

# अंतर विश्वविद्यालय त्वरक केंद्र-

INTER-UNIVERSITY ACCELERATOR CENTRE

(विश्वविद्यालय अनुदान आयोग का स्वायत्त निकाय)

(An Autonomous Centre of UGC)

अरुणा आसफ अली मार्ग 110067-नई दिल्ली ,

Aruna Asaf Ali Marg, New Delhi - 110067

## ई-निविदा आमंत्रण सूचना/ NOTICE INVITING E-TENDER

निविदा संख्या/एनआई/आईयूएसी : 12/YM //2023-24

दिनांक :06/11/2023

Tender Number: IUAC/NIT/12/YM /I.1026 /2023-24

Dated: 06/11/2023

अंतरआई) विश्वविद्यालय त्वरक केंद्र-यू.ए.सी. अनुभवी पार्टियों से दो बोली प्रणाली/पात्र (नामत: तकनीकी और वित्तीय बोली के तहत ई , प्रोक्योरमेंट पोर्टल के माध्यम से निदेशक-अंतरविश्वविद्यालय त्वरक केंद्र-, नई दिल्ली की ओर से “अनुलग्नक ए के अनुसार 30kW, 97MHz सॉलिड-स्टेट आरएफ पावर एम्पलीफायर ”की आपूर्ति के लिए ऑनलाइन बोलियां आमंत्रित करता है।

Inter - University Accelerator Centre (IUAC) invites online bids on behalf of the Director IUAC, New Delhi through e-procurement Portal under two bid system, viz., Technical and Financial bids, from eligible /experienced parties for the supply of “**30kW, 97MHz Solid State RF Power Amplifier as per Annexure A** ”.

निविदा दस्तावेज, सेंट्रल पब्लिक प्रोक्योरमेंट पोर्टल (सीपीपी)<https://eprocure.gov.in/eprocure/app> से मुफ्त में डाउनलोड किए जा सकते हैं। इच्छुक बोलीदातापंजीकरण नहीं किया है/प्रोक्योरमेंट पोर्टल में नामांकन-जिन्होंने ई ,, उन्हें भाग लेने से पहले <https://eprocure.gov.in/eprocure/app> वेबसाइट के माध्यम से नामांकन पंजीकरण करना होगा।/बोलियां केवल <https://eprocure.gov.in/eprocure/app> वेबसाइट पर ऑनलाइन जमा करनी होगी। निविदाकारों बोलीदाताओं को सलाह दी/ठेकेदारों/ डी 100 प्रोक्योरमेंट पोर्टल में दिए गए निर्देशों का पालन करें। बोली दस्तावेजों को-जाती है कि वे ई.पी.आई. में ब्लैक एंड व्हाइट स्कैन करें जो स्कैन किए गए दस्तावेजों के आकार को कम करने में मदद करता है। ,

Tender Documents may be downloaded from Central Public Procurement (CPP) Portal free of cost <https://eprocure.gov.in/eprocure/app>. Aspiring Bidders who have not enrolled/registered in e-procurement portal should enroll/register before participating through the website <https://eprocure.gov.in/eprocure/app>. Bids should be submitted online only at website: <https://eprocure.gov.in/eprocure/app>. Tenderers / Contractors / Bidders are advised to follow the instructions provided in the e-procurement portal. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned documents.

केवल ईप्रोक्योरमेंट पोर्टल के माध्यम से प्राप्त बोलियों को- ही खोला जाएगा। जो बोलियाँ उत्पादों आपूर्ति/वस्तुओं के कार्य/के वांछित प्रयोजनों को संपूर्ण रूप से पूर्ण करने में अक्षम होगीउन , बोलियों को अस्वीकार कर दिया जाएगा और केवल पूर्ण बोलियों पर विचार किया जाएगा। अंतरविश्वविद्यालय त्वरक केंद्र- के पास बिना कोई कारण बताए किसी भी पूर्ण रूप से/सभी निविदाओं को आंशिक/

Only bids received through e-procurement portal will be considered for opening. Bids not covering full scope of work/supply of the products/goods will be rejected and only complete bids will be considered. IUAC reserves the right to accept / reject any / all tenders in part / full without assigning any reasons whatsoever, and the decision of IUAC in this regard will be binding on all the bidders.

ई.डी.एम. का भुगतान करने के लिए बोलीदाता को भुगतान विकल्प का चयन "ऑनलाइन" करना होगा , <https://services.sabpaisa.in/pages/iuac.html> लिंक पर जाकर लागू होगा। बयाना राशि ऑनलाइन भुगतान के रूप में होगी और इसे बोली खोलने से पहले जमा किया जाना चाहिए। एम.एस.एम.ई.एन./एस.आई.सी. में पंजीकृत बोलीदाताओं को ई.डी.एम. के भुगतान से छूट दी गई है। तथापि, उन्हें बोली सुरक्षा घोषणा प्रपत्र जमा करना होगा। एम.एस.एम.ई.एन./एस.आई.सी. कार्य/निविदा की गई वस्तु से पंजीकृत निविदाकारों को तकनीकी बोली के साथ वैध पंजीकरण प्रमाणपत्र (के लिए पंजीकृत इकाईर की प्रति <https://eprocure.gov.in/eprocure/app> वेबसाइट पर अपलोड करनी होगी।

Bidder has to select the payment option as "online" to pay the EMD as applicable by going to the link <https://services.sabpaisa.in/pages/iuac.html> . The Earnest Money Deposit shall be in the form of online payment and it should be deposited before the bid opening. Bidders registered with MSME/ NSIC are exempted from payments of EMD. However, they have to submit Bid Security Declaration Form. Tenderers registered with MSME/NSIC (the unit being registered for the item/work tendered) are required to upload copy of valid registration certificate in the website <https://eprocure.gov.in/eprocure/app> along with technical bid.

बोलीदाताओं को इस बात को विशेष ध्यान में रखने की सलाह दी जाती है कि वे अनिवार्य रूप से उपलब्ध कराए गए प्रारूप में ही अपनी वित्तीय बोलियां जमा करें और कोई अन्य प्रारूप स्वीकार्य नहीं होगा। यदि मूल्य बोली निविदा दस्तावेज के साथ मानक .XLS BOQ प्रारूप के रूप में दी गई है, तो इसे ही डाउनलोड करना होगा और प्रारूप को संशोधित किए बिना ऑनलाइन भरना और जमा करना होगा। यदि बोलीदाता द्वारा BOQ फाइल को संशोधित पाया जाता है, तो बोली को अस्वीकार कर दिया जाएगा।

Bidders are advised to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard .XLS BOQ Format with the tender document, then the same is to be downloaded and to be filled and submitted online without modifying the format. **If the BOQ file is found to be modified by the bidder, the bid will be rejected.**

उपरोक्त निविदा के संबंध में कोई भी शुद्धिपत्र संशोधन केवल <https://eprocure.gov.in> और [www.iuac.res.in](http://www.iuac.res.in) वेबसाइट पर जारी किया जाएगा। बोलीदाता, अपनी बोली जमा करने से पहले निविदा दस्तावेज से संबंधित, प्रकाशित होने वाले किसी भी शुद्धिपत्र की जानकारी रखें। निदेशक, अंतरविश्वविद्यालय त्वरक केंद्र के पास बिना कोई कारण बताए किसी भी पूर्ण/सभी निविदाओं को आंशिक/अस्वीकार करने का अधिकार सुरक्षित है।/रूप से स्वीकार

Any Corrigendum / Amendments in respect of above tender shall be issued on website <https://eprocure.gov.in> and [www.iuac.res.in](http://www.iuac.res.in) only. Bidders should consider any corrigendum published on the tender document before submitting their bids. The Director, IUAC reserves the right to accept/reject any/all tenders in part/full without assigning any reasons thereof.

## **INSTRUCTION TO BIDDERS**

### **REGISTRATION PROCESS ON CPP PORTAL FOR ONLINE BIDDING**

- 1** There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal.
- 2** Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
- 3** The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

### **PREPARATION OF BIDS**

- 1** Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- 2** Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF/JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
- 3** To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, GST Certificate etc.) has been provided to the bidders. Bidders can use "My Space" or "Other Important Documents" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

Note: Bidder should take into account any corrigendum published on the tender document before submitting their bids.

## **INSTRUCTIONS FOR SUBMISSION OF BIDS**

1. The tender documents are available on our website [www.iuac.res.in](http://www.iuac.res.in) & [www.eprocure.gov.in](http://www.eprocure.gov.in).
2. Tender documents may be downloaded from IUAC's website [www.iuac.res.in](http://www.iuac.res.in) and CPPP site <https://eprocure.gov.in/eprocure/app> as per the schedule as given in the tender document.
3. The tender shall be submitted online in two parts, viz., Technical bid and Financial (price Bid) bid.
4. The offers submitted by hand/Post/Fax/email shall not be considered. No correspondence will be entertained in this matter.
5. All the pages of bid being submitted must be sequentially numbered by the bidder irrespective of nature and content of the documents before uploading.
6. The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.
7. Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
8. The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
9. Bidders are requested to note that they should necessarily submit their financial (price Bid ) bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BOQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BOQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.
10. The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
11. All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid opener's public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
12. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
13. Upon the successful and timely submission of bids (i.e. after Clicking "Freeze Bid Submission" in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.

14. The bid summary has to be printed and kept as an acknowledgment of the submission of the bid. This acknowledgment may be used as an entry pass for any bid opening meetings.
15. Not more than one tender shall be submitted by one contractor or contractors having business relationship. Under no circumstance will father and his son(s) or other close relations who have business relationship with one another (i.e. when one or more partner(s)/director(s) are common) be allowed to tender for the same contract as separate competitors. A breach of this condition will render the tenders of both parties liable to rejection.
16. The bidders are advised to visit CPPP website <https://eprocure.gov.in/eprocure/app> at least 3 days prior to closing date of submission of tender for any corrigendum / addendum/ amendment.
17. Bids will be opened as per date/time as mentioned in the **Tender Document**. After online opening and evaluation of technical bids, the results of their qualification as well Price-Bid opening will be intimated.
18. Submission of a tender by a tenderer implies that he has read all the stipulations contained in this tender document and has acquainted him of the nature, scope and specifications of the items to be followed. The tenderer shall submit all documents after duly filling the same in all respects. Tenders which are found to be vague or incomplete shall be rejected summarily.
19. Tenders shall be submitted ON-LINE, it shall be signed by one who has been authorized by the board of director /director / manufacture/ firm owner /their authorized agents through a resolution/ authority letter. Copy of the resolution/ authority letter in favor of the person signing must accompany the tender.
20. Tenders containing erasures and alterations of the tender documents are liable to be rejected unless these are authenticated by the person signing the Tender Documents.
21. **Code of Integrity for Public Procurement**

IUAC requires that the bidders, suppliers and contractors observe the highest standard of ethics during the procurement and execution of such contracts. In pursuit of this policy, the following are defined:

Sr. No.	Term	Meaning
(a)	<b>Corrupt practice</b>	The offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of a public official in the procurement process or in contract execution.
(b)	<b>Fraudulent practice</b>	A misrepresentation or omission of facts in order to influence a procurement process or the execution of a contract.
(c)	<b>Collusive practice</b>	Means a scheme or arrangement between two or more bidders, with or without the knowledge of the purchaser, designed to establish bid prices at artificial, non-competitive levels.
(d)	<b>Coercive practice</b>	Means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the procurement process or affect the execution of a contract.
(e)	<b>Anti-competitive practice</b>	any collusion, bid rigging or anti-competitive arrangement, or any other practice coming under the purview of the Competition Act, 2002, between two or more bidders, with or without the knowledge of the purchaser, that may impair the transparency, fairness and the progress of the procurement process or to establish bid prices at artificial, non-competitive levels
(f)	<b>Conflict of interest</b>	participation by a bidding firm or any of its affiliates that are either involved in the consultancy contract to which this procurement is linked; or if they are part of more than one bid in the procurement; or if the bidding firm or their personnel have relationships or financial or business transactions with any official of purchaser who are directly or indirectly related to tender or execution process of contract; or improper use of information obtained by the (prospective) bidder from the purchaser with an intent to gain unfair advantage in the procurement process or for personal gain
(g)	<b>Obstructive Practice</b>	materially impede the purchaser's investigation into allegations of one or more of the above mentioned prohibited practices either by deliberately destroying, falsifying, altering; or by concealing of evidence material to the investigation; or by making false statements to investigators and/or by threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or by impeding the purchaser's Entity's rights of audit or access to information.

## **SPECIAL TERMS AND CONDITIONS OF CONTRACT**

### **1.0 Carrying of work**

All the work shall be carried out in accordance strictly as per the specifications given in the tender to the total satisfaction of the Institute.

### **2.0 Contractors/Supplier Responsibility for the manner of Execution of Work**

The contractor/supplier shall be solely responsible for the manner and the method of executing the work. The work shall be subject to the approval of IUAC from time to time for purposes of determination of the question whether the work is executed by the contractor in accordance with the contract.

### **3.0 Specifications**

During execution of work, the contractor/bidder should follow all standard norms of safety measures/precautions as per relevant codes to avoid accidents/damages to man, machines and buildings, at his own cost. If specifications for an item of work are not covered as per approved Specifications of tender, the same shall be decided by the Institute and shall be binding on the contractor.

### **4.0 Agency's Risk**

All risks of loss of a or damage to physical property and of personal injury and death which arise during and in consequence of the performance of the contract other than the excepted risks are the responsibility of the contractor /supplier.

### **5.0 Action and Compensation payable in case of Bad work**

5.1 If it shall appear to IUAC, or our representatives, that any work has been executed with unsound, imperfect or unskillful workmanship **then the contractor/supplier shall be liable to pay compensation**

5.2 If during the execution of works, any damage is caused to IUAC property by contractor's/supplier's workers, contractor/supplier will duly make good the loss. IUAC has the right to make suitable deduction from contractor's/supplier's bills along with penalty, if contractor/supplier fails to make good the loss.

5.3 No material belonging to the contractor/supplier whether consumable or non-consumable should be brought inside the IUAC campus without proper entry at the Main Gate nor any material should be taken out without proper gate pass issued by the authorized representatives of the Centre. Material delivery challans duly entered at the main gate shall to be submitted. It shall always prevail, unless otherwise specifically stated, that the entire provisions of Tender document been opened upon and accepted for compliance by the contractor/supplier without any reservation.

5.4 If during the execution of works, any damage is caused to IUAC property by contractor's/supplier's workers, contractor/supplier will duly make good the loss. IUAC has the right to make suitable deduction from contractor's bills along with penalty, if contractor/supplier fails to make good the loss.

6.0 During execution of work, the contractor/supplier should follow all standard norms of safety measures/precautions as per relevant codes to avoid accidents/damages to man, machines and buildings, at his own cost. Contractor/supplier will have his own arrangement to escort the labour to the nearest hospital for treatment in case any injury happens to any worker during execution of work.

**Seal & Signature of Bidder/Bidder**

## **ASSISTANCE TO BIDDERS**

- 1) Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
- 2) Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Help desk. The contact number for the help desk is 1800 3070 2232.

## **E - TENDER DOCUMENT**

क़ाधि/आपूवति क़ा नलड Name of Work / Supply	अनुलगुनक ए क़े अनुसलर 30kW, 97MHz सॉलिड-स्टेट आरएफ़ डलवर एडुडलीफ़ायर” 30kW, 97MHz Solid State RF Power Amplifier as per Annexure A
Tender Number	IUAC/NIT/12/YM/I.1026/2023-24
Tender Value / Estimate only	Rs2,65,00,000/- (Rupees Two Crore sixty five lakh only)
Earnest Money Deposit	Rs5,30,000/- ( Rupees Five Lakh Thirty Thousand only)
Tender Document Fee	NIL
Online payment of EMD/ Tender Fee	<a href="https://services.sabpaisa.in/pages/iuac.html">https://services.sabpaisa.in/pages/iuac.html</a>
Bid Submission End Date and Time (Part - A and Part - B )	27/11/2023 at 3:00PM
<b>Technical Bid Opening Date</b> (Part - A)	28/11/2023 at 3:30PM
<b>Price Bid Opening Date</b> (Part - B)	To be intimated later on to the technically qualified bidders
Contact Person for Technical Details	Administrative Officer (S&P) / Yaduvansh Mathur E-mail: iuacstores@gmail.com / yaduvansh06@gamil.com Phone: 011-24126018, 24126022.



## **General Terms and Conditions of the Tender:**

### **1. Submission of Tender :**

Tenders should be uploaded on CPP Portal in two parts, i.e., Technical Bid (Part - A) and Price Bid / BOQ (Part - B).

### **2. Technical Bid ( Part - A ) :**

#### **Pre-qualification of the bidder**

Only Original Equipment Manufacturer (OEM) or their authorized (sales and service) representatives in India are eligible to quote for the required item as per the specification given in Annexure-A. The authorized representatives will have to submit a valid certificate of authorization from the OEM along with the BID. The bidder will have to submit OEM technical brochure wherein description of the product lineup including quoted product and company services are clearly mentioned along with required technical specifications.

The bidder must be a national or internationally reputed firm/company/manufacture or their representative for high power solid state RF power transmitter/ amplifiers/Scientific Instruments of various ratings, who have supplied and carrying out after-sale services such as installation, repair, restoration, test and calibration of supplied Instruments to the internationally reputed laboratories and industries worldwide.

The bidder must be duly authorised by the OEM for solid state RF power amplifier testing and repair facilities along with trained manpower, supported by the OEM for spare parts and other required resources for successful repair, restoration, test and calibration in India.

No deviations in respect of NIT conditions are acceptable. In this bid, the bidder should upload the following documents:

1. Tender Acceptance Letter (written on company letter head, duly signed and stamped) as per format provided in Annexure B, as a token of acceptance of the NIT conditions, with this bid.
2. Profile of the Tenderer as per Annexure C.
3. Earnest Money Deposit Proof & MSME to submit Bid Securing Declaration in lieu of EMD/Bid Security
4. Format for declaration by the Bidder for Code of Integrity & conflict of interest as in ANNEXURE-D.
5. The bidder should not be a blacklisted individual or entity by any Government, or Government Department, whether in the Central/State/District levels across India. An undertaking in this regard, Annexure-F to be enclosed with the Technical Bid.
6. Declaration of local content as in Annexure G.
7. Solvency certificate as in Annexure H
8. Technical specification compliance as in Annexure I.
9. Check list for pre-qualification bid as in Annexure J.
10. Valid authorized representatives/dealership certificate with authorization from the OEM.
11. Details (Complete address with contact number) of the authorized service center in India for the quoted product along with a valid undertaking / certificate from OEM authorising service facility of their supplied products in India for after sale services such as repair, restoration, test & calibration to be attached. Drawings / test results / catalogues / other technical specifications of the products indicating its ability to meet the technical specifications.
12. Proof of delivery of high-end scientific/electronic equipment in the form of one copy of successfully executed purchase order of value more than 80% of the estimated value, Rs.212,00000/- (Rupees two crore twelve lakhs only) or two copy of order value each of 50% of the estimated value, Rs 1,32,50000/- (Rupees One crore Thirty two Lakhs and fifty thousand only) or three copies of order value each of 40% of the estimated value, Rs1,06,00000/- (Rupees one crore six lakh only) for the supply of scientific instruments

to reputed organizations, Govt. Dept.(Central/State), PSU & Autonomous bodies/Universities in India in the last 7 years.

13. The bidder should have a minimum annual average turnover of Rs2.65 crore during the last three financial years.
14. Copies of the audited statements/turnover certificate of the past three financial years ending on 31st March of the previous financial year in which the tenders are invited. To support the claim, provide a certificate of CA. In case balance sheet and statement of Profit & Loss for the immediate preceding financial year have not be prepared/audited, the account for one more preceding financial year can be submitted.
15. Solvency certificate minimum of Rs2.6 Crore in a prescribed format is required from any scheduled bank.
16. The bidder shall assure in written for the supply of spare parts after warranty is over for maintenance of the equipment supplied if and when required for a period of at least five years.

***Technical bids which are not confirming to the technical specifications will be disqualified.***

### **3. Price Bid / BOQ ( Part - B ) :**

In this bid, the bidder is required to quote unconditional rates in the .XLS BOQ format provided with this tender. Quotes in INR will only be accepted.

The Indigenous suppliers quoting in INR should quote the rates all-inclusive upto IUAC and excluding GST. IUAC is exempted from Customs Duty and necessarily certificates shall be issued by IUAC along with the PO. The BOQ file must not be modified.

The following information to be provide along with Price Bid:

- a. Mention that the warranty period which shall not be less than 24 months.

Standard accessories and documentation such as manuals, software if any would be provided.

Price bid will be compared on the total of price bid of the all the quoted/requested items as pert Price Bid, part-B

### **4. Earnest Money Deposit:**

Bidder has to select the payment option as “**online**” to pay the EMD as applicable by going to the link <https://services.sabpaisa.in/pages/iuac.html>. The Earnest Money Deposit shall be in the form of online payment and it should be deposited before the bid opening. Bid Security shall be refunded to the unsuccessful bidders on award of contract and to successful bidders on receipt of Performance Security.

EMD is the mandatory requirement however the MSMEs/NSIC registered with Government Agencies are exempted from payment of Earnest Money Deposit (EMD) and are required to submit Bid Securing Declaration subject to conditions given below: -

- i) MSMEs participating in the tender must submit valid & authorized copy of certificate of registration. The MSME’s Bidder to note and ensure that nature of services and goods/items manufactured mentioned in MSME’s certificate matches with the nature of the services and goods/items to be supplied as per Tender.
- ii) The registration certificate issued by agencies must be valid as on Bid closing date of the tender. Bidder shall ensure validity of registration certificate in case bid closing date is extended.
- iii) The MSMEs who have applied for registration or renewal of registration with any of the authorised agencies / bodies, but have not obtained the valid certificate as on close date of the tender, are not eligible for exemption / preference.

**5. Validity of Tender:**

The rates quoted in the tender shall hold good for 90 days from the date of opening of the price bid. The validity of the rates is extendable for a period of 180 days from the date of issue of award letter with mutual consent of both the parties. No tenderer on his own withdraws or revokes the tender or revises or alters or modifies the tender for any item or condition within a period of aforesaid period of 90 days.

No escalation of cost will be acceptable in any condition after opening of tender.

**6. Escalation / Deviation:**

No escalation or deviation shall be allowed till execution of order / contract.

**7. Performance Security:**

The supplier shall require to submit the Performance Security within 15 days on issue of LOI in the form of irrevocable bank guarantee or FDR issued by any Indian Nationalized Bank for an amount which is 10% of the contract value within 15 days from the date of receipt of the purchase order and should be kept valid for a period of 60 days beyond the date of completion of all contractual obligations including guaranty/defects liability period. The Performance Security shall be refunded to the supplier on completion of all contractual obligations including guarantee/ defect liability period.

**8. Testing and Demonstration:**

The equipment must be tested by the supplier for quoted RF Power at IUAC within one month time period after delivery of goods at IUAC in presence and to the satisfaction of the team of experts constituted by IUAC who will test the performance of the equipment/amplifier. No separate charges for testing, etc., will be paid to the party beyond the quoted prices.

**9. Terms of Payment:**

80% of the payment shall be made after the delivery of all the goods at IUAC. 20% of the total payment shall be made after successful technical inspection, testing and acceptance at IUAC with due certification by the concerned IUAC personnel. All payments will be made after statutory deductions.

**10. Guarantee/Defect liability period:**

The supplied material should be guaranteed from manufacturing / engineering defect and bad material / workmanship for a minimum period of twenty four months (2 Years) from the date of acceptance of the goods by IUAC. During this period if any replacement/ repairs/ rectification of any of the supplied item etc. is needed, the supplier shall do the same free of cost to IUAC. If the equipment/ part needs to be shipped to the service centre for repair/rectification during the guarantee period, the shipment charges should be borne by the supplier. The supplier shall guarantee that all equipment shall work satisfactorily and that the performance and efficiency of the equipment shall not be less than the specified values. The bidder shall assure the supply of spare parts after warranty is over for maintenance of the equipment supplied if and when required for a period of at least five years.

**11. Timeline for supply:**

The material should be supplied within 100 days. The time allowed for the completion of work to be

reckoned from the 10<sup>th</sup> day after the date of issuance of award letter/purchase order from the date of issue of Purchase order. Any delay in completion of the work/supply due to reasons attributable to the vendor / manufacturer is liable to liquidated damages as per clause 12 of this NIT. However, under the force-majeure conditions as per clause 13 of NIT, IUAC may grant suitable time extension for which vendor has to request along with the justification/reasons well in advance to the Director, IUAC for approval without any prejudice or price escalation.

**12. Liquidated damages:**

In case the delivery of the listed items is delayed beyond the specified delivery period for reasons attributable to the supplier, deductions on account of liquidated damages @ 0.5% per week subject to maximum of 10 % of the total order value will be deducted.

**13. Force-Majeure:**

IUAC may grant an extension of time limit set for the supply items in case it is delayed by force majeure beyond the supplier's control. Force majeure is defined an event of effect that cannot reasonably be anticipated such as acts of God (like earthquakes, floods, tsunami etc.), the direct and indirect consequences of wars (declared or undeclared), national emergencies, pandemics/epidemics, civil commotions and strikes (only those which exceeds a duration of ten continuous days) at successful Tenderer's factory. Apart from the extension of the time limit, force majeure does not entitle the successful tenderer to any relaxation or to any compensation of damage or loss suffered. The decision of the Director, IUAC will be final and binding for the bidder.

**14. Preference to make in India**

Preference to local suppliers shall be given as per revised Public Procurement (Preference to Make in India), Order 2017, No.P-45021/2/2017-PP (B.EII) dated 16.09.2020 issued by DPIIT, Ministry of Commerce and Industry, Govt. of India as notified from time to time. (Submit duly filled Declaration of Content, Annexure- XV for the same). The Declaration of Content once submitted in the Technical Bid will be final. Submission of Revised Declaration of Content will NOT be accepted. As per O.M. of DPIIT, Ministry of Commerce and Industry, Govt. of India No.P-45021/102/2019- BE- II- Part (1) (E-50310) Dated 04.03.2021, Bidders offering Imported products will fall under the category of Non-Local Suppliers. They cannot claim themselves as Class-I or Class-II Local Suppliers by claiming the services such as Transportation, Insurance, Installation, Commissioning, Training and After Sale Service Support like AMC/ CMC etc. as Local Value Addition.

15. IUAC reserves the right to order all the spares quoted or some/part of the spares as per their requirement.

**16. Participation of IUAC Personnel:**

The IUAC personnel will witness and participate in the RF power testing, demonstration and operation of the quoted RF amplifier at IUAC.

**17. Final Acceptance:**

The final acceptance of the system/amplifier is defined as the successful completion of shipment, testing and acceptance tests at IUAC to substantiate compliance with the specification mentioned in annexure A.

**18. Correspondence :**

All the correspondence in respect of tender / contractual obligation/technical shall be made to The Administrative Officer (S&P),/ Shri Yaduvansh Mathur, Inter University Accelerator Centre, Aruna Asaf Ali Marg, New Delhi - 110067. E-mail: [iuacstores@gmail.com](mailto:iuacstores@gmail.com)/[yaduvansh06@gmail.com](mailto:yaduvansh06@gmail.com) Phone : +91-11-24126018, 24126022.

**19. Tender Rejection :**

- (a) Director, IUAC reserves the right to accept/reject any/all tenders in part/full without assigning any reason whatsoever and the decision of the IUAC in this regard will be binding on all the bidders.
- (b) Bids received by means other than e - procurement portal will be rejected.
- (c) Only complete bids will be considered and incomplete bids will be rejected.
- (d) If BOQ file is found to be modified by the bidder, the bid will be rejected. Only INR quote will be acceptable.
- (e) Tenders not complying with any of the provisions stated in this tender document are liable to be rejected.
- (f) If the General Terms and conditions are not accepted and not signed by the bidders, then the tender will be rejected.
- (g) Tender will be rejected on non-submission of 'Bid Security'

## **20. Negotiations**

Normally, there shall not be any negotiation. Negotiations, if at all, shall be an exception and only in the case of items with limited source of supply. Negotiations shall be held with the lowest evaluated responsive bidder.

Counter offers tantamount to negotiations, shall be treated at par with negotiations.

## **21. Termination for Insolvency**

IUAC may at any time terminate the Contract by giving written notice to the Supplier, if the Supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Supplier, provided that such termination will not prejudice or affect any right of action or remedy, which has accrued or will accrue thereafter to the Purchaser.

## **22. This notice inviting tender will form part of the contract agreement to be executed by the successful tenderer.**

The contract shall be governed by the Indian Laws. Any dispute arising out of this contract will be subjected to jurisdiction of New Delhi / Delhi only.

Accepted

(Signature of Bidder)

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## Bidders Registration

- 1) Any bidder from a country which shares a land border with India will be eligible to bid in any procurement whether of goods, services (including consultancy services and non-consultancy services) or works (including turnkey projects) only if the bidder is registered with the Competent Authority constituted by the Department for Promotion of Industry and Internal Trade (DPIIT).
- 2) **“Bidder”** for the purpose of this tender (including the term 'tender', 'consultant' 'vendor' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several person, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated here in before, including any agency, branch or office controlled by such person, participating in a procurement process.
- 3) **“Bidder from a country which shares a land border with India”** for the purpose of this tender means:
  - a) An entity incorporated, established or registered in such a country; or
  - b) A subsidiary of an entity incorporated, established or registered in such a country; or
  - c) An entity substantially controlled through entities incorporated, established or registered in such a country; or
  - d) An entity whose beneficial owner is situated in such a country; or
  - e) An Indian (or other) agent of such an entity; or
  - f) A natural person who is a citizen of such a country; or
  - g) A consortium or joint venture where any member of the consortium or joint venture falls under any of the above
- 4) **“The Beneficial owner”** for the purpose of (3) above will be as under:
  - 1) In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person(s), has a controlling ownership interest or who exercises control through other means.

Explanation:-

    - a) “Controlling ownership interest” means ownership of, or entitlement to, more than twenty-five per cent of shares or capital or profits of the company;
    - b) “Control” shall include the right to appoint the majority of the directors or to control the management or policy decisions, including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;
  - 2) In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;
  - 3) In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;
  - 4) Where no natural person is identified under (i) or (ii) or (iii) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;
  - 5) In case of a trust, the identification of beneficial owner(s) shall including identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest or more interest in the

trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.

“**An Agent**” for the purpose of this Order is a person employed to do any act for another, or to represent another in dealings with third persons.

### **Sub-contracting in works contracts**

In works contracts, including turnkey contracts, contractors shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority.

**\*Please note that the bidders shall provide the mandatory Certificates in the following formats on their registered Company's letter heads:**

#### **Certificate for Tenders involving procurement**

“I/We have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I/we certify that we are not from such a country or, if from such a country, have been registered with the Competent Authority, I/we hereby certify that we fulfill all requirements in this regard and are eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority shall be attached]”

#### **Certificate for Tenders for Works involving possibility of subcontracting**

“I/We have read the clause regarding restrictions of procurement from a bidder of a country which shares a land border with India and on sub-contracting to contractors from such countries; I/we certify that we are not from such a country or, if from such a country, have been registered with the Competent Authority and will not sub- contract any work to a contracting from such countries unless such contractor is registered with the Competent Authority. I/we hereby certify that we fulfill all requirements in this regard and is/are eligible to be considered. [Where applicable, evidence of valid registration by the competent Authority shall be attached.]”

**Tenderer’s Signature and seal**

Supply, installation and testing of 97 MHz, 30 kW Solid State RF amplifiers as per the following specifications.

### Technical Specifications

S. No.	PARAMETERS	SPECIFICATIONS	NOTE
1	Center Frequency	97MHz	
2	Bandwidth	$\pm 500\text{kHz}$	$\pm 0.5\text{dB}$
3	Output Power Maximum	30 kW CW (24x7 operation)	for 50 ohm RF Load
4	Operating modes	CW or Pulsed	With Indication of mode of operation on front panel as well as remote read
5	Input Power Level typical	0 dBm (1mW)	for maximum power output
6	Power Efficiency	$\geq 60\%$	DC-RF efficiency
7	Technology	LDMOS	Rugged, generic, easy to source MOSFET from open market should be used
8	Amplifier type with Linearity range	Class AB $\pm 0.5\text{ dB}$	Between 3kW to 27kW Power output. Ambient temperature varying between $+18^{\circ}\text{C}$ to $+50^{\circ}\text{C}$
9	Overall RF Power Output Stability	$\pm 1\%$ of set value	
10	Phase shift	$\pm 5^{\circ}$	
11	Input Power Level (No damage)	+20dBm	Overdrive protection must be activated with panel indication and remote read
12	Harmonics at P1dB	$\leq -35\text{ dBc}$	2nd and higher order harmonics
13	Spurious oscillations (if any)	$\leq -60\text{ dBc}$	
<b>Pulsed Operation</b>			
14a	Repetitive frequency	10Hz to 1000Hz	Pulse Rise time & Fall Time $\sim 10\mu\text{S}$
14b	Pulse duration	50 $\mu\text{S}$ to 50mS	
14c	Droop rate	$\leq \pm 1\%$	
15	Physical configuration	19" Rack mounted Modular System. <b>Space Constraints/ Max limits</b> Height: 200cm, Width: 135cm; Depth: 120 cm	Sub-systems must be designed for easy removal for repair & maintenance.
<b>Amplifier Sub Units</b>			
16a	(a) Amplifier RF Sub-units <i>must be independently powered through a circuit breaker. It should have an independent air cooled DC power supplies.</i> Sub units should independently displays the fault, RF power, DC power supply parameters with remote control software and local touch/push switches.		
16b	For all <i>on-board power supplies, it must be possible to extract them directly from the front-panel.</i> They must be easily replaceable and it should be possible to substitute them		



	without using any tool (extraction and plug-in must be done by hand).		
16c	All on-board sub unit <b><i>power supplies must be widely available in the market</i></b> supplied by primary/good brand and not built specifically for the amplifier		
16d	The amplifier <b><i>sub units must have an air filter. The air filter must be removable for cleaning from the front panel</i></b> without the use of any tool whatsoever, but only by hand.		
16e	<b><i>Each sub unit of amplifier must be composed of multiple independent RF PALLETS.</i></b> They must be all <b><i>identical and working in parallel.</i></b> They must be easily repairable & replaceable for easy maintenance.		
16f	Each sub unit of amplifier should be <b>equipped with an internal isolated combiner</b> with isolation between inputs > 25dB.		
16g	The independent <b><i>RF PALLETS</i></b> composing the amplifier sub units <b><i>must be equipped with an input and output planar BALUN without the use of cables.</i></b>		
16h	Each <b><i>sub unit</i></b> of amplifier must be <b><i>provided with on-board local display and keyboard/switches that allows full local control</i></b>		
16i	Each amplifier <b><i>sub unit must be driven by a 0dBm input power</i></b>		
16j	Each amplifier <b><i>sub unit should be contained/ housed in a standard 19" box/chassis</i></b>		
16k	Each amplifier sub unit <b><i>should have an individual Phase setting and an individual Gain adjustment.</i></b>		
<b>Load Conditions</b>			
17a	RF Impedance Level	50 Ohm	RF Input: N & RF Output: 3-1/8" EIA (available on top side)
17b	VSWR during continuous operation at Load	≥ 1:2 at maximum Power Level (VSWR protection must be enabled over 3kW of reflected power)	Amplifier units should be able to withstand 10% reflection power (i.e. 3kW) of maximum forward power rating and shall not damage itself.
17c	VSWR Protection	Amplifier should protect itself against open & short load conditions at all phase angles.	
<b>Interlock Protection – Latched operation</b>			
18a		Excessive VSWR (continuous operation)	Amplifier should be shut down/ tripped with status indication for both local and remote operation
18b		Over temperature	Amplifier should shut down/ tripped with status indication for both local and remote operation
18c		Over drive	Fold-back / RF OFF with status indication
18d		Insufficient cooling liquid	Amplifier should shut down/ tripped with status indication for both local and remote operation
18e		3 phase AC mains phase error (phase reversal, over or under voltage)	Amplifier should tripped with status indication for both local and remote operation

18f	External Interlock	Provision to use the status of external equipment with electrical contacts to interlock overall system  “Normal Open” contacts to break amplifier operation	Two additional potential free isolated contacts, interlock input accessible through top of amplifier preferably in a terminal block or D-Submin Connector to be provided which can be used as an external interlocks
<b>Utility System</b>			
19	AC Mains	3 x 415V $\pm$ 10%, 50 Hz $\pm$ 2 Hz, 5 wire system (3 Phase, Neutral and Earth), with safety earthing stud: on chassis	AC cable inlet preferably through top side
20	Operating Temperature Range	+18 <sup>0</sup> C to 50 <sup>0</sup> C	
21	Humidity level for amplifier operation	~ 40% to 90%	@ Ambient 18 <sup>0</sup> C to 50 <sup>0</sup> C
22	(a) Cooling system	1) Closed loop independent liquid / water cooling system should be provided with the amplifier which can be a part of the amplifier.	Preferable:  Cooling water flow sensor, flow switch, water inlet and outlet temperature sensors to indicate these parameters on display.  Amplifier sub-units must have protection against over temperature of heat sink with Indication.  Must have removable and washable air, water dust/dirt filters.
		2) Should have Built-in Redundant pumps.	
		3) A Liquid to liquid heat exchanger must be included in the supply. It will be built-in in the amplifier rack and will be connected to the Amplifier independent cooling system on one side and to the IUAC liquid cooling system on the other side	
		4)Heat exchanger cooling water provided by IUAC at 22deg C, 80PSI, 20mm	
		5) Interlocking of amplifier with cooling system with indication and remote read of interlocking systems should be provided.	
		6) Operation and monitoring of cooling system with local and remote monitoring of parameters should be provided.	
22b	Pumps and cooling system must be included within the transmitter cabinet and must be extractable on slides for servicing.		
22c	Pumps must be Independent (Twin Pumps), Redundant and mounted in Parallel (NOT in Series).		

	<p>Minimum 2 pumps per system, a single pump should be enough and capable to cool the system Pumps must automatically switch on every pre settable interval, in order to grant equal aging and functionality to both pumps.</p> <p>Preferably: Pumps should be fast-lock type so that it should be possible to change the pumps without the interruption of the ON-AIR signal and without any tool but only by hand.</p> <p>Pump speed and heat exchanger fan speed should be temperature controlled to increase reliability of the cooling system and life cycle of each component</p> <p>Liquid cooling system Should be operate by means of an independent control logic separate from the transmitter control logic.</p>		
22d	In case of outside cold temperatures, the cooling circuit should automatically reduce the flow to the external heat exchanger. The liquid flow reducer must be based on a 3 way mechanical valve.		
<b>Safety</b>			
23a	Electrical, Fire safety	Short circuit proof, regulated DC supply lines must be sufficiently secured with suitable fasteners	Chassis earthing -mandatory Secured back & side panels for operator safety Sub-units & main Chassis must have provision for external earthing connections.
23b	Mains - On/Off control	AC lines should be routed through sufficiently rated circuit breakers	Front panel accessible multi-way switch
23c	Emergency	Bang switch	Emergency shut down on Front panel
23d	RF	Amplifier should fulfill RF safety measures and should be IEC 215 Compliant  Company/ supplier should have ISO quality certification	Should satisfy international safety standards for electrical safety, radiation emission and susceptibility as the unit is liable to be placed in radiation environment. Certificates to be attached.
<b>Connectors</b>			
24a	RF Power Input	N Connector	Accessible on front panel
24b	RF Power Output	3-1/8" EIA flange	Preferably on the top of chassis/amplifier
24c	RF Samples	BNC – Forward & Reflected ports ( both in main unit and in sub units)	*Not to exceed 0dBm across 50 ohm at maximum RF output power. * Accessible on Front panel
24d	Amplifier Ready	Two potential free contact signals to given as output (when amplifier is ready to give output i.e. driver, sub	Through terminal block or D connector

		units , control unit, interlocks are ok and ready)	
<b>Parameter Indication, Remote Control &amp; Status</b>			
25a	Local control, Indication, Status thorough high level Control Unit	-Forward power (CW, Pulsed)	* Overall controller must be a central control unit with built-in converters, server built-in to display parameters, accept front Panel commands, communicate with internal and external units, handle both analogue and logic signals required for overall amplifier to indicate amplifier status and display valves.  * Response time for critical RF shut down shall be less than 5uS
		-Reflected Power	
		-VSWR Alarm	
		-Temp Alarm	
		-Water flow status	
		-Water temp Alarm	
		DC ON/OFF status	
		-RF ON/OFF/Standby status	
		-Local/Remote selection	
		-Pallet-Voltage, Current intake monitoring	
		-operation hours display	
		-TCP/IP address settings	
-External interlock (2 nos)			
25b	Interface for Remote control & monitor	-RS-232 Control	Software, command set must be supplied to write multiple parameter set points, read actual values through dedicated commands etc.
		-TCP/IP (Accessible on front panel)	
		-SNMP	
25c	Each Amplifier sub unit must be equipped with an RJ-45 connector on the front panel for monitoring purposes and LEDs for a quick overview of the amplifier units	-RJ45 -LED	Quick Overview of amplifier status
25d	From each amplifier sub units should have on board monitoring display, it must be possible to monitor	- Forward power, both in dBc and Watt	
		- Reflected power, both in dBc and Watt	

	at least:	<ul style="list-style-type: none"> <li>- Temperature of each individual on-board power supply</li> <li>- Output Voltage of each individual on-board power supply</li> <li>- Output Amperes of each individual on-board power supply</li> <li>- Total Transistor Current</li> <li>- Individual Transistor Current of each on-board power transistor</li> <li>- Overcurrent status</li> <li>- Interlock status</li> <li>Input Voltage to each individual on-board power supply</li> </ul>	
25e	Each amplifier module must be equipped with an independent IP address for FW and SW update, independent from the communication IP Address	IP Address	Dedicated, independent IP address for FW/SW update
25f	Each single amplifier module must be completely configurable via:	<ul style="list-style-type: none"> <li>- local interface (display+keyboard)</li> <li>- Web-interface without the use of Password Protected access.</li> <li>- SNMP v1 and/or v2</li> <li>- CAN bus</li> <li>- RS 485</li> </ul>	
25g	For each individual power amplifier module it must be possible to export to file the entire configuration and data in non-volatile memory	Export from local PCs and Remotely via LAN connection must be guaranteed.	
25h	For each individual power amplifier		

	module it must be possible to carry out FW updates of the management system by means of a local PC and remotely by means of a LAN connection		
25i	For each individual power amplifier module (sub-unit) setting the parameters of the remote Ethernet interface must be possible from the front controls or from the local Ethernet interface.		
26 <b>Note:</b> 1 After SHUT DOWN for any reason, the amplifier must not restore to previous condition until reset by the operator locally or remotely, only after clearing the fault(s).			
27	<b>Warranty</b>		Minimum 24 months
28	<b>Installation</b>		Refer to “Testing & Commissioning”
29	<b>Documentation</b>		Refer “Documents & manuals”
30	<b>Spare Items</b>	1. List of spare parts Suggested for our stock.	Price list to be provided for each item.
		2. Spare RF power pallets	
		3. List of customised ready to use cards installed in amplifier for maintenance	
		4. Spare DC power supply	
		5) RF Sub Unit (i.e. amplifier units whose power is combined to give 30kW output	Purchaser reserves the rights not to purchase the suggested spare parts from the equipment supplier.
		6) Drive Amplifier Unit	
		7) Control Unit	EOL items used in the amplifier must be intimated to user in advance and if they are unique, enough spares should be supplied along with amplifier
		8) BOM – List of components with details	

### Testing & Commissioning:

a) Tests to be carried out at vendor’s site must include

1. Characterisation of Power amplifier for Bandwidth, Gain and Phase measurements with actual plots.
2. Continuous 48 hours continuous full power test on 50 Ohms dummy load for required specifications.
3. Simulation of fault conditions and observations include external Interlock failure, VSWR fault, emergency stop, failure of water flow, over temperature failure, failure of MOSFET with intense flash/ARC, over voltage or over current in internal DC power source(s), mains 3-phase failure etc.,
- 4) The installation and commissioning of equipment at IUAC will be carried out by technical personnel of IUAC with the help of supplied documentation and supplier help available online.
- 5) IUAC reserve the right of Pre-dispatch Inspection. For Persons deputed for inspection from IUAC, the expenses towards 'to and fro' air fare and all local expenses including accommodation will be borne by IUAC.

**Documents and Manual:**

- a) Original hard copies of all test reports / certificates, test setup details shall be provided to IUAC.
- b) Two sets of the operation and maintenance manuals should be provided without additional cost. Manual must contain detailed mechanical, electrical drawings, BOM with catalogue/ manufacturer's part number. The supplied technical manual must include detail block diagrams, schematic diagrams, as built wiring diagrams, installation procedures, test reports, software manuals including programming steps with instructions if any, etc., for operational, maintenance, installation and repair purposes. Any third party components or PCBs used shall be clearly mentioned with details of source. Customised part(s) shall be mentioned with correct part number for identification.
- c. Any programming or control software package shall be provided in a SD card or USB/Pen drive.

Annexure B  
TENDER ACCEPTANCE LETTER  
(To be given on Company Letter Head)

Date:

To,  
The Director  
IUAC, New Delhi-67

**Sub: Acceptance of Terms & Conditions of Tender.**

**Tender Reference No: IUAC/NIT/**

**Name of Tender / Work: -**

Dear Sir,

I/ We have downloaded / read and examined the tender document(s) for the above mentioned Tender /Work from the web site(s) namely:

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as per your advertisement, given in the above mentioned website(s).

1. I / We hereby certify that I / we have read the entire terms and conditions of the tender documents (including all documents like annexure(s), schedule(s), etc .), which form part of the contract agreement and I / we shall abide hereby by the terms / conditions / clauses contained therein.
2. The corrigendum(s) issued from time to time by your department/ organization too have also been taken into consideration, while submitting this acceptance letter.
3. I / We hereby unconditionally accept the tender conditions of above mentioned tender document(s) / corrigendum(s) in its totality / entirety.
4. I / We do hereby declare that our Firm has not been blacklisted/ debarred by any Govt. Department/Public sector undertaking.
5. I / We certify that all information furnished by the our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/ organisation shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy.

Yours Faithfully,

(Signature of the Bidder, with Official Seal)



Annexure -C  
PROFILE OF THE TENDERER  
(To be given on Company Letter Head)

**TENDER FOR SUPPLY OF “30kW, 97MHz Solid State RF Power Amplifier as per Annexure A”**

1. Name of the Firm / Organization:
2. Address:
3. Telephone No. / Mobile No. & Name of the Contact Person :
4. Fax No. :
5. E-mail ID :
6. Month and Year of establishment:
7. Name of proprietor / partners / directors:
8. No. of years of experience in this field,  
with Reference, Certificates:
9. Annual Turnover during the last  
three years (Enclose copies of  
Audited Financial Statement duly  
certified by CA)  
2020-21 :  
2021-22 :  
2022-23 :
10. Whether the firm is a Tax  
Assessee? If so please give the  
details of PAN No. and copies  
of ITR files for the last three  
financial years :
11. GST Registration No.:
12. Name of the OEM and address:

Signature of the Tenderer & Seal

**ANNEXURE-D**  
**Format for declaration by the Bidder for Code of Integrity & conflict of Interest (On the Letter Head of the Bidder)**

No: \_\_\_\_\_

Date \_\_\_\_\_

To,  
The Director IUAC  
New Delhi

Sir,

With reference to your Tender No. \_\_\_\_\_ dated \_\_\_\_\_ I/We hereby declare that we shall abide by the Code of Integrity for Public Procurement as in your Tender document and have no conflict of interest. It is certified that we are not associated, or have been associated in the past, directly or indirectly, with a firm or any of its affiliates which have been engaged by the Purchaser to provide consulting services for the preparation of the design, specifications, and other documents to be used for the procurement of the goods to be purchased under this Invitation of Bids / Tender.

The details of any previous transgressions of the code of integrity with any entity in any country during the last three years or of being debarred by any other Procuring Entity are as under:

- a
- b
- c

We undertake that we shall be liable for any punitive action in case of transgression/ contravention of this code.

Thanking you,

Yours sincerely,

Signature  
(Name of the Authorized Signatory)

**Company Seal**

## **Annexure E**

This certificate shall be furnished duly signed & stamped with Technical Bid.

### **Certificate/ Undertaking for site visit if applicable**

This is to certify that we have visited the site where ----- works have to be done in IUAC laboratory complex on .....and assessed the actual situation & nature of site. We have also assessed the amount of work involved at site for tendered work before submitting our offer. We will be able to complete the above work within stipulated time as per site conditions.

We further undertake that no extra cost will be claimed by us later-on for any difficulties/ modifications involved during the execution of tendered works. We understand that work is to be executed in an already operational/ functional institute.

**(Signature of the Bidder, with Official Seal)**

**Annexure -F**

**(Undertaking to be given on Bidders/ Company Letter Head)**

I / We (bidder) hereby give an undertaking that:

1. I / We have not been blacklisted / on holiday list / debarred during last three years by any Govt. Department/Govt. Autonomous Body/Institution, etc.
2. I/We do not have any dispute with any of the Govt. Departments/ Govt. Autonomous Bodies/Institutions, etc.
3. I/We have never been certified as 'Unsatisfactory Performer' for the said services provided to the Govt. Departments/ Govt. Autonomous Bodies/ Institutions;
4. I/We have not submitted any fake/forged certificates/ documents and later, if any such 'Certificates/Documents' found to be fake/ forged or contains willful wrong/incorrect information, suitable legal actions may be initiated against me/us/agency and the agencies/ bidders shall be debarred from tendering with the Institute.
5. I/We shall not withdraw my/our bid after opening of Technical Bid and if done so, the IUAC and the agencies / bidders shall be debarred from tendering with the Institute.

Seal and Signatures of the Authorized  
Person of the Agency

Name and designation of the  
Authorized Person of the Agency

Place:

Date:

**ANNEXURE-G**  
**DECLARATION OF LOCAL CONTENT**

(To be given on Company Letter Head – For tender value below Rs.10 Crores)  
(To be given by Statutory Auditor/ Cost Auditor/ Cost Accountant/ CA for tender value above Rs.10 Crores)

To,  
The Director,  
Inter University Accelerator Centre  
Aruna Asaf Ali Marg  
New Delhi- 110 067

Subject: - Declaration of Local Content

Tender Reference No : \_\_\_\_\_

Name of Tender/ Work: \_\_\_\_\_

1. Country of Origin of Goods being offered: \_\_\_\_\_
2. We hereby declare that items offered has \_\_\_\_\_% local content
3. Details of the Location at which the Local Value Addition is made \_\_\_\_\_

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“Local Content” means the amount of value added in India which shall, unless otherwise prescribed by the Nodal Ministry, be the total value of the item procured (excluding net domestic indirect taxes) minus the value of the imported content in the item (including all customs duties) as a proportion of the total value, in percent.

***Bidders offering Imported products will fall under the category of Non-Local Suppliers. They cannot claim themselves as Class-I or Class –II Local Suppliers by claiming the services such as Transportation, Insurance, Installation, Commissioning, Training and After Sale Service Support like AMC/ CMC etc. as Local Value Addition.***

“\*False declaration will be in breach of Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151(iii) of the General Financial Rules along with such other actions as may be permissible under law.”

Yours faithfully,

(Signature of the bidder, with Official Seal)

*Note: Preference shall be given to local suppliers as per revised Public Procurement (Preference to Make in India), Order 2017, No. P-45021/2/2017-PP (B.E-II) dated 16.09.2020 issued by DPIIT, Ministry of Commerce and Industry, Govt. of India. (Submit duly filled Declaration of Local Content for the same). The Declaration once submitted in the Technical Bid will be final. Submission of Revised Declaration will NOT be accepted.*

**Annexure-H**

To be provided on the stationary of the bank

**Solvency Certificate**  
[Format for Solvency Certificate]

To  
The Director  
Inter-University Accelerator Centre  
New Delhi-110067

**Solvency Certificate**

This is to certify that to the best of our knowledge and information, M/s.....  
(address)..... A customer of our bank is respectable and be treated as good for an  
engagement to a sum of Rs ..... (Solvency amount) ..... only as on  
..... (Date of Certificate).

This certificate has been issued without any risk and responsibility on the part of the Bank or any of its officers.  
This certificate is issued at the specific request of the customer.

Yours Sincerely,

For .....Bank

Signature of Bank Officer  
Designation  
(with seal)

**Annexure-I**

<b>S. No.</b>	<b>PARAMETERS</b>	<b>SPECIFICATIONS</b>	<b>Compliance (Yes/No)</b>
1	Center Frequency	97 MHz	
2	Bandwidth	$\geq +500\text{kHz} \pm 0.5 \text{ dB}$	
3	Output Power Maximum	30 kW CW (24x7 operation)	
4	Operating modes	CW or Pulsed	
5	Input Power Level typical	0 dBm (1mW)	
6	Power Efficiency	60% typically	
7	Technology	LDMOS	
8	Amplifier type with Linearity range	Class AB	
9	Overall RF Power Output Stability	$\pm 1\%$ of set value	
10	Phase shift	$\pm 5^\circ$	
11	Input Power Level (No damage)	+20dBm	
12	Harmonics at P1dB	Better than -35 dBc	
13	Spurious oscillations (if any)	Better than -60 dBc	
14	Pulsed Operation		
14a	Repetitive frequency	10Hz to 1000Hz	
14b	Pulse duration	50uS to 50mS	
14c	Droop rate	Better than $\pm 1\%$	
15	Physical configuration	19" Rack mounted Modular System. Limits/Max. Space Constraints/limits Height: 200cm; Width: 132cm; Depth: 120 cm	
16a	Impedance Level	50 Ohm	
16b	VSWR during continuous operation at Load	Better than 1:2 at maximum Power Level	
17a	Interlock Protection	Excessive VSWR (continuous operation)	
17b	Interlock Protection	Over temperature	
17c	Interlock Protection	Over drive	
17d	Interlock Protection	Insufficient cooling liquid & air flow	
17f	Interlock Protection	3 phase AC mains phase error (phase reversal, over or under voltage)	
18	AC Mains supply input	3 x 415V, $\pm 10\%$ , 50 Hz, $\pm 2$ Hz, 5 wire system, with safety earthing stud: on chassis Power Factor: Better than 0.95	
19	Operating Temperature Range	$+18^\circ\text{C}$ to $50^\circ\text{C}$	
20	Operating Humidity Range	$\sim 40\%$ to $90\%$	
21	Cooling system	Closed loop independent liquid/ water cooled system for the amplifier cooling	

22	Electrical Safety	Sub-units & main Chassis external earthing connections done through dedicated copper strip	
23	Emergency OFF	Bang switch on front panel	
24	RF Amplifier	IEC:60215 or equvi. Compliant ISO quality certification	
25	RF Power Input	N Connector	
26	RF Power Output	3-1/8" EIA flange	
27	RF Samples	BNC – Forward & Reflected ports (both in main unit and in individual sub-units)	
28	Local control & Indication	-Forward power (CW, Pulsed)	
		-Reflected Power	
		-VSWR Alarm	
		-Temp Alarm	
		-Water flow status	
		-Water temp Alarm	
		DC ON / OFF status	
		-RF ON/OFF / Standby status	
		-Local/Remote selection	
		-Individual Pallet -Voltage & Current monitoring	
		-Operation hours display	
29	Interface for Remote control & monitor	-RS-232 Control	
		-TCP/IP (Accessible on front panel)	
30	Each amplifier sub units have on board monitoring display	- Forward power, both in dBm and in Watts	
		- Reflected power, both in dBc and in Watts	
		- Temperature of each individual on-board power supply	
		- Output Voltage of each individual on-board power supply	
		- Output Amperes of each individual on-board power supply	
		- Over current status	
		-Overdrive input	
		- Interlock status	



**Annexure-J**

**CHECK-LIST FOR PRE-QUALIFICATION BID FOR: “30kW, 97MHz Solid State RF Power Amplifier” IUAC, Aruna Asaf Ali Marg, New Delhi-110067**

<b>Sl. No.</b>	<b>Documents Provided</b>	<b>Page number</b>
1.	Tender Acceptance Letter as given in Annexure-B	
2.	Profile of the tenderer as given in Annexure-C	
3.	Proof of submission of EMD	
4.	Undertaking on letter head (as per format prescribed in Annexure-F) along with tender document.	
5.	Technical Specification as per the details as given in Annexures A	
6.	Self-attested copy of the GSTIN & PAN card issued by the respective authorities.	
7.	Copies of work/supply orders as specified in the NIT along with satisfactory performance certificates from the concerned	
8.	Annual turnover of last three financial years (2019-2020, 2020-2021 and 2021-2022) duly certified by the Statutory Auditors. To support the claim provide a certificate of CA (No need to provide copies of balance sheet).	
9.	Copies of ITR filed for the last three financial years	
10.	Certificate - Bidder Not from/ from Country sharing Land border with India & Registration of Bidder with Competent Authority as given in special instruction	
11.	Certificate – Bidder Not from/ from Country sharing Land border with India, Registration of Bidder with Competent Authority & not sub-contract any work to a contractor from such countries unless such contractor is registered with the Competent Authority as given in special instruction	
12.	OEM Authorization Certificate and Manufacturer’s Authorization form	
13.	Declaration for Code of Integrity and Conflict of Interest as given in Annexure-D	
14.	Self attested copy of MSME/NSIC Registration Certificate and Bid Securing Declaration Form	
15.	Declaration of local content as given in Annexure-G	
16.	Any other documents, asked in this tender	

**(Seal & Signatures of Contractor)**

**(Name and Address of the Bidder)**

**ANNEXURE-K**

**BID SECURING DECLARATION FORM**  
**TO BE SUBMITTED BY MSME ONLY ON COMPANY LETTER**  
**HEAD**

Tender/Bid No.:

Date:

To  
The Director  
Inter University Accelerator Centre (IUAC)  
New Delhi  
Dear Sir/Madam,

We, the undersigned, solemnly declare that:

We understand that, according to the conditions of this Tender Document, the bid must be supported by a Bid Securing Declaration in lieu of Bid Security.

We unconditionally accept the condition of this Bid Securing Declaration. We understand that we shall stand automatically suspended from being eligible for bidding in any tender in IUAC for a period of two years from the date of opening of this bid if we breach our obligation under the tender conditions, if, we,

- 1) withdraw / amend / impair / derogate, in any respect, from our bid, within the bid validity; or
- 2) being notified within the bid validity of the acceptance of our bid by IUAC
  - (i) fail or refuse to sign the contract, or
  - (ii) failed or refused to produce the original documents for scrutiny or the required Performance Security within the stipulated time under the conditions of the tender documents.

We know that this Bid Securing Declaration shall expire if the contract is not awarded to us, upon:

- 1) receipt by us of your notification
  - a) of cancellation of the entire tender process or rejection of all bids or
  - b) of the name of successful bidder or
- 2) Forty-five days after the expiration of the bid validity or nay extension to it.

Signed:

Name:

Dated on \_\_\_\_\_ day of \_\_\_\_\_

Corporate Seal (where appropriate)

(Note: In case of a Joint Venture, the Bid Securing Declaration must be in the name of all partners to the Joint Venture that submits the bid)

**Part-B**

**PRICE BID**

(Price should be quoted in the standard BOQ format of this tender, Incomplete price bid will be rejected)

**Tender Inviting Authority: INTER UNIVERSITY ACCELERATOR CENTRE**

**Name of Work/Supply: Supply of 30kW 97MHz Solid State RF Power Amplifier as per Annexure A''**

<b>S. No.</b>	<b>Description</b>	<b>Qty</b>	<b>Unit Price (in Indian Rs.)</b>	<b>GST (in Indian Rs.)</b>	<b>Total Amount (in Indian Rs.)</b>
1.	Supply of "30kW 97MHz Solid State RF Power Amplifier" as per specifications given in Annexure-A, with minimum 24 months warranty period and standard accessories.	01			
2	Sub unit RF power amplifier	01			
3	Main Control unit	01			
4	SMPS units	03			
5	Pallets	03			