

RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:
Travaux publics et Services gouvernementaux
Canada
Place Bonaventure, portail Sud-Est
800, rue de La Gauchetière Ouest
7 ième étage
Montréal
Québec
H5A 1L6
FAX pour soumissions: (514) 496-3822

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 Pulsed IV Characterization system	
Solicitation No. - N° de l'invitation 9F064-140378/A	Date 2014-10-28
Client Reference No. - N° de référence du client 9F064-14-0378	
GETS Reference No. - N° de référence de SEAG PW-\$MTA-309-12959	
File No. - N° de dossier MTA-4-37169 (309)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2014-11-21	
Time Zone Fuseau horaire Heure Normale du l'Est HNE	
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: Paradis, Mary	Buyer Id - Id de l'acheteur mta309
Telephone No. - N° de téléphone (514) 496-3874 ()	FAX No. - N° de FAX (514) 496-3822
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: AGENCE SPATIALE CANADIENNE 9F064#SPACE Science&Technology 6767 ROUTE DE L AEROPORT ST HUBERT Québec J3Y8Y9 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

Travaux publics et Services gouvernementaux Canada
Place Bonaventure, portail Sud-Est
800, rue de La Gauchetière Ouest
7 ième étage
Montréal
Québec
H5A 1L6

Delivery Required - Livraison exigée .	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

Item Article	Description	Dest. Code Dest.	Inv. Code Fact.	Qty Qté	U. of I. U. de D.	Unit Price/Prix unitaire		Del. Offered Liv. offerte
						Destination	FOB/FAM Plant/Usine	
1	Pulsed IV Characterization system (Details at Annex A - Requirement).	9F064	9F064	1	EA	\$	XXXXXXXXXXXX	

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PART 1 - GENERAL INFORMATION

1. Security Requirement

There is no security requirement associated with the requirement.

2. Requirement

The requirement is detailed under Annex 'A' - Requirement

3. Agreement

This requirement is not subject to the provisions of the North American Free Trade Agreement (NAFTA) and the Agreement of Internal Trade (AIT).

4. Communications notification

As a courtesy, the Government of Canada requests that successful bidders notify the Contracting Authority in advance of their intention to make public an announcement related to the award of a contract.

5. 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.

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

(<http://ccua-sacc.tpsgc-pwgsc.gc.ca/pub/acho-eng.jsp>) 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.

1.1 SACC Manual Clauses

B1000T Condition of Material 2007/11/30

2. Submission of Bids

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

3. Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than **seven (7) calendar days** before the bid closing date. Enquiries received after that time may not be answered.

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

4. 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 **7 calendar days** before the bid closing date. Canada will have the right to accept or reject any or all suggestions.

5. Applicable Laws

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

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. Term of contract

6.1 Complete Delivery

The Contractor must make the complete delivery **before March 31, 2015**.

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
Section II: Financial Bid
Section III: Certifications

Prices must appear in the financial bid only at Annexe 'B' - Pricing. No prices must be indicated in any other section of the bid.

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

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

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

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

Section I: Technical Bid

In the technical bid, bidder must demonstrate that they fully understand the requirement and how they will meet the requirements.

The technical bid should address clearly and in sufficient depth the points that are subject to the evaluation criteria against which the bid will be evaluated. Simply repeating the statement contained in the bid solicitation is not sufficient. In order to facilitate the evaluation of the bid, Canada request 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.

Substantial information

Bidders must demonstrate their compliance with the following sections of the bid solicitation by providing substantial information describing completely and in detail how the requirement is met or addressed. Bidders must provide with their technical bid, a document indicating clearly where the substantial information for each of the sections identified at Annexe 'A' - Requirement can be found.

Note: For conformance reasons and to assist the evaluation team in its evaluation of the technical bid, bidders could use the tables provided for this purpose at **Annex 'C' - Mandatory Evaluation Criteria**.

Section II: Financial Bid

1.1 Bidders must submit their financial bid in accordance with Basis of Payment (See clause 6 of Part 6 - Resulting contract clauses). The total amount of all applicable taxes must be shown separately, if applicable.

1.2 Pricing

The bidder must supply firm unit prices, in Annex 'B' - Pricing, in Canadian dollars, delivery and duty paid (DDP) to (*The Canadian Space Agency (CSA) 6767 Route de l'Aéroport, St. Hubert, Qc*), all applicable taxes extra, whichever the case. The transport charges to the CSA site must be included together with the applicable customs and excise taxes.

Section III: Certifications

Bidders must submit the certifications required under Part 5.

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

1. Evaluation Procedures

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

1.1 Technical Evaluation

1.1.1 Mandatory Technical Criteria

Conformity to the mandatory technical criteria which are included in Annex 'C' - Mandatory Evaluation Criteria.

1.2 Financial Evaluation

1.2.1 Mandatory financial criteria

-
- a. Compliance with the methods for setting the proposed prices;
 - b. Firm prices must be provided for **all items** listed on Annex 'B' - Pricing;

SACC Manual Clause

A0220T	Evaluation of Price	2007/05/25
A0222T	Evaluation of Price	2010/01/11

1.3.1 Price Evaluation

The prices at Annex 'B' - Basis of payment will be evaluated as follows:

A= Is the total firm price for item no's: 1+2+3+4

Total firm price (A) = Total price of contract (Applicable taxes extra)

2. Basis of Selection

2.1 Basis of Selection - Mandatory Technical Criteria

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

Note: The lowest evaluated price is the total price of item A as indicated at Annex 'B' - - Pricing.

3. Security Requirement

There is no security requirement associated with the requirement.

PART 5 - CERTIFICATIONS

Bidders must provide the required certifications and associated 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 in carrying out any of its obligations under the Contract, 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. 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 of 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 'FCP Limited Eligibility to Bid' list at the time of contract award.

2. Additional Certifications Required Precedent to Contract Award

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

2.1 Canadian Content Certification

SACC Manual clause

A3050T

Canadian content definition

2010-01-11

PART 6 - RESULTING CONTRACT CLAUSES

1. Security Requirement

There is no security requirement associated with the requirement.

2. Requirement

The Contractor must provide the items detailed under the Annex "A" - Requirement.

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 (<http://ccua-sacc.tpsgc-pwgsc.gc.ca/pub/acho-eng.jsp>) Manual issued by Public Works and Government Services Canada.

3.1 General Conditions

2030 (2014-09-25) General conditions - Higher complexity-Goods , apply to and form part of the Contract.

Supplementary general conditions

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

4003 (2010-08-16) Licensed Software

4. Term of Contract

Complete Delivery

The Contractor must make the complete delivery before **March 15, 2015**.

5. Authorities

5.1 Contracting Authority

The Contracting Authority for the Contract is:

Name: Mary Paradis

Title: Contracting officer

Public Works and Government Services Canada

Acquisitions Branch

Directorate: Quebec region

Address: 800 rue de la Gauchetière, ouest

Montreal, Qc

Telephone: 514-496-3874

Facsimile: 514-496-3822

E-mail address: mary.paradis@pwgsc.gc.ca

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

5.2 Contractor's Representative

Name and telephone number of the person to contact:

General enquiries:

Name: _____

Telephone: _____

Facsimile: _____

E-mail address: _____

Delivery follow-up:

Name: _____

Telephone: _____

Facsimile: _____

E-mail address: _____

5.3 Contact at customer department

(To be completed by Canada at the time of award)

For all information related to invoicing and /or payments you may communicate with:

Customer department:

Name:

Telephone number:

Fax number:

E-mail:

6. Payment

6.1 Basis of Payment - Firm Unit Price(s)

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a firm unit price, as specified in Annex 'B'- Pricing for a total cost of \$ _____ *(to be inserted at contract award)*. Customs duties are included and all 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 approved, in writing, by the Contracting Authority before their incorporation into the Work.

6.2 Limitation of Price

SACC Manual clause

C6000C Limitation of Price

2011/05/16

6.3 Method of payment

SACC Manual clause

H1000C Single Payment

2008/05/12

6.4 SACC Manual clauses

C2000C Taxes - Foreign-based Contractor

2007/11/30

C2605C Canadian Customs Duties and Sales Tax
- Foreign-based Contractor

2008/05/12

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.

8. Certifications

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

8.1 Limitation of Liability - Information Management/Information Technology

1. This section applies despite any other provision of the Contract and replaces the section of the general conditions entitled "Liability". Any reference in this section to damages caused by the Contractor also includes damages caused by its employees, as well as its subcontractors, agents, and representatives, and any of their employees. This section applies regardless of whether the claim is based in contract, tort, or another cause of action. The Contractor is not liable to Canada with respect to the performance of or failure to perform the Contract, except as described in this section and in any section of the Contract pre-establishing any liquidated damages. The Contractor is only liable for indirect, special or consequential damages to the extent described in this section, even if it has been made aware of the potential for those damages.
2. First Party Liability:
 - a. The Contractor is fully liable for all damages to Canada, including indirect, special or consequential damages, caused by the Contractor's performance or failure to perform the Contract that relate to:
 - i. any infringement of intellectual property rights to the extent the Contractor

breaches the section of the general conditions entitled "Intellectual Property Infringement and Royalties";

ii. physical injury, including death.

b. The Contractor is liable for all direct damages caused by the Contractor's performance or failure to perform the Contract affecting real or tangible personal property owned, possessed, or occupied by Canada.

c. Each of the Parties is liable for all direct damages resulting from its breach of confidentiality under the Contract. Each of the Parties is also liable for all indirect, special or consequential damages in respect of its unauthorized disclosure of the other Party's trade secrets (or trade secrets of a third party provided by one Party to another under the Contract) relating to information technology.

d. The Contractor is liable for all direct damages relating to any encumbrance or claim relating to any portion of the Work for which Canada has made any payment. This does not apply to encumbrances or claims relating to intellectual property rights, which are addressed under (a) above.

e. The Contractor is also liable for any other direct damages to Canada caused by the Contractor's performance or failure to perform the Contract that relate to:

i. any breach of the warranty obligations under the Contract, up to the total amount paid by Canada (including Applicable Taxes) for the goods and services affected by the breach of warranty; and

ii. any other direct damages, including all identifiable direct costs to Canada associated with re-procuring the Work from another party if the Contract is terminated either in whole or in part for default, up to an aggregate maximum for this subparagraph (ii) of the greater of **0.25** times the total estimated cost (meaning the dollar amount shown on the first page of the Contract in the block titled "Total Estimated Cost" or shown on each call-up, purchase order or other document used to order goods or services under this instrument), or **\$ 1 million**.

In any case, the total liability of the Contractor under paragraph (e) will not exceed the total estimated cost (as defined above) for the Contract or **\$ 1 million** , whichever is more.

f. If Canada's records or data are harmed as a result of the Contractor's negligence or willful act, the Contractor's only liability is, at the Contractor's own expense, to restore Canada's records and data using the most recent back-up kept by Canada. Canada is responsible for maintaining an adequate back-up of its records and data.

3. Third Party Claims:

a. Regardless of whether a third party makes its claim against Canada or the Contractor, each Party agrees that it is liable for any damages that it causes to any third party in connection with the Contract as set out in a settlement agreement or as finally determined by a court of competent jurisdiction, where the court determines that the Parties are jointly and severally liable or that one Party is solely and directly liable to the third party. The amount of the liability will be the amount set out in the settlement agreement or determined by the court to have been the Party's portion of the damages to the third party. No settlement agreement is binding on a Party unless its authorized representative has approved the agreement in writing.

b. If Canada is required, as a result of joint and several liability, to pay a third party in respect of damages caused by the Contractor, the Contractor must reimburse Canada by the amount finally determined by a court of competent jurisdiction to be the Contractor's portion of the damages to the third party. However, despite paragraph (a), with respect to special, indirect, and consequential damages of third parties covered by this section, the Contractor is only liable for reimbursing Canada for the Contractor's portion of those damages that Canada is required by a court to pay to a third party as a result of joint and several liability that relate to the infringement of a third party's intellectual property rights; physical injury of a third party, including death; damages affecting a third party's real or tangible personal property; liens or encumbrances on any portion of the Work; or breach of confidentiality.

c. The Parties are only liable to one another for damages to third parties to the extent described in this paragraph 3.

9. Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in _____ (*will be indicated in the contract*).

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) Supplementary general conditions: 4001 (2013-01-28) , Hardware purchase or lease and maintenance and 4003 (2010-08-16) , Licensed software;
- (c) the 2030 (2014-09-25) ,General conditions - Higher Complexity -Goods ;
- (d) Annex 'A' - Requirement ;

- (e) Annex 'B' - Pricing ;
 (f) the Contractor's bid dated _____, as amended on _____.

11. SACC Manual Clauses

B7500C	Excess Goods	2006/06/16
G1005C	Insurance	2008/05/12
A2000C	Foreign nationals (Canadian contractor)	2006/06/16
A2001C	Foreign nationals (Foreign contractor)	2006/06/16

12. Transportation costs

The contractor must ship the goods prepaid via _____(*insert the method of transportation*) including all delivery charges to (***The Canadian Space Agency, 6767 Route de l'Aéroport, St. Hubert, Qc***). Prépaid transportation costs must be shown as a separate item on the invoice, supported by a certified copy of the prepaid transportation bill of lading.

13. Shipping instructions

Shipping Instructions - Delivery at destination

Goods must be consigned to the destination specified in the Contract and delivered:

Delivered Duty Paid (DDP)(***The Canadian Space Agency, 6767 Route de l'Aéroport, Qc***).

Incoterms 2000 for shipments from a commercial contractor.

ANNEX "A"

REQUIREMENT

THE PURCHASE AND DELIVERY OF A PULSED I/V TEST SYSTEM

1. INTRODUCTION

The Canadian Space Agency has a need for a state of the art Automated Pulsed I/V Test System for characterizing semiconductor devices.

2. TECHNICAL SPECIFICATIONS

2.1 Physical characteristics and operational capacities

The Pulsed I/V System offered must meet the Technical Specifications listed below. It is the responsibility of the supplier to include all necessary documents to demonstrate that the proposed system meets the specifications, i.e. the supplier must not only respond by a “yes” or “requirement met” without supporting evidence.

- a) Perform automatic continuous and pulsed I-V measurement with a minimum DC pulse width of 500 nsec or less for the characterization of 2- and 3- terminal devices (e.g. diodes, transistors). The software must support viewing of IV data during and after measurement.
- b) Perform Continuous Wave (CW) S-parameter measurements under sweeping continuous bias conditions (both gate and drain), when used together with the N4252A Agilent PNA-X network analyzer described in Section 3 below. The software must feature concurrent loading and viewing of multiple measured S-parameter data files on the same monitor.
- c) Support pulsed S-parameter measurements (both narrow wide band) under continuous and pulsed-bias conditions (gate and drain, single bias point or sweeping bias points), when used together with the Agilent PNA-X. The software must feature concurrent loading and viewing of multiple measured S-parameter data files on the same monitor.
- d) Enable CW loadpull measurement for transistors, when used together with Focus tuner system and Agilent PNA-X described in section 3 below.
- e) Enable pulsed loadpull measurement (pulsed bias and pulsed RF) for transistors, when used together with Focus tuner system and Agilent PNA-X. described in section 3 below.

- f) Include a gate pulser head with a range of $\pm 100V$, 2A, 200 nsec or better as a minimum.
- g) Include a drain pulser head with a range of 220V, 2A, 200 nsec or better as a minimum.

3. Interoperability

- a) This automated Pulsed I/V Test system is intended for use with an Agilent N5242A PNA-X equipped with the following options and ancillary equipment:

10	Time Domain Measurements
20	IF Inputs for antenna and mm-wave
21	Pulse modulator for internal 1st source
22	Pulse modulator for internal 2nd source
25	Four internal pulse generators
29	Fully corrected noise figure
80	Frequency offset measurements
83	Vector and scalar converter measurements
86	Gain compression application
87	Intermodulation distortion measurements
88	Source phase control
400	4 ports dual source
419	Extended power range and bias-tees for 4-port
423	Combiner and mechanical switches for 4-port
510	Non-linear component characterization
514	Non-linear X-Parameters
518	Non-linear pulse
H08	Pulsed RF measurements
N1966A	Pulse I/O adapter
N4433A-010	4-port 3.5 mm Ecal module 300 kHz - 20 GHz
N4691B-M0F	2-port 3.5 mm Ecal module 300 kHz - 26.5 GHz

- b) This automated Pulsed I/V Test system is intended for use and must be functionally compatible with the following Focus automated tuners and software:

iCCMT-2620	2-26GHz Wideband Fundamental tuner (quantity 2)
CalEx	Tuner Control (iTuner), Tuner Cal, S2P, S1P, TRL, 3T
LP-Basic	Peak Search, L/P, L/P Patterns, IV-Curves, Power Sweep, Gain, Pin, Pout, PAE, DC meas, User Calc, User Driver (standard instrument types), Graph
LP-Spectrum	Pout@Fn, IMD, OIP3, ACPR, EVM
LP-USER	User Meas. Parameters, Cross patterns (advanced pattern options)

LP-WAVE Time Domain analysis, dynamic load line based characterization, x
parameter extraction using PNA-X or ZVA
NPEx Hot-Cold and Cold-in Noise measurements
INM-2600 Input Noise Module up to 26GHz

Should the proposed Pulsed I/V Test system not be compatible with the software listed above, the bidder must include in the proposal functionally equivalent software that will provide the same features and control of the tuners listed above as per their specifications.

ANNEX ' B '

BASIS OF PAYMENT

PRICE

A) Firm price

Item no.	Quantity	Description	Firm price	Total
1	1	Pulsed IV/RF Characterization system . (As detailed at Annex 'A'-Requirement)	\$_____/each	\$ _____
2	1	Pulser head +/- 100 v, 2 A, 200 nsec or better as a minimum (As detailed at Annexe 'A'-Requirement)	\$_____/each	\$ _____
3	1	PNA-X Pulsed RF Option (To include software and PNA-X cable kit) (As detailed at Annex 'A'-Requirement)	\$_____/each	\$ _____
4	1	Transport price (FOB destination)	\$_____/lot	\$ _____
		Total firm price (1+2+3+4):		\$ _____

ANNEX "C"

MANDATORY TECHNICAL CRITERIAS

Mandatory evaluation criteria

In order to be considered, all propositions must cover all the mandatory criteria and specifications identified below.

All of which must be respected and accompanied, **at the bid closing date and hour**, with the appropriate documentation /information requested for against each item , so as to allow for a technical evaluation. **IN THE ABSENCE OF WHICH, THE BID WILL BE REJECTED.**

Note:

To comply with the presentation of the evaluation criteria, refer to Part 3 - BID PREPARATION INSTRUCTIONS in the bid solicitation , Section 1 - Technical Bid.

Mandatory technical specifications	Please indicate where in the bid documents the appropriate documentation/information are shown for all items listed below to attest that these mandatory criterion are met.
The purchase and delivery of a Pulsed IV/RF Test system for characterizing semiconductor devices.	
1. Pulsed IV/RF Characterization system (Includes rack-mountable 2U system, enhanced user interface, Auriga MEM, Windows 7, N6700 rack mount kit, and documentation (As detailed at Annex 'A'-Requirement)	Please provide proof.
2. Pulser head +/- 100 v, 2 A, 200 nsec or better as a minimum (As detailed at Annexe 'A'-Requirement,)	Please provide proof.
3. PNA-X Pulsed RF Option (To include software and PNA-X cable kit) (As detailed at Annex 'A' - Requirement)	Please provide proof.