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SOLICITATION AMENDMENT
MODIFICATION DE L'INVITATION

The referenced document is hereby revised; unless otherwise indicated, all other terms and conditions of the Solicitation remain the same.

Ce document est par la présente révisé; sauf indication contraire, les modalités de l'invitation demeurent les mêmes.

Comments - Commentaires

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Title - Sujet
ARMOUR TDP

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W7714-115274/E	003

Client Reference No. - N° de référence du client	Date
W7714-115274	2013-04-17

GETS Reference No. - N° de référence de SEAG
PW-$$SV-051-25450

File No. - N° de dossier	CCC No./N° CCC - FMS No./N° VME
051sv.W7714-115274	

Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2013-05-30	Time Zone Fuseau horaire Eastern Daylight Saving Time EDT

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Peter Murray	051sv

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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**

Canada

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This solicitation amendment is raised to address the questions asked at the Technology Demonstration held on March 5, 2013, questions submitted, questions asked at the Bidders' Conference held on March 25, 2013, as well as, applicable changes to the solicitation documents.

A note on the numbering of questions. Questions received have all been assigned a unique number. Some questions have required more research than others and addressing them will be deferred to a subsequent solicitation amendment. Therefore, if you notice a gap in the question numbering, this is because the excluded question are to be addressed in a subsequent solicitation amendment. At the time of publishing this amendment, we have received 132 questions, excluding the items discussed at the one-on-one meetings.

Questions and Answers

Questions from the Technology Demonstration

Q1.
The solicitation refers to the Joint Network Defence and Management System (JNDMS) and its capability to collect infrastructure and security related information. An objective of the ARMOUR TDP is to cross-correlate collected infrastructure and security related information. Considering this, is DRDC intending to provide JNDMS and applicable JNDMS or JNDMS generated information related to ARMOUR to Bidders or the winning Bidder?

A1.
There is no reference to JNDMS in the evaluation criteria. There is only 1 reference to the JNDMS project, located within Annex A, Section 1.3 Background on page 4 of 19. JNDMS was mentioned purely as background information concerning the state of the art of the Observe and Orient phases of automated CND. The ARMOUR TDP does not require that any solution submitted integrate in any way with the deliverables provided under that project.

The IP resulting from the JNDMS project are fully owned by and available for licensing from Canada. However these will not be provided as GFI under the ARMOUR TDP.

Q2.
Bid Instructions state that a firm fixed price is required for the Basic Requirement and a breakdown of the firm fixed price is requested. A breakdown is usually linked to a time and materials type contract. Please confirm whether the pricing basis for the Basis requirement is a firm fixed or a time and materials? If the basis is firm fixed, is a breakdown still required?

A2.
The pricing basis for the basic requirement is a Firm all-inclusive price. A breakdown of the proposed firm all-inclusive price for the basic requirement is requested for the following purposes: to validate the labour rates for the optional services requirement and to support a

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proposed revised milestone schedule. The breakdown of the firm all-inclusive price not required at time of bid closing. However, a breakdown will be requested from the highest ranked Bidder to validate the labour rates of the optional services requirement and support the proposed milestone schedule before the highest ranked proposal is recommended for award of a contract.

Q3.

What are the licensing terms for the DRDC Technology?

A3.

Any DRDC technology provided to the winning bidder under the ARMOUR RFP will be provided as Government Furnished Information or Government Furnished Equipment.

Q4.

The solicitation provides for parts of the solution to be addressed by research and development. Where in the solicitation is this addressed and how are points evaluated in the RFP?

A4.

The level of research and development (R&D) is completely dependent on the bidder's approach to the solution. As such, it is expected that the amount of R&D required will vary between bidders. The evaluation of this is captured in the following areas:
- The TRL rating achieved through development: Criteria 1.2 a);
- The ability to meet technology challenges: Criteria 1.2 e);
- The level of COTS incorporated into the solution: Criteria 1.2 f);
- Use of proven technologies: Criteria 1.2 g); and
- A Project Management Plan able to achieve the outcomes despite the level of R&D proposed: Criteria 2.1 (all).

Q5.

What is the expectation for the level of effort required to changes to the integration framework or feed in elements? for example, 2 days or 5 months?

A5.

The level of effort required to make changes to the integration framework or feed-in elements is dependent on the design chosen by the bidder. Detailed design of the interfaces is left to the successful bidder. The mandatory and point rated evaluation criteria expressed in the solicitation capture all technical expectations of the Integration Framework and interfaces that DRDC has defined as part of the solution.

Q6.

The schedule of milestones has 10% as the value for the final meeting. This does not match up with the expended level of effort. Does the final milestone have to be 10%?

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A6.
The schedule of milestones was developed based on the project team's estimated level of effort for conduct of the Work. Bidders are permitted to propose a milestone schedule that reflects a neutral cash flow. If a Bidder wishes to propose a milestone schedule, the bidder will be requested to demonstrate that the proposed milestone schedule reflects a neutral cash flow.

Q7.
What is the basis for the markup on hardware and software? What is the expected hardware requirement for the option period?

A7.
Given that hardware and software required to support tasks raised under the Optional Services Requirement are expected to be minimal, Canada expects that Bidders' are providing competitive labour rates for the labour portion of the Optional Services Requirement. The intention of the markup on hardware and software was to provide an opportunity for the winning Bidder to recover hardware and software related procurement costs rather than build this element into the firm all-inclusive labour rates. While Canada reserves the right to procure hardware and software under other contractual vehicles, if hardware or software is procured during the optional services requirement period, Canada is willing to pay a markup on the Contractor's laid down cost for the delivery of hardware or software to Canada with all discounts applied.

The Basis of Payment for the Optional Services Requirement provides a vehicle for Canada to procure hardware and software that maybe required to specifically support additional testing of the demonstrated technology. Hardware and software procured during the period of the optional services requirement may include: servers, workstations, mass storage, switches, sensing technology, etc.

Q8.
What is the impact of hardware and software procured under the Optional Services Requirement on future procurement of hardware for operational requirements?

A8.
In the event that an Operational Requirement is developed out of the results of this ARMOUR Technology Demonstration Project, it would form a separate procurement requirement. The hardware and software requirements, if required, would be defined in the solicitation documentation supporting the procurement of an Operational Requirement.

Q9.
What is the level of Background Intellectual Property (IP) incorporated into the Integration Framework that is subject to the research license?

A9.

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Part 2 Bidder's instructions, section 8 pages 9 and 10 of 76 outlines the requirements for the research license and associated IP to be distributed under a research license.

SACC clause 2040 (20012-11-19) relating to IP is also discussed in Part 7, Section 2.1 General Conditions, page 20 of 76 and Section 2.3 SACC manual clauses, page 21 of 76.

Q10.
What browsers and browser versions are supported on the target network and what software environment is the target environment?

A10.
The current DREnet network desktop image includes the following baseline software of note:
• Microsoft Windows 7 SP2 64-bit (32-bit has been discontinued)
• Microsoft Internet Explorer 9
• Mozilla FireFox 12.0

The above list is the current baseline, but is subject to change and beyond the control of the ARMOUR TDP project.

Q11.
What is the required scale of the TDP in terms of number of nodes?

A11.
These numbers are elaborated in the STS, section 6.2 Summary of Demonstrations, Performance Targets and Metrics, page 36 of 47.

Q12.
What was the GENESIS response time to responding to a perceived attack?

A12.
The GENESIS prototype provided proactive capabilities only and did not respond to perceived attacks. The GENESIS prototype is not included among the DRDC technologies being offered to vendors as part of the ARMOUR TD project solicitation.

Q13.
Does the ARMOUR TDP have to be the same architecture as GENESIS?

A13.
There is no requirement for the bidder's proposed architecture for the ARMOUR TD project to be the same as GENESIS.

Q14.

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Can the DRDC tools be retweaked or must it follow their defined role?

A14.

Any DRDC technology licensed to the winning bidder may require modifications to meet the requirements of the ARMOUR TDP project and is acceptable.

Q15.

Can the winning bidder modify the Asset Rank (AR) and COADS source code? If so, who owns the derived IP of the modification?

A15.

The winning bidder can modify the AssetRank and COADS source code, and because these are modules within the Computational Services Component the contractor would own the new derived IP**.**

Q16.

Are AR and COADS dependent on tools such as mulval?

A16.

The AssetRank and COADS graph analysis system is not dependent on MulVAL and could be applied to any AND/OR graph.

The AssetRank and COADS API implements the AssetRank and COADS graph analysis system, and has graph format and content requirements which any imported graph must support if it is expected to be processed without error. The imported attack graph does not have to be produced by MulVAL and could be from any graph data generation tool which satisfies the existing, expected and supported graph format requirements. The API is flexible in how it interacts with the imported graph, so it is primarily the import and export convenience methods which impose these expectations on a graph.

See the HTML documentation included in the "drdc_assetrank_and_coads_documentation_0.3.zip" file hosted on the ARMOUR TD Sharepoint site.

Q17.

COA vs. closure, what is the impact of a closure on the COA?

A17.

In the context of COADS:

COA: Course of Action (COA) represents a means to remove a node/asset/vertex in an attack graph.

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COA set: COA set is an unordered collection of unique COAs, such that removal of the nodes/assets/vertices will hinder the attacker's path to the goal.

COA closure set: COA closure set is an unordered collection of unique nodes/assets/vertices that are removed from the graph as a result of executing the COA set.

Q18.
Will the DRDC code for SPADE and GRAPHWalker be available to the winning bidder as well as AR and COADS?

A18.
Yes, the DRDC owned IP relating to AssetRank, COADS, SPADE and GraphWalker will be made available to the winning bidder as GFI. This will include the source code and demonstrated VM's as well as distribution versions of dependent open source code. The winning bidder is responsible to obtain any supporting software licenses required to further develop these modules (e.g. Rapidminer for SPADE, Cytoscape for GraphWalker)**.**

Q19.
How many lines of code is the SPADE tool? What is the size of the SPADE tool package?

A19.
SPADE is a combination of the Network Modeler and Open Source RapidMiner 5 application. Effort has been made to document the basic application and library sizing below. Source code line counts are given to those applications developed as part of SPADE:
• Network Modeler
    - NetworkModeler.jar: 683K, 15760 lines of code and comments
    - Supporting libraries:
        • commons-collections.jar: 531K
        • collections-generic.jar: 571K
        • jaxen.jar: 226K
        • jdom.jar: 152K
        • jung-algorithm.jar: 253K
        • jung-api.jar: 40K
        • jung-graph-impl.jar: 61K
        • jung-visualization.jar: 327K
        • log4j-1.2.15.jar: 381K
        • opencsv-2.2.jar: 12K
• RapidMiner
    - Rapidminer-5.2.001.zip: 37.5MB (Available for download from http://rapid-i.com)
        Note: The size of the RapidMiner installation under /usr/local/rapidminer5/ is 67MB.

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- DRDC RapidMiner5 Data Processing Modules (which wrap MulVAL, AssetRank and COADS): 15K, 1509 lines of code and comments**.**

Q20.
What is the level of support provided by DRDC for the DRDC tools?

A20.
DRDC will be available to provide support in answering questions relating to AR, COADS, SPADE and GRAPHWalker. DRDC resources will not be available to perform new coding within these tools. Functional issues such as bug fixes may be handled on a case by case basis.

Questions submitted in response to the Solicitation
Q21.
In our experience, clients often take more time than we expected to approve deliverables. The impact of the time taken is that schedules are not met, and resources cannot proceed with later phases. Would Canada please describe, with timelines, the approval process for deliverables so that we can cost and schedule the approval time appropriately?

A21.
Within the RFP documents, Appendix B to the Statement of work, section 3 provides a list of the deliverables with associated acceptance time frames that are required for the ARMOUR TDP project.

Q22.
According to the documents released by DRDC on https://partners.drdc-rddc.gc.ca/centres/Ottawa/NIO/ARMOUR_TD/rfp/Shared%20Documents, TrendMicro has provided services to DRDC in the past. Will TrendMicro be allowed to bid on the requirement?

A22.
TrendMicro will not be precluded from submitting bid on this requirement because TrendMicro was not involved with the creation of the Statement of Work, the evaluation criteria or any other document in the ARMOUR solicitation.

The reference documentation relating to DRDC Genesis provided on the sharepoint are DRDC owned deliverables from a previous contract provided for information purposes only.

The Genesis prototype provided background research for DRDC. This prototype did automate and integrate AssetRank and COADS with a commercial product to test the feasibility of this work.

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The GENESIS prototype is not a solution which utilizes an integration framework, provides any modularity of components or is a technology that Canada feels can be used as a basis of the ARMOUR TDP solution. The IP from this contract rested with Canada and any vendor would be able to license this from DRDC if they so choose.

Q23.
In the System Technical Specification Table, requirement GR1 "The ARMOUR solution MUST provide an integrated computer network defence (CND) capability." encompasses all of the components. Each component making up the system has its own TRL, so how should bidders respond to GR1? With the minimum, maximum, average? Would Canada please provide the method for calculating the resulting score for GR requirements?

A23.
The TRL for GR1 should focus on the degree of integration of the entire solution. For example, there may be many existing COTS products within the solution at TRL 9, but if they are not integrated, at bid time the TRL for GR1 would be 0. If it is proposed that these same COTS products will be integrated into the solution and successfully demonstrated as part of the development associated with the Basic Requirement then the resulting TRL through development would be TRL 7 (prototype demonstration in an operational environment).

Q24.
Due to the broad nature of GR1 to GR34 would Canada remove the requirement to respond with a TRL for GR1 to GR34?

A24.
No, the requirements remain unchanged.

Q25.
Some components are production off the shelf, but require integration. Would Canada please define how we score this, before or after integration, or both?

A25.
Both. Within the STS, TRL rating at bid would be before integration, and TRL rating through development would be after integration**.**

Q26.
Would Canada please provide clarification of "TRL at bid" rating for an individual requirement?

A26.
TRL at bid is the Technology Readiness Level of the product/functionality in question at the time the bid is submitted to Canada.

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Q27.
In the System Technical Specification Table, is the "TRL Rating Through Development" to be entered as of the time of the end of the "Basic Requirement" or at the end of the productionalization at the end of one or more of the "Optional Services Requirement" options?

A27.
The TRL rating through development is the rating at the end of the "Basic Requirement."

Q28.
In the System Technical Specification Table, how are the TRL ratings to be proven by the bidder? What 'evidence' does Canada want in the proposal to support the bidder's TRL rating?

A28.
The evidence required to support the Bidders TRL rating proposed through development is described in the point rated evaluation criteria.

Evidence supporting the TRL rating at bid time may take a variety of forms including references to technical reports and publications, corporate presentations, product brochures, etc. Recognizing that reference materials may not be available, Canada will trust the integrity of the bidders claims for TRL ratings at bid time. The consequences of the discovery of false claims leading to contract award may include contract termination.

The evaluation of the bidder's ability to meet the proposed TRL rating through development is captured across the entirety of the point rated evaluation criteria (Technical Evaluation Criteria, Management Evaluation Criteria and Corporate Experience).

Benchmarks to be used for evaluation of TRL ratings are described on the Canadian Innovation Commercialization Program web site (https://buyandsell.gc.ca/initiatives-and-programs/canadian-innovation-commercialization-program-cicp/program-specifics/technology-readiness-level). The proposed TRL rating through development sets the groundwork for the acceptance of the resulting demonstrations for the Basic Requirement. In this way, the TRL rating through development will be proven via the demonstrations. It is up to the bidder to propose how their solution will meet these requirements through development. For example, in some cases, due to the anticipated development required, the bidder may only achieve TRL 4 for some requirements. These requirements would not be included in the operational demonstrations (TRL 7 expectation), but some evidence of their functional status in a laboratory environment will be required for acceptance.

Q29.
The term "integrated" is used three times in the System Technical Specification in the context of an integrated solution, or integrated system, or integrated software. The term is further used in the RFP in the same context. Would Canada please provide a description of what "integrated"

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means in the context of the solution, software, or system so that bidders may respond to the requirement appropriately?

A29.
An integrated system is one in which the required capability is delivered by assembling elements in a way that allows them to work together to achieve the intended purpose. Therefore, the proposed integrated solution, system or software should assemble the underlying elements in a way that allows them to work together to achieve the overall objectives, vision, scope and technical specifications of the ARMOUR TD project solicitation.

Q30.
In GR-1 the term "integrated CND" is used. What is the definition of "integrated" in this context? The definition is required for us to determine the TRL rating.

A30.
Similarly, "integrated CND" refers to the assembly of the underlying elements of the solution, system or software in a way that allows them to work together to achieve the intended purpose of Computer Network Defence (CND). In the context of the ARMOUR TD project, CND is described by the overall objectives, vision, scope and technical specifications of the solicitation.

Q31.
Re: COTS hardware and licenses. We understand that we are to supply hardware and COTS licenses for the solution at the demonstration points and at the end of the project. Does Canada have any technical standards that must be met for the hardware and software that must be met?

A31.
All technical standards for COTS hardware and software required by the project are captured in the System Technical Specification.

Q32.
Is there any DRDC owned current hardware and software platform that could be used for ARMOUR, to reduce the cost to Canada? If so, would Canada provide bidders with a list of computing assets that can be used?

A32.
There are no DRDC hardware and software platforms that are able to be used to reduce the cost to Canada. Bidders are responsible for all components that are required to deliver a complete solution to Canada.

Q33.
Since ARMOUR potentially combines together a number of existing COTS production hardware and software assets and a number of existing proprietary components, would Canada please

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confirm that these comprise the background IP of the bidder, and will remain so following the ARMOUR program?

A33.
Part 2 Bidder's instructions, section 8 pages 9 and 10 of 76 outlines IP requirements for the RFP. SACC clause 2040 (2012-11-19) relating to IP is also discussed in Part 7, Section 2.1 General Conditions, page 20 of 76 and Section 2.3 SACC manual clauses, page 21 of 76**.**

Q34.
We understand that intellectual property developed under this contract is foreground IP and becomes owned by Canada. Without the background IP, the foreground IP is virtually unusable, as components will be missing. While we understand the distribution of the IP for research purposes only (RFP pg. 10 of 76) the situation of non-research distribution is not discussed. Would Canada please confirm that non-research licensing of the solution is the successful bidder's domain?

A34.
The statement regarding IP ownership at the end of Q34 is incorrect. Ownership of IP developed under this is discussed in Part 2 Bidder's instructions, section 8 pages 9 and 10 of 76 outlines the IP requirements for the RFP.

SACC clause 2040 (20012-11-19) relating to IP also discussed in Part 7, Section 2.1 General Conditions, page 20 of 76 and Section 2.3 SACC manual clauses, page 21 of 76.

Licensing of the complete solution for non-research purposes will require licenses from Canada (Integration Framework), the successful bidder (e.g. Processing Modules) as well as any additional background IP holders.

Q35.
We would like to know that if Background IP is modified under this contract, then who ends up owning the IP at the end of the contract? Is it dependent upon the degree of modification? Based on lines of code modified vs. total? Dollar value at start vs. dollar value added?

A35.
All Background IP remains owned by the original owner. Any unmodified portions of the Background IP remain as Background IP. Any modifications to Background IP are Foreground IP. Part 2 Bidder's instructions, section 8 pages 9 and 10 of 76 outlines the IP requirements for the RFP. SACC clause 2040 (20012-11-19) relating to IP is also discussed in Part 7, Section 2.1 General Conditions, page 20 of 76 and Section 2.3 SACC manual clauses, page 21 of 76.

Q36.

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Given that ARMOUR is an automated computer network defence solution and given that the best attacks are formulated with the knowledge of how to overcome the defences, would it not be more appropriate for it to be considered a 'controlled good' and not freely distributed through the mechanism of making research licenses available to a broad spectrum of academia, government, etc?

A36.

This topic has been carefully considered by DRDC, and the product of the ARMOUR TDP is not considered a controlled good.

Q37.

If it is not a 'controlled good', then why is there a requirement for Controlled Goods Registration and its inclusion in the Resulting Contract clauses?

A37.

Controlled goods registration is needed by the successful bidder. Access to controlled goods, for example, will be required by the contractor in order to demonstrate the solution to DRDC on the DREnet.

Q38.

Do the 440+ requirements in the System Technical Specification Table have to be met at end of Basic Requirement, or at the end of the Optional Services?

A38.

The requirements within the STS are required to be met by the end of the relevant demonstration phases of the project, recognizing that not all requirements must be delivered to the same TRL rating. The evaluation criteria, section 1.2, page 43 of 76, discusses the percentage of requirements and the associated TRL levels that will be used for evaluation of the proposed solution**.**

Q39.

Questions Q39 - Q40 will be addressed in a subsequent solicitation amendment.

Q41.

In the System Technical Specification Table.xls, row 229 has blanks for several columns. Would Canada please correct as required?

A41.

An updated spreadsheet has been posted to the DRDC sharepoint site containing v2.1 of the STS Table.

Q42.

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Requirement IF-1 - "must support the choice between thin, thick and web-based interfaces".

Is the term "choice" related to run time (user can connect using either client) or to the integration time (the architecture provides the corresponding APIs so that the above client types can be developed and connected, but only one type of client is developed for the scope of basic TDP)?

A42.
The term "choice" is related to the integration time; the architecture provides the corresponding APIs so that the above client types can be developed and connected, but only one type of client must developed for the Basic Requirement scope of TD project. However, if the proposed solution indicates that TRL 7 rating through development will be reached for the requirement, then an operational demonstration of the choice between thin, thick and web-based interfaces will be required in the demonstration phase. In this case, the demonstration of the secondary client interfaces can be limited to a representative subset of the client functionality.

Q43.
Requirement IF-17 "must support both web client and stand alone GUI technologies".

Would Canada please confirm that this is an architectural requirement, and that only one type of client must be built for TDP?

A43.
This is an architectural requirement; only one type of client must be built for TDP. However, if the proposed solution indicates that TRL 7 rating through development will be reached for the requirement, then an operational demonstration of both web client and stand alone GUI technologies will be required in the demonstration phase. In this case, the demonstration of the second GUI client can be limited to a representative subset of GUI functionality.

Q44.
Similarly, requirement DP-1 "data presentation MUST provide a GUI module". The singular "module" is used.

Would Canada please confirm that exactly one GUI module must be developed within the scope of TDP?

A44.
Only one "GUI module" must be developed within the scope of the TD project. However, depending on the bidder's design, the GUI module may consist of one or more GUI elements. The collection of elements in the resulting GUI module must meet the required GUI technical specifications.

Q45.

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Would Canada pleas confirm that that the selection of the GUI technology is done by the bidder (subject to other related requirements)?

A45.
Yes, as with all aspects of the proposed solution, the selection of the GUI technology is done by the bidder**.**

Q46.
Requirement DP-14 "must support 3D displays". Would Canada please confirm that this is an architectural requirement and the 3D GUI does not need to be developed in the scope of TDP?

A46.
The DP-14 requirement to support 3D displays is an architectural requirement. However, if the proposed solution indicates that TRL 7 rating through development will be reached for the requirement, then an operational demonstration of 3D displays will be required in the demonstration phase. In this case, the demonstration of the 3D display can be limited to a representative subset of display functionality.

Q47.
Is a Word version of the RFP available?

A47.
The RFP is only available in PDF format.

Q48.
Ref: RFP Attachment 4 Mandatory and Point Rated Criteria (RFP Pg 56) states, in part:
   "Note that Bidders must certify successful completion of the projects included for evaluation by certifying client acceptance of the project as outlined in Attachment 5 (Certifications Required With The Bid)."
In the RFP Pg 62, Attachment 5 is Certifications Precedent to Contract Award. Please confirm that pg. 56 should read:
   "Note that Bidders must certify successful completion of the projects included for evaluation by certifying client acceptance of the project as outlined in Attachment 6 (Certifications Required With The Bid)."

A48.
Page 56 should read:
   "Note that Bidders must certify successful completion of the projects included for evaluation by certifying client acceptance of the project as outlined in Attachment 6 (Certifications Required With The Bid)."

This is addressed in the amendments to the solicitation.

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Q49.

If an advanced technology that is TRL 8 or 9 forms part of a proposed Armour technical solution and, while this technology has been deployed in other non-Armour systems, it has not been instantiated in an Armour specific solution, but the plan indicates an intention to do so via development; should these existing generic capabilities be listed at a TRL 9 (i.e. deployment) or TRL 4 (i.e. basic technology components exist and work together)?

A49.

The answer is tied to the dependency between these capabilities and the other capabilities that will be delivered to meet the remaining Data Presentation specifications. For example, if the capabilities for multiple linked views (DP18), tabular data views (DP19) and data filtering (DP20) are provided for by an existing product and is sufficiently independent such that no development/integration work will be required on these functions to display data, then they should be assessed at TRL9. If however, additional development/integration work must be done within these capabilities to present the data, then TRL4.

Q50.

How are the following components to be used in the ARMOUR system; AssetRank, COADS, GENESIS, SPADE, GraphWalker, etc?

A50.

AssetRank & COADS are software modules that could form components of the analysis core. AssetRank addresses the unique semantics of dependency attack graphs and incorporates vulnerability data from public databases to compute metrics for the graph vertices (representing attacker privileges and vulnerabilities) which reveal their importance in attacks against the system. AssetRank is a graph analysis system, which can be used within ARMOUR to compute the criticality of services and also computes which vulnerabilities are the most likely to be used by attackers.

COADS (Course-of-action decision support) is a graph analysis systems for computing sets of actions which can be implemented together in order to efficiently increase the security of a network. COADS can be part of ARMOUR Computational Services, used to prioritize and process course of action decisions.

AssetRank & COADS will be available in source code form for use in the prime contract and could be provided in executable form to the research community.

GENESIS (inteGrated ENd to End deciSIon Support) is an end-to-end decision support prototype that demonstrated a closed loop on vulnerability collection, attack graph generation, graph-based decision making, and actuation. It integrated various components (MulVAL, AssetRank, and COADS) into an end-to-end automated network security system. It was also used to evaluate the intregrability of AssetRank and COADS with COTS. The GENESIS solution will not be provided to the winning bidder.

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GraphWalker is a graph traversal and analysis plugin to Cytoscape (Open Source) that can be used to visually emphasize/de-emphasize key/selected nodes. The emphasis can be size, color, brightness, edge line color, and/or edge line size. GraphWalker can navigate a graph and nodes can be rearranged manually. It can, as such, be used to support ARMOUR for navigating through the graphs or rearranging the nodes.

SPADE (Security Posture Assessment Demonstrator and Experimenter) is a framework for a software-based research environment for the modeling of network architectures and associated security vulnerabilities. SPADE's objective is the creation of a set of modeling and analysis tools with the capability to support defence research regarding network security posture. Within ARMOUR, It can be used to visually represent AssetRank, COADS graphs.

The use of any of the above mentioned software components is optional and each bidder is free to provide their own solution.

Q51.
How are the GFE components (e. g. McAfee SW) to be used in the ARMOUR system? Any priorities?

A51.
The components mentioned with the RFP package in Annex A, Statement of Work, section 1.10 Available Data Sources and Effectors, page 9 and 10 of 19, provided to bidders a list potential data sources and effectors that are currently available within the DREnet. They are not GFE items.

These devices can be used at the discretion of the bidder and are not mandatory to be used. The roles of effectors and data sources are outlined within Annex A, Statement of Work, Section 1.8 page 9 of 19. There are no priority for the use of any of these devices within the proposed solution

Section 1.10 of the Annex A, Statement of Work has be clarified in this solicitation amendment.

Q52.
How much of the JNDMS system/concepts are expected to be included/transported into the ARMOUR system?

A52.
None of the JNDMS system/concepts are expected to be included/transported into the ARMOUR system.

Q53.

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How much of the work is expected to be executed/completed on the client's site as opposed to the contractor's site?

A53.
All development work is to be executed/completed on the contractor site. Various meetings and demonstrations, documented within Annex A page A1 and A2 of A6 which outline the locations of meetings required as part of the RFP package. Demonstrations for Phase 3, Phase 4 and Phase 5 will be held at DRDC Ottawa facilities.

Q54.
What effect will upcoming and future standards to be adopted by SSC influence the ARMOUR system?

A54.
Any standards adopted by SSC have the possibility to impact the ARMOUR project, depending on the scope and scale of these standards as well as what environments and equipment these standards apply to. With no known SSC impacts or timelines, these will need to be evaluated by the ARMOUR team and successful bidder as they become known.

Q55.
From the SOW, it is understood that the Optional Services Requirements may be exercised as early as the completion of Phase 3 of the Basic Requirement. What will determine this to happen?

A55.
The Optional Services Requirement may be exercised any time after contract award of the Basic Requirement. There are not predetermined criteria that will trigger the activation of the Optional Services Requirement, and the use of this option is at the discretion of Canada**.**

Q56.
How much custom development is anticipated?

A56.
This will depend on how many pre-built components that can fulfill the project requirements the winning bidder will bring to the project. The custom development will be a tradeoff between the relevant features available out of the box versus the lack of meeting the requirements of the project.

Q57.
How about bringing in a foreign-developed solution pieces?

A57.

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Vendors are encouraged to bring best of breed products as part of their solution.

Q58.
Will references from subcontractors be accepted for evaluation?

A58.
In accordance with Corporate Experience Evaluation Criteria, Section 3 (page 56 of 76) of the Solicitation:
- Client references for demonstration that the Bidder has successfully completed at least two (2) IT or CND Software Development and Integration relevant projects must be Bidder references only, not including subcontractors;
- Client references for demonstration that the Proposed Team has successfully completed at least two (2) relevant projects in which they were required to setup an operational simulation environment for pre-deployment testing, including the creation of test data sets may include references from subcontractors as part of the Proposed Team.
Corporate Experience Evaluation Criteria, Section 3 (page 57 of 76) of the Solicitation:
- For Criteria 3.1.1, 3.1.2, 3.1.3, and 3.1.4 evaluation will include only Bidder project references, not subcontractors; and
- For Criteria 3.2.1, 3.2.2 and 3.2.3 evaluation will include project references from affiliates or subcontractors.

Q59.
Question Q59 will be addressed in a subsequent solicitation amendment.

Q60.
If resources are brought in from outside Canada will foreign security clearances be acceptable?

A60.
Foreign resources may be proposed. However, the foreign security clearances of the proposed foreign resources must meet the equivalent Canadian security clearances defined in the Resulting Contract.

Q61.
Is there only one composite markup value to be proposed for HW and SW?

A61.
There is only one composite markup value for HW and SW procured under the Optional Services Requirement. HW and SW procured to acheive the Basic Requirement is contained in the firm fixed price for the Basis Requirement.

Please refer to A7 and the amendments to the solicitation in this solicitation amendment for further clarification to the markup.

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Q62.
Is the total budget equal to $13,950,000? Does it include the $1,000,000 for HW and SW? What about markup?

A62.
The breakdown of the budget is as follows:
i)   Maximum for the Basic Requirement - $4,400,000.00 (GST/HST/QST extra)
ii) Maximum for the Optional Services Requirement - $9,550,000.00 (GST/HST/QST extra)

For evaluation purposes:
a)   The bid price for the Basic Requirement may not exceed i) above;
b)   The bid price for the Optional Service Requirement may not exceed ii) above;
c)   The evaluated bid price for the Optional Service Requirement includes the calculated sum of the Labour Component, $1M allocation for HW and SW, and the Markup on the $1M allocation for HW and SW.

For greater clarity, the sum of items 2 and 3 in Attachment 3 of the solicitation may not exceed ii) above.

Q63.
Evaluated bid price? Is that the price presented in the bid, meaning it could be lower than the budget price?

A63.
The Budget Price for the project as outlined within the RFP is the maximum price that can be submitted by a bidder. The bid price is the price that a potential bidder submits for their proposal to Canada. This can be lower than the budget price, and points are awarded based on the ranking of the submitted proposal to the lowest submitted bid. The details of the evaluation of price are found in Attachment 3, Evaluation of Price, page 35 of 76.

Q64.
Can we get the feedback notes on the demo day?

A64.
The questions and answers from the Technology Demonstration are provided in this solicitation amendment.

Questions from the Bidders' Conference

Q65.

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Regarding the use of existing modules in the framework, is there a benefit from an evaluation perspective to use them?

A65.
The reference to the "use of existing modules" is understood to mean Crown offered GFI (e.g., AssetRank and COADS). The mandatory and point rated evaluation criteria are provided in Attachment 4 of the solicitation. In accordance with these criteria, there are no evaluation benefits to the use of Crown offered GFI, compared to any other non-GFI existing modules of equivalent development maturity and application. A separate document mapping the STS requirements to the GFI has been posted on the ARMOUR TDP Sharepoint site.

Q66.
Real-time processing vs. a modular architecture. Which is more valuable to DRDC?

A66.
Section 6 of the Section System Technical Specification (STS) provides performance specification. Specification PER1 of the STS Table states that "Performance requirements MUST be met as described in the Performance Targets and Metrics section of the STS." IF10 states "The Integration Framework MUST be modular allowing processing modules to be removed and replaced with alternate modules providing similar functionality." These are mandatory criteria, there are no point rated evaluation criteria favoring one of these specifications over the other.

Q67.
Will there be any other concurrent development activity on DRDC tools? I.e. if COADs is used, will DRDC be proceeding with use and development of COADS and will the winning bidder have access to this development?

A67.
At this time there is no planned development activity on the DRDC tools. However, this could change. If and when changes are made, these would be made available to the contractor if deemed relevant by DRDC.

Q68.
The RFP specifically identifies web standards but does not indicate whether the standards are examples or limited.

A68.
The standards listed are intended to be examples. Any open and well established standard that fulfills the open concept and modularity requirements will be considered on equal footing.

Q69.

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Evaluation Criteria and benefit of using DRDC technology. Is there a preference and what is the TRL of the DRDC Technology?

A69.

The mandatory and point rated evaluation criteria are provided in Attachment 4 of the solicitation. In accordance with these criteria, there are no evaluation benefits to the use of Crown offered GFI, compared to any other non-GFI existing modules of equivalent development maturity and application. The TRL ratings of the Crown offered GFI have been mapped to the STS Requirements G75Table against the relevant requirements. This file has been posted on the ARMOUR TDP Sharepoint site.

Q70.

Beyond the DREnet as a target network, is there a benefit in the proposal evaluation to propose a solution that functions on more complex networks?

A70.

No, there is no evaluation benefit for solutions proposed on more complex networks. However, demonstration of capabilities on more complex networks can be used as evidence to substantiate claims in response to performance based evaluation criteria. Section 6.2, Summary of Demonstration, Performance Targets and Metrics, page 36-41 of 47 of the System Technical Specification document outline the performance criteria for project.

Q71.

If we introduce a new technology, what do we have to include as part of the distributed version under a research license?

A71.

It depends on the form the new technology takes. If the new technology is part of the ARMOUR solution, then it is distributed as part of the research license. If the new technology sits at the infrastructure or infrastructure management layers (external to the ARMOUR solution) then the new technology is not distributed with the research license, however the product distributed under the research license must still be able to demonstrate the capabilities of the ARMOUR solution**.**

Q72.
Define "Plug-in".

A72.
A Plug-in is equivalent to a processing module as otherwise mentioned in the solicitation.

Q73.

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What about the computational services? Could it be considered a 'plug-in', could all the inner dashed boxes of the architecture diagram be considered a 'plug-in' or a 'subplug-in'?

A73.
The computational services component is an architectural description of the collective processing capabilities of the ARMOUR solution. The processing modules (plug-in) are the implementations of these capabilities.

Q74.
Research License vs. Commercial License: What part of the solution is subject to the commercial license?

A74.
The Canada owned IP is subject to the commercial license.

Q75.
For parts owned by the Contractor, how are they distributed under the research license (i.e. binary's, etc.)?

A75.
For the research license, binary's and executable code will be provided for the Contractor owned IP, the only source code that will be released is the Canada owned IP in the Integration Framework.

Q76.
What are the Contractor Rights to Integration Framework.

A76.
The Contractor must request a license to the Integration Framework after it is completed and the Crown will not unreasonably deny the Contractor a license to the Integration Framework.

Q77.
Should this requirement not be subject to Controlled Goods? It is a defense related product that should be controlled.

A77.
This topic has been carefully considered by DRDC, and the product of the ARMOUR TDP is not considered a controlled good.

Q78.
What is the process for registering to the Controlled Goods Program?

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A78.
The processes for registering to Controlled Goods Program is contained in Section 3 of Part 6 - Security and Financial Requirements of the solicitation.

Q79.
Will DRDC provide network discovery data?

A79.
DRDC will not provide any network discovery data to the successful bidder to be used during testing and product development. The successful bidder is required to provide their own test data to ensure system functionality. Network specific information for DRDC networks will be discovered by the solution when implemented and demonstrated as part of the Demonstration phases of the project.

Q80.
The Volume details are not clearly provided in the requirement, is this information available?

A80.
The performance requirements for the demonstration are based on an expectation of the subset of the DREnet that the demonstration would run on (not the entire DREnet). The data that will be processed will depends on the proposed solution and might fluctuate radically from one solution to another.

For the demonstrator the solicitation has outlined in the package the performance needed. Performance requirements for scalability of an operational solution is also provided in Section 6.2, Summary of Demonstration, Performance Targets and Metrics, page 36-41 of 47 of the System Technical Specification document outline the performance criteria for project.

Q81.
Why is facility clearance required?

A81.
The security requirement requires personnel to have a security clearance. Personnel security clearance can only be provided if the organization has a facility clearance.

Q82.
Is there an Order of Magnitude of the fee for commercial license?

A82.
This information is negotiated on a case by case basis with the interested parties. Without knowledge of the IP that will be generated as part of the solution, DRDC cannot place predetermine any fees associated with the commercial license.

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Q83.

Basis of points for an accelerated schedule? Proposing a 41 month 29 day schedule earns all points for an accelerated schedule.

A83.

The 2 points identified for an accelerated schedule in Attachment 4, Point Rated Evaluation Criteria 2.1 b) will be awarded for proposed schedules of 40 months or less.

This change is captured in the amendments to the solicitation of this solicitation amendment.

Q84.

Change management. Is the optional services requirement intended to be used for change management of the basic requirement?

A84.

The Optional Services requirement is intended to support pre-operational development, testing and deployment and is not intended for accomodating change management to the basic requirement.

Q85.

Question Q85 will be addressed in a subsequent solicitation amendment.

Q86.

Resources. Are resumes only required for the Key personnel?

A86.

Resumes are only required for the Key personnel for the Basic Requirement.

Q87.

Scoring Structure. At what point are bids deemed non-responsive if they are not within 6 points of the top rated architecture?

A87.

At the Bidders' Conference, Canada indicated that bids which did not obtain points for their Draft Architectural Design Document within 6 points of the top rated Draft Architectural Design Document would be deemed non-responsive and the remainder of the bid will not be evaluated.

The statement made at the Bidders' Conference was incorrect. After determining if bids with valid Canadian Content certifications only will be evaluated, any bids meeting the Mandatory Evaluation Criteria and the stipulated maximum budgets for the Basic Requirement and Optional Services Requirement will be assessed in accordance with the entire requirement of the bid

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solicitation. On completion of the evaluation, the bids with point scores for Point Rated Evaluation Criteria 1.0 not within 6 points of the top rated Draft Architectural Design Document point score will be deemed non-responsive.

Q88.
Does the $9.55M include the markup on hardware and software?

A88.
Yes the markup on hardware and software is included in the calculation of the optional services requirement bid price.

Q89.
Can subs be included in the evaluation of the team?

A89.
It is assumed the use of the term "Team" refers to the members of the Key Technical Personnel. Yes, subcontractors can be included in the evaluation of the Key Technical Personnel. The solicitation does not require the Key Technical Personnel to consist of the Bidder's employees only.

Q90 - Q93
Questions Q90 to Q93 will be addressed in a subsequent solicitation amendment.

Q94.
Will CFNOC be involved in the 1 on 1 meetings?

A94.
No. Only PWGSC and DRDC representatives will be present at the 1 on 1 meetings**.**

Q95.
Will questions asked during the 1 on 1 meetings be linked to the Bidder asking the question?

A95.
No, questions will not be attributed to individual vendors.

Q96.
To how many decimal points will the Total Point Scores be calculated?

A96.
Four decimal points.

Questions submitted in response to the Solicitation

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Q97.
Please refer to the table at Mandatory Technical Evaluation Criteria (p.38), M3 whereby the requirement indicates that the bidder must identify one individual for each Key Technical Personnel position who meets the requirement defined in Appendix D of the Statement of Work in Annex A. Then refer to item 3. Key Technical Personnel of the same section, which indicates at the introductory paragraph that the Bidder must identify one individual for each of the following positions…and demonstrate that each identified individual meets the mandatory requirements that are applicable to the labour category of the proposed individual as defined in minimum resource requirements table found in Appendix "D" of Annex "A". Within the bulleted list of key technical personnel it specified that:
• Lead System Architect (LSA) - LSA may also fill the SSA position or vice versa;
• Software Solution Architect (SSA) – SSA may also fill the LSA position and vice versa;
• Information Technology Security Analyst (ITSA) - ITSA may also fill the CAS position or vice versa;
• Information Technology Security Certification and Accreditation Specialist (CAS) – CAS may also fill the ITSA position and vice versa;

Please confirm that one key individual could be presented in both positions of LSA and SSA and that one key individual could be presented in both positions of ITSA and CAS provided that they met the collective experience requirements of both positions in the minimum resource requirements table found in Appendix D of Annex A. To confirm, a bidder could present only 7 key resources for 9 resource categories.

A97.
Yes, one individual can be presented for the LSA and SSA positions. Similarly, one individual can be presented for the ITSA and CAS positions. If the LSA and SSA position is filled by 1 person and/or the ITSA and CAS position is filled by one person, than the bidder could present only 7 key resources in their proposals.

Q98 - Q99.
Questions Q98 to Q99 will be addressed in a subsequent solicitation amendment.

Q100.
Refer to Attachment 4 – Mandatory and Point Rated Criteria (p. 37 and p. 38).
Please refer to the Experience Requirements which instructs bidders that in evaluating resource past performance experience compliance should be demonstrated through brief past project descriptions (Attachment 4 – Mandatory and Point Rated Requirements, Experience, p. 37, 3rd paragraph).

Then please refer to the table at Mandatory Technical Evaluation Criteria (p.38), M3 whereby the requirement indicates that the bidder must identify one individual for each Key Technical Personnel position who meets the requirement defined in Appendix D of the Statement of Work in Annex A. Also, refer to item 3. Key Technical Personnel of the same section, which indicates

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at the introductory paragraph that the Bidder must identify one individual for each of the following positions…and demonstrate that each identified individual meets the mandatory requirements that are applicable to the labour category of the proposed individual as defined in minimum resource requirements table found in Appendix "D" of Annex "A".

Refer to Part 5 – Certifications, Attachment 6, Certifications Required with the Bid, 4 Education and Experience (p.64).

This certification makes reference to all of the information provided in the resumes and supporting material submitted with the bid has been verified to be true and accurate.
Are bidders to demonstrate a resource's past experience in support of Appendix "D" of Annex "A" through brief past project descriptions in accordance with the instructions at Attachment 4 or are resumes to be included in support of past experience as referred to at Part 5? Please clarify.

A100.
Bidders are free to demonstrate a resource's past experience in support of Appendix "D" of Annex "A" through brief past project descriptions in accordance with instructions at Attachment 4, so long as the brief past project descriptions provide sufficient substantiation that the resource meets the minimum category requirements of Appendix "D" of Annex "A" and include sufficient detail to support the evaluation according to the Point Rated Evaluation Criteria of Key Technical Personnel Section 2.2 Personnel. Otherwise, resumes should be provided.

Q101.
Please refer to Attachment 4 – Mandatory and Point Rated Criteria, 2.2.2 Key Technical Personnel, Proposal Evaluation (p.53), opening paragraph '…The experience for each team member within the past ten (10) years on projects of similar nature, size and complexity will be evaluated according to the criteria defined from a) to e) below. Also, refer to 3.1.2, 3.1.3, 3.1.4, 3.2.1. and 3.2.2 (p. 57 – 59) Corporate Experience Evaluation Criteria within the same evaluation grid at Attachment 4 where "relevant projects" are defined throughout each criteria.

Would the Crown please either provide a definition for the Key Technical Personnel evaluation criteria at Section 2.2.2 as it relates to projects of similar nature, size and complexity in order to adequately present the information within the past project descriptions or confirm that by providing supporting descriptive information related to the rated criteria defined from a) to e) as being projects of similar nature, size and complexity**.**

A101.
Supporting descriptive information related to the rated criteria defined from a) to e) is confirmed to be descriptive of projects of similar nature, size and complexity.

Q102.

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Refer to Attachment 4 – Mandatory and Point Rated Criteria, 3.0 Corporate Experience (p.59), 3.2 Corporate Experience of Proposed Team

It is the bidder's understanding that the intent of this Section is to demonstrate through past corporate project descriptions that project teams of similar capabilities have been provided by the bidder. Please confirm that the experience at 3.2 Corporate Experience of the Proposed Team is independent of the Key Technical Personnel being presented as part of Section 2.2.2.

A102.
Yes. The corporate experience of the bidder is independent of the key technical personnel outlined in section 2.2.2.

Q103.
Refer to Appendix D – Minimum Resource Requirements. Specifically:
• Lead System Architect (p. D2), item 1. …8 years within the last twelve
• Software Solution Architect (p. D2), item 1. …5 years within the last eight
• User Interface Analyst (p. D3), items, 1., 3., and 4., …xx years within the last xx
• Computer Network Defence Functional Analyst (p. D4), item 1. …5 years within the last eight
• Information Technology Security Analyst (p. D4), item 1. …5 years within the last eight
• Information Technology Security Certification and Accreditation Specialist (p. D4), items 1 and 2.,…xx years within the last xx
• Senior Programmer (p. D5), items 1 and 2…xx years within the last xx
• Quality Assurance Specialist (p. D7), item 1., …4 years within the last eight…

When stipulated 'within the last XX years', for bid response purposes for these key technical resources, please indicate whether the window should be by solicitation closing date (e.g. within the last 8 years = 2005–04-30) or the solicitation release date (e.g. within the last 8 years = 2005-02-18). Also, confirm that should it be 'by solicitation closing date' that for calculation purposes the original closing date will be the basis from which to make calculations regardless of whether or not an extension is granted. This will alleviate a bidder's necessity to recalculate project dates should one be granted.

A103.
The reason behind requesting experience recently acquired is minimizing skill fade. Having said that, when stipulating "within the last XX years", the number of years window is calculated by solicitation closing date.

Q104.
Question Q104 will be addressed in a subsequent solicitation amendment.

Q105.

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Please refer to Attachment 4, Mandatory and Point Rated Criteria, Section 2.2 Personnel, specifically criteria 2.2.2 Key Personnel requirement b) which states "Education and credentials of key members of proposed team (excluding the Project Manager)" with points being awarded at 0.25 Points for each key team member with a natural science, engineering, or mathematics university degree. Would the Crown consider amending this requirement to also award 0.25 points for a degree in Computer Science.

A105.

For Attachment 4, Mandatory and Point Rated Evaluation Criteria 2.2.2 b), in the scale statement "0.25 Points for each key team member with a natural science, engineering, or mathematics university degree;" insert "computer science" as qualifying for 0.25 points.

The amendments to the soliciation in this solicitation amendment contains this change.

Q106.

On p.38/76, the RFP defines the following roles:

Key Technical Personnel	Acro
Lead System Architect	LSA
Software Solution Architect	SSA
IT Security Analyst	ITSA
IT Security Certification and Accreditation Specialist	CAS

and says that the LSA and SSA may be the same person, and the ITSA and CAS may be the same person. RFP Attachment 4 §2.2 (pp.54/76 ff.) then describe how points will be awarded for the number of key team members having specific experience. Can we assume that if the LSA and SSA are the same person, then that individual's experience counts twice for evaluation purposes, and similarly that if the ITSA and CAS are the same person, then his/her experience counts twice? (Otherwise the same person cannot perform two roles without penalty.)

A106.

If one team member is proposed to fill the LSA and SSA positions and meets the requirements of both positions, than yes the proposed resources degree will be counted twice for the evaluation of this criteria. Similarly if one team member is proposed to fill the ITSA and CAS positions and meets the requirements of both positions, than yes the proposed resources degree will be counted twice for the evaluation of this criteria.

Q107 -Q109

Questions Q107 to Q109 will be addressed in a subsequent solicitation amendment.

Q110.

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In order to understand how the GFI tools may be best incorporated into ARMOUR, it is necessary to understand specifically what requirements they are able to satisfy. Specifically:

1. Which Attack Graph Generator requirements (starting at CS 59) are met by the MulVAL (w/DRDC extensions) tool to be made available to the contracting team.

2. Which Attack Graph Analyzer requirements (starting at CS 76) are met by the AssetRank tool to be made available to the contracting team.

3. Which Course of Action Analyzer requirements (starting at CS 114) are met by the COADS tool to be made available to the contracting team.

A110.
DRDC will be providing the AssetRank, COADS, SPADE and Graphwalker extension to the successful bidder only if those solutions are being proposed as part of the winning bidders solution. MulVAL is not DRDC technology and will not be provided to the winning bidder.

DRDC has mapped the GFI tools that it will be making available against the complete STS requirements. This mapping, and which tool maps to those requirements, has been posted to the ARMOUR RFP Sharepoint site.

Bidders that do not already have access to this Sharepoint site are requested to contact the Contracting Authority for the required login credentials to access the DRDC Sharepoint site.

Q111 - Q131.
Questions Q111 to Q131 will be addressed in a subsequent solicitation amendment.

Amendments to the Solicitation

1)	**Reference:**	Part 2, Section 7. Applicable and Reference Documentation on page 9 of 76 of the solicitation
	Delete:	"ARMOUR TD System Technical Specification Table v2.0, DRDC Ottawa, 18 January (Annex B)" and
	Insert:	"ARMOUR TD System Technical Specification Table v2.1, DRDC Ottawa, 9 March (Annex B)" to replace the above deletion.

2)	**Reference:**	Part 4, Section 2. Basis of Selection on page 13 of 76 of the solicitation
	Insert:	the following text after table, Example 1: "Total Point Scores will be calculated to 4 decimal places."

3)	**Reference:**	Attachment 3, Item 3. Mark-Up on Hardware and Software Components on page 35 of 76 of the solicitation
	Delete:	Item 3, in its entirety, and

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Insert: the following Item 3 to replace the above deletion:

"3. MARK-UP ON HARDWARE AND SOFTWARE COMPONENTS PROCURED UNDER THE OPTIONAL SERVICES REQUIREMENT: Mark - up on laid down costs of Hardware and Software Components as provided by 2.2 Hardware and Software in Annex C Basis of Payment.

TOTAL ESTIMATED COST OF HARDWARE AND SOFTWARE COMPONENTS PROCURED UNDER THE OPTIONAL SERVICES REQUIREMENT INCLUDING MARK-UP FOR EVALUATION PURPOSES:

$ 1,000,000.00(GST/HST/QST extra) * (1 + proposed Mark-up) = $_____(GST/HST/QST extra)"

4)   **Reference:**   Attachment 4, Point Rated Technical Criteria, Section 2 Management Evaluation Criteria, subsection 2.1 Project Management Plan (Draft PM001), item b) Work plan and schedule on page 49 of 76 of the solicitation

        Delete: "An additional 2 points will be awarded if the schedule provides accelerated delivery of the Basic Requirement in less than 42 months." and

        Insert: "An additional 2 points will be awarded if the schedule provides accelerated delivery of the Basic Requirement of 40 months or less." to replace the above deletion.

5)   **Reference:**   Attachment 4, Point Rated Technical Criteria, Section 2 Management Evaluation Criteria, criteria 2.2.2 b) on page 54 of 76 of the solicitation

        Delete: "**0.25** Points for each key team member with a natural science, engineering, or mathematics university degree;
0.25 Points for each key team member with an active IT Security certification." from the Scale column and

        Insert: "**0.25** Points for each key team member with a natural science, computer science, engineering, or mathematics university degree;
0.25 Points for each key team member with an active IT Security certification." to replace the above deletion.

6)   **Reference:**   Attachment 4, Point Rated Technical Criteria, Section 3 Corporate Experience Evaluation Criteria on page 56 of 76 of the solicitation

        Delete: "Note that Bidders must certify successful completion of the projects included for evaluation by certifying client acceptance of the project as outlined in Attachment 5 (Certifications Required With The Bid)" and

        Insert: "Note that Bidders must certify successful completion of the projects included for evaluation by certifying client acceptance of the project as outlined in Attachment 6 (Certifications Required With The Bid)." to replace the above deletion.

7)   **Reference:**   Section 1.10 on page 9 of 19 of the Annex A, Statement of Work

        Delete: Section 1.10, in its entirety, and

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Insert: the following to replace the above deletion:

"**1.10 Available Data Sources and Effectors**

Some Data Sources and Effectors may already be available on the ARMOUR TD project target demonstration network (an operational subset of DREnet). The use of the Available Data Sources and Effectors listed below is not mandatory.

For Data Sources and Effectors used in the Contractor solution, the Contractor may use the existing operational products for the operational Demonstrations and are not required to be delivered as part of the Demonstrations. These devices will only be available as part of the Demonstrations being conducted on the DREnet and are not available for any other testing, demonstrations or for evaluation purposes. It is the responsibility of the Contractor to provide all items needed to meet the requirements of the ARMOUR TDP, including but not limited to: test data, equivalent products, lab systems or simulations. It is also the responsibility of the Contractor to ensure that their solution can be packaged and demonstrated without any connectivity to these operations devices.

The Available Data Sources and Effectors that are available to be integrated in the ARMOUR TD project include:

a) Sourcefire Intrusion Prevention System
b) Symantec Endpoint Protection
c) McAfee Firewall
d) CheckPoint Firewall
e) McAfee Web Gateway
f) DB Protect
g) NetScout

While the Contractor is encouraged to leverage the available Data Sources and Effectors, it is not mandatory to do so. The ARMOUR interfaces to these products, or others that are chosen, must be standardized to enable Data Sources and Effectors to be interchanged with other comparable solutions."

8)   **Reference:**   Annex C, Basis of Payment, on page 69 of 76 of the solicitation
    Delete: 2.2 HARDWARE AND SOFTWARE of Annex C, in its entirety, and
    Insert: the following to replace the above deletion:

"**2.2**   **Hardware and Software:** at actual laid down cost, delivered to DRDC Ottawa, with all discounts applied, without markup

Est.: $ _____

All licenses are to be perpetual licenses for the latest software version at the time of purchase."