



RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:
Bid Receiving - PWGSC / Réception des
soumissions - TPSGC
11 Laurier St. / 11, rue Laurier
Place du Portage, Phase III
Core 0B2 / Noyau 0B2
Gatineau, Québec K1A 0S5
Bid Fax: (819) 997-9776

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 LTE Network Analyzer	
Solicitation No. - N° de l'invitation U6800-163871/A	Date 2015-12-07
Client Reference No. - N° de référence du client U6800-163871	
GETS Reference No. - N° de référence de SEAG PW-\$\$HN-329-68570	
File No. - N° de dossier hn329.U6800-163871	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2016-01-20	
Time Zone Fuseau horaire Eastern Standard Time EST	
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: Dumaresq, Steve	Buyer Id - Id de l'acheteur hn329
Telephone No. - N° de téléphone (819) 956-3487 ()	FAX No. - N° de FAX (819) 953-4944
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: DEPARTMENT OF INDUSTRY CANADA 3701 CARLING AVE P.O.BOX 11490 STATION H OTTAWA Ontario K2H8S2 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

Electrical & Electronics Products Division
11 Laurier St./11, rue Laurier
7B3, Place du Portage, Phase III
Gatineau, Québec K1A 0S5

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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PART 1 - GENERAL INFORMATION

1. Security Requirement

There is no security requirement associated with the requirement.

2. Requirement

The contractor must provide the goods in accordance with the technical requirements and quantities stated 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.

4. Trade Agreements

The requirement is subject to the provisions of the North American Free Trade Agreement (NAFTA) and the Agreement on Internal Trade (AIT).

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 (2015-07-03) 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) calendar days

1.1 SACC Manual Clauses

SACC Reference	Section	Date
A9033T	Financial Capability	2012-07-16
B1000T	Condition of Material	2014-06-26

2. Submission of Bids

Bids must be submitted ONLY TO THE BID RECEIVING UNIT by the date, time and place indicated on page 1 of the bid solicitation. Do not send proposal directly to the Contracting Officer. Email proposals not accepted.

PWGSC Bids Receiving Unit
11 Laurier Street
Place du Portage, Phase 3, Core 0B2
Gatineau, Québec, K1A 0S5
Tel.: 819-956-3366
Fax: 819-997-9776

3. Enquiries - Bid Solicitation

All enquiries must be submitted in writing 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 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.

Steve Dumaresq (steve.dumaresq@pwgsc-tpsgc.gc.ca)

4. 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.

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 (1 copy)
Section II: Financial Bid, Certifications and Additional Information (1 copy)

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

SECTION I: TECHNICAL BID (1 copy)

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, CERTIFICATIONS AND ADDITIONAL INFORMATION (1 copy)

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

1.1 Exchange Rate Fluctuation Risk Mitigation

The Bidder may request Canada to assume the risks and benefits of exchange rate fluctuations. If the Bidder claims for an exchange rate adjustment, this request must be clearly indicated in the bid at time of bidding. The Bidder must submit form PWGSC-TPSGC 450, Claim for Exchange Rate Adjustments with its bid, indicating the Foreign Currency Component (FCC) in Canadian dollars for each line item for which an exchange rate adjustment is required.

The FCC is defined as the portion of the price or rate that will be directly affected by exchange rate fluctuations. The FCC should include all related taxes, duties and other costs paid by the Bidder and which are to be included in the adjustment amount.

The total price paid by Canada on each invoice will be adjusted at the time of payment, based on the FCC and the exchange rate fluctuation provision in the contract. The exchange rate adjustment will only be applied where the exchange rate fluctuation is greater than 2% (increase or decrease).

At time of bidding, the Bidder must complete columns (1) to (4) on form PWGSC-TPSGC 450, for each line item where they want to invoke the exchange rate fluctuation provision. Where bids are evaluated in Canadian dollars, the dollar values provided in column (3) should also be in Canadian dollars, so that the adjustment amount is in the same currency as the payment.

Alternate rates or calculations proposed by the Bidder will not be accepted for the purposes of this exchange rate fluctuation provision.

1.2 Certifications

Bidders must submit the certifications required under Part 5 prior to contract award.

1.3 Additional Information

1.3.1 Procurement Business Number (PBN) (Canadian suppliers)

<https://buyandsell.gc.ca/for-businesses/register-as-a-supplier>

The Procurement Business Number of the supplier is: _____

Note: Not mandatory at bid closing but required precedent to contract award.

1.4 Contractor Representatives

Name and telephone number of the person responsible for:

General enquiries

Name: _____

Telephone: _____

Facsimile: _____

E-mail: _____

Delivery follow-up

Name: _____

Telephone: _____

Facsimile: _____

E-mail: _____

1.5 Delivery Offered

Offered delivery: _____

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

1. Evaluation Procedures

Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria. All bids must be completed in full and provide all of the information requested in the bid solicitation to enable full and complete evaluation.

1.1 Technical Evaluation

1.1.1 Mandatory Technical Criteria

The following Mandatory requirements must be submitted with the bid for evaluation:

- Technical compliance to the requirement presented herein and at Annex A;
- Complete technical specifications submitted to fully demonstrate technical compliance.

1.2 Financial Evaluation

The bidder must quote firm prices in Canadian dollars, DDP Delivered Duty Paid (destination), with all applicable Custom duties and Excise taxes included. Freight/Shipping charges to destination extra, as applicable. Goods and Services Tax (GST) and/or the Harmonized Sales Tax (HST) extra, as applicable.

If the Exchange Rate Fluctuation Risk Mitigation is being requested, a completed form PWGSC-TPSGC 450, Claim for Exchange Rate Adjustments, must be included with the bid.

2. Basis of Selection

A bid must comply with the requirements of the bid solicitation and meet all mandatory technical evaluation criteria to be declared responsive. The responsive bid with the lowest evaluated price on an aggregate basis will be recommended for contract award.

PART 5 - CERTIFICATIONS

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

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

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

5.1 Certifications Required with the Bid

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

5.1.1 Declaration of Convicted Offences

If applicable, pursuant to subsection Declaration of Convicted Offences of section 01 of the Standard Instructions, the Bidder must provide with its bid, a completed Declaration Form, to be given further consideration in the procurement process.

5.2 Certifications Precedent to Contract Award and Additional Information

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

5.2.1 Integrity Provisions – List of Names

Bidders who are incorporated, including those bidding as a joint venture, must provide a complete list of names of all individuals who are currently directors of the Bidder.

Bidders bidding as sole proprietorship, as well as those bidding as a joint venture, must provide the name of the owner(s).

Bidders bidding as societies, firms or partnerships do not need to provide lists of names.

5.2.2 General Environmental Criteria Certification

By submitting the bid, the bidder certifies that the information submitted in the General Environmental Criteria table found at Table 1 is accurate and complete.

By submitting the bid the Bidder certifies that it meets, and will continue to meet throughout the duration of any resulting contract, a minimum of four out of seven requirements identified in the General Environmental Criteria Table found at Table 1;

The Bidder must complete Table 1 by inserting a checkmark next to every criteria that are met. Bidders are requested to submit Table 1 with their bid. As this is a new procedure, Canada reserves the right to request Table 1 after bid closing. The Contracting Authority will inform the Bidder of a time frame within which to provide it. Failure to provide Table 1 within the required time frame will render the bid non-responsive.

The Contractor must meet and continue to meet four out of seven criterions during the entire duration of the contract.

Table 1: Green practices within supplier's organization:	Insert a checkmark for each criteria that is met
Promotes a paperless environment through directives, procedures and/or programs.	
All documents are printed double sided and in black and white for day to day business activity unless otherwise specified by your client.	
Paper used for day to day business activity has a minimum of 30% recycled content and has a sustainable forestry management certification.	
Utilizes environmentally preferable inks and purchase remanufactured ink cartridges or ink cartridges that can be returned to the manufacturer for reuse and recycling for day to day business activity.	
Recycling bins for paper, newsprint, plastic and aluminum containers available and emptied regularly in accordance with local recycling program.	
A minimum of 50% of office equipment has an energy efficient certification.	
Registered to ISO 14001 or has an equivalent environmental management system in place	

5.2.3 Federal Contractors Program for Employment Equity - Bid Certification

By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "[FCP Limited Eligibility to Bid](http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/list/inelig.shtml)" 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 "[FCP Limited Eligibility to Bid](#)" list at the time of contract award.

PART 6 - RESULTING CONTRACT CLAUSES

1. Security Requirement

There is no security requirement associated with the requirement.

2. Requirement

The contractor must provide the goods in accordance with the technical requirements and quantities stated herein

2.1 SACC Manual Clauses

SACC Reference	Section	Date
B1501C	Electrical Equipment	2006-06-16
B7500C	Excess Goods	2006-06-16

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

2010A (2015-07-03), General Conditions - Goods (Medium Complexity), apply to and form part of the Contract.

4. Term of Contract

4.1 Period of the Contract

The period of the Contract is from ___date___ to ___date___ inclusively, which permits the delivery of the initially required product and the period of validity of the warranty for support and upgrades.

One (1) LTE network monitoring tool (LTE Network Analyzer) delivered by ___
(Delivery as offered and as accepted will be inserted at contract award).

5. Authorities

5.1 Contracting Authority

Steve Dumaresq
Public Works and Government Services Canada
Acquisitions Branch
Logistics, Electrical, Fuel and Transportation Directorate
"HN" Division, 7B3, Place du Portage, Phase III, 11 Laurier Street
Gatineau, QC, K1A 0S5
Telephone: (819) 956-3487 Facsimile: (819) 953-4944
E-mail address: steve.dumaresq@pwgsc-tpsgc.gc.ca

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

5.2 Technical Authority

Name: will be inserted at contract
Telephone No. will be inserted at contract
Facsimile No. will be inserted at contract
E-mail address: will be inserted at contract

The Technical Authority named above 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.

5.3 Contractor Contacts

General Enquiries

Name: will be inserted at contract
Telephone No. will be inserted at contract
Facsimile No. will be inserted at contract
E-mail address: will be inserted at contract

Delivery Follow-up

Name: will be inserted at contract
Telephone No. will be inserted at contract
Facsimile No. will be inserted at contract
E-mail address: will be inserted at contract

6. Payment

6.1 Basis of Payment

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

1. One (1) LTE network monitoring tool (LTE Network Analyzer) \$ ___
2. Freight/Shipping \$ ___

6.2 Single Payment

SACC Manual clause H1000C (2008-05-12) Single Payment

6.3 SACC Manual Clauses

SACC Reference	Section	Date
G1005C	Insurance	2008-05-12

6.4 Exchange Rate Fluctuation Adjustment (If applicable)

1. The foreign currency component (FCC) is defined as the portion of the price or rate that will be directly affected by exchange rate fluctuation. The FCC should include all related taxes, duties and other costs paid by the Bidder and which are to be included in the adjustment amount.
2. For each line item where a FCC is identified, Canada assumes the risks and benefits for exchange rate fluctuation, as shown in the Basis of Payment. For such items, the exchange rate fluctuation amount is determined in accordance with the provision of this clause.
3. The total price paid by Canada on each invoice will be adjusted at the time of payment, based on the FCC and the exchange rate fluctuation provisions in the contract. The exchange rate adjustment amount will be calculated in accordance with the following formula:

$$\text{Adjustment} = \text{FCC} \times \text{Qty} \times (i1 - i0) / i0$$

where formula variables correspond to:

FCC Foreign Currency Component (per unit)

i0 Initial exchange rate (CAN\$ per unit of foreign currency [e.g. US\$1])

i1 exchange rate for adjustments (CAN\$ per unit of foreign currency [e.g. US\$1])

Qty quantity of units

4. The initial exchange rate is typically set as the noon rate as published by the Bank of Canada on the solicitation closing date.
5. For goods, the exchange rate for adjustment will be the noon rate as published by the Bank of Canada on the date the goods were delivered. For services, the exchange rate for adjustment will be the noon rate on the last business day of the month for which the services were performed. For advance payments, the exchange rate for adjustment will be the noon rate on the date the payment was due. The most recent noon rate will be used for non-business days.
6. The Contractor must indicate the total exchange rate adjustment amount (either upward, downward or no change) as a separate item on each invoice or claim for payment submitted under the Contract. Where an adjustment applies, the Contractor must submit with their invoice form PWGSC-TPSGC 450, Claim for Exchange Rate Adjustments.
7. The exchange rate adjustment will only be applied where the exchange rate fluctuation is greater than 2% (increase or decrease), calculated in accordance with column 8 of form PWGSC-TPSGC 450 (i.e. $[i1 - i0] / i0$).
8. Canada reserves the right to audit any revision to costs and prices under this clause.

7. Invoicing Instructions

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

Department of Public Works and Government Services
"HN" Division, 7B3 Place du Portage, Phase III
11 Laurier Street, Gatineau, QC K1A 0S5
Attention: Steve Dumaresq

8. Certifications

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. Applicable Laws

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

10. 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. 2010A (2015-07-03) General Conditions – Goods (Medium Complexity);
- c. Requirement as presented at Solicitation U6800-163871/A;
- d. the Contractor's bid dated _date_.

11. SACC Manual Clauses (Delivery)

SACC Reference	Section	Date
D9002C	Incomplete Assemblies	2007-11-30

11.1 Shipping Instructions - Delivery at Destination

Goods must be consigned to the destination specified in the Contract and delivered:
Delivered Duty Paid (DDP) (destination) Inco terms 2000 for shipments from a commercial contractor.

ANNEX A
Statement of Requirement
LTE network monitoring tool
(LTE Network Analyzer)

1. Objective

The objective of this RFP is to obtain an Application Evaluation Platform (AEP) that will monitor signalling and application traffic between LTE user devices and an LTE mobile broadband network at the Communications Research Centre (CRC). The purpose of this platform is to monitor how new and existing public safety applications impact an LTE network and how the network layout impacts these same applications.

2. 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:

- Define the requirements and expected performance of a broadband wireless LTE network serving the public safety community in Canada.
- Address the needs of CSS and PSC in regards to interoperability
- Mitigate the risks of introducing new communications technologies and applications

3. Scope

CRC is looking to obtain an LTE network monitoring tool that will monitor signalling and application traffic between LTE user devices and an LTE mobile broadband network. This tool will form the application Evaluation Platform of the CIRTEC research network. The Statement of Technical Requirement below describes the deliverables for the purchase. The solution proposed must not be a leasing option. As part of the bid, the Contractor's must provide the physical assets with a one (1) year equipment warranty and support. The equipment warranty and support must include, at a minimum, the following:

- Basic technical support whereas vendor's subject matter experts are available to assist CRC support staff by answering questions, providing advices and assisting in the troubleshooting and resolution of major issues;
- Repair of solution damaged equipment;
- Software (including firmware) patches as required; and
- Updated documentation.

During the warranty period, the vendor must provide the following services:

- Receive and action telephone and email requests for technical support from 0900 hours to 1700 hours local customer time.
- Respond to Canada requests for technical support with at least a plan of action within one business week.
- Advise the Technical Authority of software updates within thirty (30) business days of their availability. The implementation of new releases and updates will rest solely with Canada's Technical Authority.
- Replace or repair damaged components under warranty. If a component of the solution is declared damaged, Canada will pay the transportation cost associated with returning the component for repair under the warranty. The vendor must pay the transportation cost associated with returning the repaired components to Canada.

The warranty period will begin once Canada obtains the solution. The Vendor must clearly specify any and all exclusions that apply to the warranty and support as part of its proposal.

4. SPECIFICATIONS

A. General Requirements	
1	The solution must be a stand-alone system that can tap into existing LTE networks without the need to upgrade infrastructure equipment that support specific protocols.
2	The solution must be able to generate customized reports based on user preferences or needs.
3	The solution must have the ability for remote access with full control over a serial interface or over an IP network.
4	The solution must use standard HTTP or RDP protocols for remote access. This will allow any client (with the proper credentials) to access the platform, without the need for customized software.
5	The solution must support LTE release 9 and above.
6	The solution must not be network vendor specific. Must support any LTE network elements.
7	The contractor must provide technical support for the solution, which include: <ul style="list-style-type: none"> ▪ Basic technical support where the vendor's subject matter experts are available, to answer questions, provide advices and assistance in the troubleshooting and resolution of major issues; ▪ Repair damaged equipment or components; ▪ Software (including firmware) patches as required; ▪ Provide Updated documentation
B. Functional/Technical Requirements	
1	The solution must have the ability to capture data packets on the LTE network at line rate (max 1 Gbps) and output results in real time. This is the current speed/interface used on the core network.
2	The solution must have the ability to capture GTP-C, GTP-U, and Diameter packets and extract details of the data packet, allowing the user to capture the UE source IP and the destination IP addresses.
3	The solution must have the ability to capture and store data to local disk. This will be use for post data analysis.
4	The solution must have the ability to monitor network traffic, analyze the data, and display the following information: <ul style="list-style-type: none"> - Data usage and latency of different types of traffic based on application and port - Count of dropped packets - Network issues such as bottlenecks, link failures, and latency.
5	The solution must have the ability to capture OSI Network Layer 7 data packets. For example; L7 protocols including, but not limited to (HTTP, RDP, RTP, H.323) and non-standard protocol ports used by custom applications.
6	The solution must have the ability to monitor the signalling traffic on the LTE network.
7	The solution must support PCAP, for example libpcap and/or winpcap. PCAP files captured will be imported to testbed emulators for furthers network tests and analysis.

ANNEX B
Pricing Schedule

The bidder must quote firm prices in Canadian dollars, DDP Delivered Duty Paid (Ottawa, Ontario), with all applicable Custom duties and Excise taxes included. Freight/Shipping charges to destination extra. Goods and Services Tax (GST) and/or the Harmonized Sales Tax (HST) extra, as applicable.

If the Exchange Rate Fluctuation Risk Mitigation is being requested, a completed form PWGSC-TPSGC 450, Claim for Exchange Rate Adjustments, must be included with the bid.

1. One (1) LTE network monitoring tool (LTE Network Analyzer) \$ _____

2. Freight/Shipping to destination \$ _____

Total Evaluated Bid Price (Sum of line items) \$ _____

Delivery/Lead Time: _____ ARO

ANNEX C
Form PWGSC-TPSGC 450
Claim for Exchange Rate Adjustments (If Applicable)
<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/450-eng.html>



Claim for Exchange Rate Adjustments Demande de rajustement du taux de change

Contractor Name - Nom de l'entrepreneur		PWGSC File Number - Numéro du dossier de TPSGC			Contract Number - Numéro du contrat		Item/Invoice Number - Numéro d'article/de facture	
1	2	3	4	5	6	7	8	9
Item Number Numéro d'article	Description	Foreign Currency Component (FCC) per Unit Montant en monnaie étrangère par unité (\$CAN)	Foreign Currency Devise étrangères	Quantity Quantité	Initial Exchange Rate Facteur de conversion initial (i0)	Exchange Rate for Adjustments Taux de change aux fins du rajustement (i1)	% Change Variation en % $(i1-i0)/i0 > 0.02$ (+/-)	Adjustment = FCC X Quantity X (i1 - i0)/i0 Rajustement = montant en monnaie étrangère X Quantité X (i1 - i0)/i0
								\$ 0.000
								\$ 0.000
								\$ 0.000
								\$ 0.000
								\$ 0.000
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								\$ 0.000
								\$ 0.000
								\$ 0.000
								\$ 0.000
								\$ 0.000
Total Exchange Rate Adjustment Rajustement total du taux de change								\$ 0.000

Instructions

Where:

i_0 = initial exchange rate (CAN\$ per unit of foreign currency [e.g. US\$1])

i_1 = exchange rate for adjustment purposes (CAN\$ per unit of foreign currency [e.g. US\$1])

Instructions to bidders:

1. Bidders must complete columns (1) to (4) at time of bidding, for each line item where they want to invoke the exchange rate fluctuation provisions.
2. Where bids are evaluated in Canadian dollars, the dollar values provided in column (3) should also be in Canadian dollars, so that the adjustment amount is in the same currency as the payment.

Instructions for Payment:

1. This form must be submitted with the invoice for payment with respect to all items with an FCC. Complete columns (1) through (7). Columns (8) and (9) will auto complete.
2. Suppliers should submit a separate calculation sheet for each invoice submitted showing the exchange rate adjustment for all line items with an FCC.
3. This form must be provided with all invoices where the exchange rate fluctuates more than 2% (increase or decrease), (i.e. $\text{abs}[(1 - i_0) / i_0] > .02$), unless otherwise stated in the contract.

Étant entendu que :

i_0 = Facteur de conversion du taux de change initial (\$ CA par unité de devise étrangère [p. ex. 1 \$ US])

i_1 = Taux de change aux fins du rajustement (\$ CA par unité de devise étrangère [p. ex. 1 \$ US])

Instructions aux soumissionnaires :

1. Les soumissionnaires doivent remplir les colonnes (1) à (4) au moment de présenter leur soumission, pour chacun des produits pour lesquels ils veulent se prévaloir des dispositions relatives à la fluctuation du taux de change.
2. Lorsque les soumissions sont évaluées en dollars canadiens, les montants en dollars indiqués dans la colonne (3) doivent également être en dollars canadiens, de sorte que le montant du rajustement soit indiqué dans la même devise que pour le paiement.

Instructions relatives au paiement :

1. Le présent formulaire doit accompagner la facture en vue du paiement pour chaque article comportant un montant en monnaie étrangère. Il faut remplir les colonnes (1) à (7). Les colonnes (8) et (9) seront remplies automatiquement.
2. Les fournisseurs doivent présenter une feuille de calcul séparée pour chaque facture et indiquer le rajustement du taux de change pour chaque article comportant un montant en monnaie étrangère.
3. Le présent formulaire doit accompagner toutes les factures pour lesquelles la fluctuation du taux de change est supérieure à 2% (augmentation ou diminution), (c. -à-d. $\text{abs}[(1 - i_0) / i_0] > .02$), à moins d'indication contraire dans le contrat.