

Tender Details

Tender No: NRSC/PUR/2019E0477501

Tender Date: 01/09/2020

Purchase Entity: National Remote Sensing Centre

Tender Notice

GOVERNMENT OF INDIA DEPARTMENT OF SPACE INDIAN SPACE RESEARCH ORGANISATION NATIONAL REMOTE SENSING CENTRE BALANAGAR, HYDERABAD – 500 037. e-PROCUREMENT TENDER NOTICE PT – Two part TENDER NOTICE NO. NRSC/PUR/2019E04775-01 NRSC/PUR/e-TENDERS/2019
Dt.: 02.09.2020 e-Tenders are invited for UP AND DOWN CONVERTERS will be released on 02.09.2020, 15.30 hrs and vendors may download from 02.09.2020 15:31 Hours to 01.10.2020 15:30 Hours after registering in e-portal <http://eprocure.isro.gov.in>. Interested vendors may register themselves as vendors in the link provided above with the help of demos and help desk support provided on the home page. Vendors may also contact help desk at NRSC over phone 0854 -222-5072/5071 for ready help. For complete details please log on to <http://eprocure.isro.gov.in>.
HEAD, PURCHASE & STORES

Tender Attachments

Technical Write-up/Drawings (Viewable to Vendor)

Attachment - I:

IDT007018000000000000isro05401.pdf

Attachment - II:

Attachment - III:

Attachment - IV:

Attachment - V:

Instructions to Tenderers (PT)

Government of India

Department of Space

National Remote Sensing Centre

Hyderabad – 500037

INSTRUCTIONS TO TENDERERS ON E-PROCUREMENT AND GENERAL TENDER TERMS AND
CONDITIONS

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Chapter 1

Important: Tenderer[s] are requested to read the instructions carefully and submit the Offer[s]. Non-Compliance to Commercial Terms and Conditions will result in rejection of the Offer[s].

1.0 Instructions to E-Procurement Tenderers:

1.1 National Remote Sensing Centre [NRSC] has implemented e-tender system for ONLINE tenders. NRSC invites offer through e-tender portal <https://eprocure.isro.gov.in> for the supply of Stores. The suppliers need to get enrolled in the e-tender portal to access tender and submit their offer online. Vendors need to have Digital Signature Certificate as detailed on our e-portal and corporate e-mail ID to register on the above portal. Only online tenders will be accepted. MANUAL/POSTAL/COURIER/E-MAIL/FAX OFFERS WILL NOT BE CONSIDERED. FURTHER, IT MAY BE NOTED THAT NO MANUAL TENDER DOCUMENT WILL BE ISSUED BY NRSC.

1.2 Interested tenderers may login to <https://eprocure.isro.gov.in> and submit their offers through Online only. The tenders should be submitted in the NRSC Centre link before the due date and time as specified in the tender schedule in the portal.

1.3 The Vendors are requested to submit the Bids online at least two days prior to closing date to avoid last minute computer network related problems. Request for the extension of the due date will not be considered.

1.4 The Suppliers have to provide the Open Authorization as per Tender Schedule defined. The Open Authorization will not be extended under any circumstances. In case Open Authorization as per Tender schedule is not provided such Bids will not be considered and it will be treated as invalid.

1.5 All the Vendors should regularly browse the e-mail being sent from e-procurement portal for initiating appropriate action or for any updates on the Tender.

1.6 All enquiries regarding the tenders and submission of offers shall be online and only through our Procurement portal. Vendors may approach help desk -mail id and phone number given on the home page for any technical help (e-mail: support.isro@nextenders.com and Ph: 020-25315555).

1.7 In case bidder encounters any technical snag pertaining to e-procurement system while acting on the tender, computer screen shot of the error message with date & time stamp on the web-browser along with the query shall be e-mailed by the bidder to the help desk (as mentioned above) for problem resolution well in advance before the due date and time of the tender. NRSC is not responsible for any delay in resolving the technical snag, which has not communicated to our helpdesk in writing along with the screen shots within the due date and time of bid submission.

1.8 NRSC 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 online by vendor etc.

1.9 The Server Date & Time as appearing on our website <https://eprocure.isro.gov.in> shall only be considered for the cut-off date and time for receipt of tenders.

1.10 Vendors have to note that once rework is initiated the status of the earlier submitted bid becomes till the bidding process is completed once again. During the process of rework earlier submitted bid data becomes invalid and will not be available for opening. If rework is initiated then vendor has to complete the entire process of bid submission once again within the due date and time for a valid bid submission.

1.11 NRSC will not be responsible for non submission of bids resulting due to failure of vendor to once again complete the process of bid submission before due date after reworking of submitted bid is initiated.

1.12 Please note that unsolicited clarifications / changes / modifications sought by the vendors after submitting their bids will not be considered.

1.13 Vendors may note that in e-procurement systems submission of bid is a two-step process. After submission of their bids, vendors have to wait for bid sealing by NRSC purchase officer. Following that vendors have to submit open authorization in the e-procurement system to enable the purchase officer to open the bid. If open authorization is not completed by the vendor then purchase officer will not be able to open the bid and the bid becomes invalid.

1.14 Vendors may note that digital keys of class-III USB tokens, which supports both digital signing and encryption are to be used for bidding in NRSC e-procurement system.

1.15 Vendors may note that they have to use the same digital key with which they submitted the bid to give open authorization. If vendors use different key for open authorization, the system will not accept the open authorization and the bid becomes invalid.

1.16 In case the digital key which is used during bid submission expires before giving open authorization, then vendor has to first login with the new key and use the expired key for completing open authorization process for the bid.

1.17 Vendors may please note that the maximum file size that can be uploaded per attachment in e-procurement system is 4 MB. If the document is more than 4 MB then the document is to be split into multiple documents of size less than 4 MB and upload into attachments. Literature/ Technical data should accompany the quotation.

1.18 Similarly, if the number of files to be uploaded is more than the number of attachments allowed in the tender then group the files into folders such that the number of folders is less than the number of attachments. Further zip/archive the folders and upload as attachments. However, the attachment size should still be less than 4 MB.

1.19 Vendors may note that documents including Literature/ Technical data are to be uploaded through e-procurement system only.

1.20 No Tender fee shall be payable for submission of tender through e-procurement.

1.21 Payment Terms :

a) For Foreign Orders: Our normal payment terms are Sight Draft through State Bank of India, HAL Campus Branch, Hyderabad-500042. For high value orders, 90% payment through Sight Draft and balance 10% upon satisfactory completion of installation and acceptance of the equipment and on production of a Performance Bank Guarantee for an equivalent amount valid till 2 months after the expiry of warranty period.

b) For Indigenous Suppliers: the normal terms of payment are 100% within 30 days of receipt & acceptance of the material in good condition for small value orders. For high value orders, 90% payment within 30 days of receipt, installation and acceptance and balance 10% on production of a Performance Bank Guarantee for an equivalent amount valid till 2 months after the expiry of warranty period

1.22 Foreign Vendors, Registered Vendors or Vendors who have already applied for Renewal of Registration, Central PSUs/PSEs/Autonomous Bodies, Micro and Small Enterprises, KVIC, National Small Industries Corporation etc., shall be exempt from the payment of EMD.

1.23 The minimum validity of the tender submitted against Single Part shall be 90 days from the date of opening of the tender. In case of Two Part tender, the tenders should be valid for a period of 120 days after opening of Part-I (Technical bid) and 90 days after opening of Part-II (Price bid).

1.24 Quote should be submitted in Single Part/Two Part as specified in the Tender Enquiry.

1.25 Our Tender Enquiry contains technical requirements and specification. The detailed technical specification along with Commercial Terms and Conditions of your offer should be covered in Technical Bid i.e. Part-1 [Technical and Commercial] and Part -2 [Price Bid].

1.26 Specification: Stores offered should strictly conform to our specification. Deviations, if any, should be clearly indicated by the Tenderer in their quotation. The Tenderer should also indicate the Make / Type number of the Stores offered and upload catalogues, technical literature along with the quotations

and provide samples wherever necessary. Test Certificates wherever necessary should be forwarded along with Supplies. Whenever options are called for and specifically mentioned by us, the Tenderer could suggest changes to specifications with appropriate response for the same.

1.27 In the case of Two Part Tender, Price details should NOT be disclosed in the Part - 1 [Technical and Commercial Bid] and in any other attachments enclosed in the Technical Bid. In case, Price details are mentioned, the same will be rejected. The Technical documents need to be attached online as a single PDF file without any price information.

1.28 In case of Two Part Tender, Commercial Terms to be covered in the Part - 1 [Technical and Commercial Bid] such as Delivery Terms as per (INCOTERMS), Delivery Period, Payment Terms (without mentioning the price or amount), acceptance of Bank Charges payable outside India, Security Deposit for execution of Contract, Whether items need Export License, Validity of the Offer, Warranty/Guarantee, Performance Guarantee for fulfillment of Warranty obligation, Liquidated Damages (for delayed supplies) and All available technical literature, catalogues and other data in support of the specifications and details of the items etc, have to be filled up online.

1.29 In case of imported stores, Ex-Works/FOB/FCA prices should be indicated. In case of indigenous stores the quotation should be on FOR-Destination / Door delivery basis.

1.30 Prices are required to be quoted according to the units indicated, in the Part - 2 [Price Bid] only.

1.31 The quote should indicate quantity wise unit rates separately which have to be filled online. The Prices are to be mentioned both in figures as well as in words. Where there is difference between amounts quoted in words and figures, the amount quoted in words shall prevail. The percentage of Taxes, Duties, etc., where legally leviable and intended to be claimed shall be calculated and indicated in the column provided in online forms explicitly.

1.32 The facility of Inter-State Purchases by Government Department against Form-D stands withdrawn w.e.f. from 01.04.2007. As such, Tenderers are requested to indicate the percentage of Sales Tax applicable without any concession.

1.33 Sales Tax/or Other Duties/Levies where leviable and intended to be claimed should be distinctly shown separately in the Tender.

1.34 For the Procurement /providing of Services, the Tenderer [s] are requested to quote the correct percentage of Service Tax.

1.35 GST

NRSC-ISRO is eligible for concessional GST @ 5% under notification no. 45/2017 & 47/2017. Vendors may please note this while calculating tax implications. NRSC will provide GST/ IGST Exemption Certificate, if required.

1.36 Samples, if called for, should be submitted free of charges by the tenders and the Purchaser shall not be responsible for any loss or damages thereof, due to any reason whatsoever. In the event of non acceptance of tender, the Tenderer will have to remove the samples at his own expenses.

1.37 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.

1.38 In order to avail of the benefits extended by Government of India to the Micro and Small Sectors, please attach copy of the valid Entrepreneur Memorandum Part II signed by the General Manager, District Industries Centre or NSIC Registration Certificate along with your offer as a PDF file through online. The facilities/benefits will be extended as per the Orders issued by Ministry of MSME, Government of India, New Delhi or any instructions issued from time to time.

1.39 The document solicited from vendor should be submitted online. Document has to be a single PDF file and attached online.

1.40 Indian agents while quoting on behalf of their Principals are requested to attach necessary authorization letter [PDF file] from their Principals.

1.41 The Purchaser shall be under no obligations to accept the lowest or any tender and reserve the right of acceptance of the whole or any part of the tender or portion of the quantity offered and the Tenderers shall supply the same at the rates quoted.

1.42 In case of Two-Part Public/Open Tender, the exact date and time of opening of Technical bid for all Tenderers and Price Bid of successful Tenderers will be intimated later.

1.43 The opening date and time informed by NRSC shall be subject to changes due to Network/ Computer Server related problems. In such instances, the tender opening may get delayed by one or two days and the exact date and time of opening will be intimated later in case of Public or Open Tender.

1.44 The Tenderer should supply along with his tender the Name of his Bankers, if required by the Purchaser.

1.45 The Purchaser reserves the right to place order on the successful Tenderers for additional quantity at the rates quoted.

1.46 NRSC reserves the right to cancel the tender at any point of time, by recording the reasons thereof.

Chapter 2

2.0 Terms and Conditions:

2.1 Definitions:

(a) The term 'Purchaser' shall mean the President of India represented by Director or Head, Purchase and Stores, National Remote Sensing Centre [NRSC] Hyderabad or his successors or assigns.

(b) 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 Successors/Representative, Heirs, Executors and Administrators unless excluded by the Contract.

(c) The term 'Purchase Order' shall mean the communication signed on behalf of the Purchaser by an officer duly authorized intimating the acceptance on behalf of the Purchaser on the terms and condition mentioned or referred to in the said communication accepting the Tender or offer of the Contractor for supply of Stores or Plant, Machinery or part thereof.

(d) The term 'Stores' shall mean what the Contractor agrees to supply under the Contract as specified in the Purchase Order including erection of plants and machinery and subsequent testing should such a condition be included in the Purchase Order.

3.0 Prices:

Tenders offering Firm and Fixed Prices will be considered. Where a price variation clause is insisted upon by a Tenderer for quotations 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 variations. The price variation clause shall be applicable only in case of Long term contracts and shall be as per the illustrative Formulae provided under General Financial Rules [GFR], 2005, No. 204(vii) (b) Appendix-15.

4.0 Terms of Payment in case of Overseas Supplier[s]:

4.1 Being a Government of India Department, the normal terms of payment are by Sight Draft [SD]. However, other terms of payment like establishment of Letter of Credit [LC] may be considered by the Purchaser on such terms and conditions as may be agreed upon.

4.2 The Sight Draft/Letter of Credit will be operative on presentation of the following documents:

(a) Original Bill of Lading/Airway Bill. (b) Commercially certified Invoices in triplicate describing the Stores delivered, Quantity Unit Rate and their Total Value. The Invoice should indicate the discounts, if any and Agency Commission separately. (c) Packing List showing individual Dimensions and Weight of the Packages. (d) Country of Origin Certificate can be declared on the Invoice. (e) Test Certificate. (f) Declaration by the Seller that the Contents in each case are not less than those entered in the Invoices and the quality of the Stores are guaranteed as per the specification asked by the Purchaser. (g) Warranty and Guarantee Certificates.

4.3 Packing:

(a) The Contractor wherever applicable shall pack and crate all Stores for Sea/Air shipment as applicable in a manner suitable for export to a tropical humid climate, in accordance with Internationally accepted Export practices and in such a manner so as to protect it from damages and deteriorations in transit by Road, Rail or Sea. The Contractor[s] shall be held responsible for all damages due to improper packing.

(b) The Contractor shall ensure that each Box/Unit of shipments are legible and properly marked for correct identification. The failure to comply with this requirement shall make the Contractor liable for additional expenses involved.

(c) The Contractor shall notify the Purchaser of the date of shipment from the Port of Embarkation as well as the expected date of arrival of such shipment at the designated Port of Arrival.

(d) The Contractor shall give complete shipment information concerning the Weight, Size, content of each packages etc.,

(e) Transshipment of Stores shall not be permitted except with written permission of Purchaser.

(f) Apart from the dispatch documents negotiated through Bank, the following document shall also be airmailed to the Purchaser within 7 days from the date of shipment by Sea and within 3 days in case of Air Consignment:

- a. Commercial Bill of Lading/Air Way Bill, Post Parcel Receipt (two non-negotiable copies).
- b. Invoice (3 copies).
- c. Packing List (3 copies).
- d. Test Certificates (3 copies).
- e. Certificate of Origin as declared in the Invoice.
- f. Warranty/Guarantee Certificate

Contractor shall also ensure that one copy of the Packing List is enclosed in each case/box.

5.0 Terms of Payment in case of Indigenous Supplier[s]:

Contractor [s] Bill will be passed for payment only after the Stores have been received, inspected and accepted by the Purchaser. Normally payment will be made for the accepted Stores within 30 days from the date of receipt and acceptance of the material at NRSC.

6.0 Import Licence:

All Imports are being covered under Free Importability under Para 2.1 of Chapter 2 of EXIM Policy 2015-2020 of Government of India. No separate Import License is required. If it is required subsequently, Department will obtain necessary Import License. Similarly, if Export License is required, the Tenderer[s] shall mention the same while submitting the offer.

7.0 Address of Indian Agent:

In case of the overseas Supplier, please mention the Name and complete Postal Address of their Indian Agent with necessary details regarding Type of Relationship, Proof of Certificate if any.

8.0 Guaranteed Time of Delivery:

The time for and the date of delivery of Stores will be deemed to be the essence of the Purchase Order/Contract failing which Purchaser reserves the right to Cancel the Order/Contract at his discretion.

9.0 Inspection and Acceptance Tests:

9.1 The Purchaser's representatives shall also be entitled at all reasonable times during manufacture to inspect, examine and test at the Contractor's premises, the material and workmanship of all Stores to be supplied under this contract and if part of the said Stores is being manufactured on other premises, the Contractor shall obtain the Purchaser's representative permission to inspect, examine and test and shall not release the Contractor from the obligations under this Contract.

9.2 For tests conducted at the premises of the Contractor or any of his sub-contractors, the Contractor shall provide free of cost assistance, labour, materials, electricity, fuel and instruments as may be required or as may be reasonably needed by the Purchaser's representative to carry out the tests efficiently.

9.3 When the Stores have passed the specified test, the Purchaser's representative shall furnish a certificate to this effect in writing to the Contractor. The Contractor shall provide copies of Test Certificate to the Purchaser as may be required.

10.0 Bank Guarantee towards Free Issue Materials (FIM):

The successful Tenderers shall furnish Bank Guarantee (BG) towards the cost of Free Issue Materials issued by Purchaser towards adequate Security for the FIM for the execution of the Contract. The BG is to be kept valid till supply and acceptance of the final product.

10.1 In the case of Public Sector Undertaking, Public Sector Enterprises and Government Organization, Indemnity Bond [IB] together with Insurance shall be considered.

10.2 For Fabrication of items, the Supplier should quote the rates considering the Scrap Materials generated and taken over by Supplier.

11.0 Mode of Despatch:

11.1 For Air Consignments: - Generally, Stores should be dispatched by Air Freight through Purchaser nominated freight forwarder as per the delivery terms and mode of dispatch mentioned in the Purchase Order. A copy of the Invoice and Packing List should invariably be kept inside each of the package. Port of Entry: - RAJIV GANDHI INTERNATIONAL AIRPORT, HYDERABAD.

11.2 For Sea Consignments: - The Stores should be dispatched by Ocean Freight by First Class Indian Flagged Vessel or Conference Vessel on freight collect basis as per the delivery terms and mode of dispatch mentioned in the Purchase Order. A copy of the Invoice and Packing List should invariably be kept inside each of the package. Port of Entry shall be 'CHENNAI'. The Port of Ultimate Destination shall be 'INLAND CONTAINER DEPOT [ICD, HYDERABAD]'. The Customs Clearance shall be arranged at ICD Hyderabad.

12.0 Ultimate Consignees:

Senior Purchase & Stores Officer [Stores], National Remote Sensing Centre, Hyderabad.

13.0 Shipping Marks:

The marks on the shipping documents such as Invoice, Bill of Lading/Airway Bill and on the packages should be as follows:

Purchase Order No: Date: GOVERNMENT OF INDIA

Department of Space/ National Remote Sensing Centre

Hyderabad / INDIA Destination: Port of Entry:

14.0 Demurrage:

Supplier shall bear demurrage charges if any, incurred by the Purchaser due to delayed presentation of shipping documents as prescribed in Para 4.3(f) to the Bankers within reasonable time (say within 7 days) from the date of Bill of Lading for Sea Consignments and within 3 days from the date of Air Way Bill for Air Consignments.

15.0 Insurance of the Stores:

No Insurance is required at our cost. The Supplier shall be responsible for Insuring the Stores wherever considered necessary. The Contractor shall however, be responsible for notifying to the Purchaser or the Insurer nominated by the Purchaser, the completed details of the proposed shipments including the value of each shipment and other relevant data immediately after shipment, to enable the Purchaser or the Insurer to arrange for the issuance of the Insurance Policy, if required. The necessity or otherwise of Insurance will be as indicated in the Purchase Order.

16.0 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, expenses 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 that do not meet the performance or quality requirements specified in the Purchaser 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. 16.0 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 Purchaser or the agreement to purchase from another supplier is made six months from the date of rejection of the Stores as aforesaid.

17.0 Contractor[s] Default Liability:

17.1 The Purchaser may upon written notice of default to the Contractor, may terminate the Contract by giving 30 days prior notice in whole or in part in circumstances detailed hereunder:-

(a) If in the judgment of the Purchaser, the Contractor fails to make delivery of Stores within time specified in the Contract/Agreement or within the period for which extension has been granted by the Purchaser to Contractor.

(b) If in the judgment of the Purchaser, the Contractor fails to comply with any of the other provisions of this Contract.

17.2 In the event of Purchaser terminating the Contract in whole or in part thereof, as provided in Clause 17.1, the Purchaser reserves the right to purchase, upon such terms and in a manner as he may deem

appropriate, Stores similar to that terminated and the Contractor shall be liable to the Purchaser for any additional cost for such similar Stores, and/or for Liquidated Damages for delays as defined in Clause 22.0 until such reasonable time as may be required for the final supply of Stores.

17.3 If Contract is terminated as provided in Clause 17.1 the Purchaser in addition to any other rights provided in this Article, may require the Contractor to transfer title and deliver to the Purchaser under any of the following cases in the manner and as directed by the Purchaser.

(a) Any completed Stores.

(b) Such partially completed Stores, drawing information and Contract right (here -in-after called manufacturing material) as the Contractor has specifically produced or acquired for the Contract as terminated. The Purchaser shall pay to the Contractor, the Contract price for completed Stores delivered to and accepted by the Purchaser and for manufacturing materials delivered and accepted.

17.4 In the event, the Purchaser does not terminate the Contract as provided in Clause 17.1, the Contractor shall continue the performance of the Contract, in which case he shall be liable to the Purchaser for Liquidated Damages for delay as set out in Clause 22.0 until the Stores are accepted.

18.0 Replacement:

If the Stores or any portion thereof, is damaged or lost during the transit, the Purchaser shall give notice to the Contractor setting forth particulars of such Stores damaged or lost during transit. The replacement of such Stores shall be effected by the Contractor within a reasonable time to avoid unnecessary delay in the intended usage of the Stores. The payment for the replacement of Stores shall be in accordance with the responsibilities as per INCOTERMS.

19.0 Rejection:

If the Stores supplied by the Contractor are found defective in material or workmanship or otherwise not in conformity with the requirements of the Contract specification, the Purchaser shall either reject

the Stores or request the Contractor in writing to rectify the same. The Contractor, on receipt of such notification shall either rectify or replace the defective Stores free of cost to the Purchaser. If the Contractor fails to do so, the Purchaser may either: -

(a) Replace or rectify such defective Stores and recover extra cost so involved from the Contractor or

(b) Terminate the Contract for default as provided under Clause 17.0 above.

(c) Acquire the defective Stores at a reduced price considered equitable under the circumstances.

The provision of this Article shall not prejudice the Purchaser's rights under Clause 22.0.

20.0 Force Majeure:

20.1 Neither party shall bear responsibility complete or partial non performance of any of his obligations [except for failure to pay any sum which has become due on account of receipt of goods under the provisions of the Purchase Order/Contract] if the non-performance results from such force majeure circumstances such as, but not restricted to, flood, fire, earthquake, civil commotion, sabotage, explosion, epidemic, quarantine restriction, strike, lock out, freight embargo, acts of the Government either in its sovereign or its contractual capacity, hostility, acts of public enemy and other acts of God as well as war or revolution, military operation, blockade, acts or actions of state authorities or any other circumstances beyond the control of the parties that have arisen after the conclusion of Purchase Order/Contract. In such circumstances, the time stipulated for the performance of an obligation under the Purchase Order/Contract may be proportionately extended.

20.2 The party for whom it has become impossible to meet the obligation under this contract due to force majeure condition will notify the other party in writing not later than 21 days from the date of commencement of unforeseeable event. Unless agreed by both the parties, in writing, the Contractor shall continue to perform his obligations under the Purchase Order/Contract as far as is practical and shall seek all reasonable alternative means for performance not prevented by the force majeure event.

20.3 Any Certificate issued by the Chamber of Commerce or any other competent authority or organization of the respective country shall be sufficient proof of commencement and cessation of the above circumstances. In case of failure to carry out complete or partial performance of an obligation for more than 60 days, either party shall reserve the right to terminate the Contract totally or partially. A prior written notice of 30 days to the other party will be given informing of the intention to terminate without any liability.

21.0 Erection of Plant and Machinery:

Wherever erection of Plant or Machinery is the responsibility of the Contractor as per the terms of the Contract and in case the Contractor fails to carry out the erection as and when called upon to do so within the period specified by the Purchaser, the Purchaser shall have the right to get the erection done through any source of his choice. In such an event, the Contractor shall be liable to bear any additional expenditure that the Purchaser is liable to incur towards erection. The Contractor, shall, however, not be entitled to any gain due to such an action by the Purchaser.

22.0 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 one-half of one percent (0.5 percent) of the Contract price for each calendar week of delay or part thereof. The total Liquidated Damages shall not exceed Ten percent (10 percent) of the Contract price. Stores will be deemed to have been delivered only when all its component/parts are also delivered in full to make use of the whole system/equipment as the case may be. If certain components/parts are not delivered in time, the entire value of Contract/Stores will be considered as delayed until such time as the missing parts are delivered.

In case of delay in delivery of the Stores beyond the delivery date stipulated in the Purchase Order/Contractor any extension thereof, such Stores shall be received under protest. The Stores shall be accepted without prejudice to the terms and conditions of the Purchase Order/Contract.

23.0 Guarantee and Replacement:

(a) The Contractor shall guarantee that the Stores supplied shall comply fully with the specifications laid down, for material, workmanship and performance.

(b) Guarantee for the period as indicated in the tender documents shall be after acceptance of the Stores. If any defects are discovered, therein or any defect therein are found to have developed under proper use arising from faulty materials, design or workmanship, Contractor shall remedy such defects at his own cost provided, he is called upon to do so within a period of 14 months from the date of acceptance thereof, 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 14 months from the date of acceptance of Stores thereof.

(d) If Contractor fail to rectify the defects, the Purchaser shall have 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 12 months or as to whether the nature of the defects requires renewal or replacement, shall be final, conclusive and binding on the Contractor.

(f) To fulfil guarantee conditions outlined in Clause 23.0(a) to (h) above, the Contractor shall, at the option of the Purchaser, furnish a Bank Guarantee (as prescribed by the Purchaser - Bank Guarantee format) from a Nationalized/Scheduled Bank approved by the Purchaser for an amount equivalent to 10% of the value of the Contract within a reasonable time after the receipt of PO/Contract for the due performance of the Contract as well as the product delivered. On the performance and completion of the contract in all respects, the Performance Bank Guarantee will be returned to the Contractor without any interest.

(g) All the replacement Stores shall also be guaranteed for a period of 12 months from the date arrival of Stores at Purchaser's site.

(h) Even while the 12 months guarantee applies to all Stores in case where a greater period is called for by your specifications then such a specification shall apply, in such cases the period of 14 months referred to in Clause 23.0 (a) and (h) shall be the 'asked for' guarantee period plus two months.

24.0 Arbitration:

In the event of any dispute, disagreement, difference, claim or question relating to the interpretation and application of the Purchase Order/Contract, such dispute, disagreement, difference, claim or question shall be settled amicably by mutual consultations of the good Offices of the respective parties. If such a resolution is not possible, then the unresolved dispute, disagreement, difference, claim or question shall be referred by the Contractor in writing to Director, National Remote Sensing Centre, Hyderabad within 30 days after the receipt of final payment for appointment of Arbitrator in accordance with the rules and procedures of Indian Arbitration and Conciliation Act 1996 or any modification thereof. The decision of the Arbitrator shall be final and binding on both the parties. The expenses for the Arbitration shall be paid as may be determined by the Arbitrator. The Arbitration proceedings shall be conducted at National Remote Sensing Centre, Hyderabad

Pending the submission of and/or decision on a dispute, disagreement, difference, claim or question or until the Arbitral award is published; the Parties shall continue to perform all of their obligations under this Purchase Order/Contract without prejudice to a final adjustment in accordance with such award.

25.0 Arbitration with Overseas Supplier:

In the event of any dispute or difference arising out of or in connection with this Purchase Order/Contract, such dispute or difference shall be settled amicably by mutual consultants or through the good offices of the respective parties. If such resolution is not possible, then the unresolved dispute or difference shall be referred to the Sole Arbitrator appointed in accordance with provisions of the ICADR Arbitration Rules, 1996 of the International Center for Alternative Dispute Resolution, New Delhi. The Arbitration shall be conducted in India in accordance with the Rules & Procedures of the Arbitration and Conciliation Act of 1996 or any re-enactment or modification thereof. The decision of the Arbitrator shall be final and binding upon the parties and the expenses for the arbitrations shall be paid as may be determined by the Arbitrator.

26.0 Arbitration with Public Sector Undertakings:

In the event of any dispute or difference relating to the interpretation and application of the Contract, such dispute or difference shall be settled amicably by mutual consultations of the good Offices of the respective parties. If such a resolution is not possible, then the unresolved dispute or differences shall be referred to the Sole Arbitrator appointed in the Department of Public Enterprise under the Permanent Machinery for Arbitration.

27.0 Language and Measures:

All documents pertaining to the Contract including specification schedule notices, correspondence, operating and maintenance instruction drawings or any other writing shall be written in English language only. The metric system of measurement shall be used exclusively in the Contract.

28.0 Applicable Law:

The Contract shall be interpreted, construed and governed by the Laws of India.

29.0 Jurisdiction:

The Courts within Hyderabad will have the Jurisdiction to deal with and deciding any matter arising out of this Contract.

30.0 Indemnity:

The Contractor shall warrant and deemed to have warranted that all Stores/Services/Supplied/Rendered against this Contract/Purchase Order are free and clean of infringement of any Patent, Copy Right or Trademark and shall at all times indemnify the Purchaser against all claims which may be made in respect of the Stores for infringement of any right protected by Patent, Registration of the design or Trade mark and shall take all risk of accidents or damage which may

cause a failure of the supply from whatever cause arising and the entire responsibility for the sufficiency of all the means used by him for the fulfillment of the Contract.

31.0 Counter Terms & Conditions:

Where counter terms and conditions printed or cyclostyled condition have been offered by the supplier, the same shall not be deemed to have been accepted by the Purchaser, unless specific written acceptance thereof, is obtained.

32.0 Security Interest:

On each item to be delivered under this Contract, including an item of work in progress in respect of which payment have been made in accordance with the Terms of the Contract. Purchaser shall have a Security Interest in such items which shall be deemed to be released only at the time when the applicable deliverable items is finally accepted and delivered to the Purchaser in accordance with the terms of Contract. Such Security Interest of the Purchaser shall constitute a prior charge as against any other charge or interest created in respect of such items by any other entity.

33.0 Bank Charges:

All Bank Charges Payable within India shall be borne by Purchaser. Similarly, all Bank Charges Payable outside India shall be borne by the Supplier.

34.0 Training:

The Contractor shall, if required by the Purchaser, provide facilities for the Practical Training of Purchaser's Engineering or Technical Personnel from India and for their active association on the manufacturing process throughout the manufacturing period of the Contract/Stores, number of such personnel to be mutually agreed upon.

35.0 Excise Duty:

National Remote Sensing Centre, Hyderabad is completely exempted from payment of Excise Duty vide Notification No. 10/97CE dated 01.03.1997 as amended vide Notification No. 16/2007CE dated 01.03.2007. The necessary Excise Duty Exemption Certification [EDEC] shall be provided by NRSC. Tenderers are requested to take note of this aspect and submit the offer clearly mentioning that the quoted price does not include Excise Duty and NRSC has to provide EDEC. The EDEC will not be issued in favour of Third Parties for Raw Materials or other Components that go into the manufacture of the End-Products. EDEC will be issued in favour of Original Equipment Manufacturer provided the Tender has been received from the Sole Selling Agent of the OEM concerned [Documentary Proof shall be produced]. The request for EDEC should be made in the Original Offer itself.

NRSC shall provide the ED exemption certificate.

36.0 Customs Duty:

National Remote Sensing Centre, Hyderabad is eligible for concessional rate of Customs Duty @ 5.5% vide Notification No. 51/96, as amended by Notification No. 24/2007. The necessary Customs Duty Exemption Certification [CDEC] shall be provided. Tenderers are requested to take note of this aspect and submit the Offer.

37.0 Annual Maintenance Contract [AMC]/Extended Warranty:

Tenderers are requested to quote separately towards Annual Comprehensive Maintenance Service/Extended Warranty and Non-Comprehensive Maintenance besides attending to unlimited Break-Down calls wherever specification calls for after expiry of Standard Warranty.

38.0 Transparency:

Tenderers are free to ask Purchaser for the Bidding conditions, Process and/or Rejection of bids etc., during the procurement process.

39.0 Participation of Indian Agents:

In a Tender, either the Indian Agent on behalf of Principal/OEM or Principal/OEM itself can bid. But both cannot bid simultaneously for same item/product. If an Agent submit bid on behalf of Principal/OEM, the same Agent shall not submit a bid on behalf of another Principal/OEM in the same Tender for the same item/product.

40.0 Implementation of Government Purchase and Price Preference Policy for MSEs:

In order to avail of the benefits extended by Government of India to the Micro and Small Enterprises [MSEs], please submit attested copy of the valid Entrepreneur Memorandum Part -II signed by General Manager, District Industries Center or National Small Industries Corporation [NSIC] Registration Certificate along with your offer. The facilities/ benefits will be extended as per Order issued by Ministry of MSME, Government of India, New Delhi from time to time. The benefit will be extended to MSEs upto the monetary ceiling fixed by MSME.

41.0 Purchase Preference to Public Sector Undertakings:

Wherever, Purchase/Price Preference is applicable for Public Sector Undertaking [PSUs] will be as per the extant orders of Department of Space.

42.0 High Sea Sale:

Tenderers submitting offer[s] against High Sea Sale Trade, the price of such offers be in Indian Rupees only and shall be inclusive of Freight and Clearance Charges for delivery up to National Remote Sensing Centre, Hyderabad. The offers shall be Firm, Fixed Price without any variation in Exchange Conversion Rate whatsoever. No Sales Tax will be applicable for High Sea Sale.

43.0 Splitting of Order[s]:

The Volume/Quantity for certain specialized nature of jobs is considerably large and it is necessary the orders are split with more than one party in order to ensure timely delivery/services. NRSC reserves right to split the Purchase Orders to more than one party. However, every effort will be made to bring the Commercial aspect including price of the parties on a single common platform. This is aimed at providing equal opportunity for the parties while taking the decision.

44.0 Agency Commission:

The amount of Commission included in the price and payable to the Indian Agent of the Contractor shall be paid directly to the Indian Agent[s] by the Purchaser in equivalent Indian Rupees on the basis of an Invoice from the Indian Agent by applying T. T. buying rate of exchange ruling on the date of placement of the Purchase Order/Contract and within 30 days from the date of receipt and acceptance of the Stores. The Contractor shall Invoice only for the net amount payable to him, after deducting the amount of Agency Commission included in the Invoice which would be paid to the Indian Agent[s] directly by the Purchaser. However, the Contractor[s] quote should separately reflect the amount of Commission payable to his Indian Agent.

As per the Compulsory Enlistment Scheme of the Department of Expenditure, Ministry of Finance, it is compulsory for Indian Agents who desired to quote directly on behalf of their Foreign Principals to get themselves enlisted with the Central Purchase Organization [Eg: DGS&D]

45.0 Validity of Offer:

The minimum validity of the tender submitted against Single Part shall be 90 days from the date of opening of the tender. In case of Two Part tender, the tender should be valid for a period of 120 days after opening of Part-I (Technical bid) and 90 days after opening of Part-II (Price bid).

46.0 The Authority of person signing the Tender, if called for shall be produced.

47.0 Instruction/Operation Manual containing all assembly details including wiring diagrams should be sent wherever necessary in duplicate. All documents/correspondence should be in English language only.

48.0 The Purchaser reserves the right to accept or reject any offer in whole or in part by recording the reasons.

49.0 It is expressly agreed that the acceptance of the Stores contracted for is subject to final approval in writing by the Purchaser.

50.0 Permitted Number of Shipment [ONE] only. Any additional shipment will be at suppliers cost. Part shipment is not allowed unless specifically agreed to by us.

51.0 Inspection/Test/Certificate should be provided for the goods after testing it thoroughly at the Contractor's works. If any inspection by Lloyds or any other Testing Agency is considered necessary, it shall be arranged by Contractors on the instructions of the Purchaser.

52.0 Where Erection, Assembly or Commissioning is a part of the Contract, it should be done immediately on notification. The Contractor shall be responsible for any loss/damages sustained due to delay in fulfilling this responsibility.

53.0 For items having Shelf Life, the same shall be supplied with maximum Shelf Life if order is placed.

54.0 Buy-Back Offer:

Wherever Contract considered necessary, the quotation shall be given separately with Buy-Back Offer and also without Buy-Back Offer so as to enable Purchaser either to Trade or not to Trade the item while purchasing the new one.

55.0 Evaluation of Tenders:

The Evaluation/Loading criteria in respect of Security Deposit for execution of Contract, Payment Terms, Performance Bank Guarantee for fulfilment of warranty Obligations, Material Bank Guarantee for Free issue of Materials etc., having financial implications wherever called for will be considered to arrive at L-1 status of Lowest Technically suitable Offer.

56.0 Risk Purchase:

Risk Purchase Clause will be applicable wherever considered necessary.

57.0 Fall Clause:

The price[s] charged for the Stores/Services supplied under the Contract by the Contractor shall be no event exceed the lowest price at which the Contractor sell the Stores/Services or offer to sell the Stores of identical description to any person[s], Firm, Party, Organisation[s] including the Purchaser or any Department of Central Government or any Department of State Government or any statutory undertaking of the Central/State Government as the case may be during the period till the performance of all supply orders placed during the currency of the Rate Contract is completed.

If at any time during the said period, the Contractor reduces the sale price, sells or offers to sell such Stores/Services to any person[s], Organisation[s], including the Purchaser or any Department of Central Government or any Department of State Government or any statutory undertaking of the Central or a State Government as the case may be, at a price lower than the price chargeable under the Contract, he shall forthwith notify such reduction or sale or offer to the Purchaser and the price payable under the Contract for the Stores/Services supplied after the date of coming into force of such reduction or sale or offer of sale stand correspondingly reduced.

58.0 Conditional Discount/Offer:

Conditional Discounts/Offer will not be considered.

59.0 Free Supply of Public Tender Documents:

One set of tender documents, can be supplied free of cost to Government Departments, Public Sector Undertakings [both Central and State]. Tender documents, can also be supplied free of cost to Foreign sources.

60.0 Termination:

Under the normal circumstances, Termination/Short Closing of the PO/Contract is not foreseen. However in case of repeated non performance of the PO/Contract, NRSC reserves the right to terminate the Contract in whole or in part by giving 30 days prior notice under the following circumstances:

[i] For repeated non-performance in the execution of P.O/Contract.

[ii] If the Contractor fails to deliver the final Product within the stipulated delivery schedule or any extension thereof, granted by the Purchaser.

[iii] If the final Product does not pass inspection and quality requirements of P.O/Contract

[iv] If the Contractor fails to perform any other obligations under P.O/Contract.

[v] If the Contractor becomes bankrupt or otherwise insolvent.

[vi] Owing to deficiency of service, breach of Contract.

[vii] For inefficiency, indiscipline, irregularity, insincerity, indifference in work, disobedience, doubtful credentials/integrity, etc., at any point of time during the Contract period.

[viii] To terminate the PO/Contract at any time by giving 30 days prior notice.

61.0 Parallel Contract:

NRSC reserves the right to enter into Parallel Contract/s with one or more Contractors.

62.0 Security Deposit:

The Successful vendor shall execute Security Deposit for 10% of the value of the Purchase Order/Contract towards satisfactory execution of the Purchase Order/Contract. The Security Deposit shall be executed through Demand Draft/Bankers Cheque/Fixed Deposit Receipts or Bank Guarantee issued by a Nationalized Bank/Scheduled Bank valid till the Purchase Order/Contract is completely executed. The BG shall be executed on a Non-judicial stamp paper of appropriate value as per Specimen.

In case the vendor fails to furnish the Security Deposit within 20 days after the receipt of PO or on signing of the Contract or any extension thereof, NRSC reserves the right to terminate or cancel the Purchase Order/Contract and the EMD if any executed shall be forfeited apart from initiating appropriate penal action.

The Security Deposit will not carry any interest and shall be returned after completion of all the obligations of the Contract.

Central Public Sector Undertakings [PSUs]/Public Sector Enterprises [PSEs]/Autonomous Bodies are exempted from payment of Security Deposit [SD], and instead, an Indemnity Bond shall be executed in lieu of SD. MSMEs Policy provides benefits to Supply Tender Set free of Cost and Exemption from payment of Earnest Money Deposit etc. However, policy does not provide benefits for Exemption from Security Deposit.

63.0 Performance Bank Guarantee [PBG]:

The successful Tenderer[s] has to execute a Performance Bank Guarantee for 10% of the Total PO value as security for the fulfilment of warranty obligations valid till the completion of warranty period plus

2months. The PBG will not carry any Interest and will be returned after completion of all the contractual obligations. PBG is to be executed before claiming the Payment.

Central Public Sector Undertakings [PSUs]/Public Sector Enterprises [PSEs]/Autonomous Bodies are exempted from submission of PBG and instead, an Indemnity Bond shall be executed in lieu of PBG.

64.0 Subletting Contract:

The Contract shall not be sublet, transferred or assigned to any other firm/agencies/person, etc., without the prior written permission of NRSC. In case of violation of this clause, the Service Provider/ Contractor shall be solely responsible for any legal action besides termination of Contract.

65.0 Clarification regarding contents of the Bids:

During evaluation and comparison of bids, the Buyer may, at his discretion, ask the bidder for clarification on their bid.

The request for clarification will be given in writing and no change in prices or substance of the bid will be sought, offered or permitted. In case, tenderer fails to provide clarifications/confirmations within a specified time, the original bid submitted by the tenderer shall be treated as incomplete and liable for rejection. No post-bid clarification on the initiative of the bidder will be entertained.

66.0 Rejection of Bids:

Canvassing by the Bidder in any form, unsolicited letter and post-tender correction may invoke summary rejection of Bids. Conditional Tenders will be rejected.

67.0 Secrecy:

The technical information, drawings, specifications and other related documents provided by the Purchaser and forming part of the Contract are the property of 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 provided by the Purchaser 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 Purchaser's consent in writing except to the extent required for the execution of this Contract. These technical information, drawings, specifications and other related documents which were originally provided by the Purchaser shall be returned to the Purchaser with all approved copies and duplicates, if any, immediately after they have been used for the agreed purpose.

68.0 The Tenderer shall bear all cost towards preparation of tender document, Supply of Samples and arranging demonstration.

69.0 Limitation of Liability:

69.1 The remedies stated in this Contract are exclusive and in no event shall the Contractor be liable for any, special, incidental, consequential or punitive damages of any nature. Notwithstanding any other provision of this contract, the Contractor's total liability to the Purchaser, whether in Contract shall not exceed the total amount paid to the Contractor under this Contract.

69.2 The Purchaser shall be under no obligations to accept the lowest or any tender and reserve the right of acceptance of the whole or any part of the tender or portion of the quantity offered and the Tenderer[s] shall supply the same at the rates quoted.

69.3 The Tenderer shall bear all cost towards preparation of tender.

70.0 Change in the Name and Address of the Supplier:

In the event of Change in Name and Address of Supplier, Documentary Proof issued by the Appropriate Government Authorities shall be produced for such change.

71.0Lowest Offer:

The Lowest Technically suitable Offer [L- 1] shall be decided based on the aggregate value of all items put together for which Quotation have been called for wherever necessary.

72.0Public Procurement for Startups:

The facilities/benefits will be extended for Startups as per the Guidelines issued by Government of India.

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Bid Templates

Technical specifications_upconverter

Tech Specs Form-1.

Sl. No	Specifications	Compliance (Yes /No)	Offered Specifications	Remarks
1	Detailed specifications•Input Frequency: 720 MHz ± 200 MHz			
2	•Conversion : Single/ Dual conversion without inversion•Channels : Two independent channels (possibility of tuning both channels to different frequency to be provided).			
3	•Reference : Both Internal and External			
4	•Step Size: 10 KHz tunable			
5	•Output Frequency : 2100 - 2900 MHz			

	(programmable)			
6	•Band width(instantaneous): ± 200 MHz			
7	•Frequency Stability (Time & Temp): 0.2 ppm (0°C to +50°C)			
8	•Input Level: -35 dBm Typical			
9	•Input & Output Return Loss: 18 dB Minimum			
10	•Input & Output Impedance: 50 Ohms			
11	Output Level: + 10 dBm @ 1dB Comp.			
12	•Gain: 35 dB			
13	•Gain Adjust: 0 – 20 dB in 0.25 dB steps •Gain Stability: ±0.5 dB/day			
14	•Gain Flatness (± 200 MHz): ± 0.75 dB max. •Gain Slope : 0.05 dB/MHz			

15	<ul style="list-style-type: none"> Spurious/Non-Carrier: – 75 dBm/Carrier: – 60 dBc @ 0 dBm Output 			
16	<ul style="list-style-type: none"> 3rd Order Intermod: – 38 dBc (2 Carriers) @ 0 dBm Output 			
17	<ul style="list-style-type: none"> Image Rejection: 65 dB min 			
18	External Reference: 5/10 MHz @ + 3 dBm. In presence of external ref signal, the unit shall lock to the external ref automatically.			
19	<ul style="list-style-type: none"> Group Delay/Linear: 0.03 ns/MHz/Parabolic : 0.01 ns/MHz²/Ripple: 1.0 ns Peak-to-Peak 			
20	<ul style="list-style-type: none"> Phase noise/100 Hz: – 67 dBc / Hz/1 KHz: – 84 dBc / Hz/10 KHz: – 			

	105 dBc /Hz 100 KHz : – 107 dBc/Hz1MHz: – 130 dBc/Hz			
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Upconverter_specs_continued

TS-Form2.

Sl. No	Specifications	Compliance (Yes /No)	Offered Specifications	Remarks
21	•Remote M&C Control (Rear Panel): TCP/IP (LAN), RJ45 connector			
22	•Test Points (Front Panel)RF sample: SMA (F) -20dBcIF Sample: SMA (F) - 20dBc•Input & Output Interface: SMA (F), Rear panel			
23	•Power (Power On switch to be provided)Voltage: 230 V ± 10%			

	AC#61607;Frequency: 47 – 53 Hz •Environmental Temperature: 0 – 50 Deg. CAltitude: 8,000 Feet MSLHumidity: 0 – 95% Relative			
24	Physical Size: 19 Inch Rack Mountable (2U size max.)			
25	•Warranty : 3 Year Standard Warranty.			
26	•The unit shall have suitable interface like keypad, display, LEDs, etc for local control of the parameters and to display the status.			
27	•One set of Operation & Service Manuals to be provided for each UP converter			

Technical specifications_Downconverter

TS-Form3.

Sl. No	Specifications	Compliance (Yes /No)	Offered Specifications	Remarks
1	•Input Frequency: 2100 - 2900 MHz(programmable)			
2	•Conversion : Single/ Dual conversion without inversion			
3	•Channels: Two independent channels (possibility of tuning both channels to different frequency to be provided).			
4	•Reference: Both Internal and External			
5	•Step Size: 10 KHz tunable			
6	•Output Frequency: 720 ± 200 MHz			
7	•Frequency Stability (Time & Temp): 0.2 ppm (0°C to +50°C)			
8	•Input Level: -40 dBm Typical			

9	•Input & Output Return Loss: 18 dB Minimum			
10	•Input & Output Impedance: 50 Ohms			
11	•Noise Figure: 8 dB Max at maximum gain.			
12	•Output Level: + 10 dBm @ 1dB Comp.			
13	•Gain: 40 dB +/- 2 dB			
14	•Gain Adjust: 0 – 20 dB in 0.25 dB steps			
15	•Gain Stability: ±0.5 dB/day			
16	•Gain Flatness (± 200 MHz): ± 0.75 dB max. •Gain Slope: 0.05 dB/MHz typical			
17	•Spurious & Non-Carrier: – 75 dBm; Carrier: – 60 dBc @ 0 dBm Output			
18	•3rd Order Intermod: – 50 dBc (2 Carriers) @ 0 dBm			

	Output			
19	•Image Rejection: 65 dB min			
20	•External Reference: 5/10 MHz @ + 3 dBm. In presence of external ref signal, the unit shall lock to the external ref automatically.			

Down_conv_specs_continued

TS-Form4.

Sl. No	Specifications	Compliance (Yes /No)	Offered Specifications	Remarks
21	•Group Delay; Linear: 0.03 ns/MHz; Parabolic : 0.01 ns/MHz ² ; Ripple: 1.0 ns Peak-to-Peak			
22	•Phase noise; 100 Hz: - 67 dBc / Hz; 1 KHz: - 84			

	dBc/Hz10 KHz: – 105 dBc /Hz 100 KHz: – 107 dBc/Hz1MHz: – 130 dBc/Hz			
23	Remote M&C Control (Rear Panel): TCP/IP (LAN), RJ45 connector			
24	Test Points (Front Panel)RF sample: SMA (F) -20dBcIF Sample: SMA (F) -20dBc			
25	•Input & Output Interface: SMA (F), Rear panel			
26	•Power (Power On switch to be provided)Voltage: 230 V ± 10% ACFrequency: 47 – 53 Hz			
27	EnvironmentalTemperatur e: 0 – 50 Deg. CAAltitude: 8,000 Feet MSLHumidity: 0 – 95% Relative			
28	Physical Size: 19 Inch Rack Mountable (2U size max.)			
29	•Warranty: 3 Year			

	Standard Warranty.			
30	•The unit shall have suitable interface like keypad, display, LEDs, etc for local control of the parameters and to display the status.			
31	•One set of Operation & Service Manuals to be provided for each Down converter.			

TERMS & CONDITIONS

TS-Form5.

Sl. No	Specifications	Compliance (Yes /No)	Offered Specifications	Remarks
1	1. Technical a) Technical compliance to be provided along with supporting data sheets from the original manufacturer. b) Individual unit test data for both the channels like dynamic range, conversion loss,			

	frequency response, image frequencies and spurious shall be provided along with the equipment at the time of supply.			
2	Acceptance Test: a) The test results shall be submitted to NRSC for approval, before the actual shipment of the equipment. The system shall undergo the acceptance tests as per the mutually agreed Test Plan at IMGEOs, Shadnagar. b) Site details for the utilization of Down Converters and Up converters are as follows. No. of Down Converters : 3; No. of Up Converters : 2 AT NTRD Delhi. Delivery of the units will be at NRSC, Shadnagar. However the warranty of the units will be as per the above table.			
3	2. Commercial: a) The			

	<p>vendor should have supplied UP & Down converters and shall have proven operational performance for the past 3 years. b) If the bid is from a foreign principal/vendor, for ensuring smooth warranty support, the vendor should have / maintain local representative/office within India. c) If an Indian agent/partner is quoting on behalf of foreign OEM, suitable tender specified authorization letter from OEM should be enclosed. d) The bid shall be evaluated based on the technical compliance to the Specifications and the lowest quoted price (landed cost). Compliance to other clauses such as acceptance to SD, PBG, LD etc. are mandatory in order to evaluate the vendor's offer. In case a bidder proposes different</p>			
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	terms, financial implications of the same shall be loaded on the offered prices to determine rank of the offer in price comparison.			
4	Delivery of units is at NRSC, Shadnagar for verification and testing for acceptance of the units. STANDARD WARRANTY :a)3 years standard warranty covering on-site support. Warranty will be at NTRO, Delhib)Onsite Warranty shall start after acceptance of the system.c)During warranty period, the vendor should ensure that the system is maintained in good working condition with satisfactory performance and operational on 24 x 7 basis.d)In the event of failure of the system or degradation in performance of any			

	<p>component/subsystem during the period of warranty, the vendor shall put the system in upright working condition within a period of 10 days of intimation by NRSC/ onsite personnel. Failing which, NRSC shall reserve the right to invoke PBG.</p> <p>e)The bidder shall guarantee supply of spares and maintenance support for at least 10 years from the date of acceptance of the system.</p>			
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Vendor Specified Terms

Description	Vendor Terms
Taxes and other costs, if any:(NRSC-ISRO is eligible for concessional GST @ 5% under notification no. 45/2017 & 47/2017. Vendors may please note this while calculating tax implications.)	
Warranty	
Delivery Term	

Delivery Period	
Payment Term	
Validity	
Any other terms	
Liquidated Damage (LD) Clause	
Performance bank Guarantee(PBG) Clause	
Security Deposit (SD) Clause	

Supporting Documents from Vendor

Attachment - I:

Attachment - II:

Price Bid Form

Item Description	Slab Range	Qty	UOM	Currency	Unit Price	Total Price
RF RECEIVER SYSTEMS UP Converters as per	-	2	NO.	-	-	-

given specifications						
RF RECEIVER SYSTEMS DOWN Converters as per given specifications	-	3	NO.	-	-	-

Break-up of other taxes and other costs should be specified in respective narration columns.

Sum of these Break-up values should be specified in respective value columns.