

**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

Title - Sujet ASSESSMENT OF ALTERNATIVE FUELS	
Solicitation No. - N° de l'invitation W7707-145682/A	Date 2013-07-23
Client Reference No. - N° de référence du client W7707-14-5682	
GETS Reference No. - N° de référence de SEAG PW-\$HAL-208-9041	
File No. - N° de dossier HAL-3-71062 (208)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2013-08-13	Time Zone Fuseau horaire Atlantic Daylight Saving Time ADT
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input checked="" type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: LeBlanc, JoAnne	Buyer Id - Id de l'acheteur hal208
Telephone No. - N° de téléphone (902) 496-5010 ()	FAX No. - N° de FAX (902) 496-5016
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: DEPARTMENT OF NATIONAL DEFENCE DRDC ATLANTIC 9 GROVE STREET DARTMOUTH NOVA SCOTIA B3A 3C5 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

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

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Buyer ID - Id de l'acheteur

hal208

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

W7707-14-5682

CCC No./N° CCC - FMS No/ N° VME

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PART 1 - GENERAL INFORMATION

1. Security Requirement

There is no security requirement associated with this bid solicitation.

2. Statement of Work

The work will be performed as per the Annex "A" - Statement of Work, attached herein.

3. Debriefings

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

PART 2 - BIDDER INSTRUCTIONS

1. Standard Instructions, Clauses and Conditions

All instructions, clauses and conditions identified in the bid solicitation by number, date and title are set out in the *Standard Acquisition Clauses and Conditions Manual*

(<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

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

The 2003 (2013-06-01) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

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

Delete: sixty (60) days

Insert: ninety (90) days

2. Submission of Bids

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

Due to the nature of the bid solicitation, bids transmitted by facsimile to PWGSC will not be accepted.

3. Former Public Servant

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

Former Public Servant in Receipt of a Pension

As per the above definitions, is the Bidder a FPS in receipt of a pension? **Yes () No ()**

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

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

By providing this information, Bidders agree that the successful Bidder's status, with respect to being a former public servant in receipt of a pension, will be reported on departmental websites as part of the published proactive disclosure reports in accordance with Contracting Policy Notice: 2012-2 and the Guidelines on the Proactive Disclosure of Contracts.

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 Applicable Taxes.

4. Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than six (6) 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.

5. Applicable Laws

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

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 (two copies)
 Section II: Financial Bid (one copy)
 Section III: Certifications (one copy) **Bidder must submit the certifications required under Part 5.**

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 should:

- 1) use 8.5 x 11 inch (216 mm x 279 mm) paper containing fibre certified as originating from a sustainably-managed forest and 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.

Section I: Technical Bid

In their technical bid, bidders should explain and demonstrate how they propose to meet the requirements and how they will carry out the Work.

Section II: Financial Bid

Bidders must submit their financial bid in accordance with the Basis of Payment. The total amount of Applicable Taxes must be shown separately.

Section III: Certifications

Bidders must submit the certifications required under Part 5.

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

1. Evaluation Procedures

- (a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria.
- (b) An evaluation team composed of representatives of Canada will evaluate the bids.
- (c) The evaluation team will determine first if there are three (3) or more bids with a valid Canadian Content certification. In that event, the evaluation process will be limited to the bids with the certification; otherwise, all bids will be evaluated. If some of the bids with a valid certification are declared non-responsive, or are withdrawn, and less than three responsive bids with a valid certification remain, the evaluation will continue among those bids with a valid certification. If all bids with a valid certification are subsequently declared non-responsive, or are withdrawn, then all the other bids received will be evaluated.

1.1 Technical Evaluation

Point Rated Technical Criteria are listed herein in Annex "D".

2. Basis of Selection

2.1 Highest Rated Within Budget

1. To be considered responsive, a bid must:

- (a) comply with all the requirements of the bid solicitation;
- (b) meet all mandatory technical evaluation criteria; and
- (c) obtain the required minimum of 70 percent overall of the points for the technical evaluation criteria which are subject to point rating. The rating is performed on a scale of 200 points.

2. Bids not meeting (a) or (b) or (c) will be declared non responsive.. The responsive bid with the highest number of points will be recommended for award of a contract, provided that the total evaluated price does not exceed the budget available for this requirement. The maximum funding available for the Contract resulting from the bid solicitation is \$35,000.00 (Goods and Services Tax or Harmonized Sales Tax extra, as appropriate). This disclosure does not commit Canada to pay the maximum funding available. 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 and documentation to be awarded a contract.

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

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

1. Mandatory Certifications Required Precedent to Contract Award

1.1 Code of Conduct and Certifications - Related documentation

By submitting a bid, the Bidder certifies that the Bidder and its affiliates are in compliance with the provisions as stated in Section 01 Code of Conduct and Certifications - Bid of Standard Instructions 2003. The related documentation therein required will assist Canada in confirming that the certifications are true.

1.2 Federal Contractors Program for Employment Equity - Bid Certification

By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "FCP Limited Eligibility to Bid" list (http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/list/inelig.shtml) available from Human Resources and Skills Development Canada (HRSDC) - Labour's website.

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

2. Additional Certifications Precedent to Contract Award

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

2.1 Canadian Content Certification

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

2.1.2 This procurement is conditionally limited to Canadian services.

Subject to the evaluation procedures contained in the bid solicitation, bidders acknowledge that only bids with a certification that the service offered is a Canadian service, as defined in clause A3050T, may be considered.

Failure to provide this certification completed with the bid will result in the service offered being treated as a non-Canadian service.

The Bidder certifies that:

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

Signature

Date

PART 6 - RESULTING CONTRACT CLAUSES

1. Security Requirement

There is no security requirement applicable to this Contract.

2. Statement of Work

The Contractor must perform the Work in accordance with the Statement of Work at Annex "A".

3. 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.

3.1 General Conditions

3.1.1 SACC Manual Clause 2040 (2013-06-27), General Conditions - Research & Development apply to and form part of the Contract.

3.1.2 SACC Manual clause K3410C (2008-12-12) - Canada to own Intellectual Property Rights in Foreground Information applies to and forms part of the Contract.

If requested by Canada, during and after the Contract, the Contractor must provide a written permanent waiver of moral rights, as defined in the Copyright Act, R.S., 1985, c. C-42, from every author that contributes to any Foreground Information subject to copyright protection that is a deliverable to Canada under the Contract. If the Contractor is an author of the Foreground Information, the Contractor permanently waives the Contractor's moral rights in that Foreground Information.

4. Term of Contract

4.1 Period of the Contract

The work will be performed from date of contract award, and completed by January 1st, 2014.

5. Authorities

5.1 Contracting Authority

The Contracting Authority for the Contract is:

JoAnne LeBlanc
Supply Officer
Public Works and Government Services Canada
Acquisitions Branch
1713 Bedford Row
Halifax, Nova Scotia B3J 3C9
Telephone: 902-496-5010
Facsimile: 902-496-5016
Email: JoAnne.LeBlanc3@pwgsc.gc.ca

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

5.2 Project Authority

The Project Authority for the Contract is:

Will be completed upon contract award.

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.

5.3 Contractor's Representative (to be completed by supplier)

Contractor Contact Name: _____
 Business Name: _____
 Telephone: _____
 Email: _____
 Procurement Business Number: _____

6. Proactive Disclosure of Contracts with Former Public Servants

By providing information on its status, with respect to being a former public servant in receipt of a Public Service Superannuation Act (PSSA) pension, the Contractor has agreed that this information will be reported on departmental websites as part of the published proactive disclosure reports, in accordance with Contracting Policy Notice: 2012-2 of the Treasury Board Secretariat of Canada.

7. Payment

7.1 Basis of Payment

The Contractor will be reimbursed for the costs reasonably and properly incurred in the performance of the work, as determined in accordance with the prices quoted in accordance with Annex B, Basis of Payment.

7.2 Limitation of Expenditure

1) Canada's total liability to the Contractor under the Contract must not exceed \$_____ and Goods and Services Tax or Harmonized Sales Tax is extra, if applicable.

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

- (a) when it is 75 percent committed, or
- (b) four (4) months before the contract expiry date, or
- (c) as soon as the Contractor considers that the contract funds provided are inadequate for the completion of the Work,

whichever comes first.

3) 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.

7.3 Method of Payment - Progress Payments

1. Canada will make milestone payments in accordance with the Schedule of Milestones detailed in the Contract and the payment provisions of the Contract, up to **90 percent** of the amount claimed and approved by Canada if:

(a) an accurate and complete claim for payment using form PWGSC-TPSGC 1111, Claim for Progress Payment, and any other document required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract;

(b) the total amount for all milestone payments paid by Canada does not exceed total amount to be paid under the Contract;

(c) all the certificates appearing on form PWGSC-TPSGC 1111 have been signed by the respective authorized representatives;

(d) all work associated with the milestone and as applicable any deliverable required have been completed and accepted by Canada.

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

8. Invoicing Instructions - Progress Claims

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

Each claim must show:

- (a) all information required on form PWGSC-TPSGC 1111;
- (b) all applicable information detailed under the section entitled "Invoice Submission" of the general conditions;
- (c) a list of all expenses;
- (d) expenditures plus pro-rated profit or fee;
- (e) the description and value of the milestone claimed as detailed in the Contract.

Each claim must be supported by:

- (a) a copy of the invoices, receipts, vouchers for all direct expenses, travel and living expenses;
- (b) a copy of the monthly progress report, if applicable.

2. Goods and Services Tax or Harmonized Sales Tax (GST/HST), as applicable, must be calculated on the total amount of the claim before the holdback is applied. At the time the holdback is claimed, there will be no GST/HST payable as it was claimed and payable under the previous claims for progress payments.

3. The Contractor must prepare and certify one original and two (2) copies of the claim on form PWGSC-TPSGC 1111, and forward it to the Project Authority identified under the section entitled "Authorities" of the Contract for appropriate certification after inspection and acceptance of the Work takes place.

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

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

9. Certifications

9.1 Compliance

Compliance with the certifications and related documentation 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, provide the related documentation or if 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.

9.2 SACC Manual Clauses

SACC Manual Clause A3060C (2008-05-12) Canadian Content Certification.

10. Applicable Laws

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

11. Priority of Documents

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

- (a) the Articles of Agreement;
- (b) the general conditions:
 - 2040 (2013-06-27) General Conditions - Research and Development;
 - K3410C (2008-12-12) Canada to own Intellectual Property Rights in Foreground Information;
- (c) Annex A, Statement of Work;
- (d) Annex B, Basis of Payment;
- (e) Annex C, Intellectual Property Disclosure Certification;
- (f) the Contractor's bid dated _____ .

12. Defence Contract

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

13. SACC Manual Clauses

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

List of Annexes:

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- Annex A - Statement of Work
- Annex B - Basis of Payment
- Annex C - Intellectual Property Disclosure Certification

ANNEX "A" **STATEMENT OF WORK**

Title: Assessment of alternative fuels and consequences for usage on naval vessels

Requirement

Defence R&D Canada (DRDC) has initiated a scientific scoping study to obtain relevant knowledge concerning the feasibility of using mature liquid alternative fuels on naval vessels and their associated fuel infrastructure. This initiative is intended to better enable DRDC to provide timely S&T advice if and when required. This does not constitute part of any Canadian Armed Forces or Department of National Defence requirement or plan to acquire or develop an alternative fuel capability.

The contractor shall conduct a comprehensive critical examination of the literature for consequences related to the introduction and continued use of mature liquid alternative fuels on naval fuel infrastructure. This will include the following goals;

1. To identify and analyze performance properties of mature liquid alternative fuels.
2. To identify and critically examine consequences related to use of liquid alternative fuels on fuel infrastructure.

Detailed mandatory requirements are identified in the attached Statement of Work, Appendix A.

Security

All work is unclassified and the contractor will not have access to any classified information. No access to DRDC or DND facilities is required.

Intellectual Property

No IP is anticipated to be generated as a result of this requirement. However the information that will be provided will be subject to copyright protection. **The title and copyright to the work will rest with the Crown.**

Time Schedule

Start Date: Upon contract award
Mid-contract evaluation: November 1, 2013
Completion: January 1, 2014

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. A mid-contract informal (ex., email) report that details all requested technical information (see attached Appendix A: Statement of Work for specifics) completed to date.

2. A Final Report that details all requested technical information (see attached Appendix A: Statement of Work for specifics).

Reports

As directed by the Project Authority, DRDC Atlantic requires (1) unbound hard copy and (1) electronic copy of final Contract Report.

Report Standard and Format

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 CD that contains: 1) a word template of a Contract Report, 2) a PDF file of a sample Contract Report, and 3) 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 final report format shall comply with the standards set out in the DRDC Atlantic guide "Requirements for DRDC Atlantic Contractor Reports".

Travel and Living

None.

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

No government furnished equipment will be provided as a result of this work.

DRDC Atlantic Support, Facilities and Responsibilities

There is no other DRDC Atlantic support or facilities required for this work.

Policy for Connecting Non-DND Computers to DRDC Atlantic Networks

Non-DND computers will not be connected to DRDC Atlantic networks as a result of this requirement.

Controlled Goods

The contractor will not require access to controlled goods and no controlled goods will be generated as a result of this contract.

Control Procedures

Inspection shall be by and to the satisfaction of the Project Authority

Progress will be monitored through regular consultations between the contractor and the Project Authority as well as the mid-term evaluation. The work can be invoiced on a monthly basis, and will be approved by the Project Authority before payment. The contractor must allow time for editorial review of the draft report by the Project Authority and agree to make minor editorial changes to the report, to print the report, and to deliver the report, at no additional cost.

Available Documentation

None.

Approval Prior To Publication

All manuscripts for publication in scientific journals or the like, abstracts of oral presentations and any releases that describe portions of the contract work or related information shall be submitted to the Project Authority for approval of release. If the inadvertent presence of either Defence classified or proprietary material is determined, the Project Authority will consult with the contractor to redraft the relevant sections to their joint satisfaction to produce an unclassified text or theme without sensitive information. Review of manuscripts and releases will be completed within two months after receipt. Review of abstracts and any other releases will proceed rapidly and approval of release will follow without delay.

Appendix A: Statement of Work

Background

Defence R&D Canada (DRDC) has initiated a scientific scoping study to obtain relevant knowledge concerning the feasibility of using mature liquid alternative fuels on naval vessels and associated fuel infrastructure. This initiative is intended to better enable DRDC to provide timely S&T advice if and when required. This does not constitute part of any Canadian Armed Forces or Department of National Defence requirement or plan to acquire or develop an alternative fuel capability.

Mandatory Requirements

As part of this scoping study, the contractor shall conduct a comprehensive critical examination of the literature for the consequences related to the introduction and continued use of mature liquid alternative fuels on naval fuel infrastructure. This shall include the following two requirements (A & B) that represent

the minimum mandatory requirements. As such the mandatory requirements may be expanded by the contractor within their contract proposal or, once contract is awarded, by approval of Project Authority.

Mature liquid alternative fuels are biomass based (not mineral oil- or petroleum-based) liquid fuels that are currently in use or are under development with the expectation to be in use within the next 10 years. Consequences for usage shall vary from minor inconveniences (associated with one-time, short duration usage) to major engineering modifications (associated with continued long-term effects). Fuel infrastructure shall comprise naval on-board and dockside refueling systems that includes storage tanks, piping, engines & peripherals. Comprehensive critical examination of the literature that shall comprise a variety of referenced international perspectives that include national policy documents, reports, journal papers, conference proceedings and presentations.

A. consultation with the Project Authority, the contractor shall identify (as per A1), describe in detail the chemistry and performance properties (as per A2) and evaluate integration factors (as per A3) of mature liquid alternative fuels. In particular, the contractor shall focus their efforts on NATO countries and include the following;

1. Identify and describe all mature alternative fuels that shall include the following;
 - a. Renewable biofuels such as;
 - i. Alcohol (ex., bioethanol, biomethanol & biobutanol)
 - ii. Biodiesel (<4% FAME)
 - iii. FAME-based Biodiesel (>4% FAME)
 - iv. Hydrogenated renewable
 - b. Synthetic fuels, including those made by the following processes;
 - i. Fisher Tropsch
 - ii. Direct Coal Liquefaction
 - iii. Thermocatalytic
 - iv. Lignocellulosic
 - v. Pyrolysis
 - vi. Alcohol Oligeramisation
2. Describe mature alternative fuels (identified in A1) in detail including but not limited to;
 - a. As a minimum fuel chemistry (chemical formula) and all by-products and, when available, feedstock material and chemical processing approaches. Use specific terminology such as 'canola-based biodiesel' instead of generic terms such as 'biodiesel'.
 - b. Relevant performance related properties, especially those related to cold-flow, long-term storage, hygroscopic tendencies & bacterial growth, energy density and chemical compatibility (with conventional petroleum-based fuels and fuel systems).
3. Critically evaluate mature alternative fuels (identified in A1) against a variety of integration factors including technical readiness, cost (per liter), environmental sensitivity (burden to natural resources), net energy balance, emissions, engine/generator operation & performance, fuel system inconvenience or re-engineering and potential future global availability (by geographic region).

B. In consultation with the Project Authority, identify and critically examine the consequences related to use of mature alternative fuels (identified in A1 and described in A2) on naval fuel infrastructure. This is to include a comprehensive assessment of specific material incompatibilities (as per B1), potential marine degradation mechanisms (as per B2), mitigation approaches (as per B3) and a risk analysis (as per B4). In particular, the contractor shall focus their efforts on the following as a minimum;

1. Identify and critically examine known & suspected material incompatibilities that must include specific;
 - a. polymer types. Such as teflon, nylon, nitrile, Viton, fluorosilicon, polyurethane, polypropylene
 - b. metals and alloys. Such as Cu-, Ni-, Fe- and Al-based alloys
 - c. chemicals, such as foams (ex., fire retardant) and lubricants
 - d. paints, coatings and epoxies
2. Identify known or potential degradation mechanism that may occur in marine and other environments. This is to include influence of the following factors;
 - a. fuel chemistry (including feedstock material)
 - b. fuel concentration (pure fuel and blends)
 - c. time
 - d. environment including exterior (temperature, humidity) and interior (temperature, pressure)
 - e. water ingress (fresh and saltwater) and other contaminants (ex., bacteria, debris)
 - f. material interactions
 - g. other factors
3. Identify potential mitigation approaches such as;
 - a. compatible replacement parts
 - b. modifying fuel system conditions
 - c. modifying engine/generator operation
 - d. additives and stabilizing agents
 - e. blending with other fuels (ex., kerosene)
 - f. maintenance requirements
4. Conduct a risk analysis using the parameters defined in requirements B1-B3.

In support to requirements A & B, the contractor shall provide;

1. A mid-term informal (email) progress report by 1 November 2013 on progress made toward all requirements.
2. A Final Report by 1 January 2014 that details all requested technical information identified in the requirements.

Solicitation No. - N° de l'invitation

W7707-145682/A

Amd. No. - N° de la modif.

File No. - N° du dossier

HAL-3-71062

Buyer ID - Id de l'acheteur

hal208

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

W7707-14-5682

CCC No./N° CCC - FMS No/ N° VME

ANNEX B

BASIS OF PAYMENT

Your Financial Bid will be used to determine the Basis of Payment. Negotiation of the pricing basis may be required. If the proposed hourly rates are not those negotiated with PWGSC, detailed financial data should be provided if required.

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

\$ _____

Other Direct Charges:

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.

\$ _____

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

\$ _____

Profit: State your proposed profit, if any, and the basis on which it is computed and applied.

\$ _____

Total Estimated Price (excluding HST/GST): _____

Harmonized or Goods and Services Taxes (HST/GST) must be identified separately.

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ANNEX "C"

Intellectual Property Disclosure Certification

See attached herein

Annex C - Evaluation 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 100 POINTS MAX / 70 POINTS MINIMUM

- | | |
|---|-----------|
| (a) Demonstrated understanding of scope and objectives | 40 POINTS |
| (b) Proposed work feasibility, approach and methodology | 30 POINTS |
| (c) Recognition of direct as well as peripheral problems and solutions proposed | 10 POINTS |
| (d) Adequacy of level of effort, workplan and schedule, deliverables | 20 POINTS |

MANAGEMENT PROPOSAL 100 POINTS MAX / 70 POINTS MINIMUM

- | | |
|---|-----------|
| (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. | 20 POINTS |
| (b) key personnel capability - demonstrated relevant experience, qualifications and competence proven by similar and/or related work in review of and assessment of alternative fuel technologies. | 40 POINTS |
| (c) company capability including subcontractors, if applicable, relevant experience/competence proven by similar or related work in to areas identified under Mandatory requirements. | 20 POINTS |
| (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. | 20 POINTS |

TOTAL POINTS - 200

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 % or 140 points for the technical and management criteria specified in the solicitation. The total overall rating is performed on a scale of 200 points.
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.

ANNEX "C"
INTELLECTUAL PROPERTY DISCLOSURE CERTIFICATION -
CERTIFICAT DE DIVULGATION DE LA PROPRIÉTÉ INTELLECTUELLE

This form is to be completed and signed by the contractor upon completion of the contract and returned to:

JoAnne LeBlanc
Acquisitions Branch
Public Works and Government Services Canada
1713 Bedford Row, PO Box 2247
Halifax, Nova Scotia
B3J 3C9
Tel: (902) 496-5010
Fax: (902) 496-5016

Contract Title: Assessment of Alternative Fuels & Consequence for usage on Naval Vessels

PWGSC File number – **W7707-145682/001/HAL**

It is a term of the referenced contract that, regardless of its ownership, all Foreground Information¹ that could be Inventions¹ and all other Foreground Information, shall be promptly and fully disclosed to Canada.

Tel que stipulé dans le contrat mentionné ci-dessus, et peu importe à qui sont dévolus les droits de propriété intellectuelle, tous les renseignements originaux * susceptibles de constituer des inventions*, de même que tous les autres renseignements originaux découlant de ce contrat, devront être divulgués pleinement et sans délai au Canada.

¹ - defined in the General Conditions identified in the Contract

* - tels que définis dans les conditions générales identifiées dans le contrat.

Consequently, the undersigned, being a duly authorized officer of the Contractor, certifies that during the tenure of the contract
(mark appropriate box):

Par conséquent, le soussigné, étant un agent dûment autorisé de l'Entrepreneur, certifie que durant la période du contrat
(cochez la case appropriée):

☐ No Foreground Information was conceived, developed or produced as part of the Work and, therefore the Contractor has nothing to disclose.

Aucun renseignement original n'a été conçu, développé ou produit pendant l'exécution des travaux; l'entrepreneur n'a donc aucun renseignement original à divulguer.

☐ All Foreground Information which was conceived, developed or produced as part of the Work was fully disclosed and documented in the technical reports delivered by the Contractor to the Technical Authority designated in the Contract, and the Contractor has nothing further to disclose.

Tous les renseignements originaux conçus, développés ou produits pendant l'exécution des travaux ont été entièrement divulgués et documentés dans les rapports techniques livrés par l'Entrepreneur à l'autorité technique indiquée dans le contrat, et l'Entrepreneur certifie qu'il n'existe aucune information supplémentaire à divulguer.

☐ All Foreground Information conceived, developed or produced as part of the Work by the Contractor is hereby fully disclosed in the attached document.

Tous les renseignements originaux conçus, développés ou produits pendant l'exécution des travaux par l'Entrepreneur sont entièrement divulgués dans le document ci-joint.

Signature - Signature: _____

Print Name - Nom en caractère imprimé: _____

Title - Titre: _____

Company Name - Entrepreneur: _____

Date - Date: _____