



Travaux publics et
 Services gouvernementaux
 Canada

Public Works and
 Government Services
 Canada

**RETURN BIDS TO:
 RETOURNER LES SOUMISSIONS À:**
*Bid Receiving Public Works and Government
 Services Canada/Réception des soumissions
 Travaux publics et Services gouvernementaux
 Canada*

11 Laurier St. / 11, rue Laurier
 Place du Portage, Phase III
 Core 0A1 / Noyau 0A1
 Gatineau, Québec K1A 0S5
 Bid Fax: (819) 997-9776

**REQUEST FOR PROPOSAL /
 DEMANDE DE SOUMISSION**

Proposal To: Public Works and Government
 Services Canada

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

Proposition aux: Travaux Publics et Services
 Gouvernementaux Canada

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

Comments - Commentaires

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

Issuing Office - Bureau de distribution
 Science Procurement Directorate/Direction de
 l'acquisition
 de travaux scientifiques
 11C1, Phase III
 Place du Portage
 11 Laurier St. / 11, rue Laurier
 Gatineau, Québec K1A 0S5

Title-Sujet Rental of EPC equipments for R&D purposes / Location d'équipements EPC à des fins de recherche et développement	
Solicitation No. - N° de l'invitation U6800-142681/A	Date 2015-02-16
Client Reference No. - N° de référence du client	
GETS Reference No. - N° de référence de SEAG U6800-142681/A	
File No. - N° de dossier SV_U6800-142681	CCC No./N° CC - FMS NO. / N° VME
Solicitation Closes - L'invitation prend fin at - à 17:00 on - le 2015-03-31	Time Zone / Fuseau horaire <i>See on Notice / Voir sur l'avis</i>
F.O.B. - F.A.B Plant-Usine : <input type="checkbox"/> Destination: <input type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Ian Potvin - ian.potvin@tpsgc-pwgsc.gc.ca	Buyer Id - Id de l'acheteur
Telephone No. - N° de téléphone 819-956-9489	FAX No. - N° de FAX 819-997-2229
Destination of Goods, Services and Construction: Destinations des biens, services et construction : Specified Herein Précisé aux présentes	

Instructions : See Herein

Instructions : voir aux présentes

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



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PART 1 - GENERAL INFORMATION

1.0 Introduction

The bid solicitation document is divided into six 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, Basis of Selection and Bids Ranking: indicates how the evaluation will be conducted, the evaluation criteria that must be addressed in the bid, the basis of selection and how bids will be ranked for the forthcoming procurement;
- Part 5 Certifications: includes the certifications to be provided;
- Part 6 Resulting Contract Clauses: includes the clauses and conditions that will apply to any resulting contract.

The Attachments include the Financial Bid Presentation Sheet and the Mandatory Technical Criteria. The Annexes include the Statement of Requirement, the Basis of Payment and Task Authorization Form.

2.0 Summary

Communications Research Centre Canada (CRC) is looking to lease a Long Term Evolution (LTE) Evolved Packet Core (EPC) to be used for R&D purposes as part of the Communications Interoperability Research, Test and Evaluation Centre (CIRTEC).

The Work will be on an "as and when requested basis" using Task Authorization(s) (TA). It is understood that CIRTEC will require EPC Equipment Solution from at least one vendor but the procurement strategy will strive towards obtaining EPC Equipment Solution from multiple vendors depending on the available budget. As such, Canada reserves the right to award multiple contracts for this requirement.

The period of any resulting Contract(s) should be from date of Contract Award (May 01, 2015) to March 31, 2017 inclusive (initial contract period). Lease period will be from date of receipt and acceptance of equipment(s) to March 31, 2017 (on a monthly basis).

Canada reserves the right to extend the initial period of the contract, as well as the lease period by up to four (4) additional periods of 6 months each or to buy the leased equipments at the end of the initial contract period, as stated under section 1.1, Optional Services of Part 6, Resulting Contract Clauses.

Bidders must provide a list of names, or other related information as needed, pursuant to section 01 of Standard Instructions 2003 (2014-09-25).

For services requirements, Bidders in receipt of a pension or a lump sum payment must provide the required information as detailed in article 3 of Part 2 of the bid solicitation.

The requirement is subject to the provisions of the World Trade Organization Agreement on Government Procurement (WTO-AGP), the North American Free Trade Agreement (NAFTA), and the Agreement on Internal Trade (AIT).

The resulting Contract's TA may include both required and optional contract deliverables. Additional details are provided in this RFP. The inclusion of optional deliverables will be at the Technical Authority's sole discretion.



3.0 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.

4.0 Communications

As a courtesy and in order to coordinate any public announcements pertaining to this contract, the Government of Canada requests that successful Bidders notify the Contracting Authority 5 days in advance of their intention to make public an announcement related to the recommendation of a contract award, or any information related to the contract. The Government of Canada retains the right to make primary contract announcements.

5.0 Conflict of Interest

The Work described herein and the deliverable items under any resulting Contract specifically exclude the development of any statement of work, evaluation criteria or any document related to a bid solicitation. The Contractor, its subcontractor(s) or any of their agent(s) directly or indirectly involved in the performance of the Work and/or in the production of the deliverables under any resulting Contract will not be precluded from bidding on any potential future bid solicitation related to the production or exploitation of any concept or prototype developed or delivered under any resulting Contract.



PART 2 - BIDDER INSTRUCTIONS

1.0 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 (2014-09-25) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

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

Delete: sixty (60) days

Insert: **one hundred and twenty (120) days**

2.0 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 or email to PWGSC or to the Contracting Authority will not be accepted.

3.0 Former Public Servant

Contracts awarded to former public servants (FPS) in receipt of a pension or of a lump sum payment must bear the closest public scrutiny, and reflect fairness in the spending of public funds. In order to comply with Treasury Board policies and directives on contracts awarded to FPSs, bidders must provide the information required below before contract award. If the answer to the questions and, as applicable the information required have not been received by the time the evaluation of bids is completed, Canada will inform the Bidder of a time frame within which to provide the information. Failure to comply with Canada's request and meet the requirement within the prescribed time frame will render the bid non-responsive.

Definitions

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

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

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



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

Former Public Servant in Receipt of a Pension

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

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

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

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

Work Force Adjustment Directive

Is the Bidder a FPS who received a lump sum payment pursuant to the terms of the Work Force Adjustment Directive? **Yes** () **No** ()

If so, the Bidder must provide the following information:

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

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.

4.0 Communications - Solicitation Period

All enquiries must be submitted to the Contracting Authority no later than ten (10) calendar days before the bid closing date. Enquiries received after that time may not be answered.

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



5.0 Applicable Laws

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

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.

6.0 Improvement of Requirement - During Solicitation Period

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



PART 3 - BID PREPARATION INSTRUCTIONS

1.0 Bid Preparation Instructions

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

Section I: Technical Bid (3 hard copy)

Section II: Financial Bid (1 hard copy)

Section III: Certifications, including Former Public Servant certification (1 hard copy)

Prices must appear in the financial bid only. No prices should 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; and
- (b) use a numbering system that corresponds to the bid solicitation.

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

- (1) use 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, print double sided/duplex, using staples or clips instead of Cerlox, duo tangs or binders.

Section I: Technical Bid

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

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

Section II: Financial Bid

- 1.1 Bidders must submit their financial bid in accordance with the "Financial Bid Presentation Sheet", identified at Attachment 1. The total amount of Applicable Taxes must be shown separately.
- 1.2 The requirement **does not offer exchange rate fluctuation risk mitigation**. Requests for exchange rate fluctuation risk mitigation will not be considered. All bids including such provision will render the bid non-responsive. All financial information must be provided in Canadian dollars, Applicable Taxes excluded Canadian customs duties and excise taxes included.

Section III: Certifications

Bidders must submit the certifications required under Part 5.



PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

1.0 Evaluation Procedures

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

1.1 Technical Evaluation

Refer to Attachment 2, Mandatory Technical Criteria.

1.1.1 Supporting Information

In the event that the Bidder fails to submit any supporting information pursuant to technical or financial evaluation criteria, the Contracting Authority may request it thereafter in writing, including after the closing date of the bid solicitation. It is mandatory that the Bidder provide the supporting information within three (3) business days of the written request or within such period as specified or agreed to by the Contracting Authority in the written notice to the Bidder.

1.2 Financial Evaluation Criteria and Evaluation of Price

In order to provide its pricing information, Bidder must refer to Attachment 1, Financial Bid Presentation Sheet.

For financial evaluation purposes, the method used to establish the Evaluated Price of bid is identified in Attachment 1, Financial Bid Presentation Sheet, sub-section 1.4, Evaluation of price.

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

2.0 Basis of Selection

2.1 Basis of Selection - Responsive bid

To be declared responsive, a bid must:

- (a) comply with all the requirements of the bid solicitation; and,
- (b) meet all mandatory technical evaluation criteria;

Bids not meeting (a) or (b) will be declared non responsive.

2.1.1 Basis of Selection - Lowest Evaluated Price ranked in ascending order of evaluated price

Responsive bids will be ranked in ascending order of evaluated prices, the responsive bid with the lowest evaluated price being ranked first. Of the highest ranked responsive bids in ascending order of evaluated prices, more than one (1) bidder may be recommended for award of a contract.

For Research & Development purposes, it is the goal of the CRC to obtain one EPC Equipment Solution from multiple bidders that submitted a responsive bid. The number of EPC Equipment Solution to be acquired will be based on CRC available budget (budget will not be disclosed). Bidders are advised that Canada reserves the right to award only one contract to the highest ranked responsive bid, regardless of the available budget.

2.1.2 Example of ranking and selection of bidder(s) for award of a contract (for information purposes only, may not reflect reality)

The following table provides an example where CRC has verified that four bidders submitted a responsive bid and where the available budget is insufficient to obtain a single EPC Equipment Solution from each compliant bidder.



Bid received from:

Bidder 1 – Responsive bid – Evaluated Price of bid \$110.00
Bidder 2 – Responsive bid – Evaluated Price of bid \$ 70.00
Bidder 3 – Responsive bid – Evaluated Price of bid \$230.00
Bidder 4 – Non responsive bid – Evaluated Price of bid \$ 50.00
Bidder 5 – Responsive bid – Evaluated Price of bid \$100.00

Ranking:

Bidder ranking	Evaluated Price of bid	Selected EPCs for award of a contract
Bidder 2	\$70.00	√
Bidder 5	\$100.00	√
Bidder 1	\$110.00	√
Bidder 3	\$230.00	X
Bidder 4*	\$50.00	X

**bid was deemed non responsive.*

Results and selection of bidder(s) for award of a contract:

If CRC's budget is \$300.00, only bidder 2, bidder 5 and bidder 1 may be recommended for award of a contract.



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 made knowingly or unknowingly, during the bid evaluation period or during the contract period.

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

1.0 Certifications Required Precedent to Contract Award

1.1 Integrity Provisions – Associated Information

By submitting a bid, the Bidder certifies that the Bidder and its Affiliates are in compliance with the provisions as stated in Section 01 Integrity Provisions - Bid of Standard Instructions [2003](#). The associated information required within the Integrity Provisions 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 Employment and Social Development Canada (ESDC) - 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 "Bid" list at the time of contract award.

2.0 Status and Availability of Resources (as applicable)

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

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

3.0 Language Capability

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



PART 6 - RESULTING CONTRACT CLAUSES

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

In this document, the meaning of: "Work" may also refer to "equipment lease";
"Initial contract period" is the date of contract award to 31 March 2017.
"Lease period" is from date of receipt and acceptance of equipment(s) to March 2017.

1.0 Statement of Requirement

The Contractor must perform the Work in accordance with the Statement of Requirement at Annex A, as and when requested by Canada during the period of the Contract.

An obligation for any Work will come into force only when a Task Authorization (TA) is approved and issued in accordance with the clause entitled "Task Authorization Process".

1.1 Optional Goods and/or Services

One of the following two optional services may be used at the end of the initial contract period.

1.1.1 Option to extend the Contract Period

The Contractor grants to Canada the option to extend the period of the Contract by up to four (4) additional periods of six (6) months each.

OR

1.1.2 Option to Purchase

The Contractor grants to Canada the option to purchase the leased EPC Equipment Solution and/or the EMS and/or IMS equipment at the end of the initial contract period. In this event, Canada will pay the firm amount specified in section 1.1.2.1, below.

1.1.2.1 EPC Equipment Solution (PA-001), Firm Price to Purchase Equipment: \$ _____
*EMS Equipment Solution (PA-002), Firm Price to Purchase Equipment: \$ _____
IMS Equipment Solution (OP-001), Firm Price to Purchase Equipment \$ _____
**if not part of DID PA-001*

1.1.3 Canada may exercise one of these two options at any time by sending a written notice to the Contractor at least ten (10) calendar days before the Contract expiry date. The option may only be exercised by the Contracting Authority, and will be evidenced for administrative purposes only, through a contract amendment.

1.2 Task Authorization

The Work or a portion of the Work to be performed under the Contract will be on an "as and when requested basis" using a Task Authorization (TA). The Work described in the TA must be in accordance with the scope of the Contract.

1.2.1 Task Authorization Process

1. The Technical Authority will provide the Contractor with a description of the task using the Task Authorization Form specified in Annex C.
2. The Task Authorization (TA) will contain the details of the activities to be performed, a description of the deliverables, and a schedule indicating completion dates for the major activities or submission dates for the deliverables. The TA will also include the applicable basis and methods of payment as specified in the Contract.



3. The Contractor must provide the Technical Authority, within *six (6)* calendar days of its receipt, the proposed total estimated cost for performing the task and a breakdown of that cost, established in accordance with the Basis of Payment specified in the Contract.
4. The Contractor must not commence work until a signed TA authorized by the Technical Authority has been received by the Contractor. The Contractor acknowledges that any work performed before a TA has been received will be done at the Contractor's own risk and cost.

1.2.2 Task Authorization Limit

The Technical Authority may authorize individual task authorizations up to a limit of **\$100,000.00**, Applicable Taxes excluded, inclusive of any revisions.

Any task authorization to be issued in excess of that limit must be authorized by the Contracting Authority before issuance.

1.2.3 Minimum Work Guarantee - All the Work - Task Authorizations

1. In this clause,

"Maximum Contract Value" means the amount specified in the "Limitation of Expenditure" clause set out in the Contract; and

"Minimum Contract Value" means 10%

2. Canada's obligation under the Contract is to request Work in the amount of the Minimum Contract Value or, at Canada's option, to pay the Contractor at the end of the Contract in accordance with paragraph 3. In consideration of such obligation, the Contractor agrees to stand in readiness throughout the Contract period to perform the Work described in the Contract. Canada's maximum liability for work performed under the Contract must not exceed the Maximum Contract Value, unless an increase is authorized in writing by the Contracting Authority.
3. In the event that Canada does not request work in the amount of the Minimum Contract Value during the period of the Contract, Canada must pay the Contractor the difference between the Minimum Contract Value and the total cost of the Work requested.
4. Canada will have no obligation to the Contractor under this clause if Canada terminates the Contract in whole or in part for default.

2.0 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

2040 (2014-09-25), General Conditions - Research & Development, apply to and form part of the Contract.

2.2 Supplemental General Conditions

The following supplemental general conditions apply to and form part of the Contract:

4001 (2013-01-28), Hardware Purchase, Lease and Maintenance

3.0 Period of Contract

The period of the Contract is from date of Contract award to _____ (to be inserted at contract award).



4.0 Authorities

4.1 Contracting Authority

The Contracting Authority for the Contract is:

Ian Potvin

Supply Team Leader
Public Works and Government Services Canada
Acquisitions Branch
Science Procurement Directorate
Place du Portage, Phase III, 11C1
11 Laurier Street
Gatineau, Quebec
K1A 0S5

Telephone: 819-956-9489
Facsimile: 819-997-2229
E-mail address: ian.potvin@tpsgc-pwgsc.gc.ca

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

4.2 Technical Authority

The Technical Authority for the Contract is:

TBD

Telephone: _____
Facsimile: _____
E-mail address: _____

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

4.3 Contractor's Representative

TBD

5.0 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.

6.0 Payment

6.1 Basis of Payment

One of the following types of basis of payment will form part of any approved Task Authorization (TA). The task price must be determined in accordance with the Annex "B", Basis of Payment. For the lease of equipments: if the first day of the Lease Period is not on the first day of a calendar month, then the charge for the first and last months of the lease will be the portion of the specified monthly charge determined by multiplying the number of days in the month during which the lease is in effect by 1/30 of the monthly lease charge in effect under the Contract at the time.

- (a) TA subject to a Firm Lot Price



In consideration of the Contractor satisfactorily completing all of its obligations under the authorized Task Authorization (TA), the Contractor will be paid the firm price specified in the authorized TA. Customs duties are included and Applicable Taxes are extra, if applicable.

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

(b) Ceiling Price TA

The Contractor will be reimbursed its costs reasonably and properly incurred in the performance of the Work, as determined in accordance with the Annex "B", Basis of Payment, to the ceiling price specified in the approved TA. Customs duties are included and Applicable Taxes are extra, if applicable.

The ceiling price is subject to downward adjustment so as not to exceed the actual costs reasonably incurred in the performance of the Work and computed in accordance with the Basis of Payment.

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

(c) TA subject to a Limitation of Expenditure

The Contractor will be reimbursed for the costs reasonably and properly incurred in the performance of the Work specified in the authorized Task Authorization (TA), as determined in accordance with the Annex "B", Basis of Payment, to the limitation of expenditure specified in the authorized TA.

Canada's liability to the Contractor under the authorized TA must not exceed the limitation of expenditure specified in the authorized TA. Customs duties are included and Applicable Taxes are extra, if applicable.

No increase in the liability of Canada or in the price of the Work specified in the authorized TA 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 authorized, in writing, by the Contracting Authority before their incorporation into the Work.

6.2 Limitation of Expenditure - Cumulative Total of all Task Authorizations

1. Canada's total liability to the Contractor under the Contract for all authorized Task Authorizations (TAs), inclusive of any revisions, must not exceed the sum of \$_____ (amount to be inserted at contract award). Customs duties are included and Applicable Taxes are extra, if applicable.
2. No increase in the total liability of Canada will be authorized or paid to the Contractor unless an increase has been approved, in writing, by the Contracting Authority.
3. 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 sum is inadequate for the completion of the Work required in all authorized TAs, inclusive of any revisions,whichever comes first.
4. 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.



6.3 Method of Payment

6.3.1 Payments will be made not more frequently than once a month. Depending on the method of payment specified in the applicable TA, one of the following methods of payment clauses will apply:

6.3.1.1 Single Payment

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

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

6.3.1.2 Milestone Payments

Canada will make milestone payments in accordance with the Schedule of Milestones detailed in the Task Authorization and 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 work associated with the milestone and as applicable any deliverable required has been completed and accepted by Canada.

6.3.1.3 Progress Payments (For a TA subject to a Limitation of Expenditure or Ceiling Price)

- (a) Canada will make progress payments in accordance with the payment provisions of the Task Authorization and the Contract for cost incurred in the performance of the Work if:
 - (i) an accurate and complete invoice and any other document required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract;
 - (ii) the amount claimed is in accordance with the Basis of payment and the Task Authorization;
- (b) Progress payments are interim payments only. Canada may conduct a government audit and interim time and cost verifications and reserves the right to make adjustments to the Contract from time to time during the performance of the Work. Any overpayment resulting from progress payments or otherwise must be refunded promptly to Canada.

6.3.1.4 Monthly Payment (For TA subject to equipment lease)

Canada will pay the Contractor on a monthly basis for work/lease performed during the month covered by the invoice 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; and,
- (c) the Work performed has been accepted by Canada.

7.0 Invoicing Instructions - Progress Claim

7.1 The Contractor must submit a claim for payment using form [PWGSC-TPSGC 1111](#).

Each claim must show, as applicable:

- (a) all information required on form PWGSC-TPSGC 1111;



- (b) all applicable information detailed under the section entitled "Invoice Submission" of the general conditions;
- (c) the Task Authorization (TA) number;
- (d) the description of the milestone invoiced or description of the Work performed during the month, as applicable.

7.2 For TAs subject to a Limitation of Expenditure or Ceiling Price, each invoice must be supported by, as applicable:

- (e) a copy of the release document and any other documents as specified in the Contract;
- (f) a copy of the monthly progress report, as applicable.

7.3 The Contractor must prepare and certify an original claim on Form PWGSC-TPSGC 1111, and forward it to the Contracting Authority for certification in an electronic format to the electronic mail address identified under section entitled "Authorities" of the Contract. Portable Document Format (.pdf) format is acceptable. The Contracting Authority will then forward the certified claim, in an electronic format, to the Technical Authority for appropriate certification after inspection and acceptance of the Work takes place, and onward submission to the Payment Office for the remaining certification and payment.

7.4 The Contractor must not submit claims until all work identified in the claim is completed. Leased equipments will be paid at the end of each month of use.

8.0 Certifications - 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 entire contract period. 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.

9.0 Applicable Laws

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

10.0 Priority of Documents

If there is a discrepancy between the wordings 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 supplemental general conditions 4001 (2014-09-25), Hardware Purchase, Lease and Maintenance;
- (c) the general conditions 2040 (2014-09-25), General Conditions - Research & Development;
- (d) Annex A, Statement of Requirement (including all of its appendices);
- (e) Annex B, Basis of Payment;
- (f) the signed Task Authorizations (including all of its annexes, if any);
- (g) the Contractor's bid dated _____.

11.0 Foreign Nationals (Canadian Contractor)

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

12.0 Insurance

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

13.0 Government Site Regulations

The Contractor must comply with all regulations, instructions and directives in force on the site where the Work is performed or delivered.



ATTACHMENT 1 FINANCIAL BID PRESENTATION SHEET

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

For items listed in Table 1, Section 1.1 and Section 1.2, below:

- (a) A firm Monthly Lease Price for the identified equipment solution for the initial contract period and optional periods. The total amount of Applicable Tax is to be shown separately, if applicable.

For the item listed in Table 1, Section 1.3 below:

- (b) A firm all-inclusive price for each package identified for the initial contract period and optional periods, inclusive of travel and living expenses, as and when applicable. The total amount of Applicable Tax is to be shown separately, if applicable.

For the item listed in Table 1, Section 1.4 below:

- (c) A firm all-inclusive price for each package identified for the initial contract period and optional periods, inclusive of travel and living expenses, as and when applicable. The total amount of Applicable Taxes are to be shown separately, if applicable.
- (d) For Canadian-based bidders and foreign-based bidders, prices must be in Canadian funds, Applicable Taxes excluded, and Canadian customs duties and excise taxes included.

For the purpose of the bid solicitation, bidders with an address in Canada are considered Canadian-based bidders and bidders with an address outside of Canada are considered foreign-based bidders.

1.1.1 Price Breakdown

Bidders are requested to detail the following elements for each Firm Price/Lease Price to be quoted in Table 1, Section 1.1 to 1.4, as applicable:

- (a) Labour: For each labour category to be assigned to the Work, indicate: i) the hourly rate, inclusive of overhead and profit; and ii) the estimated number of hours.
- (b) Equipment: Specify each item required to complete the Work and provide the pricing basis of each one, Canadian customs duty and excise taxes included, as applicable.
- (c) Materials and Supplies: Identify each category of materials and supplies required to complete the Work and provide the pricing basis.
- (d) Travel and Living Expenses (Service Support only): Indicate the number of trips and the number of days for each trip, the cost, destination and purpose of each journey, together with the basis of these costs. The Treasury Board Secretariat's Special Travel Authorities, http://www.tbs-sct.gc.ca/pubs_pol/hrpubs/tbm_113/statb-eng.asp, also apply.
- (e) Subcontracts: Identify any proposed subcontractor and provide for each one the same price breakdown information as contained in this article.
- (f) Other Direct Charges: Identify any other direct charges anticipated, such as long distance communications and rentals, and provide the pricing basis.
- (g) Applicable Taxes: Identify any Applicable Taxes separately.

1.2 Exchange Rate Fluctuation

The requirement does not offer exchange rate fluctuation risk mitigation. Requests for exchange rate fluctuation risk mitigation will not be considered. All bids including such provision will render the bid non-responsive.



1.3 Table 1 – Financial Elements

Section 1.1 – EPC and EMS Equipment Solution					
Item	DID (Appendix 1 of the SOR)	Deliverable(s)	Firm Monthly lease Price (initial contract period)	Firm Monthly lease Price (option periods)	Estimated Delivery Date
1	PA-001	Evolved Packet Core Equipment Solution	\$ _____/Month	\$ _____/Month	No later than ten weeks after issuance of TA.
Bidder must indicate whether the EMS forms part of PA-001 or not. In the event that the EMS is not included in PA-001, the bidder must provide a Firm monthly lease price below.					
2	PA-002	Element Management System (or equivalent) Equipment Solution	\$ _____/Month	\$ _____/Month	No later than ten weeks after issuance of TA.
*PA-001 EPC Equipment Solution – Firm Price to Purchase: \$ _____					
*PA-002 EMS Equipment Solution – Firm Price to Purchase: \$ _____					
Section 1.2 – Optional IMS					
Item	DID (Appendix 1 of the SOR)	Deliverable(s)	Firm Monthly lease Price (initial contract period)	Firm Monthly lease Price (option periods)	Estimated Delivery Date
3	OP-001	[Optional] Internet Protocol Multimedia Subsystem (IMS)	\$ _____/Month	\$ _____/Month	No later than ten weeks after issuance of TA.
*OP-001 IMS Solution – Firm Price to Purchase: \$ _____					
Section 1.3 – Optional Pre-Delivery EPC and EMS Integration Services Package					
Item	DID (Appendix 1 of the SOR)	Deliverable(s)	Firm All-inclusive Price (initial contract period)	Firm All-inclusive Price (option periods)	Estimated Delivery Date
4	OP-002	[Optional] Pre-delivery EPC and EMS (or equivalent) Integration Services	\$ _____	N/A	After issuance of TA and prior to the delivery of PA- 001.
Section 1.4 – Optional Support and Training Services Package					
Item	DID (Appendix 1 of the SOR)	Deliverable(s)	Firm All-inclusive Price (initial contract period)	Firm All-inclusive Price (option periods)	Estimated Delivery Date
5	OP-003 A	[Optional] Remote EPC and EMS (or equivalent) Integration Support Services	\$ _____	N/A	No later than four weeks after issuance of TA.
6	OP-003 B	[Optional] On-Site EPC and EMS (or equivalent) Integration Support Services	\$ _____	N/A	No later than four weeks after issuance of TA.
7	OP-004 A	[Optional] Remote EPC and EMS (or equivalent) Operational Support Services	\$ _____	\$ _____	No later than four weeks after issuance of TA.
8	OP-004 B	[Optional] On-Site EPC and EMS (or equivalent) Operational Support Services	\$ _____	\$ _____	No later than four weeks after issuance of TA.
9	OP-005 A	[Optional] Remote Training	\$ _____	\$ _____	No later than eight weeks after issuance of TA.
10	OP-005 B	[Optional] On-Site Training	\$ _____	\$ _____	No later than eight weeks after issuance of TA.

Table 1 – Financial elements

* In order to provide Canada with the option to purchase the equipment(s), at the end of the initial contract period, Bidders are requested to provide a “Firm Price to Purchase Equipment” in accordance with the provisions of this RFP.



1.4 Evaluation of Price (Evaluated Price of Bid Formula)

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

Evaluated Price of Bid = ((Item 1- DID PA-001- Evolved Packet Core Equipment Solution + Item 2 – DID PA-002 - Element Management System Firm Monthly Lease Price (initial contract period) x 23 months) + Item 1 – DID PA-001 Option to Purchase Price + Item 2 – DID PA-002 Option to Purchase Price)

Item	Firm Monthly Lease Price (initial contract period)	Total
Item 1- DID PA-001- Evolved Packet Core Equipment Solution	\$ _____ x23 months	\$ _____
		+
Item 2 – DID PA-002 - Element Management System	\$ _____ x23 months	\$ _____
		+
	Firm Price to Purchase Equipment, at the end of the initial contract period	+
Item 1- DID PA-001- Evolved Packet Core Equipment Solution	\$ _____	\$ _____
		+
Item 2 – DID PA-002 - Element Management System	\$ _____	\$ _____
		=
	Evaluated Price of bid	\$ _____



ATTACHMENT 2 MANDATORY TECHNICAL CRITERIA

1. Mandatory Technical Criteria

At bid closing time, all of the Contractor's proposed EPC equipment solution, as defined in DID PA-001 of Appendix 1 to Annex A, must comply with the following mandatory technical requirements. Contractors must provide the necessary documentation to support compliance. Any proposal which fails to meet the following mandatory technical requirements will be declared non-responsive. Each requirement should be addressed separately.

MANDATORY TECHNICAL CRITERIA		
M1	Equipment	The EPC forms the core network of an LTE network. For the purpose of this RFP, it is considered that the EPC must include at least the following 3GPP defined entities: S-GW, P-GW, MME, HSS, PCRF and SPR. The EPC Equipment Solution may be provided as a virtualized implementation, but must be hosted (located) at CRC
M2	3GPP Specifications and Standards	The EPC components must comply to 3GPP Specifications Release 10
M3	Internet Protocol Version	The EPC Equipment Solution components must support both IPv4 and IPv6
M4	IP/VLAN reconfigurability	IP addresses associated to LTE interfaces/network elements must be reconfigurable. If one or more VLANs are associated to LTE interfaces/network elements, the VLAN ID(s) must be reconfigurable.
M5	Minimum Capacity	At a minimum, the EPC Equipment Solution must support the following capacity specifications <ul style="list-style-type: none"> - 20 eNodeBs - 500 Simultaneously Attached Users - 1000 Subscribers
M6	Capacity Scaling	The EPC Equipment Solution must be scalable* to support a national Public Safety broadband network with the following capacity specifications <ul style="list-style-type: none"> - 1000 eNodeBs - 250 000 Simultaneously Attached Users - 1 000 000 Subscribers <p>* It is understood that additional hardware/software not included in the bid may be required to transition from the minimum capacity requirement (M5) and this requirement. In this scenario, bidders are encouraged to provide a description of the additional hardware/software required to meet this requirement.</p>
M7	Mobility	The EPC Equipment Solution must support RAN mobility within and between eNodeBs of the same Public Land Mobile Network (PLMN)
M8	Roaming	The EPC Equipment Solution must support the capability of users roaming to/from another Public Land Mobile Network (PLMN)
M9	3GPP Interfaces	The EPC Equipment Solution must support the following list of common 3GPP interfaces <ul style="list-style-type: none"> - S1-U - S1-MME - S5 - S8 - S6a - S9 - S10 - S11 - SGi
M10	3GPP Interface Access	The EPC Equipment Solution must allow access* to the following list of common 3GPP interfaces <ul style="list-style-type: none"> - S1-U - S1-MME - S5 - S8 - S6a - S9 - S10 - S11 - SGi <p>* Access is defined as the ability to monitor traffic at the interface level using a packet analyzer tool such as Wireshark</p>
M11	IMS Support	The EPC Equipment Solution must support the required interfaces to an IP Multimedia Subsystem (IMS)
M12	Supported RAN equipment	The EPC Equipment Solution must be interoperable* with a minimum of two of the following LTE RAN equipment: <ul style="list-style-type: none"> - Alcatel-Lucent: 9412 eNodeB - General Dynamics Broadband: LTE V6 eNodeB - Motorola (Ericsson RAN): RBS 6202 - Nokia Networks: Flexi Multiradio 10 BTS <p>* S1-U and S1-MME functionality required for UE connection and mobility</p>
M13	QoS Support	The EPC Equipment Solution must support QoS provisioning through network initiated dedicated bearer activation



ANNEX A STATEMENT OF REQUIREMENT

CIRTEC Public Safety LTE System – EPC Equipment Solution Lease

Foreword

This document describes the deliverables for the EPC Equipment Solution portion of the system that may be leased on a monthly basis up until the end of March 2017.

1.0 Objective

As part of its goal to obtain a full end-to-end LTE mobile broadband network and address the unique needs of the public safety community, the Technical Authority is looking to lease one or more EPCs.

2.0 Background

The Centre for Security Science (CSS) of Defence Research and Development Canada (DRDC), with the help of partner organizations, has been retained by Public Safety Canada (PSC) to investigate and propose solutions to technical issues related to communications performance, network design and interoperability for public safety organizations. A significant component of this work is to study the use of LTE networks in the 700 MHz band for mobile broadband wireless communications. The LTE standard and specifications are defined by the 3rd Generation Partnership Project (3GPP).

The Communications Research Centre Canada (CRC) of Industry Canada is the primary federal laboratory for research and development (R&D) in wireless telecommunications. CSS has been working closely with CRC over the past three years to devise a long term strategy for this important activity. To this end, the Communications Interoperability Research, Test and Evaluation Centre (CIRTEC) is being implemented via the Canadian Safety and Security Program (CSSP) to address the needs of both CSS and PSC with respect to public safety communications interoperability, the study of LTE technology and other complementary wireless technologies. Currently, the project has a 3 year time frame, though it is expected that the public safety community will make use of this R&D facility beyond that point.

The CIRTEC will be centralized at the CRC campus in Ottawa with supporting sites in Ottawa, Ontario. It will leverage the existing telecommunication infrastructure of CRC's wireless research network composed of separate distinct mobile broadband technologies and made up of four over-the-air (OTA) sites covering over 100 km² in west Ottawa.

CIRTEC will be accessible to all national public safety organizations, industry and academia as external partner collaboration is vital to its success. International collaborations are expected as well, specifically with the United States where work is underway to establish such a relationship. As part of this 3 year project, the overall goals of this innovative facility are to:

- Mitigate the risks of introducing new communications technologies
- Assist public safety organizations in achieving regional and national interoperability objectives
- Build up the knowledge base and expertise leading to the successful design of a nation-wide mobile broadband network for public safety use
- Understand certain distinctions of public safety LTE relative to commercial-grade LTE
- Develop guidelines and best practices on the use of new technologies that meets the unique functional and operational requirements of the public safety community.

3.0 Scope

This Statement of Requirement describes the deliverables for the EPC Equipment Solution portion of the system that may be leased on a monthly basis up until the end of March 2017. All equipment is to be physically installed on CRC's campus (otherwise mentioned in the TA, installation will be completed by CRC's employees). For the purpose of this Work, the EPC Equipment Solution must include at least the following 3GPP defined entities: S-GW, P-GW, MME, HSS, PCRF and SPR.

The Contractor's must provide the physical assets, which must include all hardware/firmware/software and all maintenance and release upgrades for hardware/firmware/software associated with the equipment for the duration of the lease. At its sole discretion, the Technical Authority may consider optional services.



4.0 Tasks

For this requirement, the Contractor must perform the following tasks on an “as and when requested basis”:

- Delivery of all required physical assets or optional service support selected by the Technical Authority and identified on the TA, and in accordance with section 8, below.

5.0 Constraints

It is understood that all LTE equipment obtained must conform to 3GPP standards and specifications. All equipment will be physically installed by the Technical Authority and integrated into CRC’s wireless research network.

Since communication interoperability extends beyond the National level, international collaborations are included in the scope of this project, specifically with the United States. One such partner will be the US Public Safety Communications Research (PSCR) program, under the auspices of the June 1, 2004 Agreement between the Government of Canada and the Government of the United States for Cooperation in Science and Technology for Critical Infrastructure Protection and Border Security. As part of this collaboration, the CIRTEC LTE mobile broadband system is expected to be physically interconnected with the PSCR Program and/or other US Government experimental systems. As such, Contractor’s equipment for this RFP should be suitable to be physically interconnected with these systems.

6.0 Client Support

The Contractor may be expected to provide some or all of the following services on an “as and when requested basis”:

- Pre-delivery EPC and/or EMS Integration Services
- EPC and EMS Integration Technical Support Services
- EPC and EMS Operational Technical Support Services
- Provide training for the EPC and EMS Equipment Solution

The Technical Authority will perform all of the physical installation in CRC’s wireless research network, including backhaul equipment if required.

7.0 Meetings

Some meetings may take place between the Contractor and the Technical Authority. Where possible, meetings will be held electronically as opposed to face-to-face. It is expected that any such meetings will take place at the onset of the project up until the commissioning of the equipment.

8.0 Deliverables

8.1 Contract Items Deliverable

The following table presents the contract deliverables for this requirement. Additional details on each item are provided in Appendix 1 to Annex A, Data Item Description. The inclusion of optional deliverables will be at the Technical Authority’s sole discretion. The Contractor is responsible to deliver and take back all leased equipment, as well as to acquit associated delivery expenses, including insurance. Canada cannot be held responsible for any damage or lost caused to equipment during its delivery.

Section 1.1 – EPC and EMS Equipment Solution			
Item	DID (Appendix 1 of the SOR)	Deliverable(s)	Description
1	PA-001	Evolved Packet Core Equipment Solution	The Contractor must provide an Evolved Packet Core Equipment Solution on a lease basis. The EPC Equipment Solution may be provided as a virtualized implementation and must be hosted (located) at CRC. The Contractor must include all hardware, firmware, software, licenses, interconnecting cables, documentation, all maintenance and release upgrades for hardware, firmware and software associated with the EPC Equipment Solution for the duration of the lease.



2	PA-002	Element Management System (or equivalent) Equipment Solution	The Contractor must provide an Element Management System (or equivalent) Equipment Solution on a lease basis. The EMS (or equivalent) Equipment Solution must provide the functionality required to configure, operate and monitor the EPC components of PA-001 and must be hosted (located) at CRC. The Contractor must include all hardware, firmware, software, licenses, interconnecting cables, documentation, all maintenance and release upgrades for hardware, firmware and software associated with the EMS Equipment Solution for the duration of the lease.
Section 1.2 – Optional IMS Solution			
Item	DID (Appendix 1 of the SOR)	Deliverable(s)	Description
3	OP-001	[Optional] Internet Protocol Multimedia Subsystem (IMS)	The Contractor must provide an Internet Protocol Multimedia Subsystem solution on a lease basis. The Contractor must include all hardware, firmware, software, licenses, interconnecting cables, documentation, software/user interface required for configuration and operation of the IMS, all maintenance and release upgrades for hardware, firmware and software associated with the IMS Equipment Solution for the duration of the lease.
Section 1.3 – Optional Pre-Delivery Integration Services			
Item	DID (Appendix 1 of the SOR)	Deliverable(s)	Description
4	OP-002	[Optional] Pre-delivery EPC and EMS Integration Services Package	The Contractor must provide pre-delivery EPC and EMS (equivalent) integration (installation and configuration) services to reduce the post-delivery integration effort.
Section 1.4 – Optional Support and Training Services (these packages can be purchased more than once)			
Item	DID (Appendix 1 of the SOR)	Deliverable(s)	Description
5	OP-003 A	[Optional] Remote EPC and EMS (equivalent) Integration Support Services Package	The Contractor must assist the Technical Authority and CRC personnel during the EPC and EMS (equivalent) integration phase by providing 40 hours of remote (via the web/e-mail and/or phone) technical support services.
6	OP-003 B	[Optional] On-Site EPC and EMS (equivalent) Integration Support Services Package	The Contractor must assist the Technical Authority and CRC personnel during the EPC and EMS (equivalent) integration phase by providing 40 hours of on-site technical support services.
7	OP-004 A	[Optional] Remote EPC and EMS (equivalent) Operational Support Services Package	The Contractor must assist the Technical Authority and CRC personnel during the EPC and EMS (equivalent) operational phase by providing 40 hours of remote (via the web/e-mail and/or phone) technical support services.
8	OP-004 B	[Optional] On-Site EPC and EMS (equivalent) Operational Support Services Package	The Contractor must assist the Technical Authority and CRC personnel during the EPC and EMS (equivalent) operational phase by providing 40 hours of on-site technical support services.
9	OP-005 A	[Optional] Remote Training Package	The Contractor must provide remote (e.g. webinar) training for the EPC and EMS (equivalent) Equipment Solution. It is expected training would cover the configuration and operation of the EPC Equipment Solution for a maximum of 5 students.
10	OP-005 B	[Optional] On-Site Training Package	The Contractor must provide on-site training for the EPC and EMS (equivalent) Equipment Solution. It is expected training would cover the configuration and operation of the EPC Equipment Solution for a maximum of 5 students.

9.0 Management Requirements

9.1 Work site. Unless otherwise specified all work must be carried out at the CIRTEC facilities located on CRC campus and sites in the West end of Ottawa. Development work resulting from R&D collaboration activities may be carried out at the Contractor’s own facilities with the understanding that resulting outputs be integrated into the equipment located at CIRTEC facilities.

9.2 Language requirements. All deliverables must be submitted in English.



10.0 Government Supplied Components and Services

10.1 EPC Equipment Solution components. The following physical assets typically associated with EPC Equipment Solution must not be included as they will be provided by the Technical Authority or are already in place within CRC's wireless research network.

- Equipment racks
- Power supplies, distribution equipment and battery backup solutions
- Backhaul to and from the main facility and remote sites
- Network servers/services (DNS, NTP, DHCP)

10.2 EPC Equipment Solution installation. As previously described in this document, physical installation services must not be included as it is expected that the Technical Authority and CRC personnel will perform most of the physical installation of the various EPC Equipment Solution in CRC's wireless research network, including backhaul equipment if required.

11.0 CRC campus Regulations

Although there are no security requirements applicable to this Contract, site access to the CRC facilities is restricted. Access for contractors not having Canadian citizenship will be reviewed on a case by case basis.



**APPENDIX 1 TO ANNEX A
DATA ITEM DESCRIPTION**

Evolved Packet Core Equipment Solution, PA-001

DATA ITEM DESCRIPTION	3. Identification No. PA-001
1. Title Evolved Packet Core Equipment Solution	
2. Description/Purpose The Contractor must provide an Evolved Packet Core on a monthly lease basis, on an "as and when requested basis".	4. Delivery Date No later than ten weeks after issuance of TA
	5. Office of Primary Interest (OPI) Contractor
	6. Office of Collateral Interest (OCI)
7. Application/Interrelationship	8. Approval Limitation
	9. References: 3GPP Specifications
<p>10. Preparation Instructions The Contractor must provide an EPC that will be leased on a monthly basis. All EPC equipment must be compliant with 3GPP specifications and must be physically located on CRC's campus.</p> <p>The EPC equipment lease must at least consist of the following components:</p> <ul style="list-style-type: none"> - Mobility Management Entity (MME) - Serving Gateway (S-GW) - Packet Data Network Gateway (P-GW) - Home Subscriber Server (HSS) - Policy and Charging Rule Function (PCRF) - Subscription Profile Repository (SPR) <p>The EPC solution may be provided as a virtualized implementation which includes all required hardware and software components.</p> <p>The Contractor must include the following:</p> <ul style="list-style-type: none"> - All hardware, firmware, software, licenses and interconnecting cables required for the EPC Equipment Solution. - All documentation required for the installation, configuration and operation of the EPC Equipment Solution - All maintenance and release upgrades for hardware, firmware and software associated with the EPC Equipment Solution for the duration of the lease <p>It is understood that the Technical Authority and CRC personnel will perform the physical installation of the above EPC components in CRC's wireless research network.</p>	

Element Management System (or equivalent) Equipment Solution, PA-002

DATA ITEM DESCRIPTION	3. Identification No. PA-002
1. Title Element Management System (or equivalent) Equipment Solution	
2. Description/Purpose The Contractor must provide an Element Management System (or equivalent) on a monthly lease basis (if not part of the PA-001), on an "as and when requested basis".	4. Delivery Date No later than ten weeks after issuance of TA
	5. Office of Primary Interest (OPI) Contractor
	6. Office of Collateral Interest (OCI)
7. Application/Interrelationship	8. Approval Limitation
	9. References: 3GPP Specifications
<p>10. Preparation Instructions The Contractor must provide an EMS (or equivalent) that will be leased on a monthly basis. All EMS equipment must be located on CRC's campus.</p> <p>The EMS (or equivalent) support the following functionality:</p> <ul style="list-style-type: none"> - Configuration of the EPC components of PA-001 - Operation of the EPC components of PA-001 - Monitoring of the EPC components of PA-001 <p>The Contractor must include the following:</p> <ul style="list-style-type: none"> - All hardware, firmware, software, licenses and interconnecting cables required for the EMS Equipment Solution. - All documentation required for the installation, configuration and operation of the EMS Equipment Solution - All maintenance and release upgrades for hardware, firmware and software associated with the EMS Equipment Solution for the duration of the lease <p>It is understood that the Technical Authority and CRC personnel will perform the physical installation of the EMS components in CRC's wireless research network.</p> <p>In the event the EMS functionality mentioned above (configuration, operation, monitoring of EPC components of PA-001) is met through other means (e.g. the EMS functionality is integrated with the EPC PA-001 deliverable), the Contractor should indicate so in writing.</p>	



[Optional] Internet Protocol Multimedia Subsystem (IMS), OP-001

DATA ITEM DESCRIPTION	3. Identification No. OP-001
1. Title Internet Protocol Multimedia Subsystem (IMS)	
2. Description/Purpose The Contractor must provide an Internet Protocol Multimedia Subsystem on a monthly lease basis, on an "as and when requested basis".	4. Delivery Date No later than ten weeks after issuance of TA
	5. Office of Primary Interest (OPI) Contractor
	6. Office of Collateral Interest (OCI)
7. Application/Interrelationship	8. Approval Limitation
	9. References: 3GPP Specifications
<p>10. Preparation Instructions The Contractor must provide an IMS that will be leased on a monthly basis. All equipment must be compliant with 3GPP specifications, must support VoLTE and must be physically located on CRC's campus.</p> <p>The IMS may be provided as a virtualized implementation which includes all required hardware and software components.</p> <p>The Contractor must include the following:</p> <ul style="list-style-type: none"> - All hardware, firmware, software, licenses and interconnecting cables required for the IMS. - All hardware, firmware, software, licenses and interconnecting cables required for the configuration, operation, monitoring of the IMS (Element Management System or equivalent). - All documentation required for the installation, configuration and operation of the IMS. - All maintenance and release upgrades for hardware, firmware and software associated with the IMS for the duration of the lease. <p>It is understood that the Technical Authority and CRC personnel will perform the physical installation of the above IMS in CRC's wireless research network.</p>	

[Optional] Pre-delivery EPC and EMS (equivalent) Integration Services, OP-002

DATA ITEM DESCRIPTION	3. Identification No. OP-002
1. Title [Optional] Pre-delivery EPC and EMS (or equivalent) Integration Services Package	
2. Description/Purpose The Contractor must provide a pre-delivery EPC and EMS (or equivalent) integration (installation and configuration) services package for the deliverables of PA-001 and PA-002, on an "as and when requested basis".	4. Delivery Date After issuance of TA and prior to the delivery of PA-001 and PA-002.
	5. Office of Primary Interest (OPI) Contractor
	6. Office of Collateral Interest (OCI)
7. Application/Interrelationship	8. Approval Limitation
	9. References
<p>10. Preparation Instructions The Contractor must provide pre-delivery EPC and EMS (or equivalent) integration (installation and configuration) services for the deliverables of PA-001 and PA-002 to reduce the post-delivery integration effort. The Contractor must provide a description of the integration tasks that will be performed at the contractor's facilities prior to the delivery of the EPC and EMS (or equivalent). The Contractor must also provide a description of the integration tasks that will remain to be performed by the Technical Authority and CRC once the EPC and EMS (or equivalent) are delivered.</p> <p>After issuance, the Technical Authority and CRC may answer the Contractor's technical inquiries for information required in the installation/configuration of the EPC/EMS (e.g. required IP address scheme).</p>	



[Optional] Remote EPC and EMS (or equivalent) Integration Support Services, OP-003 A

DATA ITEM DESCRIPTION		3. Identification No. OP-003 A
1. Title [Optional] Remote EPC and EMS (or equivalent) Integration Support Services Package		
2. Description/Purpose The Contractor must provide a Remote EPC and EMS (or equivalent) Integration Support Services package, on an "as and when requested basis".	4. Delivery Date No later than four weeks after issuance of TA.	
	5. Office of Primary Interest (OPI) Contractor	
	6. Office of Collateral Interest (OCI)	
7. Application/Interrelationship	8. Approval Limitation	
	9. References	
10. Preparation Instructions The Contractor must assist the Technical Authority and CRC personnel during the EPC and EMS (or equivalent) integration phase by providing 40 hours of technical support services. It is expected that the technical support services will be provided remotely by the Contractor and will mostly consist in answering the Technical Authority and CRC personnel technical inquiries (via e-mail/web and/or telephone) that arise during the EPC and EMS (or equivalent) installation and configuration phase. Technical support should be provided Monday to Friday 9am to 5pm EST with an expected response time of 2 business days.		

[Optional] On-Site EPC and EMS (or equivalent) Integration Support Services, OP-003 B

DATA ITEM DESCRIPTION		3. Identification No. OP-003 B
1. Title [Optional] On-Site EPC and EMS (or equivalent) Integration Support Services Package		
2. Description/Purpose The Contractor must provide an On-Site EPC and EMS (or equivalent) integration support services package, on an "as and when requested basis".	4. Delivery Date No later than four weeks after issuance of TA.	
	5. Office of Primary Interest (OPI) Contractor	
	6. Office of Collateral Interest (OCI)	
7. Application/Interrelationship	8. Approval Limitation	
	9. References	
10. Preparation Instructions The Contractor must assist the Technical Authority and CRC personnel during the EPC and EMS (or equivalent) integration phase by providing 40 hours of on-site technical support services. It is expected that the 40 hours of technical support services will be provided consecutively over a period of five days and will mostly consist in assisting the Technical Authority and CRC personnel during the EPC and EMS (or equivalent) installation and configuration phase.		

[Optional] Remote EPC and EMS (or equivalent) Operational Support, OP-004 A

DATA ITEM DESCRIPTION		3. Identification No. OP-004 A
1. Title [Optional] Remote EPC and EMS (or equivalent) Operational Support Package		
2. Description/Purpose The Contractor must provide a Remote EPC and EMS (or equivalent) Operational Support package, on an "as and when requested basis".	4. Delivery Date No later than four weeks after issuance of TA.	
	5. Office of Primary Interest (OPI) Contractor	
	6. Office of Collateral Interest (OCI)	
7. Application/Interrelationship	8. Approval Limitation	
	9. References	
10. Preparation Instructions The Contractor must assist the Technical Authority and CRC personnel during the EPC and EMS (or equivalent) operational phase by providing 40 hours of technical support services. It is expected that the technical support services will be provided remotely by the Contractor and will mostly consist in answering the Technical Authority and CRC personnel technical inquiries (via e-mail/web and/or telephone) that arise during the operation of the EPC and EMS (or equivalent). Technical support should be provided Monday to Friday 9am to 5pm EST with an expected response time of 2 business days.		



[Optional] On-Site EPC and EMS (or equivalent) Operational Support Services, OP-004 B

DATA ITEM DESCRIPTION	3. Identification No. OP-004 B
1. Title [Optional] On-Site EPC and EMS (or equivalent) Operational Support Services Package	
2. Description/Purpose The Contractor must provide an On-Site EPC and EMS (or equivalent) Operational Support Services package, on an "as and when requested basis".	4. Delivery Date No later than four weeks after issuance of TA.
	5. Office of Primary Interest (OPI) Contractor
	6. Office of Collateral Interest (OCI)
7. Application/Interrelationship	8. Approval Limitation
	9. References
10. Preparation Instructions The Contractor must assist the Technical Authority and CRC personnel during the EPC and EMS (or equivalent) operational phase by providing 40 hours of on-site technical support services. It is expected that the 40 hours of technical support services will be provided consecutively over a period of five days and will mostly consist in assisting the Technical Authority and CRC personnel with the operational aspects of the EPC and EMS (or equivalent).	

[Optional] Remote Training, OP-005 A

DATA ITEM DESCRIPTION	3. Identification No. OP-005 A
1. Title [Optional] Remote Training Package	
2. Description/Purpose The Contractor must provide a remote training package for the EPC Equipment Solution, on an "as and when requested basis". It is expected training would cover the configuration and operation of the EPC and EMS (or equivalent) Equipment Solution for a maximum of 5 students.	4. Delivery Date No later than eight weeks after issuance of TA.
	5. Office of Primary Interest (OPI) Contractor
	6. Office of Collateral Interest (OCI)
7. Application/Interrelationship	8. Approval Limitation
	9. References
10. Preparation Instructions The contractor must provide remote training (e.g. webinar), for a maximum of 5 students, on the configuration, operation and monitoring the EPC components of PA-001 using the software/user interface (Element Management System or equivalent) of PA-002. The remote training should be accessible electronically from the Technical Authority/CRC premises (e.g. webinar). The bid should specify the duration of the training and provide a table of contents indicating the topics to be covered.	

On-Site Training, OP-005 B

DATA ITEM DESCRIPTION	3. Identification No. OP-005 B
1. Title [Optional] On-Site Training Package	
2. Description/Purpose The Contractor must provide an on-site training package for the EPC Equipment Solution, on an "as and when requested basis". It is expected training would cover the configuration and operation of the EPC and EMS (or equivalent) Equipment Solution for a maximum of 5 students.	4. Delivery Date No later than eight weeks after issuance of TA.
	5. Office of Primary Interest (OPI) Contractor
	6. Office of Collateral Interest (OCI)
7. Application/Interrelationship	8. Approval Limitation
	9. References
10. Preparation Instructions The contractor must provide on-site training, for a maximum of 5 students, on the configuration, operation and monitoring the EPC components of PA-001 using the software/user interface (Element Management System or equivalent) of PA-002. The bid should specify the duration of the training and provide a table of contents indicating the topics to be covered.	



**ANNEX B
BASIS OF PAYMENT**

All Task Authorization (TA) price will be determined in accordance with the following Table:

Section 1.1 – EPC and EMS Equipment Solution					
Item	DID (Appendix 1 of the SOR)	Deliverable(s)	Firm Monthly lease Price up to March 2017	Firm Monthly lease Price (option periods)	Estimated Delivery Date
1	PA-001	Evolved Packet Core Equipment Solution	\$ _____/Month	\$ _____/Month	No later than ten weeks after issuance of TA.
2	PA-002	Element Management System (or equivalent) Equipment Solution	\$ _____/Month	\$ _____/Month	No later than ten weeks after issuance of TA.
Section 1.2 – Optional IMS					
Item	DID (Appendix 1 of the SOR)	Deliverable(s)	Firm Monthly lease Price (initial contract period) up to March 2017	Firm Monthly lease Price (option periods)	Estimated Delivery Date
3	OP-001	[Optional] Internet Protocol Multimedia Subsystem (IMS)	\$ _____/Month	\$ _____/Month	No later than ten weeks after issuance of TA.
Section 1.3 – Optional Pre-Delivery EPC and EMS Integration Services Package					
Item	DID (Appendix 1 of the SOR)	Deliverable(s)	Firm All-inclusive Price (initial contract period) up to March 2017	Firm All-inclusive Price (option periods)	Estimated Delivery Date
4	OP-002	[Optional] Pre-delivery EPC and EMS (or equivalent) Integration Services	\$ _____	N/A	After issuance of TA and prior to the delivery of PA-001.
Section 1.4 – Optional Support and Training Services Package					
Item	DID (Appendix 1 of the SOR)	Deliverable(s)	Firm All-inclusive Price (initial contract period) up to March 2017	Firm All-inclusive Price (option periods)	Estimated Delivery Date
5	OP-003 A	[Optional] Remote EPC and EMS (or equivalent) Integration Support Services	\$ _____	N/A	No later than four weeks after issuance of TA.
6	OP-003 B	[Optional] On-Site EPC and EMS (or equivalent) Integration Support Services	\$ _____	N/A	No later than four weeks after issuance of TA.
7	OP-004 A	[Optional] Remote EPC and EMS (or equivalent) Operational Support Services	\$ _____	\$ _____	No later than four weeks after issuance of TA.
8	OP-004 B	[Optional] On-Site EPC Operational Support Services	\$ _____	\$ _____	No later than four weeks after issuance of TA.
9	OP-005 A	[Optional] Remote Training	\$ _____	\$ _____	No later than eight weeks after issuance of TA.
10	OP-005 B	[Optional] On-Site Training	\$ _____	\$ _____	No later than eight weeks after issuance of TA.



**ANNEX C
TASK AUTHORIZATION (TA) FORM**

PWGSC FILE NO.: _____

CONTRACT SERIAL NO.: _____

TASK NO.: _____

AMENDMENT NO.: _____

TITLE: _____

REASON FOR AMENDMENT, IF APPLICABLE:

1.0 DESCRIPTION OF THE WORK: As follows _____ See attached _____

Deliverables: As follows _____ See attached _____

Delivery Date(s):

2. COST BREAKDOWN

(a) Services (Items 4 to 10 identified at Annex B, Basis of payment)

Category of Service	Firm Price	Qty	Total Amount
Total Estimated Cost:			\$

(b) Equipment to be leased on a monthly basis (Items 1 to 3 identified at Annex B)

Equipment (DID #)	Number of month(s) of leasing	Firm Monthly Lease Price	Total Lease price
Total Lease Price:			\$

TOTAL ESTIMATED/FIRM COST:

\$ _____

(Applicable Taxes extra, as applicable)



3. BASIS OF PAYMENT:

<input type="checkbox"/> Firm Price	\$ _____	(Applicable Taxes extra)
<input type="checkbox"/> Limitation of Expenditure	\$ _____	(Applicable Taxes extra)
<input type="checkbox"/> Ceiling Price	\$ _____	(Applicable Taxes extra)

4. METHOD OF PAYMENT:

Single payment
 Milestone payments as set out in the attached Schedule of Milestones
 Progress payments
 Monthly payments

5.0 APPROVALS:

APPROVED: _____
 Technical Authority Signature Date

APPROVED: _____
(If required) Finance/Administration (client) Signature Date

APPROVED: _____
 PWGSC Contracting Authority Signature Date