment Equity - Certification, for each member of the Joint Venture.

5.2.4 Additional Certifications Precedent to Contract Award

5.2.4.1 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.

5.2.4.2 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.

5.2.4.3 Language Capability

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

ATTACHMENT 1 TO PART 5 OF THE BID SOLICITATION

FEDERAL CONTRACTORS PROGRAM FOR EMPLOYMENT EQUITY – CERTIFICATION

I, the Bidder, by submitting the present information to the Contracting Authority, certify that the information provided is true as of the date indicated below. The certifications provided to Canada are subject to verification at all times. I understand that Canada will declare a bid non-responsive, or will declare a contractor in default, if a certification is found to be untrue, whether during the bid evaluation period or during the contract period. Canada will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply with any request or requirement imposed by Canada may render the bid non-responsive or constitute a default under the Contract.

For further information on the Federal Contractors Program for Employment Equity visit [Employment and Social Development Canada \(ESDC\) – Labour's](#) website.

Date: _____ (YYYY/MM/DD) [If left blank, the date will be deemed to be the bid solicitation closing date.]

Complete both A and B.

A. Check only one of the following:

- ☐ A1. The Bidder certifies having no work force in Canada.
- ☐ A2. The Bidder certifies being a public sector employer.
- ☐ A3. The Bidder certifies being a [federally regulated employer](#) being subject to the [Employment Equity Act](#).
- ☐ A4. The Bidder certifies having a combined work force in Canada of less than 100 permanent full-time and/or permanent part-time employees.

A5. The Bidder has a combined workforce in Canada of 100 or more employees; and

- ☐ A5.1. The Bidder certifies already having a valid and current [Agreement to Implement Employment Equity](#) (AIEE) in place with ESDC-Labour.

OR

- ☐ A5.2. The Bidder certifies having submitted the [Agreement to Implement Employment Equity \(LAB1168\)](#) to ESDC-Labour. As this is a condition to contract award, proceed to completing the form Agreement to Implement Employment Equity (LAB1168), duly signing it, and transmit it to ESDC-Labour.

B. Check only one of the following:

- ☐ B1. The Bidder is not a Joint Venture.

OR

- ☐ B2. The Bidder is a Joint venture and each member of the Joint Venture must provide the Contracting Authority with a completed attachment *Federal Contractors Program for Employment Equity - Certification*. (Refer to the Joint Venture section of the Standard Instructions)

Solicitation No. - N° de l'invitation
W7701-217392/A
Client Ref. No. - N° de réf. du client
W7701-217392

Amd. No. - N° de la modif.
File No. - N° du dossier
QCL-0-43244

Buyer ID - Id de l'acheteur
QCL054
CCC No./N° CCC - FMS No./N° VME

ATTACHMENT 2 TO PART 5 OF THE BID SOLICITATION

APPLICATION FOR REGISTRATION (AFR) FORM

Please complete the Application for Registration (AFR) Form at the following address: <http://publiservice-app.pwgsc.gc.ca/forms/pdf/471-E.pdf> and submit with your bid.

PART 6 - SECURITY, FINANCIAL AND OTHER REQUIREMENTS

6.1 Security Requirements

1. Before award of a contract, 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 must provide the addresses of proposed sites or premises of work performance and document safeguarding as indicated in Part 3 - Section IV Additional Information.
2. Before access to sensitive information is provided to the Bidder, the following conditions must be met:
 - (a) the Bidder's proposed individuals requiring access to sensitive information, assets or sensitive work sites must meet the security requirements as indicated in Part 7 - Resulting Contract Clauses.
 - (b) the Bidder's security capabilities must be met as indicated in Part 7 - Resulting Contract Clauses.
3. For additional information on security requirements, Bidders should refer to the [Contract Security Program](http://www.tpsgc-pwgsc.gc.ca/esc-src/introduction-eng.html) of Public Works and Government Services Canada (<http://www.tpsgc-pwgsc.gc.ca/esc-src/introduction-eng.html>) website.

6.2 Financial Capability

SACC Manual clause [A9033T](#) (2012-07-16), Financial Capability

6.3 Controlled Goods Requirement

SACC Manual clause [A9130T](#) (2019-11-28), Controlled Goods Program - Bid

PART 7 - RESULTING CONTRACT CLAUSES

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

7.1 Statement of Work

The Contractor must perform the Work in accordance with the Statement of Work in Annex A and the Contractor's technical and Managerial Bid entitled _____, dated _____. *(to be completed by Canada at contract award)*

7.1.1 Work Authorization

Despite any other condition of the Contract, the Contractor is only authorized to perform the Work up to the "Mid-term review meeting" (see Annex A – Statement of Work, section 6.4). Depending on the results of the review and evaluation of the Work, Canada will decide at its discretion whether to continue with the Work.

If Canada decides to continue with the Work, the Contracting Authority will advise the Contractor in writing to continue with the work in accordance with the Statement of Work in Annexe A. The Contractor must immediately comply with the notice.

If Canada decides not to proceed with the Work, the Contracting Authority will advise the Contractor in writing of the decision and the Contract will be considered completed at no further costs to Canada. In no event will the Contractor be paid for any cost incurred for unauthorized work.

7.2 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.

7.2.1 General Conditions

2040 (2021-12-02) General Conditions - Research & Development, apply to and form part of the Contract.

7.3 Security Requirements

7.3.1 The following security requirements (SRCL and related clauses provided by the Contract Security Program) apply and form part of the Contract.

Note: One of the following clause will be deleted, as applicable, before contract award.

7.3.1.1 SECURITY REQUIREMENTS FOR CANADIAN SUPPLIER:

1. The Contractor/Offeror must, at all times during the performance of the Contract/Standing Offer, hold a valid Facility Security Clearance at the level of **SECRET**, with approved Document safeguarding at the level of **SECRET**, issued by the Contract Security Program (CSP), Public Works and Government Services Canada (PWGSC).
2. 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 (PWGSC).
3. The Contractor/Offeror personnel requiring access to CLASSIFIED information, assets or sensitive site(s) must EACH hold a valid personnel security screening at the level of **SECRET**, granted or approved by the CSP, PWGSC. Until the security screening of the Contractor personnel required by this Contract has been completed satisfactorily by the CSP, PWGSC, the Contractor/ personnel MAY NOT HAVE ACCESS to CLASSIFIED information or assets, and MAY NOT ENTER sites where such information or assets are kept, without an escort.
4. Processing of **CLASSIFIED** information electronically at the Contractor/Offeror's site is NOT permitted under this Contract/Standing Offer.
5. Subcontracts which contain security requirements are NOT to be awarded without the prior written permission of the CSP, PWGSC.
6. The Contractor/Offeror must comply with the provisions of the:
 - a) Security Requirements Check List and security guide (if applicable), attached at Annex C;
 - b) *Contract Security Manual* (Latest Edition).

7.3.1.2 SECURITY REQUIREMENTS FOR FOREIGN SUPPLIER:

1. All CANADA CLASSIFIED information/assets, furnished to the Foreign recipient Contractor or produced by the Foreign recipient Contractor, shall be safeguarded as follows:
2. All CANADA CLASSIFIED information/assets provided or generated under this Contract will continue to be safeguarded in the event of withdrawal by the recipient party or upon termination of the Contract, in accordance with the National legislation, regulations and policies of their country.
3. The Foreign recipient Contractor shall provide the CANADA CLASSIFIED information/assets a degree of safeguarding no less stringent than that provided by the Government of Canada in accordance with the National legislation, regulations and policies of, National Security legislation and regulations and as prescribed by the National Security Authority (NSA) or Designated Security Authority (DSA) of their country.
4. All CANADA CLASSIFIED information/assets provided to the Foreign recipient Contractor pursuant to this Contract by the Government of Canada, shall be marked by the Foreign recipient Contractor with the equivalent security classification utilized by their country and in accordance with the National legislation, regulations and policies of their country.

5. The Foreign recipient Contractor shall, at all times during the performance of this Contract, ensure the transfer of CANADA CLASSIFIED information/assets be facilitated in accordance with the National legislation, regulations and policies of their country, and in compliance with the provisions of the Bilateral Industrial Security Instrument between their country and Canada.
6. Upon completion of the work, the Foreign recipient Contractor shall return to the Government of Canada, via government-to-government channels, all CANADA CLASSIFIED information/assets furnished or produced pursuant to this Contract including all CANADA CLASSIFIED information/assets released to and/or produced by its subcontractors, unless otherwise authorised in writing by the Canadian DSA.
 - i. Canadian persons that examine, possess, or transfer controlled goods (*refer to Note) that are domestically controlled by Public Services and Procurement Canada (PSPC) for Contracts and Subcontracts are required to register with PSPC's Controlled Goods Program (CGP) before accessing controlled goods, unless excluded from CGP registration as defined by the *Controlled Goods Regulations*.

Throughout the duration of this Contract and Subcontract, the Foreign recipient Contractor and Subcontractor must adhere to its respective national policies pertaining to the examination, possession, or transfer of controlled goods and must immediately report to its responsible National Security Authority (NSA) all cases in which it is known or there is reason to suspect that controlled goods, furnished or generated pursuant to this Contract and Subcontract have been lost or disclosed to unauthorized persons (entities not registered with the CGP or entities not excluded from CGP registration), including but not limited to a third party government, person, firm, or representative thereof. Controlled goods which are lost or compromised while handled outside of Canada, should be immediately reported, as per the requirements of the Treasury Board of Canada Secretariat's Controlled Goods Directive and Directive on Material Management and to the Canadian Government Authority owner of the controlled goods, for example the Canadian Department that issued the controlled goods to the Foreign recipient Contractor and Subcontractor, as part of this Contract and Subcontract. Additionally, controlled goods that are lost or disclosed to unauthorized persons which are subject to the United States of America's (U.S.) the export controls of International Traffic in Arms Regulations of the United States of America International Traffic in Arms Regulations, will require the NSA or the Canadian Government Authority owner to report the situation to the U.S. exporter or the U.S. Department of State's Directorate of Defense Trade Controls (DDTC)

*Note: Controlled goods are goods, including components and their associated technologies (e.g., blueprints, technical specifications, etc.), that primarily have a military or national security significance, including "defense articles" that are controlled by the United States' International Traffic in Arms Regulations. The list of controlled goods Controlled Goods List contained in the Schedule to the Defence Production Act (section 35) details the specific controlled goods that are domestically controlled by PSPC.

7. The Foreign recipient Contractor must identify an authorized Contract Security Officer (CSO) to be responsible for the overseeing of the security requirements, as defined in this contract. This individual will be appointed by the proponent Foreign recipient Contractor's Chief Executive Officer or Designated Key Senior Official, defined as an Owner, Officer, Director, Executive, and/or partner who

occupies a position which would enable them to adversely affect the organization's policies or practices in the performance of the contract.

8. Until the Foreign recipient's responsible National Security Authority (NSA) or Designated Security Authority (DSA) for industrial security of their country has provided Canadian DSA with the required written Personnel Security Screening assurances, the Foreign recipient Contractor personnel SHALL NOT HAVE ACCESS to SECRET: CANADA CLASSIFIED information/assets, and SHALL NOT ENTER "Government of Canada" or "Contractor" sites where such information or assets are kept, without an escort. An escort is defined as "a Government of Canada" or "Contractor" employee who holds the appropriate Personnel Security Clearance at the required level.
9. Subcontracts which contain security requirements are NOT to be awarded without the prior written permission of {their respective National Security Authority (NSA) or Designated Security Authority (DSA), in accordance with the National legislation, regulations and policies of the country / the Canadian DSA}.
10. The Foreign recipient Contractor shall not use the CANADA CLASSIFIED information/assets for any purpose other than for the performance of the Contract without the prior written approval of the Government of Canada. This approval must be obtained from the Canadian DSA.
11. The Foreign recipient Contractor visiting Canadian Government or industrial facilities, under this contract, will submit for approval a Request for Visit form to Canada's Designated Security Authority (DSA) through their respective National Security Authority (NSA) or Designated Security Authority (DSA).
12. The Foreign recipient Contractor shall immediately report to the Canadian DSA all cases in which it is known or there is reason to suspect that CANADA CLASSIFIED information/assets pursuant to this Contract has been compromised.
13. The Foreign recipient Contractor shall not disclose CANADA CLASSIFIED information/assets to a third party government, person, firm or representative thereof, without the prior written consent of the Government of Canada. Such consent shall be sought through the recipient's National Security Authority/ Designated Security Authority (NSA/DSA) / Canadian DSA.
14. The Foreign recipient Contractor must comply with the provisions of the Security Requirements Check List attached at Annex C.

7.3.2 Contractor's Sites or Premises Requiring Safeguarding Measures

- 7.3.2.1** Where safeguarding measures are required in the performance of the Work, the Contractor must diligently maintain up-to-date the information related to the Contractor's and proposed individuals' sites or premises for the following addresses: *(to be completed by Canada at contract award)*

Street Number / Street Name, Unit / Suite / Apartment Number
City, Province, Territory / State
Postal Code / Zip Code
Country

7.3.2.2 The Company Security Officer must ensure through the Contract Security Program that the Contractor and individuals hold a valid security clearance at the required level.

7.3.3 Visit Clearance Requests for Employees

If applicable and immediately after contract award, the supplier will be required to obtain, without delay, visit clearance from ISS for each of its employees assigned to the contract.

A minimum lead time of 25 working days is required to obtain a visit clearance from ISS.

Without visit clearance, the supplier's employees will not have access to DRDC-Valcartier facilities, leaving the supplier liable for delays in delivery.

Suppliers can consult the ISS Web site on visit clearances at: <http://iss-ssi.pwgscc-tpsgc.gc.ca/msi-ism/index-eng.html>, chapter 6.

7.4 Term of Contract

7.4.1 Period of the Contract *(to be completed by Canada at contract award)*

The period of the Contract is from date of Contract to _____ inclusive.

7.5 Authorities

7.5.1 Contracting Authority

The Contracting Authority for the Contract is:

Name: Daniel Boisclair
Title: Supply Specialist
Public Works and Government Services Canada
Address: 1550 D'Estimauville Ave., Quebec, QC, G1J 0C7
Telephone: 418-571-8051
E-mail address: Daniel.Boisclair@tpsgc-pwgscc.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.

7.5.2 Technical Authority *(to be completed by Canada 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.

7.5.3 DND Procurement Authority *(to be completed by Canada at contract award)*

The DND Procurement Authority for the Contract is:

Name: _____
Title: _____
Organization: _____
Address: _____
Telephone: _____
Facsimile: _____
E-mail address: _____

The DND Procurement Authority is the representative of the department or agency for whom the Work is being carried out under the Contract. The DND Procurement Authority is responsible for the implementation of tools and processes required for the administration of the Contract. The Contractor may discuss administrative matters identified in the Contract with the DND Procurement Authority however the Procurement Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of Work can only be made through a contract amendment issued by the Contracting Authority.

7.5.4 Contractor's Representative *(to be completed by the Contractor)*

Administrative representative:	Technical representative:
Name : _____	Name : _____
Telephone : _____	Telephone : _____
Facsimile : _____	Facsimile : _____
Email : _____	Email : _____

7.6 Proactive Disclosure of Contracts with Former Public Servants

By providing information on its status, with respect to being a former public servant in receipt of a [Public Service Superannuation Act](#) (PSSA) pension, the Contractor has agreed that this information will be reported on departmental websites as part of the published proactive disclosure reports, in accordance with [Contracting Policy Notice: 2019-01](#) of the Treasury Board Secretariat of Canada.

7.7 Payment

7.7.1 Basis of Payment

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a firm price as specified in Annex B for a cost of \$_____ *(insert the amount at contract award)*. Customs duties are included and Applicable Taxes are extra.

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.

7.7.2 Travel and Living Expenses

Canada will not pay any travel or living expenses associated with performing the Work.

7.7.3 Method of Payment

7.7.3.1 Payments will be made not more frequently than once a month.

7.7.3.1.1 Milestone Payment

Canada will make milestone payments in accordance with the Schedule of Milestones detailed in the Contract and the payment provisions of the Contract if:

- (a) an accurate and complete claim for payment using [PWGSC-TPSGC 1111](#), Claim for Progress Payment, and any other document required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract;
- (b) all the certificates appearing on form [PWGSC-TPSGC 1111](#) have been signed by the respective authorized representatives;
- (c) all work associated with the milestone and as applicable any deliverable required has been completed and accepted by Canada.

7.7.3.1.2 Schedule of Milestone

The schedule of milestones according to which payments will be made under the contract is detailed at Annex B.

7.7.4 SACC Manual Clauses

[A9117C](#) (2007-11-30), T1204 - Direct Request by Customer Department

[C2000C](#) (2007-11-30), Taxes – Foreign-based Contractor

7.7.5 Electronic Payment of Invoices – Contract

The Contractor accepts to be paid using any of the following Electronic Payment Instrument(s):

- (a) Direct Deposit (Domestic and International);
- (b) Electronic Data Interchange (EDI);
- (c) Wire Transfer (International Only).

7.8 Invoicing Instructions – Progress payment claim

1. The Contractor must submit a claim for payment using form [PWGSC-TPSGC 1111](#), Claim for Progress Payment.

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) the description and value of the milestone claimed as detailed in the Contract.

2. Applicable Taxes, 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 Applicable Taxes payable as it was claimed and payable under the previous claims for progress payments.
3. The Contractor must prepare and certify the request on form [PWGSC-TPSGC 1111](#), and send it in electronic format to the following address for certification:

Supply and Support Clerk - Claims

QueReclamation.QueClaim@tpsgc-pwgsc.gc.ca

The Contracting Authority will then forward the claim to the Technical Authority for appropriate certification after inspection and acceptance of the Work takes place, and onward submission to the Payment Office for the remaining certification and payment.

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

7.9 Certifications and Additional Information

7.9.1 Compliance

Unless specified otherwise, the continuous compliance with the certifications provided by the Contractor in its bid or precedent to contract award, and the ongoing cooperation in providing additional information are conditions of the Contract and failure to comply will constitute the Contractor in default. Certifications are subject to verification by Canada during the entire period of the Contract.

7.9.2 Federal Contractors Program for Employment Equity - Default by the Contractor

The Contractor understands and agrees that, when an Agreement to Implement Employment Equity (AIEE) exists between the Contractor and Employment and Social Development Canada (ESDC)-Labour, the AIEE must remain valid during the entire period of the Contract. If the AIEE becomes invalid, the name of the Contractor will be added to the "[FCP Limited Eligibility to Bid](#)" list. The imposition of such a sanction by ESDC will constitute the Contractor in default as per the terms of the Contract.

7.9.3 SACC Manual Clauses

[A3015C](#) (2014-06-26), Certifications - Contract

7.10 Applicable Laws

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

7.11 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) the general conditions [2040](#) (2021-12-02), Research & Development;
- (c) Annex A, Statement of Work;
- (d) Annex B, Basis of Payment & Schedule of Milestones - Phase 1;
- (e) Annex C, Security Requirements Check List (SRCL);
- (f) Annex D, Contractor Disclosure of Foreground Information;
- (g) Annex E, COVID-19 Vaccination Requirement Certification Form;
- (h) Annex F, Certification Form - Inclusion of Resources Designated by the Employment Equity Act;
- (i) the Contractor's bid dated _____ (*insert the date of the bid*), and, as amended on _____ (*insert the date(s) of the amendments*).

7.12 Defence Contract

SACC Manual clause [A9006C](#) (2012-07-16), Defense Contract

7.13 Foreign Nationals (*To be determined at Contract award*)

SACC Manual clause [A2000C](#) (2006-06-16) Foreign Nationals (Canadian Contractor)

OR

SACC Manual clause [A2001C](#) (2006-06-16) Foreign Nationals (Foreign Contractor)

7.14 Insurance

SACC Manual clause [G1005C](#) (2016-01-28) Insurance - No Specific Requirement

7.15 Controlled Goods Program

SACC Manual clause [A9131C](#) (2020-11-19), Controlled Goods Program

SACC Manual clause [B4060C](#) (2011-05-16), Controlled Goods

7.16 SACC Manual Clause

[A9062C](#) (2011-05-16), Canadian Forces Site Regulations

7.17 Identification Badge

SACC Manual clause [A9065C](#) (2006-06-16), Identification Badge

7.18 Inclusion of Resources Designated by the Employment Equity Act

In the event of changes in the project team, a resources designated by the Employment Equity Act identified in Annex F, should be replaced by a resources belonging to one or many of the following groups: women, indigenous peoples, persons with disabilities and members of visible minoritie, and according to the terms of the General Conditions 2040, article 9, Replacement of specific individuals. If the Contractor is unable to find a a resources designated by the Employment Equity Act as a replacement resource, the Contractor will need to demonstrate that reasonable efforts has been put in place to do so. Canada reserves the right to accept any other resource.

7.19 Dispute Resolution

- (a) The parties agree to maintain open and honest communication about the Work throughout and after the performance of the contract.
- (b) The parties agree to consult and co-operate with each other in the furtherance of the contract and promptly notify the other party or parties and attempt to resolve problems or differences that may arise.
- (c) If the parties cannot resolve a dispute through consultation and cooperation, the parties agree to consult a neutral third party offering alternative dispute resolution services to attempt to address the dispute.
- (d) Options of alternative dispute resolution services can be found on Canada's Buy and Sell website under the heading "Dispute Resolution".

ANNEX A

STATEMENT OF WORK – PHASE 1

1.0 TITLE

Lightweight Standalone Specific Threat Plate – Generation C3

2.0 PURPOSE

The purpose of this statement of work is to describe the requirements for the development of the Generation C3 of the Lightweight Standalone Specific Threat Plate (armour plate) to the Department of National Defence (DND). The new standalone armour plates must have a significantly reduced mass compared to the Generation C2 of the Lightweight In-Conjunction Specific Threat Plate (armour system) while maintaining the same ballistic performances.

3.0 BACKGROUND

Soldier burden has been defined as one of the hard problems to increase soldier effectiveness. One of the major contributors to soldier's physical burden is encumbrance imposed by personal clothing, load carriage and personal protective equipment (PPE), but also the weight of the equipment itself. These has been demonstrated to reduce soldier mobility and increase risk of musculoskeletal injury. While PPE such as body armour is essential in mitigating battlefield injuries, continuous effort must be taken to reduce its mass while keeping the same level of ballistic protection.

DND presently uses Generation C2 armour system, which consists of an armour plate used in conjunction with an NIJ Level II soft body armour. The armour system provides protection against several rounds not defined in the NIJ 0101.06 Standard (often referred to as Level III+), but excluding armour piercing (AP) rounds that correspond to a level IV. DND seeks to significantly reduce the mass of the Generation C2 armour system in order to decrease the weight burden of its soldiers, while maintaining the same ballistic performance. However, the Generation C3 must be a standalone armour plate.

A large variety of materials can be used to defeat NIJ threat level III+. Materials such as aramid, ultrahigh molecular weight polyethylene (UHMWPE), metal and ceramic are among the most commonly used. R&D is constantly contributing to material improvement and other varieties of materials might exists and are all of interest if they can contribute to reduce weight burden and keeping the same ballistic performance as the Generation C2 armour system. The integration of nanotubes or nanoparticles within armour ceramic or composite materials, auxetic material or the integration of new energy absorbed materials are all examples of possible avenues. The preferred material of choice depends on the nature of the mission, the mass, the price, the threat definition, etc. Optimization or development of new manufacturing processes can also be considered.

In addition, woman specific profile plate must be investigated and developed to provide better comfort and fit to female soldiers.

4.0 ACRONYMS

BFS	Back Face Signature
DND	Department of National Defence
DRDC	Defence Research Development Canada
FAT	First Article Testing
FRM	Final Review Meeting
KOM	Kick-Off Meeting
NIJ	National Institute of Justice
PRM	Progress Review Meeting
UHMWPE	Ultra-Molecular Weight Polyethylene
ZMR	Zone of Mixed Results

5.0 APPLICABLE DOCUMENTS & REFERENCES

5.1 Applicable Documents

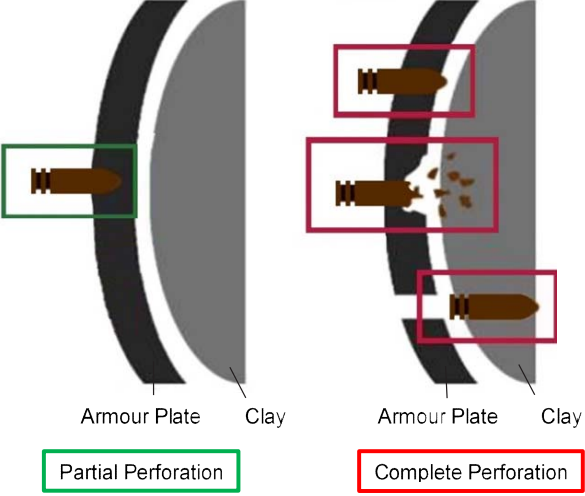
The following documents form part of this statement of work to the extent specified and are supportive of this statement of work when referenced; all other document references are to be considered supplemental information only. In the event of a conflict between the documents referenced and the contents of this statement of work, then the contents of this statement of work must take precedence.

- National Institute of Justice (NIJ) 0101.06 Ballistic Resistance of Body Armour (www.nij.gov)
- STANAG 4370 - Environmental Testing (www.nato.int)
- AECTP 300 - Climatic Environmental Test (www.nato.int)
- MIL-STD-810G - Test Method Standard for Environmental Engineering Considerations and Laboratory Tests (www.everyspec.com)
- Appendix 1 to Annex A: Operational performance and technical requirements for the lightweight standalone specific threat plate
- Appendix 2 to Annex A: Production performance verification test procedure for the lightweight standalone specific threat plate
- Appendix 3 to Annex A: First article testing procedure for the lightweight standalone specific threat plate

5.2 Definitions

The following definitions are used within the statement of work and the Appendices.

Back Face Signature (BFS) (NIJ 0106.06)	The greatest extent of indentation in the backing material caused by a non-perforating impact on the armour plate. The BFS is the perpendicular distance between two planes, both of which are parallel to the front surface of the backing material fixture. One plane contains the reference point on the original (pretest) backing material surface that is co-linear with the bullet line of flight. (If armour were not present, the bullet would strike this point). The other plane contains the point that represents the deepest indentation in the backing material. Depending on bullet-armour-backing material interactions, the two points that define the locations of the measurement planes may not be co-linear with the bullet line of flight.
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<p>Perforation</p>	 <p>Any impact that creates a hole passing through the armour plate is a complete perforation. This may be evidenced by any of the following:</p> <ul style="list-style-type: none"> (a) The presence of the projectile, a projectile fragment, or an armour fragment in the clay backing material; (b) A hole that passes through the armour plate; or (c) Any portion of the bullet being visible from the rear side of the armour plate. <p>Any other situation is considered a partial perforation.</p>
<p>Production Batch/Lot</p>	<p>A discrete group of Lightweight Standalone Specific Threat Plates (armour plates) having the same recipe, manufactured under the same conditions and production method, and comprised of materials within the same lot number.</p>
<p>Control Group</p>	<p>A series of Lightweight Standalone Specific Threat Plates (armour plates) selected from a production batch/lot required for destructive ballistic performance verification testing.</p>
<p>V50</p>	<p>The striking velocity at which 50% of the impacts of a particular projectile are expected to result in complete perforations of an armour plate of given thickness and physical properties at a specified angle of obliquity in a limited statistical test.</p>
<p>Yaw</p>	<p>Angle between the main axis of the line of flight of the projectile and its velocity vector. Should be measured as close to the armour plate as possible.</p>
<p>Yaw Card</p>	<p>Stiff paper-type material placed in the projectile's line of flight used to determine the projectile yaw.</p>
<p>Zone of Mixed Results (ZMR)</p>	<p>The difference in velocities between the highest partial perforation and the lowest complete perforation actually obtained during a V50 test.</p>

6.0 SCOPE

The objective is to develop the Generation C3 of the standalone armour plate with significantly reduced mass compared to the Generation C2 in-conjunction armour system, and having the operational performance and technical requirements described in 0 to Annex A. Any approach of new concept such as new fiber/material for composite combination, new metal or metal matrix composite, integration of nanofibers with UHMWPE, new ceramic base material, etc., as well as optimization or new manufacturing processes can be explored.

During Phase 1, a maximum of two (2) control tests per year, for a total of four (4) control tests, can be performed by DRDC Valcartier to monitor the progress of the armour plate development. After Year 1 of Phase 1, a mid-term review meeting will be held to evaluate the pertinence of continuing the development program based on the progress accomplished with respect to the objectives.

For each control test, a maximum of thirty (30) armour plate (male and female profile) samples must be provided by the Contractor but the number of samples prior to each control test will be confirmed and agreed during the Progress Review Meetings. The control test consists of conducting ballistic limit (V50) and/or Perforation-Back Face Signature (P-BFS) tests in accordance with the test methods described in Appendix 2 to Annex A, Sections A2.3 to A2.5 and Appendix 3 to Annex A, Sections A3.3 to A3.5, respectively. However, deviations from the test methods, in particular the shot pattern, may be applied to better monitor the improvements of the armour plate, in agreement with the Contractor. After completion of the control test, data will be provided to the respective Contractors.

At the end of Phase 1- Development phase, and if considered relevant by DND based on previous control test results, a final control test will be conducted at DRDC Valcartier ballistic laboratories for ballistic performance assessment of the final concept of the male profile amour plates. One hundred and forty-four (144) plates must be provided by the Contractor. The final control test will be conducted in accordance with the test methods described in Appendix 2 to Annex A, Sections A2.3 to A2.5 for ballistic limit (V50) and in Appendix 3 to Annex A for the First Article Testing. After completion of the final control test, data will be provided to the respective Contractors.

A limited Request for a Standing Offer (RFSO) will be sent to Contractors whose control test results of their final concept at Phase 1 are conclusive and who agree to proceed to Phase 2 - Production phase according to the statement of work defined in Attachment 1 to Annex A will be issued. The Offerors will be evaluated based on mandatory and point rated evaluation criteria defined in Attachment 2 to Annex A and ranked on the highest combined rating of technical merit and price. Up to two (2) National Individual Standing Offers (NISO) may be recommend for issuance.

6.1 Kick-Off Meeting (KOM)

The contractor must:

6.1.1 Within two (2) weeks after contract award date (or a date mutually agreeable to by the Technical Authority and the Contractor), prepare and hold a kick-off meeting, at which time the following activities will take place:

- Review contract deliverables;
- Review the requirements of the work;
- Review the work schedule;
- Review risk assessment and mitigation plan;
- Review basis of payment, and claim format;
- Review reporting requirements;
- Discuss any licensing issues; and
- Meet the personnel assigned to the work.

6.1.2 Provide the Technical Authority with the deliverables associated with the kick-off meeting as described at section 7.0 - DELIVERABLES of this document.

6.2 Progress Review Meeting (PRM)

The contractor must:

6.2.1 Every three (3) months, prepare and hold a progress review meeting in order to monitor the work progress, discuss and take decisions. These meetings will be scheduled by the Contractor and will be held by teleconference.

6.2.2 Present the following in details:

- The current percentage of completion and accomplishments;
- Discuss relevant results achieved;
- Determine the quantity of armour plate samples necessary for the next control test;
- Project management issues; and
- Other items as deemed appropriate.

6.2.3 The progress review meetings are intended to provide an opportunity for the Contractor, the Technical Authority, contracting authority and other invited attendees to review and discuss the items described in paragraph 0.

6.2.4 Provide the Technical Authority with the deliverables associated with the progress review meeting as described at section 7.0 - DELIVERABLES of this document.

6.3 Control Test

For each control test, the Contractor must:

6.3.1 Provide armour plate samples (male and female profiles) for control test to be conducted at Defence Research Development Canada (DRDC) Valcartier ballistic laboratories. Each armour plate samples must have a unique identification, must have a minimum width and height of 215 mm and 280 mm, respectively, and must have a multi-curve profile.

- 6.3.2 Provide, prior to shipping the armour plate samples for a control test:
- A description of the technology including the list of all material content;
 - The length, width, mass and areal density of each samples; and
 - A listing of the sample identifications.
- 6.3.3 Provide the Technical Authority with the deliverables associated with the control test as described at section 7.0 - DELIVERABLES of this document.

6.4 Mid-Term Review Meeting

The Contractor must:

- 6.4.1 At the end of Year 1, prepare and hold a mid-term review meeting to evaluate the pertinence of continuing the program based on the progress accomplished with respect to the objectives. The meeting will be scheduled by the Contractor and will be held by teleconference.

This meeting will serve as the basis for the decision whether or not to undertake the subsequent activities planned to the contract.

This decision will be based mainly on the progress made and if it is believe that a final solution will be achieved. The Procurement Authority and Technical Authority will assess whether significant progress has been made in the results obtained during the control tests conducted so far based on the work plan submitted in the Bid and for the elements described in Section 6.4.2

- 6.4.2 Present the following in details:
- The current percentage of completion and accomplishments;
 - Results achieved;
 - Planned strategy and activities to achieve the objectives of the program; and
 - Expected areal density at the end of the development.
- 6.4.3 Provide the Technical Authority with the deliverables associated with the mid-term review meeting as described at section 7.0 - DELIVERABLES of this document.

6.5 Final Review Meeting (FRM)

The Contractor must:

- 6.5.1 At the end of Phase 1, prepare and hold a final review meeting to present and recap the accomplished work during the whole development program. The meeting will be scheduled by the Contractor and will be held by teleconference.
- 6.5.2 Present the following in details:
- Program objectives;
 - Description of the chosen approaches;
 - Work progress and achievements;
 - Final solution;
 - Lessons learned;
 - Recommendations;
 - Final report;

-
- Disclosure of foreground information; and
 - Other items as deemed appropriate.

6.5.3 Within two (2) weeks after the final review meeting, provide a final report which must contain the following:

- Introduction and background;
- Description of the different iteration and final solution;
- Results and analysis of each control tests;
- Discussions and recommendation; and
- Conclusions.

6.5.4 Provide the Technical Authority with deliverables associated with the final review meeting as described at section 7.0 - DELIVERABLES of this document.

6.6 Final Control Test – Ballistic limit (V50) test and First Article Testing

The Contractor must:

6.6.1 Provide, at the end of the development phase and if considered relevant by DND based on previous control test results, armour plates (male profile only) for a final control test to be conducted at DRDC Valcartier ballistic laboratories. Each armour plate must have a unique serial number and must have a size, mass and curve profile as specified in Section A1.2.2 of Appendix 1 to Annex A.

6.6.2 Provide, prior to shipping the armour plates for the final control test:

- A description of the technology including the list of all material content;
- Mass, length, width and areal density for each samples; and
- A listing of the plates serial numbers.

6.6.3 Provide the Technical Authority with deliverables associated with the final control test as described at section 7.0 - DELIVERABLES of this document.

6.7 Publications

The Contractor must:

6.7.1 If applicable, submit to the Technical Authority all publications including manuscripts, presentation summaries or any other publications for revision and approbation ninety (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).

7.0 **DELIVERABLES**

This section reviews and describes the contract deliverables and meetings required as well as the program milestones.

The table below contains the list of meetings and associated contract deliverables. The meetings' locations are described at Section 11.0 – MEETINGS of this document.

Deliverable number	Task reference	Description	Date Due	Quantity and/or format
7.1	6.1	Meeting agendas	2 weeks before each meeting	Electronic format
7.2	6.2	Meeting presentation	1 week before each meeting	Electronic format
7.3	6.4		1 week after each meeting	Electronic format
7.4	6.5	Meeting minutes and action items	5 days before shipping the control test samples	Electronic format
7.5	6.3	Bill of loading and tracking number	Refer to the milestone schedule	Up to 30 armour plate samples per control test (quantity to be confirmed during PRM); A maximum of 120 armour plate samples for the 4 control tests; Male and female profiles.
7.6	6.6	Armour plate samples for control tests, delivered to DRDC Valcartier; Minimum width and height of 215 mm and 280 mm, respectively with multi-curve profile;		
7.7	6.3.1	Description document of the armour plate samples	5 days before shipping the control test samples	Electronic format
7.8	6.3.2	Armour plates or final control test, delivered to DRDC Valcartier Size, mass and curve profile as specified in Section A.1.2.2 of Appendix 1 to Annex A.	2 weeks before the end of contract	144 armour plates Male profile only.
7.9	6.6.1	Description document of the armour plates	5 days before shipping the armour plates for final control test	Electronic format
7.10	6.6.2	Proactive disclosure of foreground information	2 weeks after final review meeting	Electronic format
7.11	6.5.1	Final report	2 weeks after final review meeting	1 final report. Formatted in accordance with DRDC standard. The standard can be obtained through the project's scientific authority; Electronic format.

8.0 LANGUAGES

- 8.1 All meetings must be held in English or French. The Contractor must ensure that all their participants understand and speak English or French.
- 8.2 All documents and presentations must be written in English or French.

9.0 LOCATION OF WORK

The R&D work for the development phase must be conducted at the Contractor's site. Control tests and the final control test will be conducted at DRDC Valcartier ballistic laboratories.

10.0 TRAVEL

The Contractor is not required to travel. However, upon mutual agreement, meetings may be held at DND or DRDC Valcartier facilities. Also, if deemed relevant by the Procurement Authority and Technical Authority, the Contractor may assist ballistic tests during the control test evaluation. The travel cost is the Contractor's responsibility and is not included in this Phase 1 contract.

11.0 MEETINGS

Progress review meetings and mid-term review meeting will be held by teleconference. However, if appropriate and upon mutual agreement, progress review meetings could be held at the Contractor and/or DRDC Valcartier facilities. On-site meeting will be classified industry confidential.

12.0 SECURITY

All information provided by Contractors will be protected. Information, data, test results obtained from a Contractor or performed under this contract will circulate only between DND and the concerned Contractor to whom it belongs.

APPENDIX 1 TO ANNEX A

OPERATIONAL PERFORMANCE AND TECHNICAL REQUIREMENTS FOR THE LIGHTWEIGHT STANDALONE SPECIFIC THREAT PLATE

A1 Purpose

Appendix 1 to Annex A defines the operational performance and technical requirements for the Lightweight Standalone Specific Threat Plates (armour plates). All requirements are mandatory.

A1.1 Operational Performance Requirements

The armour plates must provide ballistic protection to the front and back of the torso as follows:

- (a) The armour plates must be designed as a standalone plate that can be inserted in a plate carrier;
- (b) Each armour plate must be subjected to a drop test in accordance with the test procedure in Appendix 2 to Annex A, Section A2.3.2 prior to ballistic evaluation;
- (c) The armour plates must provide V50 as follows, when tested in accordance with the V50 test method defined in 0 to Annex A:
 - i. Four (4) shots of **A** ammunition at a velocity \geq *[info provided at contract award]*;
 - ii. Two (2) shots of **B** ammunition at a velocity \geq *[info provided at contract award]*;
 - iii. Four (4) shots of **C** ammunition at a velocity \geq *[info provided at contract award]*; and
 - iv. Four (4) shots of **D** ammunition at a velocity \geq *[info provided at contract award]*.
- (d) For First Article Testing, the armour plates must provide no perforation and a maximum Back Face Signature (BFS) of 44 mm for the following, when tested in accordance with the P-BFS test methods defined in 0 to Annex A:
 - i. Five (5) shots of **A** ammunition at a velocity of *[info provided at contract award]*;
 - ii. Four (4) shots of **B** ammunition at a velocity of *[info provided at contract award]*;
 - iii. Four (4) shots of **C** ammunition at a velocity of *[info provided at contract award]*; and
 - iv. Four (4) shots of **D** ammunition at a velocity of *[info provided at contract award]*.
- (e) The armour plates must not produce spall when hit by the four (4) types of ammunition with the specified velocities described in paragraph d), and tested in accordance with P-BFS test methods defined in 0 to Annex A, Section A3.6.

A1.2 Technical Requirements

The Technical Requirements for the armour plates are given in the following sections.

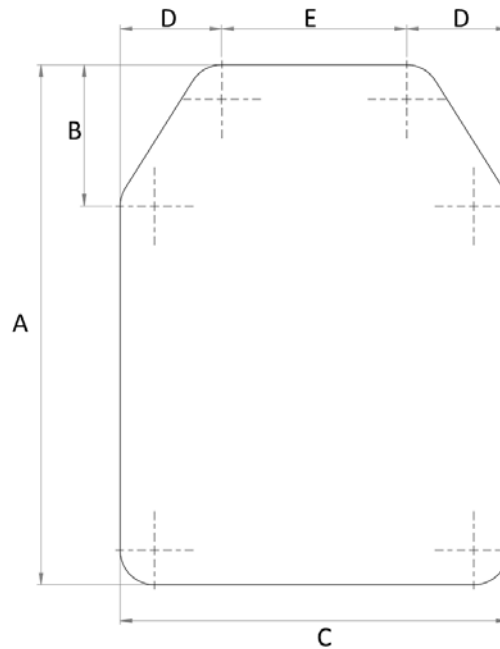
A1.2.1 Materials

All material must:

- (a) Be sourced and supplied by the vendor; and
- (b) Support cleaning by wipe down with mild soap and water.

A1.2.2 Curve Profile, Dimension and Areal Density

The armour plates must be anatomically curved with a multi-curve profile (a horizontal-axis curve in the upper half and a vertical-axis curve in the lower half) to provide ergonomic comfort to the user. The exact multi-curve profile used for the Generation C2 will be provided by DND at contract award, but a different profile may be used for the Generation C3 if during the development phase it is demonstrated that it provides better comfort and fit to the operators. The dimensions and areal density must be as follows:



Size	A (± 5 mm)	B (± 5 mm)	C (± 5 mm)	D (± 5 mm)	E (± 5 mm)	Thickness (mm)	Areal density (kg/m ²)
Small	289	79	216	57	102	≤ 27.0	≤ 29
Medium	312	98	241	77	87	≤ 27.0	≤ 29

Table A1.1: Plate Dimensions and Mass by Size

Note that the dimensions specified in Table A1.1 may change if, during the development phase, it is demonstrated that the comfort and fit of the operators are improved. However, the areal density must meet the minimum requirement. The areal density will be calculated by taking the mass of the armour plate divided by its surface area.

In addition, woman specific plate profile must also be developed during Phase 1 to improve comfort, fit and protection for female operators. The external dimensions specified in Table A1.1 may vary for the woman specific plate profile. However, the areal density must meet the requirement.

A1.2.3 Environmental

The armour plate must have a shelf life of not less than five (5) years when stored in accordance with the manufacturer's recommendations.

A1.2.4 Construction

The armour plates must:

- (a) Be of superior construction and free from inferior workmanship;
- (b) Be molded in a manner that provides uniform properties including, but not limited to, thickness and layering of materials;
- (c) **Not** be repaired or patched (i.e., non-cosmetic repair of the ballistic material) after being molded; and
- (d) **Not** be re-molded.

A1.2.5 Colour

The exterior surface of the armour plates must:

- (a) Have a tan outer color;
- (b) Have a low-gloss finish; and
- (c) Not have any florescent colors.

A1.2.6 Labeling

Each armour plate must have a label as follows:

- (a) Sized such that it is easily readable without the use of any type of magnifying device other than regular prescription corrective glasses (if required);
- (b) Securely bonded to the plate;
- (c) Durable wear-resistant lettering that will remain legible for the life of the plate;
- (d) Resistant to distilled water, denatured alcohol and isopropyl alcohol when hand-rub for 15 seconds using a cotton cloth; and
- (e) Include the information shown at Figure A1.1 (minimum).

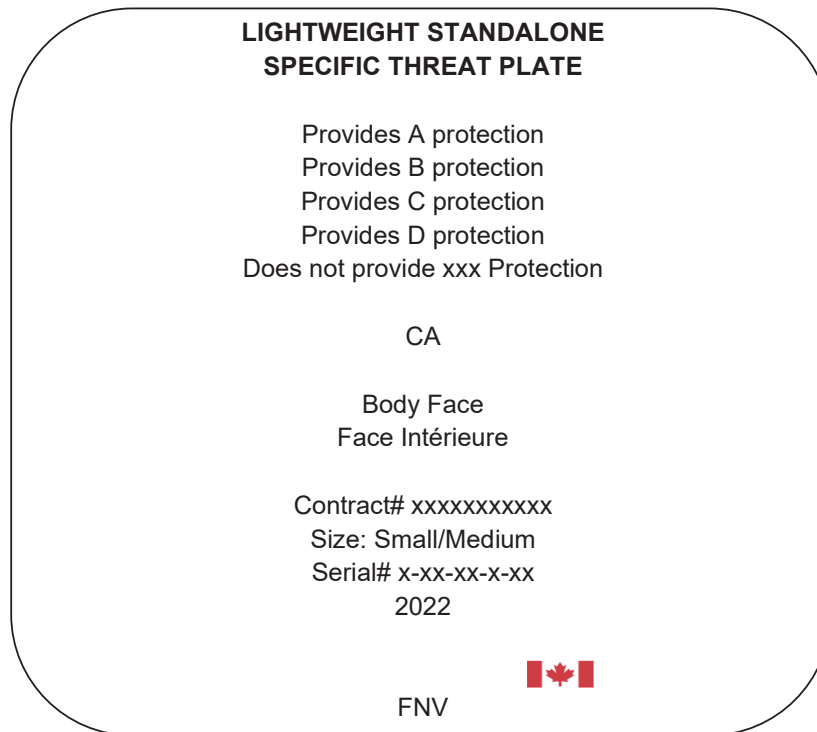


Figure A1.1: Lightweight Standalone Specific Threat Plate Label

APPENDIX 2 TO ANNEX A

PRODUCTION PERFORMANCE VERIFICATION TEST PROCEDURE FOR THE LIGHTWEIGHT STANDALONE SPECIFIC THREAT PLATE

A2. Purpose

Appendix 2 to Annex A outlines the Production Performance Verification (PPV) test procedure to be conducted by DND for the Lightweight Standalone Specific Threat Plates (armour plates).

The Production Performance Verification test procedure consists of performing quality control inspection, label permanency and durability testing, pre-test conditioning, materials and test setup followed by the ballistic performance testing and the pass assessment.

A2.1 Quality Control Inspection

Prior to conducting the ballistic performance testing, DND will conduct a quality control inspection at DRDC Valcartier (or as otherwise designated by DND) as follows:

- (a) Visual inspection of the armour plates for damage, material flaws and poor workmanship such as wrinkles, blisters, cracks, delamination, sharp corners, etc. All plates must be structurally rigid, identical in appearance and manner of construction, and be correctly labeled. Any deficiencies will be noted;
- (b) Weigh and measure the surface of the armour plates to confirm the areal density is less than the specified value detailed in the Technical and Performance Specifications at 0 to Annex A and
- (c) Measure the thickness of the armour plates to confirm they have a uniform thickness of less than or equal to the specified value detailed in the Technical and Performance Specifications at 0 to Annex A.

An areal density and/or thickness in excess of that specified above will result in the return of defective armour plates to the Contractor for replacement. The replacement armour plates must come from the same batch under testing, and the maximum number of replacement plates must be less than 10% (rounded up to the unit) of the whole batch, otherwise it will result in a failure of the batch.

A2.2 Label Permanency and Durability Testing

Three (3) randomly chosen plates from the Control Group will be subjected to the label permanency and durability of the markings tests using the following procedure:

- (a) A representative area of the label markings is rubbed by hand for 15 seconds with a cotton cloth soaked with distilled water;
- (b) The same area must then be rubbed by hand for 15 seconds with a cotton cloth soaked with denatured alcohol (10% methylated spirit); and
- (c) Finally, the same area must then be rubbed by hand for 15 seconds with cotton cloth soaked with isopropyl alcohol.

A2.3 Pre-Test Conditioning

The following sections describe the armour plate conditioning before conducting the ballistic performance testing.

A2.3.1 Temperature Conditioning

Prior to ballistic performance testing, all armour plates must be acclimated for a minimum of 24 hours at ambient range conditions (temperature of $21^{\circ}\text{C} \pm 3^{\circ}\text{C}$ and a relative humidity between 20% and 60%);

A2.3.2 Drop Testing

After temperature conditioning and prior to ballistic performance testing, all armour plates must be subjected to a drop test as follows:

- (a) Each armour plate will be subjected to two (2) consecutive drop tests on to a hard surface in accordance with NIJ 0101.06 (Section 6.3.4) as per Figure A2.1; and
- (b) Following the drop testing, all armour plates will be inspected to confirm that they retain their structural integrity. Any anomalies or deficiencies will be noted.

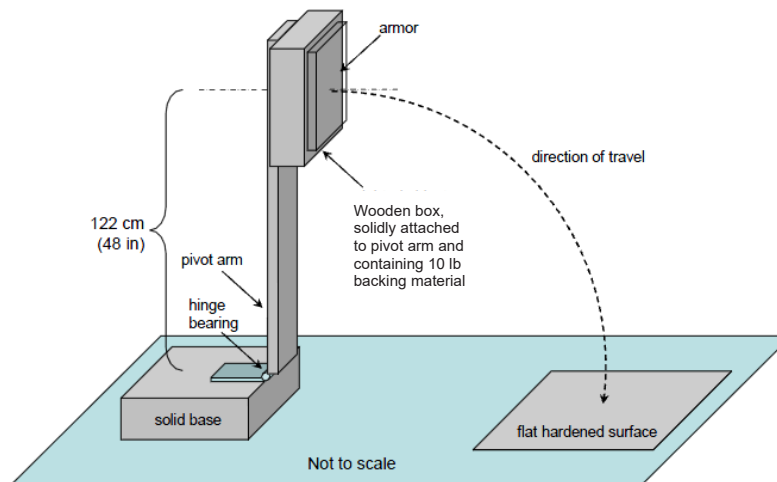


Figure A2.1: Drop Test Apparatus (Figure from NIJ 0101.06 with wooden box modification)

A2.4 Materials and Test Setup for Ballistic Performance Testing

The following sections detail the materials and test setup for ballistic performance testing.

A2.4.1 Ammunition

Details of the ammunition to be used for the ballistic performance testing are as follows:

AMMUNITION	A	B	C	D
Mass				
Diameter		Details of the ammunition will be provided after contract award		
Material (Jacket)				
Material (Core)				
Acceptable Source				
Core Hardness				

A2.4.2 Test Barrel

The barrel must be capable of firing the projectile at the specified velocity range, and must be firmly held horizontally in such a manner that its alignment does not change upon firing.

A2.4.3 Velocity Measurement

Bullet velocity at the point of impact must be measured using a Doppler radar system. Velocity screens or a second Doppler radar system must also be used as backup system.

A2.4.4 Yaw Measurement

The maximum acceptable yaw (θ) must not exceed five (5) degrees. The yaw angle must be measured using two (2) synchronized high speed video cameras, positioned at 90° angle. A yaw card made of a stiff material from which the projectile will punch a clean hole showing its presented area at impact is used as a backup system. It should be perpendicular to the line of flight and positioned as near the armour plate surface as possible (desirably within 150 mm). Processed photographic paper, single weight, 200 mm by 200 mm in size, may be used for the yaw card.

A2.4.5 Test Range Ambient Conditions

The ballistic performance testing will be carried out in a test facility having a temperature of $21^{\circ}\text{C} \pm 3^{\circ}\text{C}$ and a relative humidity between 20% and 60%. If any variations to these test range conditions are made then the conditions used must be recorded in the final report.

A2.4.6 Range Preparation

The test equipment will be arranged as shown in Figure A2.2. The armour plate will be mounted 15 m \pm 1.0 m from the muzzle of the test barrel. The backing material fixture will be rigidly held by a suitable test stand, which must permit the entire armour plate and backing material assembly to be shifted vertically and horizontally such that the entire face of the backing material can be targeted. Before testing, all electronic equipment will be allowed sufficient time to warm up so that stability is achieved.

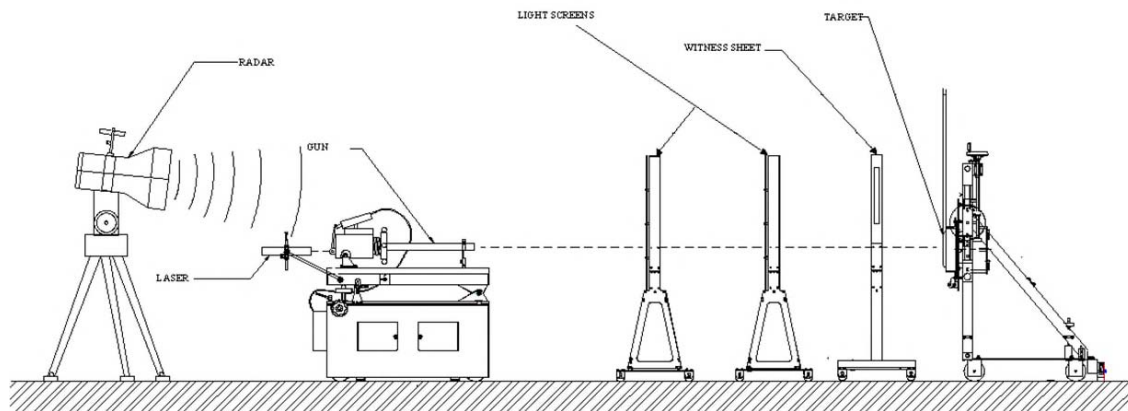


Figure A2.2 Test Range Configuration

A2.4.7 Backing Material

Roma Plastilina No. 1 oil-based modeling clay must be used as backing material for all ballistic performance testing and for measuring the back face signature depth. The clay will be prepared and calibrated in accordance with the procedures in the following sections.

A2.4.7.1 Preparation and Control of the Backing Material

The clay backing material will be worked thoroughly to eliminate any voids or imperfections in order to make it as homogeneous as possible, and then slow pressed into a rigid metallic box of 457 x 406 x 102 mm dimensions. The clay (and the metallic box) will then be conditioned at a constant temperature (respective of the test) for at least three (3) hours prior to testing in order to obtain the desired consistency. Additional clay, conditioned along with the clay in the metallic box, will be used to fill voids and restore the front surface as needed.

The entire clay block within the metallic box will be changed at least on an annual basis to ensure consistency of the clay. Complete perforation of the armour plate with projectiles will contaminate the clay over time. In order to keep the clay block as clean and pure as possible, the surrounding area around the cavity channel caused by the perforation and projectile/fragments will be removed and the cavity re-packed after each complete perforation.

A2.4.7.2 Calibration of the Backing Material

The clay backing material will be calibrated by the drop-weight technique. The consistency of the clay in the block will be tested using a 1043 ± 5 g steel ball with a diameter of 63.5 ± 0.05 mm dropped in free fall without a guide tube from a height of 2000 ± 5 mm, as measured from the surface of the backing material (see Figure A2.3). The depth of the indentations for each of two (2) such drops must be 19 ± 2 mm. The separation distance between any two (2) indentation centers must be greater than or equal to 90 mm, and the distance from the center of any indentation to any edge of the test block must be greater than or equal to 60 mm. After completion of the calibration, the surface of the clay must be re-leveled and if necessary, additional clay conditioned along with the clay in the metallic box must be used.

The calibration must apply throughout the duration of the testing procedure, and will be repeated as required to confirm consistency of the clay material.

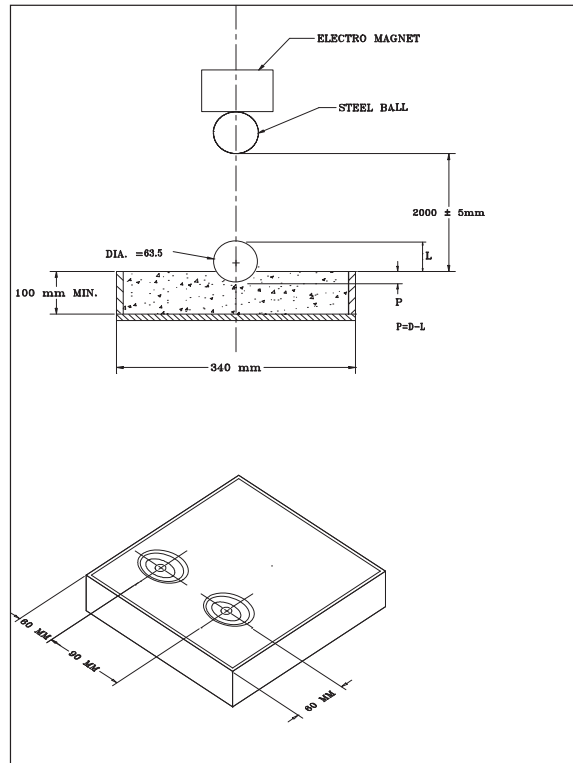


Figure A2.3: Clay Block Calibration Drop Test

A2.4.8 Retention of the Armour Plate

The armour plate will be mounted on the rigid metallic box filled with the clay backing material by means of two (2) elastic straps to ensure a good contact between the armour plate and the block. The two (2) straps should be approximately 150 mm apart and the point of impact must be at an equal distance from the two (2) straps so that there is no interference with the shot pattern. No individual shot must fall within 50 mm of either retaining strap. The block itself must be supported on a rigid fixture so that it remains firmly in place before, during and after projectile impact.

A2.5 Ballistic Test Methods for Ballistic Limit (V50) Test

The following sections detail the test methods and determination of the outcome of the ballistic performance testing, which consists of performing ballistic limit (V50) test.

A2.5.1 Armour Plate Mounting for Ballistic Performance Testing

The armour plate must be positioned on the backing material such that the point of impact, projected through the armour onto the surface of the backing material, is no closer than 106 mm from the edge of the backing material fixture. The backing material will be built up to conform to the anatomical curved shape of the armour plate such that the armour plate and backing material are in contact across the surface of the armour plate. The backing material fixture must be positioned to ensure proper bullet impact placement and angle of incidence of the test round.

A2.5.2 Impact Angle

Each armour plate must be impacted perpendicular to the line of fire so that each impact is made normal to the intended impact location. The armour plate and the support fixture will be aligned using a laser sighting and mirror system so that the barrel axis coincides with a line normal to the surface of the armour plate at the intended impact location. This procedure is used to ensure the obliquity angle of the armour plate at the projectile impact point is as close as possible to zero.

A2.5.3 Backing Material During Testing

After each shot, the surface of the clay backing material must be re-leveled and if necessary, additional clay conditioned along with the clay in the metallic box must be used to fill the cavity created by the previous shot. In the event of a complete perforation of the armour plate, a new clay block must be used to continue testing if additional shots with the same armour plate is required.

A2.5.4 Fair Hit Requirements

Only fair hits will be considered for the purpose of assessment. A shot must be considered a fair hit if:

- (a) It impacts the armour plate at an angle of incidence no greater than $\pm 5^\circ$ from the intended angle of incidence (measured by high speed video or by yaw cards);
- (b) It impacts within the allowable impact zone, which is no closer to the edge of the armour plate than the minimum shot-to-edge distance of 25 mm;
- (c) It impacts no closer to a previous shot than the minimum shot-to-shot distance of 120 mm;
- (d) Two (2) shots per armour plate is allowed when using the **B** ammunition and four (4) shots per armour plate is allowed for the **A**, the **C** and the **D** ammunitions;
- (e) The shot sequence is as follows:
 - i. The first shot (#1) is fired at the chosen aim position within the allowable impact zone (see Figure A2.4) which is all the plate less the minimum shot-to-edge distance of E;
 - ii. The possible impact zone for the second shot (#2) is then determined by tracing concentric circles of minimum radial distance L-T and maximum radial distance L+T onto the armour plate (see Figure A2.5);
 - iii. For the A, C and D ammunitions only, the same sequence is repeated for shot #3 and #4 maintaining the minimum shot-to-shot distance of L-T and a maximum distance of L+T from any other shots (see Figure A2.6 and Figure A2.7);
 - iv. To test edge resistance, one (1) shot of all shot impact positions will be near an edge between the minimum shot-to-edge distance E and a maximum distance of E+T; and
 - v. To test corner resistance, one (1) shot of all shot impact positions will be near a corner between the minimum shot-to-corner distance E and a maximum distance of E+T;
- (f) Examples of resulting shot patterns are given as follows:
 - i. Figure A2.8: Possible shot sequence for V50 test using the **B** ammunition; and
 - ii. Figure A2.9: Possible shot sequence for V50 test using the **A**, **C** and **D** ammunitions.

Dimensions Definition	Value	Size (mm)
Distance from midpoint of shots #1 and #2 to shot #3	L	120
Maximum tolerance on shot impact position	T	15
Excluded Zone (Minimum distance to armour plate edge/boundary)	E	25

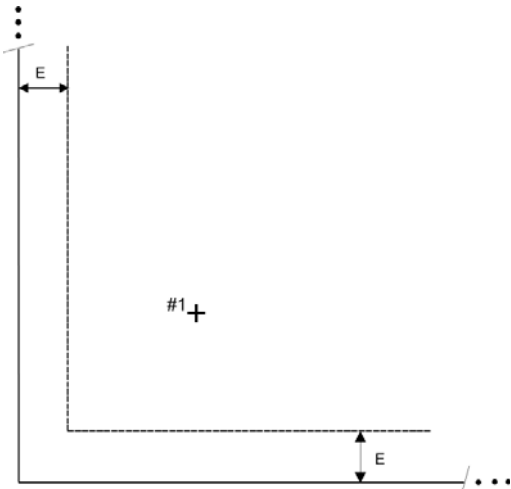


Figure A2.4: V50 impact zone - Shot #1

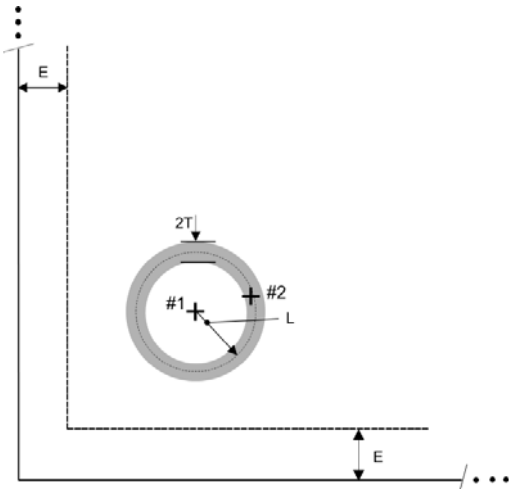


Figure A2.5: V50 impact zone - Shot #2
(Dark grey zone)

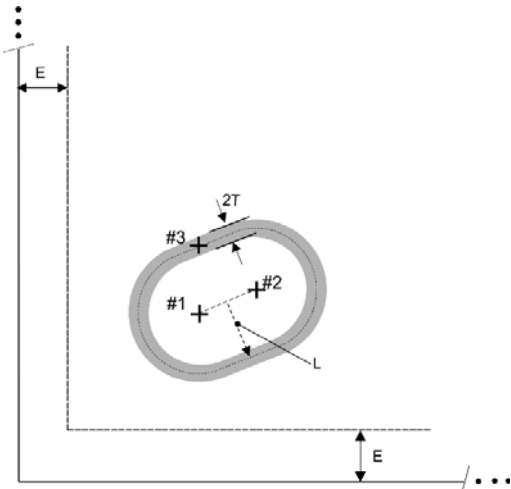


Figure A2.6: V50 impact zone - Shot #3
(Dark grey zone)

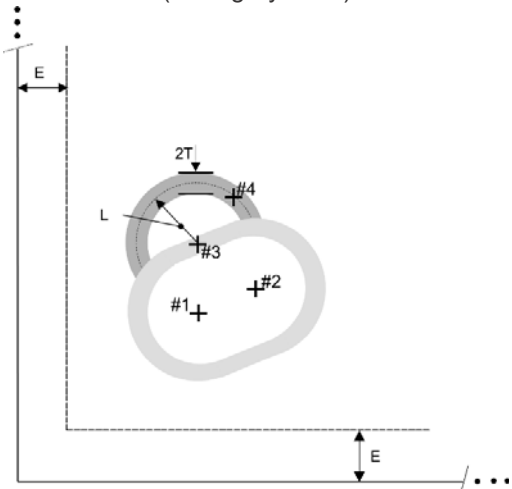


Figure A2.7: V50 impact zone - Shot #4
(Dark grey zone; light grey zone is excluded)

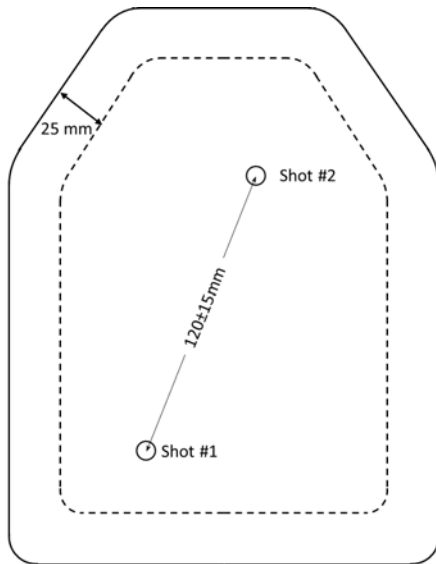


Figure A2.8: Possible shot sequence for V50 test using the **B** ammunition

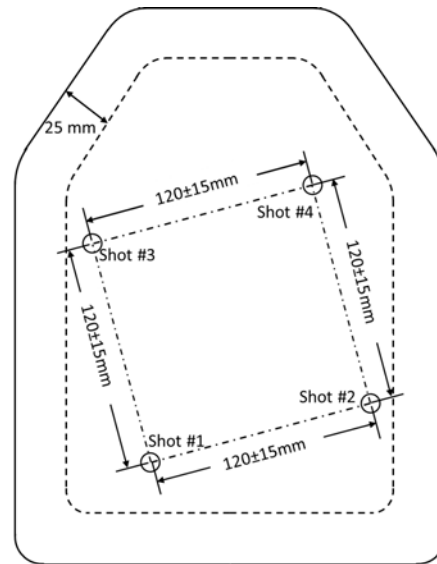


Figure A2.9: Possible shot sequence for V50 test using the **A, C** and **D** ammunitions

A2.5.5 Determination of V50

The result of each fair impact is to be qualified as a complete perforation or a partial perforation. If a shot does not result in a fair impact, the shot has to be repeated using the same intended impact velocity as the shot rejected. To obtain sufficient fair impacts, testing should continue using a series of armour plates from the same lot. A minimum of four (4) plates per threat must be used to perform a V50. The velocity of each impact must be adjusted using the modified up and down sequence as follows.

- (a) The first impact must be at a velocity of 50 m/s lower than the estimated ballistic limit V50 of the armour plate as follows:
 $V1 = \text{estimated V50} - 50\text{m/s}$
- (b) If the first impact results in a non-perforation the second impact must be at a velocity of about 30 m/s higher than the measured velocity from first impact;
- (c) If the first impact results in a complete perforation the second impact must be at a velocity of about 30 m/s lower than the measured velocity from the first impact;
- (d) Upon achieving the first set of complete perforation reversals, all of the following shots must have an increment or decrement of velocity based on previous measured velocity of about 15 m/s:
 - i. A minimum of five (5) pairs of partial and complete perforations must be obtained with a Zone of Mixed Results (ZMR) not exceeding 50 m/s.
 - ii. If the ZMR exceeds 50 m/s with five (5) pairs of partial and complete perforations, then testing must be continued until seven (7) pairs of partial and complete perforations is obtained within a ZMR of 60 m/s.
 - iii. If the ZMR exceeds 60 m/s after seven (7) pairs of partial and complete perforations then testing must be stopped. At this point a retest becomes necessary.
- (e) For proper evaluation of the V50 using the Probit analysis, the following additional conditions must be met:
 - i. The shot with the lowest impact velocity should be a partial perforation; and
 - ii. The shot with the highest impact velocity should be a complete perforation.

A2.5.6 Calculation of the V50

To establish a V50, a minimum of five (5) pairs of partial and complete perforations, as detailed above, must be used in the calculation. The total number of fair shots for V50 calculation depends on the ZMR obtained during the modified up and down shot sequence. The V50 is computed by applying a maximum likelihood statistical analysis (DRDC Probit) based on the cumulative normal distribution using all fair shots. The arithmetic V50 must also be computed for reference use by taking the arithmetic average of all fair shots.

A2.6 Pass Assessment – Production Performance Verification

In order to be considered a pass, the V50 values for all four (4) threats, as defined in Section A1.1 (c) of 0 to Annex A, must be achieved.

APPENDIX 3 TO ANNEX A

FIRST ARTICLE TESTING PROCEDURE FOR THE LIGHTWEIGHT STANDALONE SPECIFIC THREAT PLATE

A3. Purpose

Appendix 3 to Annex A outlines the First Article Testing (FAT) procedure to be conducted by DND for the Lightweight Standalone Specific Threat Plates (armour plates).

The First Article Testing procedure consists of performing quality control inspection, label permanency and durability testing, pre-test conditioning, materials and test setup followed by the ballistic performance testing and the pass assessment.

A3.1 Quality Control Inspection

Prior to conducting the ballistic performance testing, DND will conduct a quality control inspection at DRDC Valcartier (or as otherwise designated by DND) as follows:

- (a) Visual inspection of the armour plate for damage, material flaws and poor workmanship such as wrinkles, blisters, cracks, delamination, sharp corners, etc. All plates must be structurally rigid, identical in appearance and manner of construction, and be correctly labeled. Any deficiencies will be noted;
- (b) Weigh and measure the surface of the armour plates to confirm the areal density is less than the specified value detailed in the Technical and Performance Specifications at 0 to Annex A; and
- (c) Measure the thickness of the armour plates to confirm they have a uniform thickness of less than or equal to the specified value detailed in the Technical and Performance Specifications at 0 to Annex A.

An areal density and/or thickness in excess of that specified above will result in the return of defective armour plates to the Contractor for replacement. The replacement armour plates must come from the same batch under testing, and the maximum number of replacement plates must be less than 10% (rounded up to the unit) of the whole batch, otherwise it will result in a failure of the batch.

A3.2 Label Permanency and Durability Testing

Three (3) randomly chosen plates from the Control Group will be subjected to the label permanency and durability of the markings tests using the following procedure:

- (a) A representative area of the label markings is rubbed by hand for 15 seconds with a cotton cloth soaked with distilled water;
- (b) The same area must then be rubbed by hand for 15 seconds with a cotton cloth soaked with denatured alcohol (10% methylated spirit); and
- (c) Finally, the same area must then be rubbed by hand for 15 seconds with cotton cloth soaked with isopropyl alcohol.

A3.3 Pre-Test Conditioning

The following sections describe the armour plate conditioning before conducting the ballistic performance testing.

A3.3.1 Temperature Conditioning

Prior to ballistic performance testing, all armour plates must be acclimated for a minimum of 24 hours at ambient range conditions (temperature of $21^{\circ}\text{C} \pm 3^{\circ}\text{C}$ and a relative humidity between 20% and 60%);

A3.3.2 Drop Testing

After temperature conditioning and prior to ballistic performance testing, all armour plates must be subjected to a drop test as follows:

- Each armour plate will be subjected to two (2) consecutive drop tests on to a hard surface in accordance with NIJ 0101.06 (Section 6.3.4) as per Figure A3.1; and
- Following the drop testing, all armour plates will be inspected to confirm that they retain their structural integrity. Any anomalies or deficiencies will be noted.

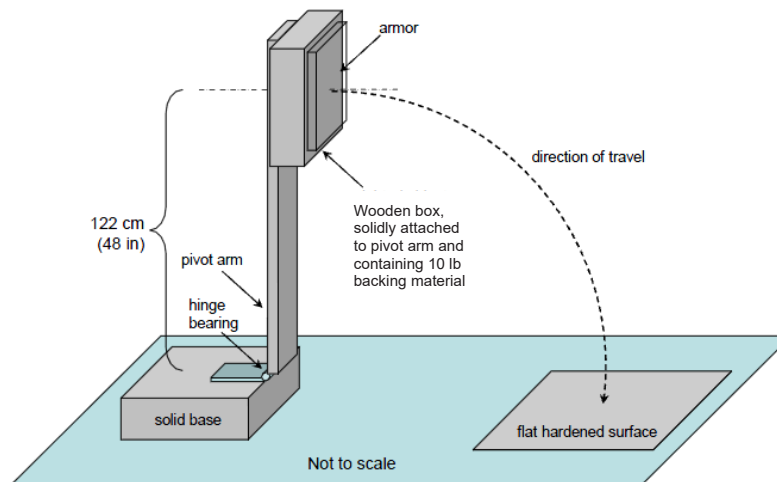


Figure A3.1: Drop Test Apparatus (Figure from NIJ-0101.06 with wooden box modification)

A3.4 Materials and Test Setup for Ballistic Performance Testing

The following sections detail the materials and test setup for ballistic performance testing.

A3.4.1 Ammunition

Details of the ammunition to be used for the ballistic performance testing are as follows:

AMMUNITION	A	B	C	D
Mass				
Diameter				
Material (Jacket)		<i>Details of the ammunition will be provided after contract award</i>		
Material (Core)				
Acceptable Source				
Core Hardness				

A3.4.2 Test Barrel

The barrel must be capable of firing the projectile at the specified velocity range, and must be firmly held horizontally in such a manner that its alignment does not change upon firing.

A3.4.3 Velocity Measurement

Bullet velocity at the point of impact must be measured using a Doppler radar system. Velocity screens or a second Doppler radar system must also be used as backup system.

A3.4.4 Yaw Measurement

The maximum acceptable yaw (θ) must not exceed five (5) degrees. The yaw angle must be measured using two (2) synchronized high speed video cameras, positioned at 90° angle. A yaw card made of a stiff material from which the fragment will punch a clean hole showing its presented area at impact is used as a backup system. It should be perpendicular to the line of flight and positioned as near the armour plate surface as possible (desirably within 150 mm). Processed photographic paper, single weight, 200 mm by 200 mm in size, may be used for the yaw card.

A3.4.5 Test Range Ambient Conditions

The ballistic performance testing must be carried out in a test facility having a temperature of $21^{\circ}\text{C} \pm 3^{\circ}\text{C}$ and a relative humidity between 20% and 60%. If any variations to these test range conditions are made then the conditions used must be recorded in the final report.

A3.4.6 Range Preparation

The test equipment will be arranged as shown in Figure A3.2. The armour plate must be mounted 15 m \pm 1.0 m from the muzzle of the test barrel. The backing material fixture will be rigidly held by a suitable test stand, which must permit the entire armour plate and backing material assembly to be shifted vertically and horizontally such that the entire face of the backing material can be targeted. Before testing, all electronic equipment will be allowed sufficient time to warm up so that stability is achieved.

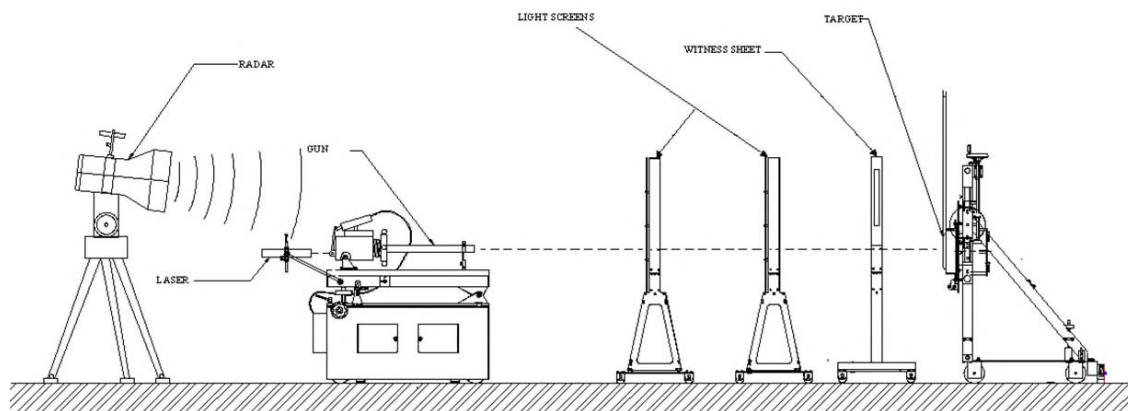


Figure A3.2: Test Range Configuration

A3.4.7 Backing Material

Roma Plastilina No. 1 oil-based modeling clay must be used as backing material for all ballistic performance testing and for measuring the back face signature depth. The clay will be prepared and calibrated in accordance with the procedures in the following sections.

A3.4.7.1 Preparation and Control of the Backing Material

The clay backing material will be worked thoroughly to eliminate any voids or imperfections in order to make it as homogeneous as possible, and then slow pressed into a rigid metallic box of 457 x 406 x 102 mm dimensions. The clay (and the metallic box) will then be conditioned at a constant temperature (respective of the test) for at least three (3) hours prior to testing in order to obtain the desired consistency. Additional clay, conditioned along with the clay in the metallic box, will be used to fill voids and restore the front surface as needed.

The entire clay block within the metallic box will be changed at least on an annual basis to ensure consistency of the clay. Complete perforation of the armour plate with projectiles will contaminate the clay over time. In order to keep the clay block as clean and pure as possible, the surrounding area around the cavity channel caused by the perforation and the projectile/fragment will be removed and the cavity re-packed after each complete perforation.

A3.4.7.2 Calibration of the Backing Material

The clay backing material will be calibrated by the drop-weight technique. The consistency of the clay in the block will be tested using a 1043 ± 5 g steel ball with a diameter of 63.5 ± 0.05 mm dropped in free fall without a guide tube from a height of 2000 ± 5 mm, as measured from the surface of the backing material (see Figure A3.3). The depth of the indentations for each of two (2) such drops must be 19 ± 2 mm. The separation distance between any two (2) indentation centers must be greater than or equal to 90 mm, and the distance from the center of any indentation to any edge of the test block must be greater than or equal to 60 mm.

The calibration must apply throughout the duration of the testing procedure, and will be repeated as required to confirm consistency of the clay material.

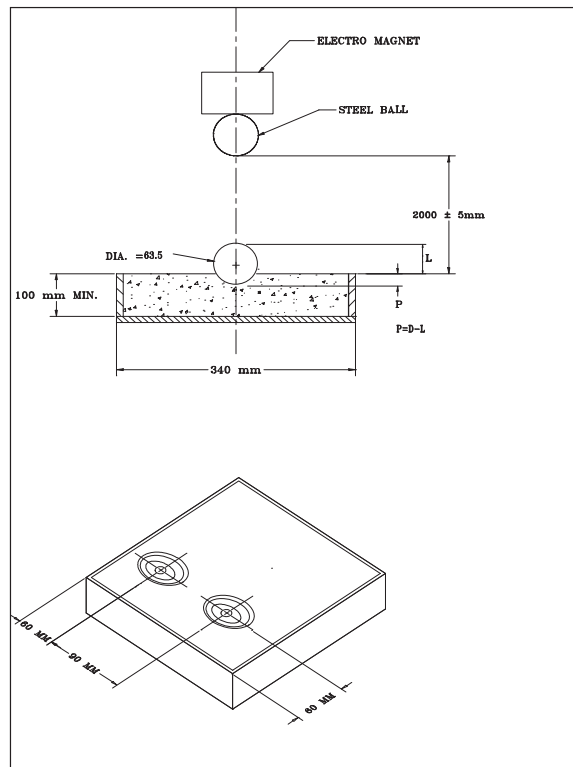


Figure A3.3: Clay Block Calibration Drop Test

A3.4.8 Retention of the Armour Plate

The armour plate will be mounted on the rigid metallic box filled with the clay backing material by means of two (2) elastic straps to ensure a good contact between the armour plate and the block. The two (2) straps should be approximately 150 mm apart and the point of impact must be at an equal distance from the two (2) straps so that there is no interference with the shot pattern. No individual shot must fall within 50 mm of either retaining strap. The block itself must be supported on a rigid fixture so that it remains firmly in place before, during and after projectile impact.

A3.5 Ballistic Test Methods for Perforation-Back Face Signature (P-BFS) Test

The following sections specify the test methods for ballistic performance testing of armour plate which consists of conducting Perforation and Back Face Signature (P-BFS) test. The P-BFS test requires the armour plate to demonstrate consistent ballistic resistance to both perforation and excessive blunt force trauma.

A3.5.1 Armour Plate Mounting for Ballistic Performance Testing

The armour plate must be positioned on the backing material such that the point of impact, projected through the armour onto the surface of the backing material, is no closer than 106 mm from the edge of the backing material fixture. The backing material will be built up to conform to the anatomical curved shape of the armour plates such that the armour plate and backing material are in contact across the surface of the armour plate. The backing material fixture must be positioned to ensure proper bullet impact placement and angle of incidence of the test round.

A3.5.2 Impact Angle

Each armour plate must be impacted perpendicular to the line of fire so that each impact is made normal to the intended impact location. The armour plate and the support fixture will be aligned using a laser sighting and mirror system so that the barrel axis coincides with a line normal to the surface of the armour plate at the intended impact location. This procedure is used to ensure the obliquity angle of the armour plate at the projectile impact point is as close as possible to zero.

A3.5.3 Backing Material and Back Face Signature Measurements

After each shot, the surface of the clay backing material must be re-leveled and if necessary, additional clay conditioned along with the clay in the metallic box must be used to fill the cavity created by previous shot. For valid Back Face Signature (BFS) measurements, no overlap can occur between any two (2) shots. In the event of a complete perforation of the armour plate, no BFS measurement will be taken and a new clay block must be used to continue testing if additional shots with the same armour plate is required.

BFS measurements will be taken as follows:

- (a) **A** ammunition: Shots #1, #3 and #4; and
- (b) **B, C** and **D** ammunition: Shots #1 and #3.

A3.5.4 Fair Hit Requirements for P-BFS test

Only fair hits will be considered for the purpose of assessment. A shot must be considered a fair hit if:

- (a) It impacts the armour plate at an angle of incidence no greater than $\pm 5^\circ$ from the intended angle of incidence (measured by high speed video or by yaw cards);
- (b) It impacts within the allowable impact zone, which is no closer to the edge of the armour plate than the minimum shot-to-edge distance of 25 mm;
- (c) The measured velocity must either:
 - i. Be within ± 10 m/s of the reference velocity for the specified bullet; or
 - ii. Be less than the minimum velocity and produce a perforation or an excessive back face signature; or
 - iii. Be greater than the maximum velocity and not produce a perforation or an excessive back face signature;
- (d) For P-BFS test the shot sequence is as follows:
 - i. The first shot (#1) is fired at the chosen aim position within the allowable impact zone (see Figure A3.4) which is all the plate less the minimum shot-to-edge distance of E;
 - ii. The possible impact zone for the second shot (#2) is then determined by tracing concentric circles on to the armour plate as follows (see Figure A3.5):
 - a. For the **A** ammunition: Minimum radial distance N and maximum radial distance N+T between shot #1 and #2; and
 - b. For the **B, C** and **D** ammunitions: Minimum radial distance M and maximum radial distance M+T between shot #1 and #2
 - iii. The possible impact zone for the third shot (#3) is then determined as follows (see Figure A3.6):
 - a. For the **A** ammunition: Trace two (2) concentric half-circles centred on shots #1 and #2 of minimum radial distance M and maximum radial distance M+T. Join the

- half circles by tracing a reference line from shots #1 and #2, keeping a constant distance with the minimum M and maximum M+T. The resulting elliptical area is the allowed zone for shot #3; and
- b. For the **B**, **C** and **D** ammunitions: Trace two (2) concentric half-circles centred on shots #1 and #2 of minimum radial distance L and maximum radial distance L+T. Join the half circles by tracing a reference line from shots #1 and #2, keeping a constant distance with the minimum L and maximum L+T. The resulting elliptical area is the allowed zone for shot #3;
- iv. The possible impact zone for the fourth shot (#4) is then determined as follows (see Figure A3.7):
- a. For the **A** ammunition: Minimum distance L and maximum distance L+T between shot pairs #3 and #4. Possible impact zones from previous shots (#1, #2 and #3) are excluded; and
- b. For the **B**, **C** and **D** ammunitions: Minimum distance M and maximum distance M+T between shot pairs #3 and #4. Possible impact zones from previous shots (#1, #2 and #3) are excluded;
- v. The possible impact zone for the fifth shot (#5) is then determined as follows (see Figure A3.8):
- a. For the **A** ammunition only: Minimum distance N and maximum distance N+T between shot pairs #4 and #5. Possible impact zones from previous shots (#1, #2, #3 and #4) are excluded;
- vi. To test edge resistance, a minimum of 3% of all shot impact positions will be near an edge between the minimum shot-to-edge distance E and a maximum distance of E+T; and
- vii. To test corner resistance, a minimum of 3% of all shot impact positions will be near a corner between the minimum shot-to-corner distance E and a maximum distance of E+T;
- (e) Examples of resulting shot patterns are given as follows:
- i. Figure A3.9: Possible shot sequence for the P-BFS tests using the **A** ammunition; and
- ii. Figure A3.10: Possible shot sequence for the P-BFS test using the **B**, **C** and **D** ammunitions.

Dimensions Definition	Value	Size (mm)
Distance between shots pairs (#1 & #2) and (#4 & #5) for A ammunition	N	30
Distance from shot (#1 & #2) and shot #3 for A ammunition	M	50
Distance between shots pairs (#1 & #2) and (#3 & #4) for B , C and D ammunitions		
Distance from shot (#1 & #2) and shot #3 for B , C and D ammunition	L	110
Distance between shot pairs (#3 & #4) for A ammunition		
Maximum tolerance on shot impact position	T	15
Excluded Zone (Minimum distance to armour plate edge/boundary)	E	25

A3.5.5 Spall test procedure

The spall test procedure consists of using an aluminum tube in front of the plate to capture any spall trajectories from debris ejecta that have sufficient energy to perforate the tube.

The tube must be made of aluminum 2024 T3 with a 0.5 mm thickness, and formed into a nominal diameter of 200 mm placed normal to the armour surface and centered at the impact point. The length of the tube must be 150 +10 mm.

For each of the four (4) types of ammunition, a minimum of twenty (20) shots must be done using the spall test procedure and no perforation of the aluminum tube is allowed. Note that when conducting the spall test, the projectile yaw can only be measured using a yaw card.

A3.6 Pass Assessment – FAT

The pass assessment for the First Article Testing is based upon a binomial statistical approach to demonstrate that there is a probability of 95% that the batch/lot meets the mandatory ballistic requirements, with a confidence level of 95% in accordance with Table A3.1.

Table A3.1: Fair Hits versus Acceptable Failures (95% Confidence Level) for all ammunition

Fair Hits	Acceptable Failures	Back Face Signature (Maximum)
60	0	44 mm
95	1	44 mm
125	2	44 mm

A failure occurs when a hit is determined to be fair and results in a perforation or Back Face Signature of greater than 44 mm or results in perforation of the aluminum tube used for the spall test. To pass the following conditions must be met for each ammunition type:

- (a) If no failure occurs after sixty (60) shots, the batch is accepted and the test is completed;
- (b) If one (1) failure occurs before sixty (60) shots, the testing continues up to one ninety-five (95) shots. If no other failure occurs, the batch is accepted and the test is completed;
- (c) If two (2) failures occur before ninety-five (95) shots, the testing continues up to one hundred twenty-five (125) shots. If no other failure occurs, the batch is accepted and the test is completed; and
- (d) If three (3) failures occur before one hundred twenty-five (125) shots, the batch is rejected and the test is stopped.

Note: When a shot results in an unfair hit, it will be discarded and not included in the overall assessment.

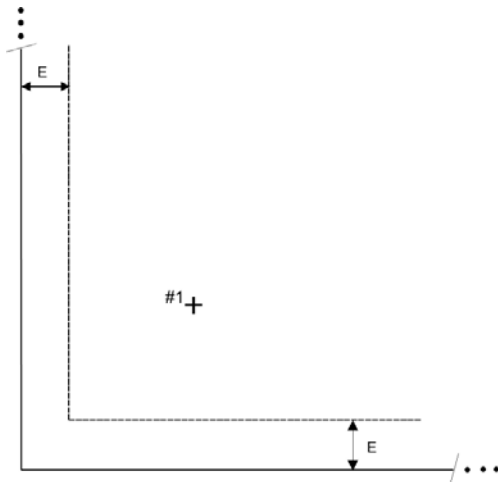


Figure A3.4: P-BFS impact zone - Shot #1

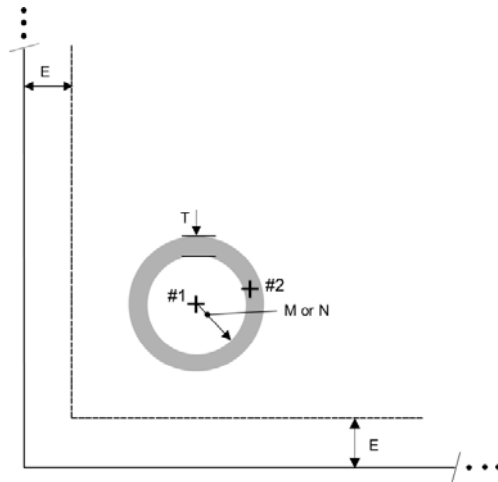


Figure A3.5: P-BFS impact zone - Shot #2 (Dark grey zone)

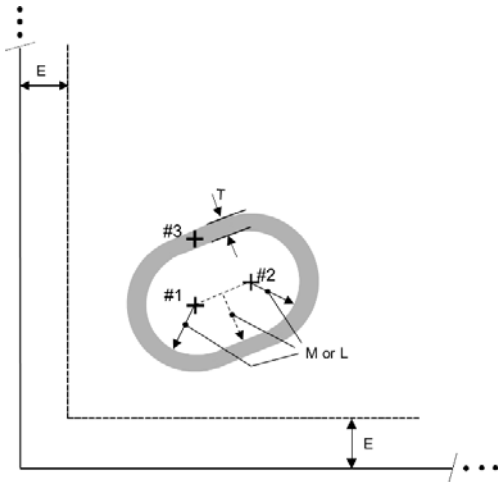


Figure A3.6: P-BFS impact zone - Shot #3 (Dark grey zone)

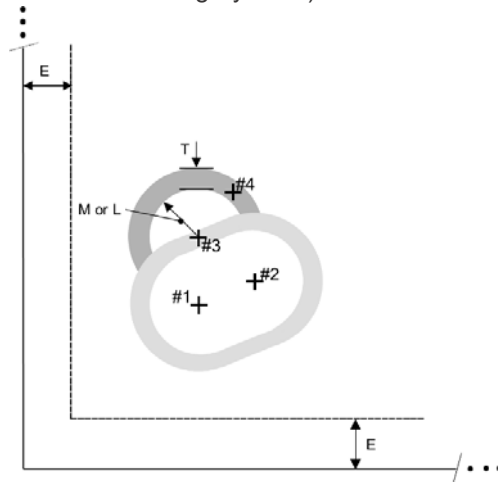


Figure A3.7: P-BFS impact zone - Shot #4 (Dark grey zone; light grey zone is excluded)

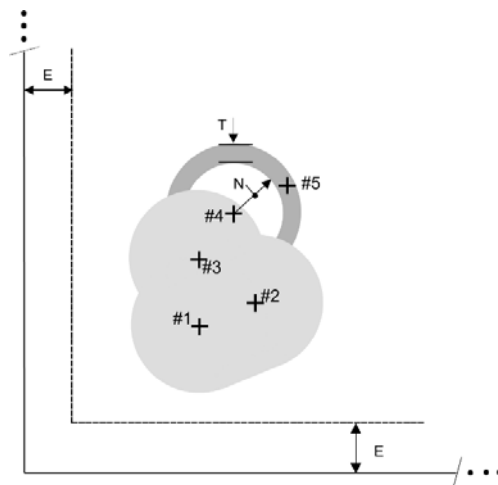


Figure A3.8: P-BFS impact zone - Shot #5 (Dark grey zone; light grey zone is excluded)

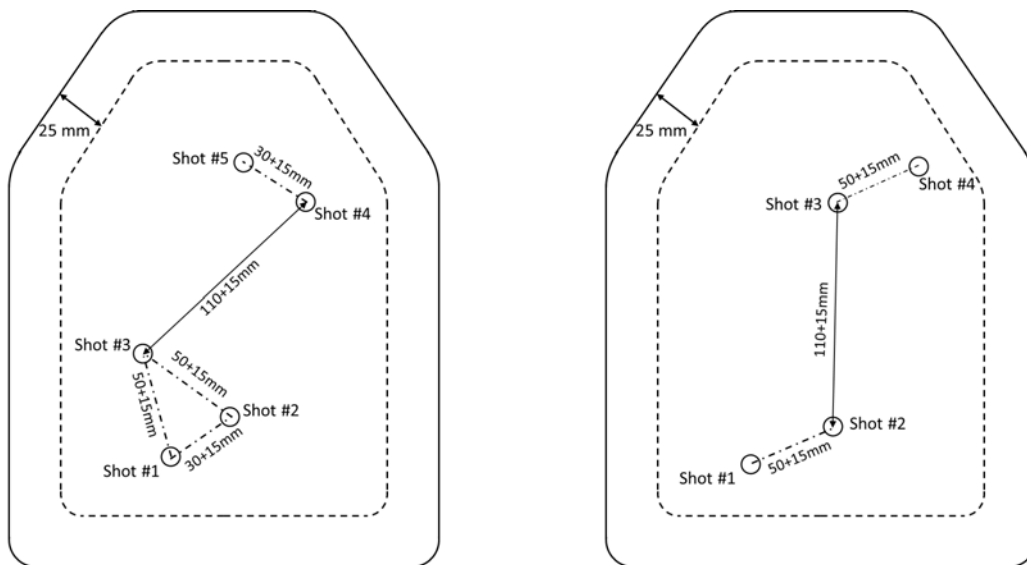


Figure A3.9: Possible shot sequence for the P-BFS tests using the **A** ammunition

Figure A3.10: Possible shot sequence for the P-BFS test using the **B, C** and **D** ammunitions

ATTACHMENT 1 TO ANNEX A

This attachment is subject to change and has been included in the Request for Proposal (RFP) for informational purposes only. This is a draft version of what will be inserted in the Request for Standing Offer (RFSO) in Phase 2 - Production Phase.

STATEMENT OF WORK – PHASE 2

1.0 TITLE

Lightweight Standalone Specific Threat Plate – Generation C3

2.0 PURPOSE

The purpose of this statement of work is to describe the production phase (Phase 2) for the Generation C3 of the Lightweight Standalone Specific Threat Plate (armour plate) to the Department of National Defence (DND) for operational usage.

3.0 BACKGROUND

Soldier burden has been defined as one of the hard problems to increase soldier effectiveness. One of the major contributors to soldier's physical burden is encumbrance imposed by personal clothing, load carriage and personal protective equipment (PPE), but also the weight of the equipment itself. These has been demonstrated to reduce soldier mobility and increase risk of musculoskeletal injury. While PPE such as body armour is essential in mitigating battlefield injuries, continuous effort must be taken to reduce its mass while keeping the same level of ballistic protection.

DND presently uses Generation C2 armour system, which consists of an armour plate used in conjunction with an NIJ Level II soft body armour. The armour system provides protection against several rounds not defined in the NIJ 0101.06 Standard (often referred to as Level III+), but excluding armour piercing (AP) rounds that correspond to a level IV. DND seeks to significantly reduce the mass of the Generation C2 armour system in order to decrease the weight burden of its soldiers, while maintaining the same ballistic performance. However, the Generation C3 must be a standalone armour plate.

A large variety of materials can be used to defeat NIJ threat level III+. Materials such as aramid, ultrahigh molecular weight polyethylene (UHMWPE), metal and ceramic are among the most commonly used. R&D is constantly contributing to material improvement and other varieties of materials might exists and are all of interest if they can contribute to reduce weight burden and keeping the same ballistic performance as the Generation C2 armour system. The integration of nanotubes or nanoparticles within armour ceramic or composite materials, auxetic material or the integration of new energy absorbed materials are all examples of possible avenues. The preferred material of choice depends on the nature of the mission, the mass, the price, the threat definition, etc. Optimization or development of new manufacturing processes can also be considered.

4.0 ACRONYMS

BFS	Back Face Signature
DND	Department of National Defence
DRDC	Defence Research Development Canada
FAT	First Article Testing
FPOM	First Pre-Order Meeting
NATO	North Atlantic Treaty Organization
NIJ	National Institute of Justice
PPE	Personal Protective Equipment
PPV	Production Performance Verification
UHMWPE	Ultra-Molecular Weight Polyethylene
ZMR	Zone of Mixed Results

5.0 APPLICABLE DOCUMENTS & REFERENCES

5.1 Applicable Documents

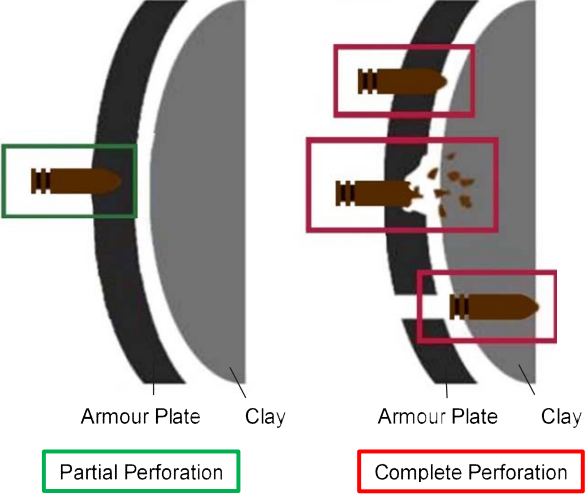
The following documents form part of this statement of work to the extent specified and are supportive of this statement of work when referenced; all other document references are to be considered supplemental information only. In the event of a conflict between the documents referenced and the contents of this statement of work, then the contents of this statement of work must take precedence.

- National Institute of Justice (NIJ) 0101.06 Ballistic Resistance of Body Armour (www.nij.gov)
- STANAG 4370 - Environmental Testing (www.nato.int)
- AECTP 300 - Climatic Environmental Test (www.nato.int)
- MIL-STD-810G - Test Method Standard for Environmental Engineering Considerations and Laboratory Tests (www.everyspec.com)
- Appendix 1 to Annex A: Operational performance and technical requirements for the lightweight standalone specific threat plate
- Appendix 2 to Annex A: Production performance verification test procedure for the lightweight standalone specific threat plate
- Appendix 3 to Annex A: First article testing procedure for the lightweight standalone specific threat plate

5.2 Definitions

The following definitions are used within the statement of work and the Appendices.

Back Face Signature (BFS) (NIJ 0106.06)	The greatest extent of indentation in the backing material caused by a non-perforating impact on the armour plate. The BFS is the perpendicular distance between two planes, both of which are parallel to the front surface of the backing material fixture. One plane contains the reference point on the original (pretest) backing material surface that is co-linear with the bullet line of flight. (If armour were not present, the bullet would strike this point). The other plane contains the point that represents the deepest indentation in the backing material. Depending on bullet-armour-backing material interactions, the two points that define the locations of the measurement planes may not be co-linear with the bullet line of flight.
--	---

<p>Perforation</p>	 <p>Any impact that creates a hole passing through the armour plate is a complete perforation. This may be evidenced by any of the following:</p> <ul style="list-style-type: none"> (a) The presence of the projectile, a projectile fragment, or an armour fragment in the clay backing material; (b) A hole that passes through the armour plate; or (c) Any portion of the bullet being visible from the rear side of the armour plate. <p>Any other situation is considered a partial perforation.</p>
<p>Production Batch/Lot</p>	<p>A discrete group of Lightweight Standalone Specific Threat Plates (armour plates) having the same recipe, manufactured under the same conditions and production method, and comprised of materials within the same lot number.</p>
<p>Control Group</p>	<p>A series of Lightweight Standalone Specific Threat Plates (armour plates) selected from a production batch/lot required for destructive ballistic performance verification testing.</p>
<p>V50</p>	<p>The striking velocity at which 50% of the impacts of a particular projectile are expected to result in complete perforations of an armour plate of given thickness and physical properties at a specified angle of obliquity in a limited statistical test.</p>
<p>Yaw</p>	<p>Angle between the main axis of the line of flight of the projectile and its velocity vector. Should be measured as close to the armour plate as possible.</p>
<p>Yaw Card</p>	<p>Stiff paper-type material placed in the projectile's line of flight used to determine the projectile yaw.</p>
<p>Zone of Mixed Results (ZMR)</p>	<p>The difference in velocities between the highest partial perforation and the lowest complete perforation actually obtained during a V50 test.</p>

6.0 SCOPE

Following the development phase (Phase 1), presuming success has been achieved in developing a product, production of armour plates could be considered according to DND discretion.

If Canada makes a call-up against the Standing Offer, DND will perform a Production Performance Verification (PPV) test for each batch/lot produced by the Contractor in accordance with the test procedures described in Appendix 2 to Annex A, prior to delivery of any armour plates to DND units. The PPV tests are to confirm that the armour plates meet the Operational Performance and Technical Specifications defined in 0 to Annex A and are consistent across the production range.

PPV test will be against a Control Group from each batch/lot produced by the Contractor. DND may increase or decrease the Control Group size at the discretion of the DND Technical Authority. The Control Group must successfully pass the PPV tests for the batch/lot to be considered acceptable.

In addition, Canada may conduct First Article Testing (FAT) at the discretion of the DND Technical Authority in accordance with the test procedures defined in 0 to Annex A. However, FAT is required under any of the following conditions (or as otherwise deemed necessary by the Technical Authority):

- (a) Armour plate production is moving from a proven manufacturing plant to an alternate plant or location;
- (b) Any change to the production line formulation or manufacturing process (e.g., new material mixture, new resin formulation, revised assembly procedures, etc.); and
- (c) A new production line is used.

FAT will be against a Control Group produced by the Contractor using the modified materials or process. The Control Group must successfully pass the FAT assessment for the change in material or process is approved for production of armour plates. Passing the FAT in no way negates the requirements to conduct PPV test against each batch/lot.

The PPV test and the FAT will be conducted by DND and will take place at Defence Research and Development Canada (DRDC) Valcartier, Quebec, or as otherwise designated by DND.

6.1 First Pre-Order Meeting (FPOM)

The contractor must:

- 6.1.1 Within two weeks prior to the first ordering (or a date mutually agreeable to by the Technical Authority and the Contractor), prepare and hold a meeting, at which time the following activities will take place:

- Review contract deliverables;
- Review the ordering process;
- Review the requirements of the work;
- Review the work schedule;
- Review risk assessment and mitigation plan;
- Review basis of payment; and
- Review the PPV test and FAT procedures.

6.1.2 Provide the Technical Authority with the deliverables associated with the first pre-order meeting as described at section 7.0 - DELIVERABLES of this document.

6.2 FAT process (if required)

If any of the following conditions (or as otherwise deemed necessary by the Technical Authority) is met:

- (a) Armour plate production is moving from a proven manufacturing plant to an alternate plant or location;
- (b) Any change to the production line formulation or manufacturing process (e.g., new material mixture, new resin formulation, revised assembly procedures, etc.); and
- (c) A new production line is used.

a FAT is required and the following process must be followed:

- 6.2.1 The Contractor must advise the DND Procurement Authority at least 1 month in advance if any of the conditions described in above is met;
- 6.2.2 The Contractor must prepare a Control Group of 128 armour plates. Each plate is to be identified by a unique serial number;
- 6.2.3 The Contractor will advise the DND Procurement Authority when the Control Group is ready and will provide the technical cataloguing information for the armour plates (each size) including the following for each item:
 - i. Item name;
 - ii. Serial number;
 - iii. Item description (dimensions, material, size, mass, etc.);
 - iv. Manufacturer Part Number;
 - v. NCAGE Code; and
 - vi. NATO stock number (where available).
- 6.2.4 Upon direction from the DND Procurement Authority, the Contractor must provide the Control Group to be tested to DRDC Valcartier (or as otherwise designated by DND);
- 6.2.5 DRDC Valcartier (or as otherwise designated by DND) will conduct FAT in accordance with the test procedures detailed in Appendix 3 to Annex A;
- 6.2.6 When testing is complete, DRDC (or as otherwise designated by DND) will notify the Procurement Authority and Technical Authority of the test results;

6.2.7 The DND Procurement Authority will:

- i. If the FAT meet the operational performances and technical requirements defined in 0 to Annex A and pass the FAT assessment defined in Appendix 3 to Annex A Section A3.6, after confirmation from the Technical Authority, the Procurement Authority will notify the Contractor that the modified process is acceptable and production can commence using the modified process; or
- ii. If the FAT does not meet the mandatory requirements or does not pass the FAT assessment, the Procurement Authority will advise the Contractor that the modified process is unacceptable. The Contractor and DND will work together to identify the causes of the failures and for a remedial plan. It is understood that no further plates will be purchased by DND until the level of performance is re-established, and that DND is not obliged to purchase the armour plates or consume the contract until the level of performance is re-established, and that the cost of re-establishing the level of performance is not on DND.

7.0 DELIVERABLES

This section reviews and describes the contract deliverables and meetings required.

The table below contains the list of meetings and associated contract deliverables. The meetings' locations are described at Section 11.0 – MEETINGS of this document.

Deliverable number	Task reference	Description	Date Due	Quantity and/or format
7.1	6.1	FPOM agenda	1 week before the FPOM	Electronic format
7.2	6.2	Quality assurance documents	Upon request by DND	Electronic format
7.3	6.3	Production of a batch/lot of armour plates for DND	When options are exercised by DND	<i>[inserted at contract award]</i> of armour plates for each batch/lot produced;
7.4	6.2.2 6.2.5 6.2.7	Control group of armour plates from each batch/lot produced for DND;	When options are exercised by DND	(a) PPV testing: 30 armour plates; and/or (b) FAT: 32 armour plates per threat; Up to 128 armour plates if all requirements for each 4 threats are not met.
7.5	6.3.2	Control Group of armour plates if FAT is required.	Upon request by DND	128 armour plates
7.6	6.2.2 6.2.9 6.3.2	Bill of loading and tracking number	1 week before shipping the armour plates	Electronic format
7.7	6.2.3 6.3.3	Technical cataloguing information of the armour plates (each size)	1 week before shipping the armour plates	Electronic format

8.0 LANGUAGES

- 8.1 All meetings must be held in English or French. The Contractor must ensure that all their participants understand and speak English or French.
- 8.2 All documents and presentations must be written in English or French.

9.0 LOCATION OF WORK

The work for manufacturing the armour plates must be conducted at the Contractor's site. The PPV test and FAT will be conducted at DRDC Valcartier ballistic laboratories.

10.0 TRAVEL

The Contractor is not required to travel. However, upon mutual agreement, meetings may be held at DND or DRDC Valcartier facilities. The travel cost is the Contractor's responsibility and is not included in this Phase 2 contract.

11.0 MEETINGS

A kick-off meeting will be held within two (2) weeks of contract award, if DND exercises the option. Additional meetings may be held, if necessary. Meetings can be held via videoconference or at DND or Contractor's facility. On-site meeting will be classified industry confidential.

12.0 SECURITY

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

ATTACHMENT 2 TO ANNEX A

This attachment is subject to change and has been included in the Request for Proposal (RFP) for informational purposes only. This is a draft version of what will be inserted in the Request for Standing Offer (RFSO) in Phase 2 - Production Phase.

MANDATORY AND POINT RATED EVALUATION CRITERIA – PHASE 2

1. Mandatory technical (MT) criteria

- 1.1** These criteria are deemed mandatory by DRDC as the minimum necessary competence and capability for undertaking the work related to the SOW - PHASE 2. Mandatory requirements are evaluated on a pass or fail basis. Therefore, no point rating is associated with them. Offers not meeting all mandatory criteria will be deemed non-responsive.

Summary of the Mandatory Technical (MT) Criteria	
Evaluation Criteria	Ratings
MT1 – Operational Performance Requirements	Pass or Fail
MT2 – Technical Requirements	Pass or Fail
MT3 – First Article Testing Requirements	Pass or Fail
MT4 – Woman Specific Armour Plate Profile	Pass or Fail

Mandatory Technical (MT) Criteria	
MT1	<u>Operational Performance Requirements</u> As defined in Appendix 1 to Annex A, Section A1.1. The results obtained in the Final Test Control conducted in Phase 1 (development phase) will be used for the assessment.
MT2	<u>Technical Requirements</u> As defined in Appendix 1 to Annex A, Section A1.2. The results obtained in the Final Test Control conducted in Phase 1 (development phase) will be used for the assessment.
MT3	<u>First Article Testing (FAT) Requirements</u> As defined in Appendix 3 to Annex A, Section A3.6. The results obtained in the Final Test Control conducted in Phase 1 (development phase) will be used for the assessment.
MT4	<u>Woman Specific Armour Plate Profile</u> The offer fully and thoroughly demonstrates the Contractor's capacity to produce woman specific armour plate profile based on the ballistic test results obtained during the Control Tests of the development phase (Phase 1), where ballistic limit (V50) and Perforation-Back Face Signature (P-BFS) tests were conducted. In addition, the offer instills confidence that woman specific armour plate profiles can be successfully produced and meet the operational performances (MT1), technical (MT2) and First Article Testing (MT3) requirements.

2. Technical Point Rated (RT) Criterion

Offers meeting all the mandatory criteria will be evaluated and scored against the following technical criterion:

Evaluation Criterion and Associated Ratings		
Technical Criterion	Maximum Rating	Minimum Rating
RT1 – Armour Plate Areal Density	30	0
Overall Score	30	0

Offers will be evaluated according to the technical point-rated criterion specified below:

Armour Plate Areal Density

This criterion will assess the areal density of the 144 armour plates provided in the final control test of the development phase (Phase 1).

The areal density (AD) will be measured by taking the average mass plus one (1) standard deviation of the 144 armour plates, divided by the average surface area plus one (1) standard deviation of 5 randomly chosen armour plates from the 144. The surface area will be calculated using 3D scan.

The rating distribution as function of the AD will be as follow:

Armour Plate Areal Density (AD) (kg/m ²)	Rating
Maximum AD = 29.0	0
28.0 ≤ AD < 29.0	0.5
27.0 ≤ AD < 28.0	1
26.0 ≤ AD < 27.0	1.5
25.0 ≤ AD < 26.0	2
24.0 ≤ AD < 25.0	3
23.0 ≤ AD < 24.0	4
22.0 ≤ AD < 23.0	5
21.0 ≤ AD < 22.0	6.5
20.0 ≤ AD < 21.0	8
19.0 ≤ AD < 20.0	9.5
18.0 ≤ AD < 19.0	11
17.0 ≤ AD < 18.0	13
16.0 ≤ AD < 17.0	15
15.0 ≤ AD < 16.0	17
14.0 ≤ AD < 15.0	20
13.0 ≤ AD < 14.0	23
12.0 ≤ AD < 13.0	26
AD < 12.0	30

ANNEX B

BASIS OF PAYMENT & SCHEDULE OF MILESTONES – PHASE 1

(To be completed by Canada at contract award)

The schedule of milestones for which payments will be made for Phase 1 in accordance with the Contract is as follows :

Milestone number	Milestone name	Milestone deliverables	All-inclusive firm price	Delivery date*
1	Kick-off meeting (KOM)	<ul style="list-style-type: none"> Meeting agendas Meeting presentation Meeting minutes and action items 	\$ _____	Within 2 weeks after contract award.
2	Project Review Meeting (PRM) #1	<ul style="list-style-type: none"> Meeting agendas Meeting presentation Meeting minutes and action items 	\$ _____	M3
3	Armour plate samples delivery at RDDC for control test #1	<ul style="list-style-type: none"> Bill of loading and tracking number Male and Female armour plate samples for control tests Description document of the armour plate samples 	\$ _____	M5 to M7
4	Armour plate samples delivery at RDDC for control test #2	<ul style="list-style-type: none"> Bill of loading and tracking number Male and Female armour plate samples for control tests Description document of the armour plate samples 	\$ _____	M10 to M12
5	Mid-Term Review Meeting <i>Decision to pursue or terminate the development program</i>	<ul style="list-style-type: none"> Meeting agendas Meeting presentation Meeting minutes and action items 	\$ _____	M12
6	Armour plate samples delivery at RDDC for control test #3	<ul style="list-style-type: none"> Bill of loading and tracking number Male and Female armour plate samples for control tests Description document of the armour plate samples 	\$ _____	M15-M16

Solicitation No. - N° de l'invitation
W7701-217392/A
Client Ref. No. - N° de réf. du client
W7701-217392

Amd. No. - N° de la modif.
File No. - N° du dossier
QCL-0-43244

Buyer ID - Id de l'acheteur
QCL054
CCC No./N° CCC - FMS No./N° VME

7	Armour plate samples delivery at RDDC for control test #4	<ul style="list-style-type: none"> • Bill of loading and tracking number • Male and Female armour plate samples for control tests • Description document of the armour plate samples 	\$ _____	M19-M20
8	Armour plates delivery at RDDC for final control test	<ul style="list-style-type: none"> • Bill of loading and tracking number • Male armour plates for control tests • Description document of the armour plate samples 	\$ _____	M24
9	Final Review Meeting (FRM)	<ul style="list-style-type: none"> • Meeting agendas • Meeting presentation • Meeting minutes and action items • Proactive Disclosure of Foreground Information • Final Report 	\$ _____	M24+ 2 weeks

* The letter "M" in the Delivery date column means "Month".

Total Firm Price CAN \$ _____
(Applicable Taxes excluded)

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W7701-217392

Amd. No. - N° de la modif.
File No. - N° du dossier
QCL-0-43244

Buyer ID - Id de l'acheteur
QCL054
CCC No./N° CCC - FMS No./N° VME

ANNEX C

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.

ANNEX D

CONTRACTOR DISCLOSURE OF FOREGROUND INFORMATION

Please refer to the Article 1, "Interpretation" of General Conditions [2040](#) applicable to the Contract for the definition of "Foreground Information" to determine what information must be disclosed.

The Contractor must provide the following information:

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 to the DRDC Valcartier)

Signature

Date

Name

Title (Technical Authority)

ANNEX E

COVID-19 VACCINATION REQUIREMENT CERTIFICATION FORM

I, _____ (*first and last name*), as the representative of
_____ (*name of business*) pursuant to
_____ (*insert solicitation number*), warrant and certify that all
personnel that _____ (*name of business*) will provide on the
resulting Contract who access federal government workplaces where they may come into contact with
public servants will be:

- a. fully vaccinated against COVID-19;
- b. for personnel that are unable to be vaccinated due to a certified medical contraindication, religion or other prohibited grounds of discrimination under the *Canadian Human Rights Act*, subject to accommodation and mitigation measures that have been presented to and approved by Canada; or
- c. partially vaccinated against COVID-19 for a period of up to 10 weeks from the date of their first dose and subject to temporary measures that have been presented to and approved by Canada, immediately after which period the personnel will meet the conditions of (a) or (b) or will no longer access federal government workplaces where they may come into contact with public servants under this Contract;

until such time that Canada indicates that the vaccination requirements of the COVID-19 Vaccination Policy for Supplier Personnel are no longer in effect.

I certify that all personnel provided by _____ (*name of business*)
have been notified of the vaccination requirements of the Government of Canada's COVID-19
Vaccination Policy for Supplier Personnel, and that the _____
(*name of business*) has certified to their compliance with this requirement.

I certify that the information provided is true as of the date indicated below and will continue to be true for the duration of the Contract. I understand that the certifications provided to Canada are subject to verification at all times. I also understand that Canada will declare a contractor in default, if a certification is found to be untrue, whether made knowingly or unknowingly, during the bid or contract period. Canada reserves the right to ask for additional information to verify the certifications. Failure to comply with any request or requirement imposed by Canada will constitute a default under the Contract.

Signature: _____

Date: _____

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W7701-217392

Amd. No. - N° de la modif.
File No. - N° du dossier
QCL-0-43244

Buyer ID - Id de l'acheteur
QCL054
CCC No./N° CCC - FMS No./N° VME

Optional

For data purposes only, initial below if your business already has its own mandatory vaccination policy or requirements for employees in place. Initialing below **is not** a substitute for completing the mandatory certification above.

Initials: _____

Information you provide on this Certification Form and in accordance with the Government of Canada's COVID-19 Vaccination Policy for Supplier Personnel will be protected, used, stored and disclosed in accordance with the *Privacy Act*. Please note that you have a right to access and correct any information on your file, and you have a right to file a complaint with the Office of the Privacy Commissioner regarding the handling of your personal information. These rights also apply to all individuals who are deemed to be personnel for the purpose for the Contract and who require access to federal government workplaces where they may come into contact with public servants.

ANNEX F

CERTIFICATION FORM - INCLUSION OF RESOURCES DESIGNATED BY THE EMPLOYMENT EQUITY ACT

Public Services and Procurement Canada (PSPC) aims to increase the number of resources designated by the [Employment Equity Act](#) in key positions on the project team.

This form is designed to collect information with regards to these resources in key positions in order to comply with the point rated social criterion *RT7 - Employment Equity*.

Your response is voluntary and you may choose to NOT RESPOND. However, the score of zero will be assigned for this criterion.

The information you provide will be used to evaluate the criterion mentioned above.

1. Voluntary Self-Attestation Form

- (a) The self-attestation form is a voluntary form within the procurement process. The form will not be shared with third parties outside government.
- (b) Among the three (3) resource categories (key position) in the project team, please identify each resource that will perform the Work and specify if these resources belong to one or more of the following groups: women, indigenous peoples, persons with disabilities and members of visible minorities.

Voluntary Self-Attestation Form		
No	Resource Category (Key Position)	Group
1	Project Manager/Scientific Lead	
	Name:	
2	Technical Team	
	Name:	
	Name:	
	Name:	
	Name:	
	Name:	
	Name:	
3	Scientific Team	
	Name:	
	Name:	
	Name:	
	Name:	
	Name:	
	Name:	

- (c) By submitting the form to the Contracting Authority, the Bidder certifies that the information provided is reliable and accurate as of the date indicated below. The self-attestation form provided to Canada are subject to verification at any time during bid evaluation and also during the performance of the Contract.
- (d) Upon the request of Canada, the Contractor agrees to provide evidence supporting any of the compliance requirements described above.

Signature: _____
Date: _____

2. Validation Process

- (a) Each resources designated by the Employment Equity Act has voluntarily declared its group(s) in the self-attestation form above.
- (b) Audits can be conducted during the performance of the Contract to validate that the information provided is reliable and accurate, and to ensure the Contractor is complying with this requirement.

3. Audit Process

- (a) It is the Contractor's responsibility to ensure continuous compliance with the certification provided. The certification is subject to verification by Canada at any given time during the performance of the Contract. If the certification provided contains false statements, Canada will declare a bid non-responsive or will declare the Contractor in default, whether made knowingly or unknowingly during the bid evaluation period or during the performance of the Contract.
- (b) It is understood that the civil consequences of making a false statement in the bid documents, or of not complying with the requirements or failing to produce satisfactory evidence to Canada regarding the requirements of the self-attestation, may include: disqualification of the business from participating in future contracts; and/or termination of the Contract.



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		2. Branch or Directorate / Direction générale ou Direction	
Défense Nationale		RDDC - Centre de recherches de Valcartier	
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 Développement d'une plaque balistique personnelle par un maximum de deux fournisseurs (phase 1) avec option d'achat (phase 2) pour un seul fournisseur.			
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"/>	
Not releasable À ne pas diffuser <input type="checkbox"/>			
Restricted to: / Limité à : <input type="checkbox"/> Specify country(ies): / Préciser le(s) pays :		Restricted to: / Limité à : <input type="checkbox"/> Specify country(ies): / Préciser le(s) pays :	
		No release restrictions Aucune restriction relative à la diffusion <input type="checkbox"/>	
		Restricted to: / Limité à : <input type="checkbox"/> Specify country(ies): / Préciser le(s) pays :	
7. c) Level of information / Niveau d'information			
PROTECTED A PROTÉGÉ A <input type="checkbox"/>		NATO UNCLASSIFIED NATO NON CLASSIFIÉ <input type="checkbox"/>	
PROTECTED B PROTÉGÉ B <input type="checkbox"/>		NATO RESTRICTED NATO DIFFUSION RESTREINTE <input type="checkbox"/>	
PROTECTED C PROTÉGÉ C <input type="checkbox"/>		NATO CONFIDENTIAL NATO CONFIDENTIEL <input type="checkbox"/>	
CONFIDENTIAL CONFIDENTIEL <input type="checkbox"/>		NATO SECRET NATO SECRET <input type="checkbox"/>	
SECRET SECRET <input checked="" type="checkbox"/>		COSMIC TOP SECRET COSMIC TRÈS SECRET <input type="checkbox"/>	
TOP SECRET TRÈS SECRET <input type="checkbox"/>			
TOP SECRET (SIGINT) TRÈS SECRET (SIGINT) <input type="checkbox"/>			
		PROTECTED A PROTÉGÉ A <input type="checkbox"/>	
		PROTECTED B PROTÉGÉ B <input type="checkbox"/>	
		PROTECTED C PROTÉGÉ C <input type="checkbox"/>	
		CONFIDENTIAL CONFIDENTIEL <input type="checkbox"/>	
		SECRET SECRET <input type="checkbox"/>	
		TOP SECRET TRÈS SECRET <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 ☐ Yes
Non 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 ☐ Yes
Non 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 ☒ Yes
Non Oui
If Yes, will unscreened personnel be escorted?
Dans l'affirmative, le personnel en question sera-t-il escorté? ☐ No ☒ Yes
Non 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 ☒ Yes
Non 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 ☐ Yes
Non 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 ☐ Yes
Non 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 ☐ Yes
Non 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 ☐ Yes
Non 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 CONFIDENTIEL	SECRET	TOP SECRET TRÈS SECRET	NATO RESTRICTED NATO DIFFUSION RESTREINTE	NATO CONFIDENTIAL NATO CONFIDENTIEL	NATO SECRET	COSMIC TOP SECRET COSMIC TRÈS SECRET	PROTECTED PROTÉGÉ			CONFIDENTIAL	SECRET	TOP SECRET
											A	B	C			
Information / Assets Renseignements / Biens Production					✓											
IT Media / Support TI																
IT Link / Lien électronique																

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 indiquer qu'il y a des pièces jointes (p. ex. SECRET avec des pièces jointes).