



National Defence Headquarters  
Ottawa, Ontario  
K1A 0K2

Quartier général de la Défense nationale  
Ottawa (Ontario)  
K1A 0K2

**REQUEST FOR PROPOSAL  
DEMANDE DE PROPOSITION**

**RETURN BIDS TO:  
RETOURNER LES SOUMISSIONS À :**

brooke.monette@forces.gc.ca

**Proposal To: National Defence 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 and services listed herein and on any attached sheets at the price(s) set out therefore.

**Proposition à : Défense nationale 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 et services énumérés ici et sur toute feuille ci-annexée, au(x) prix indiqué(s).

**Solicitation Closes –  
L’invitation prend fin**

At – à : 14 :00 EST

On - le : 11 Dec 2017

<b>Title/Titre</b> Power Amplifiers/ Amplificateurs de puissance	<b>Solicitation No – N° de l’invitation</b>  W8474-187482/b
<b>Date of Solicitation – Date de l’invitation</b> 24 Nov 2017	
<b>Address Enquiries to – Adresser toutes questions à</b>  <a href="mailto:brooke.monette@forces.gc.ca">brooke.monette@forces.gc.ca</a>	
<b>Telephone No. – N° de téléphone</b> 819-939-8549	<b>FAX No – N° de fax</b>
<b>Destination</b>	

**Instructions:**

Municipal taxes are not applicable. Unless otherwise specified herein all prices quoted must include all applicable Canadian customs duties, GST/HST, excise taxes and are to be delivered Delivery Duty Paid including all delivery charges to destination(s) as indicated. The amount of the Goods and Services Tax/Harmonized Sales Tax is to be shown as a separate item.

**Instructions:** Les taxes municipales ne s'appliquent pas. Sauf indication contraire, les prix indiqués doivent comprendre les droits de douane canadiens, la TPS/TVH et la taxe d'accise. Les biens doivent être livrés « rendu droits acquittés », tous frais de livraison compris, à la ou aux destinations indiquées. Le montant de la taxe sur les produits et services/taxe de vente harmonisée doit être indiqué séparément.

Delivery required - Livraison exigée	Delivery offered - Livraison proposée
Vendor Name and Address - Raison sociale et adresse du fournisseur	
Name and title of person authorized to sign on behalf of vendor (type or print) - Nom et titre de la personne autorisée à signer au nom du fournisseur (caractère d'imprimerie)	
Name/Nom _____	Title/Titre _____
Signature _____	Date _____

## **PART 1 - GENERAL INFORMATION**

### **1.1 Security Requirements**

There is no security requirement associated with this bid solicitation.

### **1.2 Requirement**

The requirement is detailed under Annex "A" of the resulting contract clauses.

### **1.3 Debriefings**

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

### **1.4 Trade Agreements**

The requirement is subject to the provisions of the Canadian Free Trade Agreement (CFTA).

### **1.5 Canadian Content**

The requirement is subject to a preference for Canadian goods and/or services.

## **PART 2 - BIDDER INSTRUCTIONS**

### **2.1 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 (2017-04-27) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

- a) Section 02, Procurement Business Number is deleted in its entirety.
- b) Section 20, Further Information is deleted in its entirety.

### **2.2 Submission of Bids**

Bids must be submitted, by email only, to the Contracting Authority, as identified in Part 6 – Resulting Contract Clauses by the date, time and place indicated on page 1 of the bid solicitation.

### **2.3 Enquiries - Bid Solicitation**

All enquiries must be submitted in writing to the Contracting Authority no later than five (5) calendar days before the bid closing date. Enquiries received after that time may not be answered.

Bidders should reference as accurately as possible the numbered item of the bid solicitation to which the enquiry relates. Care should be taken by Bidders to explain each question in sufficient detail in order to

enable Canada to provide an accurate answer. Technical enquiries that are of a proprietary nature must be clearly marked "proprietary" at each relevant item. Items identified as "proprietary" will be treated as such except where Canada determines that the enquiry is not of a proprietary nature. Canada may edit the 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.

## **2.4 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**

### **3.1 Bid Preparation Instructions**

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

Section I: Technical Bid (one (1) soft copy, pdf or scanned image)  
Section II: Financial Bid (one (1) soft copy, pdf or scanned image)  
Section III: Certifications (one (1) soft copy, pdf or scanned image)

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

#### **Section I: Technical Bid**

In their technical bid, Bidders should explain and demonstrate how they propose to meet the requirements.

#### **Section II: Financial Bid**

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

#### **3.1.1 Electronic Payment of Invoices – Bid**

If you are willing to accept payment of invoices by Electronic Payment Instruments, complete Annex "C" Electronic Payment Instruments, to identify which ones are accepted.

If Annex "C" Electronic Payment Instruments is not completed, it will be considered as if Electronic Payment Instruments are not being accepted for payment of invoices.

Acceptance of Electronic Payment Instruments will not be considered as an evaluation criterion.

#### **3.1.2 Exchange Rate Fluctuation**

C3011T (2013-11-06), Exchange Rate Fluctuation

#### **Section III: Certifications**

Bidders must submit the certifications and additional information required under Part 5.

## PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

### 4.1 Evaluation Procedures

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

#### 4.1.1 Technical Evaluation

##### 4.1.1.1 Mandatory Technical Criteria

For the required items under Annex A, the Bidder must bid solid state broadband high Power Amplifiers which conform to the Mandatory Technical Criteria.

MTC #	Mandatory Technical Criteria (MTC)
MTC1	<p><b>Solid State Broadband High Power Amplifier type 1</b></p> <ul style="list-style-type: none"> <li>• Operating Frequency must range from: 100 – 520 MHz</li> <li>• Input / output impedance must be: 50 ohms</li> <li>• Input power required for rated output power must be: <math>\leq 0</math> dBm</li> <li>• Gain must be: <math>\geq 44</math> dB</li> <li>• Output Power must be: <math>\geq 25</math> W</li> <li>• RF Connectors must be: N-Type female</li> <li>• Small signal gain flatness for Pin = -20 dbm must be: <math>\leq \pm 2</math> dBm</li> <li>• Harmonics 2<sup>nd</sup> and 3<sup>rd</sup> @ 20 W must be: 2<sup>nd</sup> / 3<sup>rd</sup> order = <math>\leq -20</math> / -15 dBc</li> <li>• Third order intercept point 2-Tone @ 40 dBm, 100 KHz spacing must be: <math>\geq 48</math> dBm</li> <li>• Must have adjustable front gain</li> <li>• Must have forced air cooling</li> <li>• Operating Power must be: 120-240 VAC</li> <li>• Power Consumption (rated output power at 120 V): <math>\leq 300</math> W</li> </ul>

MTC #	Mandatory Technical Criteria (MTC)
	<ul style="list-style-type: none"> <li>• Vibration and Shock resistance must meet: MIL-STD-810F (Method 514.5 / 516.5 – Procedure 1)</li> <li>• Altitude range must meet: <math>\geq 30,000</math> ft. (MIL-STD-810F Method 500.4)</li> <li>• Ambient operating temperature must be within: 10-50 °C</li> <li>• Dimensions must be no greater than: 8.5" x 3.5" x 16"</li> <li>• Weight must not exceed: 20 lbs</li> </ul>
MTC2	<p><b>Solid State Broadband High Power Amplifier type 2</b></p> <ul style="list-style-type: none"> <li>• Operating Frequency must range from: 100 – 520 MHz</li> <li>• Input / output impedance must be: 50 ohms</li> <li>• Input power required for rated output power must be: <math>\leq 0</math> dBm</li> <li>• Gain must be: <math>\geq 50</math> dB</li> <li>• Output Power must be: <math>\geq 100</math> W</li> <li>• RF Connectors must be: N-Type female</li> <li>• Small signal gain flatness for Pin = -20 dbm must be: <math>\leq \pm 2</math> dBm</li> <li>• Harmonics 2<sup>nd</sup> and 3<sup>rd</sup> @ 80 W must be: 2<sup>nd</sup> / 3<sup>rd</sup> order = <math>\leq -30</math> / -15 dBc</li> <li>• Third order intercept point 2-Tone @ 40 dBm, 100 KHz spacing must be: <math>\geq 52</math> dBm</li> <li>• Must have adjustable front gain</li> <li>• Must have forced air cooling</li> <li>• Operating Power must be: 120-240 VAC</li> <li>• Power Consumption (rated output power at 120 V) must be: <math>\leq 600</math> W</li> <li>• Vibration and Shock resistance must meet the following specification: MIL-STD-810F (Method 514.5 / 516.5 – Procedure 1)</li> <li>• Altitude range must meet the following specification: <math>\geq 30,000</math> ft. (MIL-STD-810F Method 500.4)</li> <li>• Ambient operating temperature must be within: 10-50 °C</li> <li>• Maximum Dimensions must be no greater than: 19" x 3.5" x 18"</li> <li>• Must be rack mountable</li> <li>• Weight must not exceed: 40 lbs</li> </ul>

#### 4.1.2 Financial Evaluation

The price of the bid will be evaluated as follows:

Bidders must submit firm prices DDP Incoterms 2010, Canadian customs duties and excise taxes included, and the applicable taxes excluded.

The financial proposals will be evaluated in Canadian currency. Pricing submitted in foreign currency will be converted to Canadian dollars based on the exchange rate provided by the Bank of Canada at noon on the date of RFP closing.

Exchange rate fluctuation protection is not offered for this requirement. Any request for exchange rate fluctuation protection will not be considered and will render the bid non-responsive.

#### 4.2 Basis of Selection

SACC Manual Clause A0031T (2010-08-16), Basis of Selection – Mandatory Technical Criteria

### PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION

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. Unless specified otherwise, 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 Integrity Provisions - Declaration of Convicted Offences

In accordance with the Integrity Provisions of the Standard Instructions, all bidders must provide with their bid, **if applicable**, the declaration form available on the [Forms for the Integrity Regime](http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html) website (<http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html>), to be given further consideration in the procurement process.

##### 5.1.2 Additional Certifications Required with the Bid

###### 5.1.2.1 Canadian Content Certification

This procurement is conditionally limited to Canadian goods.

Subject to the evaluation procedures contained in the bid solicitation, bidders acknowledge that only bids for items with a certification that the item(s) offered are Canadian goods, as defined in clause [A3050T](#), may be considered.

Failure to provide this certification completed with the bid will result in the item(s) offered being treated as non-Canadian goods.

Bidders must clearly identify beside each item listed in the bid solicitation document which items meet the definition of Canadian good and complete the following certification.

#### 5.1.2.1.1 SACC Manual clause A3050T (2014-11-27) Canadian Content Definition

### 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 – Required Documentation

In accordance with the section titled Information to be provided when bidding, contracting or entering into a real procurement agreement of the [Ineligibility and Suspension Policy](http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html) (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>), the Bidder must provide the required documentation, as applicable, to be given further consideration in the procurement process.

#### 5.2.2 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 available at the bottom of the page of the [Employment and Social Development Canada \(ESDC\) - Labour's](http://www.esdc.gc.ca/en/jobs/workplace/human_rights/employment_equity/federal_contractor_program.page?&_ga=1.229006812.1158694905.1413548969) website ([http://www.esdc.gc.ca/en/jobs/workplace/human\\_rights/employment\\_equity/federal\\_contractor\\_program.page?&\\_ga=1.229006812.1158694905.1413548969](http://www.esdc.gc.ca/en/jobs/workplace/human_rights/employment_equity/federal_contractor_program.page?&_ga=1.229006812.1158694905.1413548969)).

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

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

### 6.1 Security Requirements

There is no security requirement applicable to the Contract.

### 6.2 Requirement

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

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

### 6.3.1 General Conditions

2010A (2016-04-04), General Conditions - Goods (Medium Complexity), apply to and form part of the Contract.

a. Definition of Minister is modified as follows:

"Canada", "Crown", "Her Majesty" or "the Government" means Her Majesty the Queen in right of Canada as represented by the Minister of National Defence and any other person duly authorized to act on behalf of that minister or, if applicable, an appropriate minister to whom the Minister of National Defence has delegated his or her powers, duties or functions and any other person duly authorized to act on behalf of that minister.

### 6.4 Term of Contract

#### 6.4.1 Period of the Contract

The period of the Contract is from date of Contract to 31 March 2018 inclusive.

#### 6.4.2 Delivery Date

All the deliverables must be received on or before 28 February 2018.

#### 6.4.3 Delivery Points

Delivery of the requirement will be made to delivery point(s) specified at Annex "A" of the Contract.

### 6.5 Authorities

#### 6.5.1 Contracting Authority

The Contracting Authority for the Contract is:

Name: Brooke Monette  
 Title: DES Proc 4-2-3  
 Department of National Defence  
 Directorate: DES Proc  
 Address: 101 Colonel By Drive, Ottawa ON, K1A 0A2

Telephone: 819-939-8549  
 Facsimile: 819-994-0248  
 E-mail address: brooke.monette@forces.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.

#### 6.5.2 Technical Authority (Information to be provided at contract award)

The Technical Authority for the Contract is:

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



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

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.

### **6.5.3 Contractor's Representative (Information to be provided at contract award)**

## **6.6 Payment**

### **6.6.1 Basis of Payment**

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

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.

### **6.6.2 Payment – Single Payment**

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

### **6.6.3 SACC Manual Clauses**

SACC Manual clause C2000C (2007-11-30) Taxes – Foreign-based Contractor

### **6.6.4 Electronic Payment of Invoices – Contract**

The Contractor accepts to be paid using any of the following Electronic Payment Instrument(s):

- a. Visa Acquisition Card;
- b. MasterCard Acquisition Card;
- c. Direct Deposit (Domestic and International);
- d. Electronic Data Interchange (EDI);
- e. Wire Transfer (International Only);
- f. Large Value Transfer System (LVTS) (Over \$25M)

## **6.7 Invoicing Instructions**

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.

Invoices must be distributed as follows:

1. The original and one (1) copy must be forwarded to the following address for certification and payment.

Department of National Defence  
 101 Colonel By Drive  
 Ottawa, ON  
 K1A 0A2  
 ATTN: Brooke Monette DES Proc 4-2-3, HDV

## 6.8 Certifications and Additional Information

### 6.8.1 Compliance

Unless specified otherwise, the continuous compliance with the certifications provided by the Contractor in its bid or precedent to contract award, and the ongoing cooperation in providing additional information are conditions of the Contract and failure to comply will constitute the Contractor in default. Certifications are subject to verification by Canada during the entire period of the Contract.

### 6.9 Applicable Laws

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

### 6.10 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) the general conditions [2010A](#) (2016-04-04), Goods (Medium Complexity);
- (c) Annex A, Requirement;
- (d) Annex B, Basis of Payment;
- (e) the Contractor's bid dated \_\_\_\_\_ (*insert date of bid*) (*If the bid was clarified or amended, insert at the time of contract award: “, as clarified on \_\_\_\_\_” or “, as amended on \_\_\_\_\_” and insert date(s) of clarification(s) or amendment(s)*)

### 6.11 Shipping Instructions – Delivery at Destination

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

Delivered Duty Paid (DDP) Destination to the delivery address specified in Annex “A”, as per the Incoterms 2000 for shipments from a commercial contractor.

### 6.12 Defence Contract

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

### 6.13 Insurance

SACC *Manual* clause G1005C (2016-01-28) Insurance - No Specific Requirement

**ANNEX "A"**  
**REQUIREMENT**  
**POWER AMPLIFIERS**

**1.0 SCOPE****1.1 Purpose**

In support of research and testing activities within the Canadian Forces Information Operations Group (CFIOG) a requirement exists to purchase several solid state broadband high Power Amplifiers (PA).

**1.2 Background**

CFIOG recently established a new lab to test equipment in Ottawa. In order to perform the required testing, there is a baseline amount of equipment required. Due to the unique nature of the testing that is to be performed, CFIOG is unable to repurpose equipment from within the DND inventory, as it is either unsuitable for our application, or allocated for operational use.

**2.0 REQUIREMENTS**

The contractor must provide solid state broadband high PA's that meet the technical requirements of Section 2.1.

Two (2) different models of power amplifiers are required, and are denoted by PA type 1, and PA type 2 in section 2.1

**2.1 Technical Requirements**

- |       |   |  |          |
|-------|---|--|----------|
| 2.1.1 | Operating Frequency:                          | 100 – 520 MHz  |          |
| 2.1.2 | Input / output impedance:                     | 50 ohms  |          |
| 2.1.3 | Input power required for rated output power:  |  | ≤ 0 dBm  |
| 2.1.4 | Gain:   | <ul style="list-style-type: none"> <li>• PA type 1: ≥ 44 dB</li> <li>• PA type 2: ≥ 50 dB</li> </ul> |          |
| 2.1.5 | Output Power:                                 | <ul style="list-style-type: none"> <li>• PA type 1: ≥ 25 W</li> <li>• PA type 2: ≥ 100 W</li> </ul>  |          |
| 2.1.6 | RF Connectors:                                | N-Type female  |          |
| 2.1.7 | Small signal gain flatness for Pin = -20 dbm: |  | ≤ ±2 dBm |

- 2.1.8 Harmonics 2<sup>nd</sup> and 3<sup>rd</sup>
  - PA type 1 @ 20 W: 2<sup>nd</sup> / 3<sup>rd</sup> order = ≤ -20 / -15 dBc
  - PA type 2 @ 80 W: 2<sup>nd</sup> / 3<sup>rd</sup> order = ≤ -30 / -15 dBc
- 2.1.9 Third order intercept point 2-Tone @ 40 dBm, 100 KHz spacing:
  - PA type 1: ≥ 48 dBm
  - PA type 2: ≥ 52 dBm
- 2.1.10 Adjustable front gain
- 2.1.11 Forced Air Cooling
- 2.1.12 Operating Power: 120-240 VAC
- 2.1.13 Power Consumption (rated output power at 120 V)
  - PA type 1: ≤ 300 W
  - PA type 2: ≤ 600 W
- 2.2.14 Vibration and Shock: MIL-STD-810F (Method 514.5 / 516.5 – Procedure 1)
- 2.2.15 Altitude: ≥ 30,000 ft. (MIL-STD-810F Method 500.4)
- 2.2.16 Ambient operating temperature: 10-50 °C
- 2.2.17 Maximum Dimensions:
  - PA type 1: 8.5" x 3.5" x 16"
  - PA type 2: 19" x 3.5" x 18"
    - PA type 2 must be rack mountable
- 3.2.18 Maximum Weight:
  - PA type 1: 20 lbs
  - PA type 2: 40 lbs

**3.0 DELIVERABLES**

3.1 The contractor must provide the following power amplifiers in accordance with the specifications detailed in section 2:

Item	Title
1	Quantity 2 Power Amplifier type 1
2	Quantity 2 Power Amplifier type 2

#### **4.0 DELIVERY ADDRESS**

Department of National Defence  
CFIOG HQ  
3545 Leirrim Rd.  
Ottawa On K1T 3W6

**ANNEX "B"**  
**BASIS OF PAYMENT**

For the Power Amplifiers specified in Annex "A" Requirement, bidders must submit firm prices DDP Incoterms 2010, Canadian customs duties and excise taxes included, and the applicable taxes excluded.

<b>Item</b>	<b>Qty</b>	<b>Lot Price</b>
Power Amplifier Type 1 (25-30W)	2	\$
Power Amplifier Type 2 (100W)	2	\$
<b>Total Evaluated Price</b>		\$

**ANNEX "C" to PART 3 OF THE BID SOLICITATION**

**ELECTRONIC PAYMENT INSTRUMENTS**

The Bidder accepts any of the following Electronic Payment Instrument(s):

- VISA Acquisition Card;
- MasterCard Acquisition Card;
- Direct Deposit (Domestic and International);
- Electronic Data Interchange (EDI);
- Wire Transfer (International Only);
- Large Value Transfer System (LVTS) (Over \$25M)