

**GOVERNMENT OF INDIA  
DEPARTMENT OF SPACE  
ISRO TELEMETRY TRACKING & COMMAND NETWORK (ISTRAC)  
BANGALORE**

**Tender for Supply of 1.5GHz RF Front-end Units**

**Bids to be submitted online**

**Tender No.: ISTRAC/ISTRAC PURCHASE/TR202200027301 dated 26-08-2022**

## A. Tender Details

Tender No :	<b>ISTRAC/ISTRAC PURCHASE/TR202200027301</b>
Tender Date :	<b>26-08-2022</b>
Tender Classification:	<b>GOODS</b>
Purchase Entity :	<b>ISTRAC PURCHASE</b>
Centre :	<b>ISRO TELEMETRY TRACKING &amp; COMMAND NETWORK (ISTRAC)</b>

### Procurement of Supply of 1.5GHz RF Front-end Units

Note: 1) This is a Dual Part Tender. Please submit your Offers separately for Technical and Price Bid under relevant Template. Please upload Price Bid under Price Bid only and nowhere else. If price is mentioned anywhere other than Price Bid, your offer will not be considered. 2) Please provide your compliance separately for (a) Performance Bank Guarantee Clause (b) Liquidated Damages Clause (c) Security Deposit Clause. (d) Certificate of Undertaking. 3) The Technical Bid and Price Bid Opening Date and Time is tentative only. Actual bid opening date and time will be intimated separately.

#### A.1 Tender Schedule

Bid Submission Start Date :	<b>19-09-2022 17:30</b>
Bid Clarification Due Date :	<b>14-10-2022 17:00</b>
Bid Submission Due Date :	<b>03-11-2022 17:00</b>
Bid Opening Date :	<b>04-11-2022 10:00</b>
Price Bid Opening Date :	<b>17-11-2022 10:00</b>

## **B. Tender Attachments**

### **Technical Write-up/Drawings**

**Document : ANNEXURE-1 (Front-end design & RFP)**

### **Instructions To Vendors**

#### **2. CERTIFICATE OF UNDERTAKING**

1. A certificate from the bidder shall be enclosed along with their quotation (Technical bid) as per the format enclosed.
2. An AGENT is a person employed to do any act for another, or to represent another in dealings with third person.
3. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority. (Competent authority is : DEPARTMENT FOR PROMOTION OF INDUSTRY AND INTERNAL TRADE (DPIIT)).
4. (b)Control shall include the right to appoint 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.
5. Bidder from a country which shares a land border with India for the purpose 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 a 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.
6. BIDDER (including the term tenderer, consultant 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 persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by

such person, participating in a procurement process.

## 7. CERTIFICATE

8.

COMPANY NAME AND SEAL:

9. DESIGNATION:

10. 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;

11. GOVERNMENT OF INDIA

DEPARTMENT OF SPACE

ISTRAC, BENGALURU: 560 058.

12. iii) 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.

13. (iii). I/We \_\_\_\_\_ hereby undertake that if the Certificate is found to be false at any given time ISRO/ISTRAC may treat this as a ground for immediate termination and further legal action in accordance with law can be initiated.

14. ii) 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.

15. (ii). I/We hereby confirm that the country of origin of goods is \_\_\_\_\_

16. i) In case of a company or Limited Liability Partnership, the beneficial owner is a natural person(s),

who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.

17. (i).I/WE\_\_\_\_\_read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India. I / We\_\_\_\_\_Certify that this bidder is not from such a country.

18. iv)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.

19. I / We\_\_\_\_\_Certify that this bidder is from such a country and registered with the Competent Authority (i.e. Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT). Copy of Registration Certificate is enclosed.

20. NAME:

21. OR\*

I/We \_\_\_\_\_ read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India.

22. Ref:Tender No\_\_\_\_\_ date\_\_\_\_\_

Our Quotation No.\_\_\_\_\_ date\_\_\_\_\_

23. REQUIREMENT OF REGISTRATION:

24. SIGNATURE:

25. ( \* Strike out whichever is not applicable).

26. Subject: Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs) 2017 - reg.

27. The beneficial owner for the purpose of (6) above will be as under:

28. (TO BE PRINTED ON THE LETTER HEAD OF THE VENDOR)

29. v)In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent 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.

### **3. INSTRUCTIONS TO TENDERERS FOR ONLINE SUBMISSION OF TENDERS THROUGH E-PROCUREMENT SYSTEM**

1. a) Bidders shall arrange themselves all resources, including Digital signature certificates and Internet Connections at their own cost, for participating in online tendering.
- b) Vendors can download the tender details and submit their offers online using their vendor accounts (obtained during registration) in our portal. Help demos for tender download and bidding processes are given on home page.
- c) The tender should be submitted online in the ISTRAC link before the due date and time as specified in the tender schedule in the portal.
- d) Vendors shall also take note of other Instructions to tenderers indicated in the tender documents.

#### 2. Conditions for online submission of tenders:

- a) It is mandatory for interested parties to register as vendors in our e-procurement portal <https://eproc.vssc.gov.in/home.html> for participating in online eProcurement process of ISRO. Only registered vendors can submit their offers online in our eProcurement portal.
- b) Vendors who are already registered in the existing EGPS software of ISRO, please register by clicking the link in the email you would have already received from 'eproc@vssc.gov.in'. After registration, do the profile update by login to this portal.
- c) For new vendors, who are not registered in the existing EGPS software, vendor registration will be released along with the portal release. To register as vendors please refer to the help demos listed on the home page of the e-procurement link mentioned above. They may approach help desk (contact details provided on the home page) for any technical help for registration and subsequent process.
- d) OEM details should be added in your E-Procurement profile under Add Agent/Principal without fail.

3. ISTRAC shall not be responsible for failure of vendors in submitting bids online caused due to technical reasons at vendor end such as network or power failures, computer failure, internet-browser, mistakes / errors in filling the bids on line by vendor etc.

#### 4. Procedure for seeking clarifications/help for the tender:

- a) All enquiries regarding the tenders and submission of offers shall be online and only through our eProcurement portal.
- b) Vendors may approach help desk e-mail id and phone number given on the home page for any technical help (e-mail: [eproc@vssc.gov.in](mailto:eproc@vssc.gov.in) and Phone: +91471 2565454/4574/2527/3753/3289).

5. Queries by vendors on technical problems on the last day of tender will not be binding on ISTRAC/ISRO for resolving/addressing. ISTRAC will not be responsible for non-submission of bids for those cases.

#### **4. MAKE IN INDIA UNDERTAKING (VENDORS SHALL SUBMIT THE BELOW CERTIFICATE ON THEIR LETTER HEAD DULY SIGNED)**

1. The type of Class which the vendor belongs: Class-I or Class-II Local Suppliers as defined under DPIIT Order dtd 04/06/2020- Preference to Make in India Order-2017 Revision. ( Class I local supplier means a supplier or service provider, whose goods, service or works offered for procurement, has local content equal to or more than 50% & Class II local supplier means a supplier or service provider, whose goods, services or works offered for procurement, has local content more than 20% but less than 50%). NOTE: Bidders offering imported products will fall under the category of Non-local suppliers. They cannot claim themselves as Class I Local suppliers/Class II Local suppliers by claiming the services such as transportation, insurance, installation, commissioning, training and after sales service support like AMC/CMC etc. as local value addition.

2. Percentage of local content for the quoted item.

3. Details of location (s) at which the local value addition is made

4. Provide self-certification that the item (s) offered meets the local content requirement for Class-I/Class-II Local Suppliers as the case may be.

#### **5. PROFORMA FOR INSTRUCTIONS TO TENDERERS AND TERMS & CONDITIONS OF TENDER**

1. a) All available technical literature, catalogues and other data in support of the specifications and details of the items should be furnished along with the offer.

(b) Samples, if called for, should be submitted free of all charges by the tenderer and the Purchaser shall not be responsible for any loss or damage thereof due to any reason whatsoever. In the event of nonacceptance of tender, the tenderer will have to remove the samples at his own expense.

(c) Approximate net and gross weight of the items offered shall be indicated in your offer. If dimensional details are available the same should also be indicated in your offer.

(d) Specifications: Stores offered should strictly confirm to our specifications. Deviations, if any, should be clearly indicated by the tenderer in his quotation. The tenderer should also indicate the Make/Type number of the stores offered and provide catalogues, technical literature and samples, wherever necessary, along with the quotations. Test Certificates, wherever necessary, should be forwarded along with supplies. Wherever options have been called for in our specifications, the tenderer should address all such options. Wherever specifically mentioned by us, the tenderer could suggest changes to specifications with appropriate response for the same.

2. ACCEPTANCE OF STORES: (a) The stores shall be tendered by the Contractor for inspection at such places as may be specified by the purchaser at the Contractor's own risk, expense and cost. (b) It is expressly agreed that the acceptance of the stores Contracted for, is subject to final approval by the purchaser, whose decision shall be final. (c) If, in the opinion of the purchaser, all or any of the stores

do not meet the performance or quality requirements specified in the Purchase Order, they may be either rejected or accepted at a price to be fixed by the purchaser and his decision as to rejection and the prices to be fixed shall be final and binding on the Contractor. (d) If the whole or any part of the stores supplied are rejected in accordance with Clause No. (c) above, the purchaser shall be at liberty, with or without notice to the Contractor, to purchase in the open market at the expense of the Contractor stores meeting the necessary performance and quality Contracted for in place of those rejected, provided that either the purchase, or the agreement to purchase, from another supplier is made within six months from the date of rejection of the stores as aforesaid.

3. ARBITRATION : All disputes, differences, claims and demands arising under or pursuant to or touching this agreement shall be referred to Arbitration of a sole Arbitrator to be appointed by the Director, ISTRAC, whose decision/award will be final and binding on both the parties. Such arbitration shall be held in Bangalore and shall be subject to and governed by the provisions of the Arbitration and Conciliation Act of 1996 or any statutory modification or re-enactment thereof. The language to be used in Arbitration is English only.

4. As a Government of India Department, this office is exempted from payment of Octroi and similar local levies. Tenderers shall ensure that necessary Exemption Certificates are obtained by them from the Purchase Officer concerned to avoid any payment of such levies.

5. a) Your offer should be valid for 120 days from the date of opening of the tender. b) Prices are required to be quoted according to the units indicated in the annexed tender form. When quotations are given in terms of units other than those specified in the tender form, relationship between the two sets of units must be furnished.

6. CUSTOMS DUTY : This office is eligible for Concessional Customs Duty @ 5.5% against Ministry of Finance, Department of Revenue, Government of India, vide Customs Notification No.51/96-Cus Dated 23-07-1996 (Sl.No.1) and amended under Notification No.93/96 dated 11th December 1996 and 24/2002 dated 01-03-2002

7. DESPATCH: The Contractor is responsible for obtaining a clear receipt from the Transport Authorities specifying the goods despatched. The consignment should be despatched with clear Railway Receipt/Lorry Receipt. If sent in any other mode, it shall be at the risk of the Contractor. Purchaser will take no responsibility for short deliveries or wrong supply of goods when the same are booked on 'said to contain' basis. Purchaser shall pay for only such stores as are actually received by them in accordance with the Contract.

8. TAXES: GST is payable as per applicable rates.

9. GUARANTEE & REPLACEMENT: (a) The Contractor shall guarantee that the stores supplied shall comply fully with the specifications laid down, for material, workmanship and performance. (b)



Warranty shall be for the period mentioned in the tender document. After the acceptance of the stores, if any defects are discovered therein or any defects therein found to have developed under proper use, arising from faulty stores design or workmanship, the Contractor shall remedy such defects at his own cost provided he is called upon to do so within the warranty period, by the purchaser who shall state in writing in what respect the stores or any part thereof are faulty. (c) If, in the opinion of the purchaser, it becomes necessary to replace or renew any defective stores such replacement or renewal shall be made by the Contractor free of all costs to the purchaser, provided the notice informing the Contractor of the defect is given by the purchaser in this regard within the said period of warranty from the date of acceptance thereof. (d) Should the Contractor fail to rectify the defects, the purchaser shall have the right to reject or repair or replace at the cost of the Contractor the whole or any portion of the defective stores. (e) The decision of the Purchaser notwithstanding any prior approval or acceptance or inspection thereof on behalf of the Purchaser, as to whether or not the Stores supplied by the Contractor are defective or any defect has developed within the said period of warranty or any other period or as to whether the nature of defects requires renewal or replacement, shall be final, conclusive and binding on the Contractor. (f) To fulfill guarantee conditions outlined in (a) to (e) above, the Contractor shall, at the option of the Purchaser, furnish a Bank Guarantee (as prescribed by the Purchaser)

10. If the IGST is applicable, the same will be reimbursed if it is reflected in Bill Of Entry. Proof shall be provided while claiming payment.

11. It is to be noted that either Customs Duty or GST is applicable ( any one)

12. JURISDICTION : The contract/ purchase order shall be governed by an interpreted and construed in accordance with the laws of India. The courts situated at Bangalore only shall have jurisdiction to deal with and decide any legal matter or dispute arising out of contract/ purchase order.

13. PACKING FORWARDING & INSURANCE: The Contractor will be held responsible for the stores being sufficiently and properly packed for transport by rail, road, sea or air to withstand transit hazards and ensure safe arrival at the destination. The packing and marking of packages shall be done by and at the expense of the Contractor. The purchaser will not pay separately for transit insurance, all risks in transit being exclusively of the Contractor and the Purchaser shall pay only for such stores as are actually received in good condition in accordance with the Contract.

14. Please provide your compliance for Security Deposit, Performance Bank Guarantee and Liquidated Damages Clause.

15. PRICES: Tender offering firm prices will be preferred. Where a price variation clause is insisted upon by a tenderer, quotation with a reasonable ceiling should be submitted. Such offers should invariably be supported by the base price taken into account at the time of tendering and also the formula for any such variation/s.

16. REJECTED STORES: Rejected stores will remain at destination at the Contractor's risk and responsibility. If instructions for their disposal are not received from the Contractor within a period of 14 days from the date of receipt of the advice of rejection, the purchaser or his representative has, at his discretion, the right to scrap or sell or consign the rejected stores to Contractor's address at the Contractor's entire risk and expense, freight being payable by the Contractor at actuals.

17. Sales Tax and/or other duties/levies legally leviable and intended to be claimed should be mentioned in the price bid template. If nothing is mentioned, then it will be presumed that the rate quoted is inclusive of all taxes/duties.

18. SECURITY DEPOSIT: Wherever, the Purchase Order value is Rs. 5.00 Lakhs or more, on acceptance of the tender, the Contractor shall, at the option of the Purchaser and within the period specified by him, deposit with him, in cash or in any other form as the Purchaser may determine, security deposit not exceeding ten percent of the value of the Contract as the Purchaser shall specify. If the Contractor is called upon by the Purchaser to deposit, 'Security' and the Contractor fails to provide the security within the period specified, such failure shall constitute a breach of the Contract, and the Purchaser shall be entitled to make other arrangements for the re-purchase of the stores Contracted at the risk of the Contractor in terms of Sub-Clause (ii) and (iii) of clause regarding Delivery. (b) hereof and/or to recover from the Contractor, damages arising from such cancellation.

19. SETTLEMENT OF DISPUTES : Except as otherwise specifically provided in the contract, all disputes concerning question of fact arising under the Contract shall be decided by the Purchaser subject to a written appeal by the Contractor to the Purchaser whose decision shall be final to the parties hereto. Any disputes or differences including those considered as such by only one of the parties arising out of or in connection with the Contract shall be, to the extent possible, settled amicably between the parties. If amicable settlement cannot be reached, then all disputes shall be settled by arbitration.

## 20. TERMS & CONDITIONS OF TENDER

21. TEST CERTIFICATE: Wherever required, test certificates should be sent along with the despatch documents.

22. The authority of the person signing the tender, if called for, should be produced.

23. The Purchaser reserves the right to place order on the successful tenderer for additional quantity up to 25% of the quantity offered by them at the rates quoted.

24. The purchaser shall be under no obligation to accept the lowest or any tender and reserves the right of acceptance of the whole or any part of the tender or portions of the quantity offered and the tenderers shall supply the same at the rates quoted.

25. The tenderer should supply along with his tender, the name of his bankers as well as the latest Income-Tax clearance certificate duly countersigned by the Income-Tax Officer of the Circle concerned under the seal of his office, if required by the Purchaser.

26. The term Contractor shall mean, the person, firm or company with whom or with which the order for the supply of Stores is placed and shall be deemed to include the Contractor's successors, representative, heirs, executors and administrators unless excluded by the Contract.

27. The term Purchase Order shall mean the communication signed on behalf of the Purchaser by an Officer duly authorised intimating the acceptance on behalf of the Purchaser on the terms and conditions mentioned or referred to in the said communication accepting the tender or offer of the Contractor for supply of stores or plant, machinery or equipment or part thereof.

28. The term Purchaser shall mean the President of India or his successors or assigns.

29. The term "Stores" shall mean what the Contractor agrees to supply under the Contract as specified in the Purchase Order including erection of plants & machinery and subsequent testing, should such a condition is included in the Purchase Order.

## **6. TENDER TERMS AND CONDITIONS**

1. All information in Vendor Specified Terms shall be provided without fail to avoid unnecessary correspondence / delay in process. The same should reach before technical bid opening date and time without fail.

2. a) Order no: F.No.6/18/2019 PPD dated 23.07.2020 of Department of Expenditure), Ministry of Finance

Under Public procurement division for the General Financial rule (GFRs).

3. As per Rule 144(xi) of General Financial Rules, 2017, 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 (i.e., Department for Promotion of Industry and Internal Trade) in line with Order (Public Procurement No. 1, 2 and 3) dated 23/07/2020 and 24/07/2020 or any amendments thereon issued by the Public Procurement Division, Department of Expenditure, Ministry of Finance. Hence, Vendors or Agents of a Vendor (Indian or Others) from a country sharing border with India shall submit the copy of Valid Registration made with DPIIT along with the tender mandatorily, without which the offer will be treated as invalid.

4. A supplier who has been debarred by any procuring entry for violation of this order shall not be eligible

for preference under this order for procurement by any other procuring entity for the duration of the debarment. The debarment for such other procuring entities shall take effect prospectively from the date on which it comes to the notice of other procurement entities, in the manner prescribed.

5. b) Class I local supplier means a supplier or service provider, whose goods, service or works offered for procurement, has local content equal to or more than 50%, as defined under order.

6. c) Class II local supplier means a supplier or service provider, whose goods, services or works offered for procurement, has local content more than 20% but less than 50%, as defined under this Order.

7. d) Bidders offering imported products will fall under the category of Non-local suppliers. They cannot claim themselves as Class I Local suppliers/Class II Local suppliers by claiming the services such as transportation, insurance, installation, commissioning, training and after sales service support like AMC/CMC etc. as local value addition.

8. Delivery Terms: FOR ISTRAC

9. e) Verification of local content:

i) The Class I local supplier/ Class II local supplier at the time to tender, bidding or solicitation shall be required to indicate percentage of local content and provide self certification that the item offered meets the local content requirement for Class I local supplier / Class II local supplier as the case may be. They shall also give details of the location(s) at which the local value addition is made.

10. GENERAL TERMS & CONDITIONS FOR BIDDERS: For this procurement, bids from Class I & class II Local Suppliers are admissible. hence provisions contained in Public Procurement (Preference to Make in India), Order 2017 issued by Department for Promotion of Industry and Internal Trade (DIPP), Ministry of Commerce & Industries vide letter No. P 45021/2/2017 PP(BE II) dated 04.06.2020 and subsequent amendment & directives shall be followed. Accordingly, offer will be evaluated & processed in conformation with above referred GOI order (Specially mentioned below). The bidder shall provide compliance and undertaking as per order and hereafter amendments:

11. If an agent submit bid on behalf of the principal/OEM, the same agent shall not submit a bid on behalf of another principal/OEM in this tender for the same item. If submitted, all offers will be liable for rejection.

12. iii) False declarations will be in breach of the code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules (GFR) 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.

13. ii) In case bid value is in excess of Rs. 10 Cr., Class I local supplier/ Class II local supplier shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.

14. In case the bidders propose any other payment terms in deviation with the standard terms mentioned in the tender enquiry, it may be noted that applicable cash flow implications will be loaded on the prices quoted for commercial comparison of the offers. If advance payments are insisted by the bidders, interest at the rate of MCLR (Marginal Cost Linked Rate) as notified by State Bank of India from time to time shall be loaded on the prices for price comparison.

15. In this tender either the Indian agent on behalf of the principal/OEM or the principal /OEM itself can bid, but both cannot bid simultaneously for the same item. Indian agents while quoting on behalf of their principals shall provide necessary latest authorisation letter obtained from their principals/manufacturers.

16. Liquidated damages: If the vendor fails to deliver the items on or before the delivery date, or any extension thereafter purchaser shall recover from the vendor as liquidated damages a sum of 0.5% of the contract price of the undelivered stores for each calendar week of delay. The total liquidated damages shall not exceed 10% of the contract price of the unit or units so delayed.

17. Model Certificate for Tenders:

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India I certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority. I hereby certify that this bidder fulfills all requirements in this regard and is eligible to be considered.

18. Model Certificates for Tenders for Work involving possibility of sub contacting:

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and on sub contracting to contracting from such countries I certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority and will not sub contract any work to a contract form such countries unless such contractor is registered with the Competent Authority. I hereby certify that this bidder fulfills all requirements in this regard and is eligible to be considered.

Provide Compliance for the above in Vendor Specified Commercial Terms.

19. NO EMD AND TENDER FEE.

20. Performance Bank Guarantee (PBG) to be furnished as a security for fulfilment of warranty obligations by the successful vendor after satisfactory execution of purchase order/Contract (3% of the value of the purchase order/Contract). Central SUs/PSE/Autonomous bodies are exempted from the production of Performance Bank Guarantee. Instead; an indemnity bond shall be furnished in lieu of PBG.

21. Product Scope: Class I local supplier/ Class II local supplier shall offer only standard and catalogued product for Equipment / Spares Cards / assemblies. If the above offered Equipment / Cards / Assemblies are under development / to be developed the bid will not be considered.

22. PUBLICITY: No publicity of any kind whatsoever in case of PURCHASE ORDER shall be given by the Supplier without prior permission of the Purchaser.

23. SECRECY: The technical information, drawings, specifications and other related documents, forming part of the CONTRACT, are the property of the Purchaser and shall not be used for any other purpose, except for execution of the CONTRACT. All rights, including rights in the event of grant of patent and registration of designs are reserved. The technical information, drawings, specifications, records and other documents shall not be copied, transcribed, traced or reproduced in any other form or otherwise in whole and/or duplicated, modified, divulged and/or disclosed to a third party nor misused in any other form whatsoever without Purchasers consent in writing except to the extent required for the execution of this CONTRACT. These technical informations, drawings, specifications and other related documents shall be returned to the Purchaser with approved copies and duplicates, if any, immediately after they have been used for the agreed purpose.

24. Senior Purchase and Stores Officer, ISTRAC, reserves the right to accept or reject any/or all the tenders in part or full without assigning any reasons thereof.

25. Submit the bid on or before due date.

26. Successful vendor has to submit the security deposit. (3 % of the value of the purchase order). Central PSUs/PSE/Autonomous bodies shall be exempted from the payment of security deposit, and instead, an indemnity bond shall be secured from them.

27. VENDORS HAS TO REFLECT THE POINT NO (4), (5) AND (6) IN THEIR BID.

28. TAXES: GST is payable as per applicable rates.

29. Foreign OEMs/Agents quoting on behalf of Foreign OEMs are not permitted to quote. High Sea Sales quotes not permitted. The bids shall be in INR only.

## C. Bid Templates

### C.1 Technical Bid - Supply of 1.5GHz RF Front-end Units

#### 1. COMPONENTS - RF COMPONENTS (L-band 1544.5MHz Front-end Units)

##### Item specifications for COMPONENTS - RF COMPONENTS

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Operating Freq.	1544.5 ± 10 MHz or better	Yes / No / Explain		
2	1-dB Bandwidth	20 MHz or better	Yes / No / Explain		
3	Noise Figure	1.2 dB or better	Yes / No / Explain		
4	Gain	35 dB or better	Yes / No / Explain		
5	Gain Variation (over Temp.)	± 1 dB or better	Yes / No / Explain		
6	Chn-to-chn Phase Variation (over BW & Temp.)	± 3 deg. or better	Yes / No / Explain		
7	Coupled Input (over BW & Temp.)	22 ± 1 dB or better	Yes / No / Explain		
8	Input P1dB Point	-25 dBm or better	Yes / No / Explain		
9	Max. Saturated Level	20 dBm or better	Yes / No / Explain		
10	Safe Input Level	30 dBm or better	Yes / No / Explain		
11	In/Out Return Loss	15 dB or better	Yes / No / Explain		
12	Input /Output Impedance	50 ohm	Yes / No / Explain		
13	Recovery Time	1us or better	Yes / No / Explain		
14	Supply Voltage Input	18 – 28 V	Yes / No / Explain		
15	Power Consumption per unit	3W or better	Yes / No / Explain		

16	Op. Temp.	-10 to 55 degC. or better	Yes / No / Explain		
17	Maximum Size for single packaged unit	100mm × 70mm × 40mm	Yes / No / Explain		
18	RF Input Connector	Front Panel Mount SMA-type (M)	Yes / No / Explain		
19	RF Output Connector	Rear Panel Mount SMA-type (F)	Yes / No / Explain		
20	Sim. Port Connector	Rear Panel Mount SMA-type (F)	Yes / No / Explain		
21	Power Supply Connector	Rear Panel Mount 3-pin circular	Yes / No / Explain		
22	Ingress Protection	IP67 or better	Yes / No / Explain		
23	Mechanical Packaging	YES (with Rain & Dust protection)	Yes / No / Explain		
24	Warranty	3 years	Yes / No / Explain		

**Document : Tentative\_dimension**

**Common Specifications (Applicable for all items)**

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	INTRODUCTION: 1.1	Radar Development Area/ISTRAC, a unit of ISRO, involved in design and development of various Solid-state Doppler Weather Radars, Phased-array DWR, Phased-array Wind Profiler in L, S, C and X-bands. With the increasing demands of phased array radar systems, RDA/ISTRAC is planning to outsource the realization & production work of the various RF sub-systems to capable Indian industries.	Yes / No / Explain		



2	INTRODUCTION: 1.2	Realization, Fabrication & Supply of L-band RF Front-end Units is intended for Indian industry by transferring existing proven designs and fabrication technology as per project requirements and develop potential vendors under Make-in-India Policy. It is intended that Indian industry which has the capability and experience in the field of development of low noise RF front-end or receivers along with their mechanical packaging, with past heritage shall offer their interest in carrying out the above job in response to this RFP. This RFP outlines the Realization, Fabrication & Supply of L-band RF Front-end Units, for multiple L-band phased array radars.	Yes / No / Explain		
3	INTRODUCTION: 1.3	The general architecture of the L-band RF front-end units will be low noise and low insertion loss RF SMD components starting from limiter, coupler, LNA, BPF, attenuators etc. Proper mechanical packaging of the unit with necessary RF & power supply connectors is required to protect the circuitry inside from open environment conditions like rain, dust, humidity & temperature etc.	Yes / No / Explain		

4	INTRODUCTION: 1.4	The L-band RF front-end units which will be mounted direct to the individual receive antenna using SMA or N-type mating connectors. Mounting of these units will be done along with antenna mounting structure. Therefore, the size of these units is limited based on the antenna size. The specifications of these RF units, RF chain & schematic, mechanical packaging & connector details and realization guidelines with terms & conditions are listed explicitly in the subsequent sub-sections.	Yes / No / Explain		
5	VENDOR EVALUATION CRITERIA: 2.1	Vendor should have proven technical credentials and past experiences in assembling, manufacturing, testing and supplying of low noise RF front-end or receivers to reputed firms including public sectors and R&D institutes. Documentary proof shall be submitted along with the tender.	Yes / No / Explain		
6	VENDOR EVALUATION CRITERIA: 2.2	Vendor should have credentials in design and development of low noise RF front-end or receivers which are successfully deployed in various high reliability applications requiring 24/7 operations.	Yes / No / Explain		
7	VENDOR EVALUATION CRITERIA: 2.3	Vendor should have a complete in-house facility for testing and qualification of bulk level production units including all necessary RF equipments.	Yes / No / Explain		

8	VENDOR EVALUATION CRITERIA: 2.4	Bidder should have a complete in-house board assembly facility and in-house facility for manufacturing of cable harnessing. Assessment of technical capabilities (infrastructure, processing facilities and machinery) of the bidder will be done by the purchaser.	Yes / No / Explain		
9	VENDOR EVALUATION CRITERIA: 2.5	Relevant documents like in-house facility list, Purchase order copy or user certificate, supporting above experience for the last 5 years, shall be submitted along with the quotation.	Yes / No / Explain		
10	SCOPE OF THE WORK: 3.1	The vendor is required to fabricate, test and deliver RF Front-end units based on the design specifications, schematics & layout provided by ISTRAC, as shown in ANNEXURE-I. The approved final design will be provided to the vendor with the Purchase Order.	Yes / No / Explain		
11	SCOPE OF THE WORK: 3.2	Over all planning of activity along with time schedule to ensure on-time delivery of all units by vendor.	Yes / No / Explain		
12	SCOPE OF THE WORK: 3.3	Improvement on PCB layout design & Gerber files (if any), based on circuit schematics/layout provided by ISTRAC.	Yes / No / Explain		
13	SCOPE OF THE WORK: 3.4	Procurement of all components and required materials	Yes / No / Explain		
14	SCOPE OF THE WORK: 3.5	Fabrication of PCBs after layout approval	Yes / No / Explain		
15	SCOPE OF THE WORK: 3.6	Fabrication of mechanical parts as per approved drawings & processes with 100% inspection.	Yes / No / Explain		
16	SCOPE OF THE WORK: 3.7	Component population on fabricated PCB after approval	Yes / No / Explain		

17	SCOPE OF THE WORK: 3.8	Assembly and integration of units to meet the required specifications	Yes / No / Explain		
18	SCOPE OF THE WORK: 3.9	Realization of proto units with compliance to the required RF, electrical and environmental tests specifications	Yes / No / Explain		
19	SCOPE OF THE WORK: 3.10	Testing and qualification as well as ISTRAC clearance of Proto unit including environmental tests.	Yes / No / Explain		
20	SCOPE OF THE WORK: 3.11	Production of all the required number of units as well as their testing & qualification as per ISTRAC guidelines	Yes / No / Explain		
21	SCOPE OF THE WORK: 3.12	Test report generation by vendor, review and approval by ISTRAC	Yes / No / Explain		
22	SCOPE OF THE WORK: 3.13	Delivery of all the units with test report at site with approval by ISTRAC	Yes / No / Explain		
23	RESPONSIBILITY TABLE: 4.1	System Specification on ISTRAC	Yes / No / Explain		
24	RESPONSIBILITY TABLE: 4.2	System Configuration on ISTRAC	Yes / No / Explain		
25	RESPONSIBILITY TABLE: 4.3	Design Schematic on ISTRAC & VENDOR	Yes / No / Explain		
26	RESPONSIBILITY TABLE: 4.4	CAD/Gerber/DXF File Generation on ISTRAC & VENDOR	Yes / No / Explain		
27	RESPONSIBILITY TABLE: 4.5	BOM Procurement on the VENDOR	Yes / No / Explain		
28	RESPONSIBILITY TABLE: 4.6	PCB Assembly + Testing + Optimization on the VENDOR	Yes / No / Explain		
29	RESPONSIBILITY TABLE: 4.7	Mechanical Packaging on the VENDOR	Yes / No / Explain		
30	RESPONSIBILITY TABLE: 4.8	Proto Unit Testing & Optimization on the VENDOR	Yes / No / Explain		
31	RESPONSIBILITY TABLE: 4.9	Proto Unit RF & Environment Testing on the VENDOR	Yes / No / Explain		

32	RESPONSIBILITY TABLE: 4.10	Production Unit fabrication & realization as per required quantity on the VENDOR	Yes / No / Explain		
33	RESPONSIBILITY TABLE: 4.11	Production Unit FAT as per ATP on the VENDOR	Yes / No / Explain		
34	RESPONSIBILITY TABLE: 4.12	Test Procedure & Report as well as Operating Manuals generation on the VENDOR	Yes / No / Explain		
35	RESPONSIBILITY TABLE: 4.13	Delivery at site on the VENDOR	Yes / No / Explain		
36	RESPONSIBILITY TABLE: 4.14	Site Acceptance Tests on the VENDOR	Yes / No / Explain		
37	RESPONSIBILITY TABLE: 4.15	SAT Acceptance & Commissioning on ISTRAC	Yes / No / Explain		
38	LIST OF DELIVERABLES: 5.1	All the RF Front-end units as per specified quantity including all the required interconnecting RF & DC connectors. Vendor shall also supply mating connectors and pin-details for the DC supply connectors.	Yes / No / Explain		
39	LIST OF DELIVERABLES: 5.2	Softcopies of all the design related items including Design Schematics, PCB Layout Designs, Fabrication drawings, all source codes for FPGA, GUI and firmware(if any) and Datasheets of the all the components used.	Yes / No / Explain		
40	LIST OF DELIVERABLES: 5.3	Realization plan with final approved schematic & layout files.	Yes / No / Explain		
41	LIST OF DELIVERABLES: 5.4	Technical details of all components (datasheets)	Yes / No / Explain		
42	LIST OF DELIVERABLES: 5.5	All circuits details & diagrams	Yes / No / Explain		
43	LIST OF DELIVERABLES: 5.6	Test reports at various design & realization stages	Yes / No / Explain		

44	LIST OF DELIVERABLES: 5.7	Interface Control Document	Yes / No / Explain		
45	LIST OF DELIVERABLES: 5.8	Environmental & Endurance Tests Report	Yes / No / Explain		
46	LIST OF DELIVERABLES: 5.9	Operation, maintenance and troubleshooting manuals	Yes / No / Explain		
47	TEST & QUALIFICATION: 6.1	All the specification requirements shall be verified by testing Proto or Production units. Vendor is required to generate test procedure, clearly showing the test setup with properly calibrated equipments. Testing shall be done as per ISTRAC approved test procedure using calibration test and measuring instruments.	Yes / No / Explain		
48	TEST & QUALIFICATION: 6.2	Bench Level Tests (on Proto Units)	Yes / No / Explain		
49	TEST & QUALIFICATION: 6.3	Dry & Damp Heat tests (on Proto Units)	Yes / No / Explain		
50	TEST & QUALIFICATION: 6.4	Post Dry & Damp Heat tests (on Proto Units)	Yes / No / Explain		
51	TEST & QUALIFICATION: 6.5	Rain & Dust Tests (on Proto Units)	Yes / No / Explain		
52	TEST & QUALIFICATION: 6.6	Pre Burn in (on Proto Units)	Yes / No / Explain		
53	TEST & QUALIFICATION: 6.7	Burn in (72 hrs) (on Proto Units)	Yes / No / Explain		
54	TEST & QUALIFICATION: 6.8	Post Burn in (on Proto Units)	Yes / No / Explain		
55	TEST & QUALIFICATION: 6.9	Factory Acceptance Tests (on Production Units)	Yes / No / Explain		
56	TEST & QUALIFICATION: 6.10	Site Acceptance Tests (on Production Units)	Yes / No / Explain		
57	TEST & QUALIFICATION: 6.11	Endurance Test (14 days) (on Production Units)	Yes / No / Explain		

58	TEST & QUALIFICATION: 6.12	System Commissioning Tests (on Production Units)	Yes / No / Explain		
59	ISTRAC APPROVAL & CLEARANCE: 7.1	Approval of Card level schematic & design	Yes / No / Explain		
60	ISTRAC APPROVAL & CLEARANCE: 7.2	Approval of sub-vendors/OEM for procurement of BOM/sub-units	Yes / No / Explain		
61	ISTRAC APPROVAL & CLEARANCE: 7.3	Approval of Card level Layout/Gerber design	Yes / No / Explain		
62	ISTRAC APPROVAL & CLEARANCE: 7.4	Approval of CAD model design (for mechanical packaging and mounting)	Yes / No / Explain		
63	ISTRAC APPROVAL & CLEARANCE: 7.6	Approval of realization of Proto units	Yes / No / Explain		
64	ISTRAC APPROVAL & CLEARANCE: 7.7	Approval of Proto Unit test plan	Yes / No / Explain		
65	ISTRAC APPROVAL & CLEARANCE: 7.8	Approval of Proto Unit test & qualification report	Yes / No / Explain		
66	ISTRAC APPROVAL & CLEARANCE: 7.9	Approval of realization of production units	Yes / No / Explain		
67	ISTRAC APPROVAL & CLEARANCE: 7.10	Approval of FAT test plan for production units	Yes / No / Explain		
68	ISTRAC APPROVAL & CLEARANCE: 7.11	Approval of FAT test qualification report for production units	Yes / No / Explain		
69	ISTRAC APPROVAL & CLEARANCE: 7.12	Approval of SAT test plan for production units	Yes / No / Explain		
70	ISTRAC APPROVAL & CLEARANCE: 7.13	Approval of SAT test qualification report for production units	Yes / No / Explain		
71	ISTRAC APPROVAL & CLEARANCE: 7.14	Work completion certificate	Yes / No / Explain		

72	REALIZATION GUIDELINES: 8.1	Definition of Proto unit: FOUR units of fully functional and completely packaged RF Front-end units along with coaxial output as per the approved configurations and specifications. Any additional circuit required for functioning of the proto units should also be realized as a part of proto realization (same design shall be used in the final system until or otherwise modification asked by ISRAC review committee)	Yes / No / Explain		
73	REALIZATION GUIDELINES: 8.2	Vendor to submit the necessary certificates and documentary proof for the similar works carried out along with the technical proposal.	Yes / No / Explain		
74	REALIZATION GUIDELINES: 8.3	All raw materials, components, connectors, cables, mechanical parts, substrates, PCBs, etc. shall be procured by vendor through qualified sub-vendors. The procurement specifications are to be generated by the vendor and approved by ISTRAC before procurement/ placement of Purchase Order.	Yes / No / Explain		
75	REALIZATION GUIDELINES: 8.4	Vendor shall take approval from ISTRAC prior to third party outsourcing. R&QA requirements will be applicable to third party also.	Yes / No / Explain		



76	REALIZATION GUIDELINES: 8.5	All RF connectors shall from M/s Huber Schunner/Radiall (France)/Times make only. Other control/power connectors shall be MS circular connectors from M/s Amphenol/ Allied make only. Vendor shall also supply mating connectors and pin-details for the DC supply connectors.	Yes / No / Explain		
77	REALIZATION GUIDELINES: 8.6	Vendor shall select or use AC-DC & DC-DC power supplies only from following reputed manufacturers like: TDK-Lambda, GE, GWinstek, etc. DC-DC convertors shall be from Vicor/Cosel etc. The power supply configuration and make shall be approved by ISTRAC during PDR.	Yes / No / Explain		
78	REALIZATION GUIDELINES: 8.7	Proper shielding, tagging, marking and lugging shall be done in all cables. All connectors should be covered and cables shall be strain relieved by means of proper boots.	Yes / No / Explain		
79	REALIZATION GUIDELINES: 8.8	Vendor should have necessary test equipment (with valid calibration at the time of testing). Vendor to confirm the availability of the instruments and equipment while bid submission.	Yes / No / Explain		
80	REALIZATION GUIDELINES: 8.9	Vendor should submit plan and probable list of environmental test facilities at the time of bid submission.	Yes / No / Explain		

81	REALIZATION GUIDELINES: 8.10	All documents supplied by ISTRAC are the exclusive property of ISTRAC and shall not be used for any purpose other than agreed upon. Any changes carried out in the design, drawings or documents during the contract tenure, done by vendor or ISTRAC shall be exclusive property of ISTRAC and shall not be used for any purpose other than agreed upon.	Yes / No / Explain		
82	REALIZATION GUIDELINES: 8.11	RF Front-end units shall be subjected to endurance test, temperature cycling, dry heat test, damp heat test, Rain & Dust Tests as per JSS55555 standards. All the environmental tests to be carried out in presence of ISTRAC representative.	Yes / No / Explain		
83	REALIZATION GUIDELINES: 8.12	All the components used shall be of industrial grade. Adequate de-rating (minimum 50%) shall be provided to all the selected components. Any changes shall be discussed during PDR for approval.	Yes / No / Explain		
84	REALIZATION GUIDELINES: 8.13	All the sub-systems and components used in the system should be of high quality and reliability to support long-term operation of the system at coastal humid environment. They should have long operational life and should be from highly reliable and reputed manufacturers with proven track-record. Make, model numbers and detailed technical specifications of all the sub-systems and components should be provided.	Yes / No / Explain		

85	REALIZATION GUIDELINES: 8.14	All the sub systems should have only ISRO logo at the front view. Vendors can put their logo at card level.	Yes / No / Explain		
86	REALIZATION GUIDELINES: 8.15	Vendor shall do necessary modifications in the design based on ISTRAC committee suggestions & recommendations without extra cost.	Yes / No / Explain		
87	REALIZATION GUIDELINES: 8.16	System should be designed for continuous operation on a 24 x 7 basis with standard preventive maintenance schedules. Endurance test of the units shall be done for 14 days.	Yes / No / Explain		

### Supporting Documents required from Vendor

1. Company profile & previous work orders from any govt. agencies.
2. Necessary document proof as per the Selection Criteria mentioned.

5 additional documents can be uploaded by the vendor

## C.2 Commercial Terms / Bid

Sl. No.	Description	Compliance	Vendor Terms
1	1) L1 computation will be based on considering all the items and vendor shall offer for all the items.	Yes / No / Explain	
2	If Any damage is found in the Devices . The devices will returned to the vendor	Yes / No / Explain	
3	Vendor shall provide compliance for the each point mentioned in the indent.	Yes / No / Explain	
4	Payment Term (Our normal terms of payment is 100% within 30 days from the date of receipt and acceptance of the item at our site)	Yes / No / Explain	
5	Taxes and other costs, if any	Yes / No / Explain	
6	Delivery Period	Yes / No / Explain	
7	Delivery Term	Yes / No / Explain	
8	Security Deposit: FD or BG for 3% of PO value to be submitted after receipt of PO and valid till supply & acceptance.	Yes / No / Explain	
9	Performance Bank guarantee : BG for 3% of PO value to be submitted while claiming payment valid till end of warranty period with a claim period of 60 days.	Yes / No / Explain	
10	SD-cum-Warranty (PBG) (in lieu of SD & PBG as a single instrument): BG for 3% of PO value to be submitted after receipt of PO valid till end of warranty period with a claim period of 60 days.	Yes / No / Explain	

11	<p>DELAY IN COMPLETION / LIQUIDATED DAMAGES :If the Contractor fails to deliver the stores within the time specified in the Contract or any extension thereof, the Purchaser shall recover from the Contractor as Liquidated Damages a sum of one-half of one per cent (0.5%) of the Contract price of the undelivered stores for each calendar week of delay. The total liquidated damages shall not exceed ten percent (10%) of the contract price of the unit or units so delayed. Stores will be deemed to have been delivered only when all their component parts are also delivered. If certain components are not delivered in time, the stores will be considered as delayed until such time as the missing parts are delivered.</p>	Yes / No / Explain	
12	Warranty	Yes / No / Explain	
13	Validity	Yes / No / Explain	
14	<p>Name and Address of the company on whom purchase order to be placed (OEM if any should be added in your E-Procurement profile under Add Agent/Principal without fail). Address indicated here must be available in your profile as a Principal/Agent failing which PO will be placed on the e-procurement address available in the profile.</p>	Yes / No / Explain	
15	<p>Certificate of Undertaking: Any bidder from a country which shares a land border with India will be eligible to bid in any procurement whether of goods or services (including consultancy services and non consultancy services) or works (including turn-key projects) only if the bidder is registered with the Competent authority (i.e. DPIIT). Hence, it is mandatory to furnish Certificate of Undertaking as indicated in the tender document.</p>	Yes / No / Explain	

16	<p>Foreign vendors are not permitted to quote. 1. Only Class -I and Class-II Local suppliers as per make in India policy are eligible to participate in the bid. 2. The percentage of local content should be specifically mentioned in the offer, without which will be summarily rejected 3. Preference will be given to class-I Local Supplier and in their absence, class-II Local supplier will be considered.</p>	Yes / No / Explain	
17	<p>This tender is restricted only to Class-I and Class-II Local Suppliers as defined under DPIIT Order dtd 04/06/2020- Preference to Make in India Order-2017 Revision. Non-Local Suppliers need not quote. Foreign OEMs/Agents quoting on behalf of Foreign OEMs are not permitted to quote. High Sea Sales Quotes not permitted. The bids shall be in INR only. Purchase preference to eligible vendors are applicable as per extant notifications issued by the Government of India. The Class-I/Class-II Local suppliers, at the time of submitting their offer, shall also indicate percentage of local content and provide self certification that the item (s) offered meets the local content requirement for Class-I/Class-II Local Suppliers as the case may be. They shall also give details of location (s) at which the local value addition is made. In cases if the item(s) offered exceed Rs. 10 Crores, the Class-I/Class-II Local Suppliers shall provide a Certificate from the statutory auditor or cost auditor of the company (in case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content. False Declarations will be in breach of the 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.</p>	Yes / No / Explain	
18	Percentage of local content for the quoted item.	Yes / No / Explain	

19	Details of location (s) at which the local value addition is made	Yes / No / Explain	
20	Foreign OEMs/Agents quoting on behalf of Foreign OEMs are not permitted to quote. High Sea Sales quotes not permitted. The bids shall be in INR only.	Yes / No / Explain	
21	GeM Seller ID: As per Gol OM No. 6/9/2020-PPD dated 24.08.2020 and DO No. 170/CEO-GeM/2020, sellers providing Goods and Services to Central Government Organizations shall be registered on GeM and obtain a unique GeM registered ID. Hence please get registered in GeM and furnish your GeM Seller ID.	Yes / No / Explain	
22	Any other terms	Yes / No / Explain	

### C.3 Price Bid

Sl. No.	Item	Quantity	Unit Price	Currency	Total Price	Remark
1	COMPONENTS - RF COMPONENTS (L-band 1544.5MHz Front-end Units)	70.00 Nos.		-		

### Common charges (Applicable for all items)

<b>P&amp;F Charges</b>	
<b>Freight Charges</b>	
<b>Installation Charges</b>	
<b>Documentation &amp; Handling Charges</b>	
<b>Other Charges (If any)</b>	