

**RETURN BIDS TO:**  
**RETOURNER LES SOUMISSIONS À:**  
**Bid Receiving Public Works and Government  
Services Canada/Réception des soumissions**  
**Travaux publics et Services gouvernementaux**  
**Canada**  
**1713 Bedford Row**  
**Halifax, N.S./Halifax, (N.É.)**  
**B3J 1T3**  
**Bid Fax: (902) 496-5016**

**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**

|   |  |
|---|--|
| <b>Title - Sujet</b><br>PROGRAMMING WORK  |  |
| <b>Solicitation No. - N° de l'invitation</b><br>W7707-135657/A  | <b>Date</b><br>2013-01-31  |
| <b>Client Reference No. - N° de référence du client</b><br>W7707-13-5657  |  |
| <b>GETS Reference No. - N° de référence de SEAG</b><br>PW-\$HAL-220-8906  |  |
| <b>File No. - N° de dossier</b><br>HAL-2-69336 (220)  | <b>CCC No./N° CCC - FMS No./N° VME</b>                                     |
| <b>Solicitation Closes - L'invitation prend fin</b><br><b>at - à 02:00 PM</b><br><b>on - le 2013-02-19</b>  | <b>Time Zone</b><br><b>Fuseau horaire</b><br>Atlantic Standard Time<br>AST |
| <b>F.O.B. - F.A.B.</b><br><b>Plant-Usine:</b> <input checked="" type="checkbox"/> <b>Destination:</b> <input type="checkbox"/> <b>Other-Autre:</b> <input type="checkbox"/>   |  |
| <b>Address Enquiries to: - Adresser toutes questions à:</b><br>Dunphy, Nancy  | <b>Buyer Id - Id de l'acheteur</b><br>hal220                               |
| <b>Telephone No. - N° de téléphone</b><br>(902) 496-5481 ( )  | <b>FAX No. - N° de FAX</b><br>(902) 496-5016                               |
| <b>Destination - of Goods, Services, and Construction:</b><br><b>Destination - des biens, services et construction:</b><br>DEPARTMENT OF NATIONAL DEFENCE<br>DRDC ATLANTIC<br>9 GROVE STREET<br>DARTMOUTH<br>NOVA SCOTIA<br>B3A 3C5<br>Canada |  |

**Instructions: See Herein**

**Instructions: Voir aux présentes**

**Vendor/Firm Name and Address**  
**Raison sociale et adresse du**  
**fournisseur/de l'entrepreneur**

**Issuing Office - Bureau de distribution**  
Acquisitions  
1713 Bedford Row  
Halifax, N.S./Halifax, (N.É.)  
B3J 3C9

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

| Item<br>Article | Description  | Dest.<br>Code<br>Dest. | Inv.<br>Code<br>Fact. | Qty<br>Qté | U. of I.<br>U. de D. | Unit Price/Prix unitaire<br>FOB/FAM |    | Plant/Usine | Delivery Req.<br>Livraison Req. | Del. Offered<br>Liv. offerte |
|-----------------|--|------------------------|-----------------------|------------|----------------------|-------------------------------------|----|-------------|---------------------------------|------------------------------|
| 1               | Programming Work.<br>Open source HLA Agile<br>C++Implementation, packaging and<br>testing, as per Statement Of Work. | W7707                  | W7707                 | 1          | SU                   | XXXXXXXXXXXX                        | \$ |             | SEE HEREIN                      |                              |

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**Title: Open source HLA Agile C++ Implementation, release packaging, and testing.**

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Solicitation No. - N° de l'invitation

W7707-135657/A

Amd. No. - N° de la modif.

Buyer ID - Id de l'acheteur

hal220

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

File No. - N° du dossier

CCC No./N° CCC - FMS No/ N° VME

W7707-13-5657

HAL-2-69336

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**List of Annexes:**

|           |                    |
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## **PART 1 - GENERAL INFORMATION**

### **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: includes the certifications to be provided;
- Part 6 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 Annexes include the Statement of Work, Basis of Payment and Board of Directors:

### **2. Summary**

Defence Research and Development Canada - Atlantic (DRDC Atlantic) of the Department of National Defence (DND) has a requirement for the implementation of existing designs for C++ tools in the HLAGile open source project, as well as review and testing of the project's High Level Architecture (HLA) - to -Distributed Interactive Simulation (DIS) gateway, and packaging of existing libraries/documentation for end users. See Annex "A" Statement of Work for full details.

Completion date of this project is March 29, 2013 and has a maximum budget of \$50,000.00 plus applicable taxes.

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

This procurement is not subject to the Controlled Goods Program

### **3. Debriefings**

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

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## PART 2 - BIDDER INSTRUCTIONS

### 1. Standard Instructions, Clauses and Conditions

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

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

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

### 2. Submission of Bids

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

### 3. Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than 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 questions or may request that the Bidder do so, so that the proprietary nature of the question is eliminated, and the enquiry can be answered with copies to all bidders. Enquiries not submitted in a form that can be distributed to all bidders may not be answered by Canada.

### 4. Applicable Laws

Any resulting contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in the Province of Nova Scotia.

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

### 5. Basis for Canada's Ownership of Intellectual Property

DRDC has determined that any intellectual property rights arising from the performance of the Work under the resulting contract will belong to Canada, on the following grounds: 6.4.2 .

## 6. Maximum Funding

The maximum funding available for the Contract resulting from the bid solicitation is **\$50,000.00** (Goods and Services Tax or Harmonized Sales Tax extra, as appropriate). Bids valued in excess of this amount will be considered non-responsive. This disclosure does not commit Canada to pay the maximum funding available.

## PART 3 - BID PREPARATION INSTRUCTIONS

### 1. Bid Preparation Instructions

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

Section I: Technical Bid (2 hard copies)

Section II: Financial Bid (1 hard copy)

Section III: Certifications (1 hard copy)

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

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

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

In April 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to incorporate environmental considerations into the procurement process Policy on Green Procurement

(<http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html>). To assist Canada in reaching its objectives, bidders are encouraged to :

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

### Technical Section I: Technical Bid

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

The technical bid should 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.

**Section I: Management Bid**

In their management bid, bidders must describe their capability and experience, the project management team and provide client contact(s).

**Section II: Financial Bid**

Bidders must submit their financial bid in accordance with the Annex "B". The total amount of Goods and Services Tax or Harmonized Sales Tax must be shown separately, if applicable.

**Section III: Certifications**

Bidders must submit the certifications required under Part 5.

**PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION****1. Evaluation Procedures**

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

**1.1 Technical Evaluation**

Bidders shall include a "Cross Reference" index in their Technical/Management proposal that identifies the paragraphs and page numbers associated with each of the following point rated criteria.

**1.1.1 Point Rated Criteria**

Technical/Management proposals will be evaluated in accordance with the following POINT RATED CRITERIA. It is suggested you address these POINT RATED CRITERIA in sufficient depth in your proposal.

**TECHNICAL PROPOSAL****300 POINTS MAX / 210 POINTS MIN**

- |   |            |
|---|------------|
| (a) Demonstrated understanding of scope and objectives        | <b>40</b>  |
| (b) Demonstrated working knowledge and experience with:       | <b>135</b> |
| a. Java Programming Language (Java SE 1.5+)                   | (20)       |
| b. C++ Programming Language                                   | (30)       |
| c. High Level Architecture 1516, and DMSO 1.3NG               | (20)       |
| d. Real Time Platform Reference (v2) federation object model. | (20)       |
| e. HLA federate development for HLA 1516 and DMSO 1.3NG       | (20)       |



- f. MaK, Pitch, and Portico Run Time Infrastructures (10)  
 g. Demonstrated experience with Open Source Projects (15)

- (c) Proposed work feasibility, approach and methodology 80  
 (d) Recognition of direct as well as peripheral problems and solutions proposed 20  
 (e) Adequacy of level of effort, work plan and schedule, deliverables 25

## MANAGEMENT PROPOSAL

**50 POINTS MAX / 35 POINT MIN**

- (a) proposed management of the project and the demonstrated qualifications and experience of the project manager, including: position within the organization, relevant experience, education, etc.; demonstrated ability to control costs. 5  
 (b) key personnel capability - demonstrated relevant experience, qualifications and competence proven by similar and/or related work. 20  
 (c) company capability including subcontractors, if applicable - relevant experience/competence proven by similar or related work, and resource capability, risk of non-performance, commitment to this field of work. 10  
 (d) adequacy of planned team organization, including availability of team members and backup capability, reporting structure, management of project, subcontracts and capability to carry out the project within the time frame allotted. 15

### 1.2 Basis of Selection

1. To be considered responsive, a bid must:
- (a) meet all the mandatory requirements of the solicitation; and
  - (b) obtain the required minimum of 70% of the points for both the technical and management criteria specified in the solicitation, which are subject to point rating.
2. Bids not meeting (a) or (b) above will be given no further consideration. The responsive bid with the highest overall points within the stated budget will be recommended for award of a contract. In the case of a tie the bid with the highest technical proposal will be recommended.

## PART 5 - CERTIFICATIONS

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

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

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

- 1.1 Bidders should provide, with their bid or promptly thereafter, a complete list of names of all individuals who are currently directors of the Bidder - **SEE Annex "C"**. If such a list has not been received by the time the evaluation of bids is completed, the Contracting Authority will inform the Bidder of a time frame within which to provide the information. Bidders must submit the list of directors before contract award, failure to provide such a list within the required time frame will render the bid non-responsive.

The Contracting Authority may, at any time, request that a Bidder provide properly completed and Signed Consent Forms (Consent to a Criminal Record Verification form - PWGSC-TPSGC 229) (<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/formulaires-forms-eng.html>) for any or all individuals named in the aforementioned list within a specified delay. Failure to provide such Consent Forms within the delay will result in the bid being declared non-responsive.

## 2. Certifications Required with the Bid

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

### 2.1 Federal Contractor's Program Certification

Suppliers who are subject to the Federal Contractors Program (FCP) and have been declared ineligible contractors by Human Resources and Skills Development Canada (HRSDC) are no longer eligible to receive federal government contracts over the threshold for solicitation of bids as set out in the Government Contracts Regulations. Suppliers may be declared ineligible contractors either as a result of a finding of non-compliance by HRSDC, or following their voluntary withdrawal from the FCP for a reason other than the reduction of their workforce to less than 100 employees. Any bids from ineligible contractors, including a bid from a joint venture that has a member who is an ineligible contractor, will be declared non-responsive.

The Bidder, or, if the Bidder is a joint venture the member of the joint venture, certifies its status with the FCP, as follows:

The Bidder or the member of the joint venture

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

Further information on the FCP is available on the HRSDC Web site.

### 2.2 Former Public Servant Certification

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

## Definitions

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

- a. an individual;
- b. an individual who has incorporated;
- c. a partnership made of former public servants; or
- d. a sole proprietorship or entity where the affected individual has a controlling or major interest in the entity.

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

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

### Former Public Servant in Receipt of a Pension

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

If so, the Bidder must provide the following information:

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

### Work Force Reduction Program

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

If so, the Bidder must provide the following information:

- a. name of former public servant;
- b. conditions of the lump sum payment incentive;
- c. date of termination of employment;
- d. amount of lump sum payment;
- e. rate of pay on which lump sum payment is based;

f. period of lump sum payment including start date, end date and number of weeks;  
 g. number and amount (professional fees) of other contracts subject to the restrictions of a work force reduction program.

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

#### Certification

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

### 2.3 Canadian Content Certification

*SACC Manual* clause A3050T (2010-01-11) Canadian Content Definition

This procurement is limited to Canadian services.

The Bidder certifies that:

( ) the service offered is a Canadian service as defined in paragraph 2 of clause A3050T.

### 2.4 Status and Availability of Resources

Status and Availability of Resources (2010-08-16) A3005T

### 2.5 Education and Experience

Education and Experience (2010-08-16) A3010T

## PART 6 - FINANCIAL AND OTHER REQUIREMENTS

### 1. Financial Capability

*Manual SACC* clause A9033T (2012-07-16) Financial Capability

### 2. Insurance Requirements

Insurance (2008-05-12) G1005C

## PART 7 - RESULTING CONTRACT CLAUSES

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

### 1. Statement of Work

Work shall be performed in accordance with Annex "A" and generally in accordance with the Contractor's technical proposal dated\_\_\_\_\_.

## 2. Standard Clauses and Conditions

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

### 2.1 General Conditions

2035 (2012-11-19), General Conditions - Higher Complexity - Services, apply to and form part of the Contract.

## 3. Term of Contract

### 3.1 Delivery Date

All the deliverables must be received on or before March 29, 2013.

### 4.1 Contracting Authority

The Contracting Authority for the Contract is:

**Nancy Dunphy**  
**Supply Officer**  
**Public Works and Government Services Canada**  
**Acquisitions Branch**  
**Telephone: 902-496-5481**  
**Facsimile: 902-496-5016**  
**E-mail address: nancy.dunphy@pwgsc-tpsgc.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.

### 4.2 Project Authority

The Project Authority for the Contract shall be identified in the resultant contract.

Name: \_\_\_\_\_  
 Title: \_\_\_\_\_  
 Organization: \_\_\_\_\_  
 Address: \_\_\_\_\_

Telephone: \_\_\_\_-\_\_\_\_-\_\_\_\_\_  
 Facsimile: \_\_\_\_-\_\_\_\_-\_\_\_\_\_  
 E-mail address: \_\_\_\_\_

The Project 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 Project Authority; however, the Project 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.

#### 4.3 Contractor's Representative (BIDDER TO FILL IN)

Name \_\_\_\_\_:

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

Email: \_\_\_\_\_

### 5. Payment

#### 5.1 Basis of Payment

The Contractor shall be paid its costs reasonably and properly incurred in the performance of this work in accordance with Annex "B" attached.

#### 5.2 Limitation of Expenditure

Canada's total liability to the Contractor under the Contract must not exceed \$\_\_\_\_\_. Customs duties are included *and* Goods and Services Tax or Harmonized Sales Tax is extra, if applicable.

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

when it is 75 percent committed, or

four (4) months before the contract expiry date, or

as soon as the Contractor considers that the contract funds provided are inadequate for the completion of the Work, whichever comes first.

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

#### 5.3 Terms of Payment

##### 5.3.1 Single Payment

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

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

#### **5.4 Time Verification**

C0711C Time Verification (2008-05-12)

### **6. Invoicing Instructions**

1. The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions. Invoices cannot be submitted until all work identified in the invoice is completed.
2. Invoices must be distributed as follows:
  - (a) The original and one (1) copy must be forwarded to the address shown on page 1 of the Contract for certification and payment.
  - (b) One (1) copy must be forwarded to the Contracting Authority identified under the section entitled "Authorities" of the Contract.
  - (c) one (1) copy must be forwarded to the consignee.

### **7. Certifications**

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

#### **7.2 Canadian Content Certification**

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

### **8. Applicable Laws**

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in the Province of Nova Scotia.

### **9. Priority of Documents**

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

- (a) the Articles of Agreement;
- (b) 2040 (2012-07-16) General Conditions - Research and Development
- (c) Annex "A", Statement of Work
- (d) Annex "B", Basis of Payment;
- (e) the Contractor's bid dated \_\_\_\_\_

## **10. Defence Contract**

*SACC Manual* clause A9006C (2012-07-16) Defence Contract

## **11. Insurance**

The Contractor is responsible for deciding if insurance coverage is necessary to fulfill its obligation under the Contract and to ensure compliance with any applicable law. Any insurance acquired or maintained by the Contractor is at its own expense and for its own benefit and protection. It does not release the Contractor from or reduce its liability under the Contract.

## **12. Inspection and Acceptance**

The Project Authority is the Inspection Authority. All reports, deliverable items, documents, goods and all services rendered under the Contract are subject to inspection by the Inspection Authority or representative. Should any report, document, good or service not be in accordance with the requirements of the Statement of Work and to the satisfaction of the Inspection Authority, as submitted, the

Inspection Authority will have the right to reject it or require its correction at the sole expense of the Contractor before recommending payment.

## **13. Canada to Own Intellectual Property Rights in Foreground Information**

*SACC Clause* K3410C (2008-12-12) Canada to Own Intellectual Property Rights in Foreground Information



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**ANNEX "A"****STATEMENT OF WORK**

**Work shall be performed in accordance with the following information:**

**Title: Open source HLA Agile C++ Implementation, release packaging, and testing.**

**Requirement**

Implementation of existing designs for C++ tools in the HLA Agile open source project, as well as review and testing of the project's High Level Architecture (HLA) - to -Distributed Interactive Simulation (DIS) gateway, and packaging of existing libraries/documentation for end users.

Please refer to Annex A for the Statement of Work (SOW)

**Deliverables**

In addition to the return of all non-expended items (equipment, software, books, etc.) acquired by the contractor in support of this requirement and claimed for against the contract, the deliverables shall be:

1. Implementation of the C++ HLA Abstraction layer.
2. Adding C++ library code generation to the existing FOM library code generation software.
3. Design and implementation of a simple C++ test federation to demonstrate use of the code new C++ code from deliverables 1 & 2.
4. A basic developer's guide for the C++ code to accompany the sample federation in deliverable 3. This guide will become part of the documentation of the HLA Agile project.
5. Review of the existing HLA-DIS bridge code base.
6. Informal report for deliverable 5.
7. A simple RPR2 HLA federate that moves a ship over a set course.
8. Testing of the existing HLA-DIS bridge to connect the HLA federate from deliverable 7 to a DIS simulation.
9. Bug fixes and feature implementations to the OpenDIS and HLA Agile projects as necessary complete the other contract deliverables.
10. Source code checked-into the HLA Agile and OpenDIS repositories as appropriate, or when not possible, checked into the Maritime Command and Control Concept Development (MC2CD) group's Subversion (SVN) repository.
11. A contractor report providing lessons learned during the project and suggesting areas for further development.

Note: Only libraries that are free, open source, and are licensed under a version of the Lesser Gnu Public License (LPGL) shall be used in this project.

## **Report Standard and Format**

As directed by the Project Authority, DRDC Atlantic requires one (1) electronic copy of all reports mentioned in the deliverables section.

Reports will be to a standard acceptable to the Project Authority. Should a report not be in accordance with the requirement of the work, the Project Authority shall have the right to reject it or require its correction.

The Project Authority will provide the Contractor with a Word template to be used Contract Report and a PDF file of the "Requirements for DRDC Atlantic Contractor Reports". The contractor is responsible for delivering a draft copy of the Contract Report to the Project Authority for review. This review may require the contractor to make changes as directed by the Project Authority. Also, this review will help to ensure the report is in keeping with contract requirements and that DND interests, including security, are safeguarded. The report for deliverable 11 shall comply with the standards set out in the DRDC Atlantic guide "Requirements for DRDC Atlantic Contractor Reports".

## **Travel and Living**

Any anticipated travel and living expenses anticipated by the bidder must be included in the proposal.

## **Contractor Personnel**

All contractor personnel shall be named in the contract. All proposed changes in contractor personnel shall be addressed by the contractor to Public Works and Government Services Canada who in turn will request DRDC Atlantic's approval.

## **Government Furnished Equipment (GFE)**

DRDC Atlantic shall provide a Microsoft Word template for the contractor report (deliverable 11) along with its supporting documentation.

## **DRDC Atlantic Support, Facilities and Responsibilities**

The SA will make every effort to answer questions and provide review and feedback in a timely manner. Other DRDC Atlantic personnel involved in distributed simulation and the HLA Agile project will also be available to consult from time to time during the project.

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DRDC Atlantic will also test the HLA-DIS gateway against VBS2 and JSAF if requested by the contractor, although VBS2 and JSAF shall not be provided for contractor personnel to use.

## Control Procedures

Inspection shall be by and to the satisfaction of the Director General, Defence R&D Canada - Atlantic

Progress will be monitored through brief monthly written reports submitted with progress claims and regular consultations between the contractor and the Project Authority. The work shall be deemed 100% complete upon receipt and approval of all deliverables. The contractor must allow time for editorial review of the draft reports by the Project Authority and agree to make minor editorial changes to the reports, and to deliver the report, at no additional cost. Upon receipt of the Final Report and other deliverables, and upon receipt of a Claim for Holdback, the holdback will be released.

Acceptance of the C++ library shall be based upon periodic design reviews between the contractor, SA, and other DRDC subject matter experts. The intention is that the implementation will be vetted while the work is in progress, and should be accepted on completion with changes as suggested during the review process. The details of this process shall be agreed upon by the contractor and the SA before beginning work on the design.

## Scope:

The objectives of this contract are to build upon previous work on the HLA agile code base by implementing the C++ designs for libraries and the HLA Abstraction layer. Also, release packages shall be created for the existing software tools developed for Java.

## Background

The Maritime Command & Control Concept Development (MC2CD) group at DRDC Atlantic provides technical support and software development regarding High Level Architecture (HLA) standards and technologies, and is the HLA Centre of Excellence within the Department of National Defence (DND).

Over several years of HLA federate development within the MC2CD group, and in support to other DND entities we have made extensive use of open source software libraries to reduce cost, and increase the robustness of simulation software. Unfortunately, open source tools to support the core activities of HLA federate development are few.

The MC2CD group has developed many tools in-house to make development easier. It is our hope that by moving these tools into publicly available open-source projects we can both broaden

their use and create new opportunities for collaboration, thus leveraging more development effort than we could manage ourselves.

As part of our efforts to simplify federate development we have created a design concept for a multi-layered federate development framework. The framework design consists of four distinct layers, two of which have been implemented by a previous contract, although this contract will be the first real exercise of the code base.

The HLA abstraction layer forms the backbone of the code and insulates the federate developer from inconsistencies in vendor RTI implementation, and as much as possible, differences in the API for various versions of HLA. This layer has been implemented previously in Java, and design work has been done for the C++ version.

The Federation layer design includes the idea of a FOM library for any particular FOM, which is generated by a tool that is also part of the HLA Agile project. A FOM library under this design is generated code that handles all code-level representation of the objects, interactions, and data types found in an IEEE 1516 extensible mark-up language (XML) format FOM file.

The draft design document is available on request, and bidders may also view the current source code by joining the HLA Agile project on SourceForge.

## **Requirement**

1. Implement the existing design for the C++ abstraction layer
2. Based on the existing FOM library design for C++, extend the existing FOM Generator tool to generate C++ libraries
3. Design and implementation of a simple C++ test federation to demonstrate use of the code new C++ code
4. A basic developer's guide for the C++ code to accompany the sample federation.
5. Review of the existing HLA-DIS bridge code base.
6. Create a simple RPR2 HLA federate that moves a ship over a set course.
7. Create a test federation using the simple federate from requirement 6 and an existing DIS.
8. Produce documentation as detailed in the Deliverables section of this RFP.
9. Bug fixes and feature implementations for the HLA Agile and OpenDIS SourceForge project as required to complete the work.

**ANNEX "B"****BASIS OF PAYMENT****Prices shall be submitted in the following format:**

1. Labour: For each individual and/or labour category to be employed on the project, indicate the proposed hourly rate (including overhead, excluding profit).

2. Other Direct Charges to be paid at cost without mark-up:

Equipment: Identify the items required to complete the work and identify the pricing basis inclusive of customs duty. These items will be delivered to Canada upon completion of the project.

Materials, Supplies, Components: Indicate general categories and the pricing basis. Indicate whether the items are likely to be used or consumed during the course of the Work.

Other Charges: Identify any other direct charges anticipated such as long distance communication and rentals and provide the estimated costs and relevance to the proposed work.

3. Subcontracts: Identify potential subcontractors and provide the same cost breakdown information detailed herein.

4. Travel and Living -

The Contractor will be reimbursed its authorized travel and living expenses reasonably and properly incurred in the performance of the Work, at cost, without any allowance for profit and/or administrative overhead, in accordance with the meal, private vehicle and incidental expenses provided in Appendices B, C and D of the Treasury Board Travel Directive, <http://www.njc-cnm.gc.ca/directive/travel-voyage/index-eng.php>, and with the other provisions of the directive referring to "travellers", rather than those referring to "employees". All travel must have the prior authorization of the Project Authority. All payments are subject to government audit.

Total Estimated Cost \$ \_\_\_\_\_ exclusive of applicable taxes

Solicitation No. - N° de l'invitation

W7707-135657/A

Amd. No. - N° de la modif.

File No. - N° du dossier

HAL-2-69336

Buyer ID - Id de l'acheteur

hal220

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

W7707-13-5657

CCC No./N° CCC - FMS No/ N° VME

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## **Annex C Board of Directors**

**COMPLETE LIST OF EACH INDIVIDUAL WHO ARE CURRENTLY DIRECTORS OF THE BIDDER.**

**NOTE TO BIDDERS  
WRITE DIRECTOR'S SURNAMES AND GIVEN NAMES IN BLOCK LETTERS**