

**GOVERNMENT OF INDIA
DEPARTMENT OF SPACE
U. R. RAO SATELLITE CENTRE (URSC)
BANGALORE**

Tender for Embedded Software Defined Radio Transciever

Bids to be submitted online

Tender No.: URSC/IR/IS202100009201 dated 01-09-2021

A. Tender Details

Tender No : **URSC/IR/IS202100009201**

Tender Date : **01-09-2021**

Tender Classification: **GOODS**

Purchase Entity : **IR**

Centre : **U. R. RAO SATELLITE CENTRE (URSC)**

Procurement of Embedded Software Defined Radio Transciever

- 1.URSC invites offers through e-tender portal <https://eproc.isro.gov.in> for the supply of following items.
- 2.This is a Public Tender under Two Part Basis. Only online tenders will be accepted. No manual/Postal/e-mail/Fax Offers will be entertained.
- 3.No Tender Fees Applicable. REPEAT No Tender Fees Applicable
- 4.This is a Two Part Public Tender. Please do not attach price details along with technical details in pdf or any format. If so, your offer shall be rejected.
- 5.Tender shall be opened on the first day of the schedule. In the event of any technical snags and if the tender could not be opened on the first day, it will be opened on the second/next working day as per the schedule.
- 6.We are exempted from the Payment of Customs Duty. Only 5 per cent Duty and 5 per cent IGST is applicable as per notification No.5/2018-Customs, dated 25.01.2018 Sl.No.,539 A.
- 7.Strict Compliance to our Commercial Terms and Conditions will have to be followed by the Vendor(s) or otherwise, your offer will be rejected.
- 8.Please peruse Tender Conditions properly while submitting the Quotation.
- 9.Government of India has implemented Goods and Service Tax (GST) w.e.f. 01.07.2017. The Tenderer(s) should mandatorily possess a valid GSTIN along with GST Registration Certificate. Please send duly self attested certificate of GST Registration along with offer(s), in the absence of which, your offer(s) will be invalid and shall not be considered. As per Government Notification No.47/2017-Integrated Tax (Rate), dated 14.11.2017, Concessional GST at the rate of 5 per cent is applicable.
- 10.TDS at the rate of 2 per cent on GST shall be effected from Bill on supply of Goods or Services.

A.1 Tender Schedule

Bid Submission Start Date : **01-09-2021 16:15**

Bid Clarification Due Date : **15-09-2021 16:00**

Bid Submission Due Date : **28-09-2021 09:30**

Bid Opening Date : **28-09-2021 10:00**

Price Bid Opening Date : **28-09-2021 11:00**

B. Tender Attachments

NA

Instructions To Vendors

1. GENERAL TERMS AND CONDITIONS [1 of 9]

1. 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.

2. Chapter 1

3. Prices are required to be quoted according to the units indicated, in the Part-2 [Price Bid] only. Documents containing price details shall be submitted only in Price Part. If documents with price details are submitted with techno-commercial part, such tenders will be treated as invalid.

4. The Price quoted must be firm and should indicate quantity wise unit rate 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 GST where legally leviable and intended to be claimed shall be calculated and indicated in the column provided in online forms explicitly.

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

6. For the Procurement/providing of Services, the Tenderer[s] are requested to quote the correct percentage of GST

7. Micro and Small Enterprises [MSEs]

a. In order to avail the benefits extended by Government of India to the Micro and Small Enterprises [MSEs] in respect of Goods and Services as per provision of the policy, MSEs registered with District Industries Centre [DIC] or Khadi and Village Industries Commission [KVIC] or Khadi and Village Industries Board [KVIB] or Coir Board or National Small Industries Commission [NSIC] or Directorate of Handicrafts and Handlooms or Udyog Aadhar Memorandum, or any other Body specified by Ministry of MSME have to submit a copy of Valid Certificate with self-attestation along with the Techno-commercial bid. No Certificate claiming exemption will be entertained after Tender due date.

8. b. MSEs are entitled for [i] issue of Tender documents Free of Cost [ii] Exemption of Earnest Money Deposit [EMD]. However, Performance Security is mandatory for Goods and Services.

9. c.If the Tenderer[s] is/are SC/ST/Woman entrepreneur owned MSEs, specific mention for the same should be there in the valid certificate submitted by the tenderer.

10. d.Tenderers claiming MSME benefit shall furnish copy of UAM No. as uploaded on CPP portal to avail benefit.

11. The document solicited from Tenderer should be submitted online. Document has to be submitted in PDF file(s) and attached online.

12. The Tenderers 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

13. Once the offer is submitted through online mode by the Tenderer, he will not be able to provide/submit a revised offer or make any alteration or change to the offer or any terms contained therein

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

15. The Part-1 [Technical Bid and Commercial Bid] opening date and time indicated is tentative. There may be changes/delay due to Network/ Computer Server related problems and the tender opening may get delayed by one or two days under such circumstances, the exact date and time of opening will be intimated later in case of Public or Open Tender

16. Bid Securing Declaration: The Tenderers/Bidder have to sign a Bid Securing Declaration accepting that if the Tenderer[s] withdraw or modify their Bids during the period of validity, or if they are awarded the Contract and they fail to sign the Contract, or fail to submit a Security Deposit & Performance Bank Guarantee before the deadline stipulated in the request for Bid Documents, they will be suspended for the period of 2 years and such Tenderer[s] will not be eligible to submit Bids for Contracts with the entity that invited the Bids

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

18. The 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 Price should be covered only in Part -2 [Price Bid].

19. 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

20. All the Tenderers should regularly browse/check the e-mail/s being sent to them from e-procurement portal for initiating appropriate action or for any updates on the Tender.

21. The Tenderer should submit along with his tender the Name of his Bankers, Account Number etc., mandatorily to U R Rao Satellite Centre [URSC].

22. All the bids in prescribed form enclosed with tender documents must be submitted before the time and date fixed for the receipt of offers as set forth in the tender document. URSC will not be responsible for non-receipt of tender[s]/offer[s] due to any loss of tender documents and it shall be the sole responsibility of the Tenderer to ensure uploading of the tender[s]/offer[s] within the time fixed and URSC will not be responsible for non-submission of tender(s)/offer(s) within the stipulated date and time due to any software issues or Network issues or Server down. Tenderer(s) shall submit their bid(s) well in advance to overcome last minute glitches. URSC reserves the right to accept or reject any of the tender in full or part without assigning any reasons thereof. Offers received after stipulated time and date will be rejected.

23. Public Tender documents will also be uploaded on the ISRO website i.e. www.isro.gov.in Interested Tenderers may download the tender documents from website and submit their offers as per details mentioned in the Tender Notification

24. If the tender opening date happens to be on an unidentified Holiday due to any reason, including Force Majeure, tender(s) shall be opened on the next working day

25. Tenderers shall submit quotations Through Online Only. The Tender shall be complete in respect of all technical specifications, instructions, drawings, pamphlets and catalogues, as per the tender document. Failure to furnish all information as per the requirements of the tender document and submission of bid not substantially responsive to the tender document shall render the tender liable for rejection. Any/All Bids by way of Fax/E-mail shall not be accepted.

26. Tenderers shall quote Prices in Indian Rupees Only for Indigenous Stores in the Price Template.

27. All available technical literature, catalogues, Original Equipment Manufacturer Certificate [OEM] and other data in support of the specifications and details of the items should be furnished along with the offer wherever necessary. Unsolicited documents received after Tender due date & time shall not be entertained.

28. Samples, if called for, should be submitted free of charges by the Tenderers and URSC shall not be responsible for any loss or damages thereof, due to any reason whatsoever. All incidental expenses

towards submission of samples including Freight charges, Taxes & Duties etc shall be borne by the Tenderer. Delivery of samples to URSC Stores shall be the responsibility of Tenderer. In the event of non-acceptance of tender, the Tenderer will have to remove/take away the samples at his own expenses.

29. The intending Tenderers are advised to read the Technical specifications, terms and conditions and other details carefully relating to the work contemplated in the Bid document and fully acquaint themselves as to all conditions and matters which may in anyway affect the work or cost thereof. The Tenderer shall be deemed to have known the nature, scope and magnitude of the work. Tenderer should bid only if he considers himself eligible and if it is in possession of all documents required as per the tender. The intending Tenderers are required to bid after carefully examining all instructions, eligibility criteria, forms, terms standards and specifications as per the tender document with full understanding of its implications.

30. In case of Two Part Tender, Commercial Terms to be covered in the Part-1 [Technical Bid] are Delivery Terms, Delivery Period, Payment Terms (without mentioning the price or amount), Security Deposit for performance of Contract and Performance Bank Guarantee for fulfilment of Warranty obligation, Validity of the Offer, Warranty/Guarantee, 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. which have to be filled up online.

31. If the Tenderer is found ineligible after opening of tenders, his tender shall become invalid ipso facto, and costs of the tender document and processing fees, as applicable shall not be refunded. Offers which are not in compliance with the tender conditions will be rejected, without assigning any reasons thereof. Failure to furnish all requisite information or and/or documents shall result in repudiation of the Offer. Notwithstanding the foregoing, U R Rao Satellite Centre [URSC], Bengaluru reserves the right to assess the capability of the Tenderer to perform the contract keeping in view the overall interest of URSC. In the event, the Tenderer's capability and capacity are found to be unsatisfactory, URSC reserves the right to reject the bid, without assigning any reasons thereof.

32. Any neglect or omission or failure on the part of the Tenderer in obtaining necessary information as stated above or in any other matter affecting the Tenderer shall not relieve him from any risks or liabilities or the entire responsibility for completion of the work in accordance with the bid documents

33. Predatory Pricing: The Vendor[s] shall specifically take note that 'Predatory Pricing' will not be accepted and such Bids not meeting even the Basic Cost of input i.e., Quoting unreasonably low prices to undercut and obtain the Contract are liable to be ignored/rejected, in order to obtain Quality Products/ Services. The assessment of the Purchaser about the Predatory Pricing will be final

34. All requirements stated herein below are a minimum and URSC reserves the right to request for any additional information and also reserves the right to reject the proposal of any Tenderer, if in the

opinion of URSC, the qualification or data is incomplete or if the Tenderer is found not qualified to satisfactorily perform the contract. The Tenderer shall bear all costs and expenses associated with preparation and submission of bid including post bid discussions, technical and other presentations and URSC will in no case be responsible or liable for such costs, regardless of the outcome of the bidding process. The Tenderer shall also not be entitled to claim any costs, charges and expenses incidental to or incurred by him through or in connection with the submission of the Bid or its consideration by URSC, even though URSC may elect to modify or withdraw the invitation to Bid or not to accept the Bid

35. At any time prior to the deadline for submission of bids, URSC may for any reason on its own initiative modify the bidding document by amendment. The amendment will be notified in writing or by fax or e-mail to the prospective Tenderers or uploaded online on the website. URSC shall bear no responsibility or liability arising out of non-receipt of the same in time or otherwise. Notwithstanding the above, URSC may at its discretion extend the deadline for submission of bids in order to afford reasonable time to prospective Tenderers to take into account the amendment in preparing the bids.

36. Specifications: The description of the system in the documents supplied by the Tenderer along with the Bid shall be such as to ensure a clear understanding of the same and to permit its comparative evaluation. Stores offered should strictly conform to URSC Specifications. Deviations, if any, should be clearly indicated by the Tenderer in their quotation. The tender 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 Certificate wherever necessary should be forwarded along with Supplies. Whenever options are 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 justification for the same.

37. All amounts shall be indicated both in words as well as in figures. Where there is difference between amount quoted in words and figures, the amount quoted in words shall prevail over the amount mentioned in figures. The Bid and the prices quoted shall remain valid for 90 days for Single Part Tender and 180 days for Two- part tender initially from the date of the bid opening. A bid valid for a shorter period shall be rejected by Purchaser as non-responsive

38. U R Rao Satellite Centre [URSC] reserves the right to place order on the successful Tenderers for additional quantity at the rates quoted or as mutually agreed for a period up to 18 months from the date of release of original order

39. Earnest Money Deposit [EMD]:

a. The Tender should be accompanied with an Earnest Money Deposit [EMD] for a prescribed amount wherever called for in the covering sheet of Notice Inviting Tender [NIT]. Registered Tenderers and those Tenderers who have applied for renewal of registration, Central PSUs/PSEs /Autonomous Bodies, Micro and Small Enterprises, KVIC, etc., are exempted from payment of EMD. The said

Earnest Money Deposit shall be in the form of Demand Draft/Bankers Cheque/Fixed Deposit Receipts payable at place as mentioned in NIT in favour of Accounts Officer, URSC payable at Bengaluru from any Nationalized/Scheduled bank or Bank Guarantee from any Nationalized/Scheduled banks in the enclosed format. The EMD of the unsuccessful Tenderers will be returned to them within 30 days from the date of the award of the Contract to the successful Tenderer. The EMD will be forfeited if the Tenderer withdraws or amends or impairs or derogates from the Tender in any respect within the validity period of the Tender. EMD shall be submitted in a single instalment through Account Payee Demand Draft/Bankers Cheque/Fixed Deposit Receipts or Bank Guarantee from Nationalized or Scheduled Bank. The Bank Guarantee shall be valid for 45 days beyond the Tender validity date. No interest will be payable by URSC on the said amount covered under EMD/any other Security Deposit - AT PRESENT, EMD IS NOT APPLICABLE FOR TENDERERS REGISTERED ON URSC-EGPS.

40. b. Any Tender not accompanied with EMD shall be treated as invalid tender and rejected. Tenderers seeking exemption from payment of EMD shall submit necessary proof like Registration number, etc. In case of Public Tender[s] floated through E-procurement portal, such of those Tenderer[s] who are registered with ISRO/URSC web portal under e-mode are exempted from payment of Earnest Money Deposit.

41. INSTRUCTIONS TO E-PROCUREMENT TENDERERS [APPLICABLE ONLY FOR ONLINE TENDERS]:

42. U R Rao Satellite Centre has implemented e-tender system to obtain quotations through ONLINE. URSC invites offer[s] through e-tender portal for the supply of Stores. The Suppliers need to get enrolled in the e-tender portal to access tender and submit their offer online. Tenderers need to have Digital Signature Certificate as detailed on URSC 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 URSC.

43. Interested Tenderers may login to our website <https://eproc.isro.gov.in> and submit their offers via Online/internet only through the aforesaid website

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

45. If U R Rao Satellite Centre [URSC] disqualifies the Tenderer from the tender process prior to the awarding of the Project, the Earnest Money Deposit (EMD)/ Security Deposit/Performance Bank Guarantee furnished, if any, along with the offer, as per terms of the Invitation of Tender, shall also be forfeited. The Tenderers/Tenderer understand and agree that this will be in addition to the disqualification and exclusion of the Tenderers/Tenderer as may be imposed by U R Rao Satellite Centre [URSC].

2. GENERAL TERMS AND CONDITIONS [2 of 9]

1. .Chapter-2

2. Definitions: In the contract, the following expressions shall, unless the context otherwise requires, have the meanings, hereby respectively assigned to them:-

3. a.'Acceptance' shall mean conditional determination by Purchaser of the completion of the Work or any element thereof in accordance with the Contract, by issuance of a Certificate of Substantial Completion of Work as provided in the Contract

4. b.'Approval' shall mean approval in writing issued by the Purchaser in terms of the tender

5. c.'Contract' shall mean the documents forming the tender, the offer, the award of tender and the formal agreement executed between the competent authority on behalf of Purchaser and the Contractor, together with the documents referred to therein including the conditions enumerated herein, specifications, designs, drawings and instructions issued from time to time by the competent authority of Purchaser and all these documents taken together, shall be deemed to form one Contract and shall be complementary to one another.

6. d.'Contractor' shall mean the individual, firm, Limited Liability Partnership [LLP] or company, undertaking the works and shall include the legal representatives, nominees, affiliates, successors-in-interest, permitted assigns, Heirs, Executors and Administrators of such individual, LLP, Firm or Company, unless repugnant to the context or meaning thereof.

7. e.'Contract Value' shall mean the sum for which the tender is accepted as per the Letter of Award.

8. f.'Date of commencement of work' The date of start of Contract shall be reckoned from the date of issue of Letter of Award.

9. g.'Drawings' shall mean the drawings referred to in the Contract document including modifications if any and such other drawings as may be from time to time, be furnished or approved by Purchaser

10. h.'Letter of Award' shall mean Purchaser's letter or notification conveying its acceptance of the tender, subject to such conditions as may have been stated therein.

11. i.'Market Rate' shall be the rate as decided by the competent authority of the Purchaser on the basis of the prevailing cost of materials and labour at the site where the work is to be executed plus the percentage mentioned elsewhere in the tender document to cover, all overheads and profits.

12. j.'Month' means English calendar month and 'Day' means a calendar day of 24 hours each

13. k.'Purchaser' shall mean the President of India represented by its Director or Sr. Head/Head, Purchase and Stores/ Sr. Purchase & Stores Officer/Purchase & Stores Officer, U R Rao Satellite Centre [URSC] Bengaluru or his successors or assigns

14. l.'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 conditions mentioned or referred to therein accepting the Tender or offer of the Contractor

15. m.'Template' shall mean the standard template of rates to be read with any of receipt amendments thereto issued up to the date of receipt of tender.

16. n.'Stores' shall mean what the Contractor agrees to supply under the Contract/Tender as specified in the Purchase Order including erection of plant and machinery and subsequent testing should such a condition be included in the Purchase Order

17. o.Words indicating the singular only also includes the plural and vice versa, where the context so requires.

18. p.Words importing persons or parties shall include firms, corporations and organizations having legal capacities.

19. q.Words indicating male gender shall also include the female or neuter gender, and vice versa, where the context so requires.

20. Government of India Orders, Circulars and Guidelines:

All relevant Orders, guidelines issued by Government of India from time to time shall be applicable for this tender.

21. Transparency:

Tenderers are free to ask Purchaser for clarifications on the Bidding/tender terms and conditions, process, etc., during the procurement process. All such queries and clarifications shall be sought for in writing via e-mail and sent to the officer authorized by the Purchaser to issue such clarifications, as may be required. No verbal request will be entertained

22. Prices:

Tenders offering Firm & Fixed Prices will be considered. The Contractor shall be bound to carry out and complete the stipulated work irrespective of the variation in individual items as specified

hereinabove. The Tenderer shall quote prices separately furnishing break-up of cost towards Basic Cost of Items testing, inspection, packing, forwarding, Freight, Handling, Insurance, Installation if any, and GST.

23. Price Variation for Long Term Contracts:

Where Tenderer[s] quote delivery period beyond 18 months, the illustrative formula for Price Variation Clause [PVC] shall be referred under General Financial Rules [GFR], 2017, Appendix-11 [see Rule 225 [viii] [b]. It may please be noted that the formula for Price Variation is available on the Website.

24. Goods and Service Tax: Government of India has implemented Goods and Services Tax [GST] w.e.f. 01.07.2017. The Tenderer[s] should mandatorily possess a valid GSTIN along with the GST Registration Certificate. Please send duly self-attested certificate of GST Registration along with offer[s], in the absence of which your offer[s] will be invalid and shall not be considered

25. Concessional Goods and Services Tax: U R Rao Satellite Centre [URSC], Bengaluru is eligible for availing Concessional GST in terms of following Notifications issued by Government of India and Government of Karnataka for the procurement of Goods against production of Certificate issued by an Officer not below the rank of Deputy Secretary to Government of India certifying that the Goods being procured will be used for Research purposes only

Government of India,
Ministry of Finance, Department of Revenue
Notification No. 45/2017- Central Tax [Rate] dated 14.11.2017
- CGST @ 2.5%,

Government of Karnataka,
Finance Secretariat,
Notification [45/2017] No. FD 48 CSL 2017, Bengaluru
dated 14.11.2017
- SGST @ 2.5%,

Government of India,
Ministry of Finance,
Department of Revenue,
Notification No. 47/2017 - Integrated Tax [Rate] dated 14.11.2017
- IGST @ 5%

26. Tenderers are hereby requested to take note of this aspect and submit the Quotation for availing the Concessional GST by URSC. The necessary Certificate for availing concessional GST shall be issued along with the Purchase Order.

27. Customs Duty: U R Rao Satellite Centre [URSC], Bengaluru is eligible for payment of Customs

Duty @ 5% + Social Welfare Cess @ 10% on CD & IGST @ 5% vide Notification No.12/12-Cus dated 17.03.2012 superseded by Notification No.50/17-Customs dated 30.06.2017 and as amended by Notification No. 5/2018-Customs dated 25.01.2018, Sl. No. 539A

28. The necessary Customs Duty Exemption Certificate (CDEC) shall be provided by URSC only to those bidders who claim Purchase Preference under Make in India Policy shall fulfil all requirements of tender document applicable for Indigenous Manufacturer i.e., Class-I/Class-2 local supplier. Such Class-I/Class-2 local suppliers are requested to take note of this aspect and submit their Offer clearly mentioning that the quoted Price for Imported contents which includes concessional Customs Duty as per above Notification. While requesting for issue of CDEC for the imported contents, the Tenderer[s] should mention the Item Description, Quantity and Value for which CDEC is to be provided for the bought out Imported Items. The necessary proof shall be produced while requesting for issue of CDEC from URSC. However, CDEC will be issued only to those successful Class-I/Class-2 local supplier.

29. Evaluation of Tenders: The Evaluation/Loading criteria in respect of Payment Terms, Bank Guarantee towards free issue of materials [FIM], etc., having financial implications will be considered to arrive at L-1 status

30. In case of Ex-works offer, an additional one percent shall be loaded to arrive at the FOR Destination cost.

3. GENERAL TERMS AND CONDITIONS [3 of 9]

1. Adherence to this clause is compulsory or otherwise, the Tender will be rejected.

2. All payments are subject to permissible legal deductions from the contract price as per the Contract. All payments shall be released only after successful and satisfactory completion of quantum and type of work, specified for respective activity. All payments shall be directly made by the Purchaser to the Tenderer

3. Clarification regarding contents of the Bids:

4. During evaluation and comparison of bids, the Purchaser may, at its discretion, ask the Tenderer for clarification of his 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.

5. All responsive bids shall be evaluated with a view to select the lowest [L1] Tenderer who meets the qualification criteria, techno-commercial aspects and shall be compared on a common platform on the basis of total evaluated cost of each offer which will be arrived at by adding the basic price as well as other charges, and all statutory levies/taxes/duties. Maintenance charges shall be taken into account if it forms part of the tender for the purpose of cost comparison. The financial implication shall be

considered as the all-inclusive cost to the Purchaser. Evaluation of the bids shall be done on the basis of landed cost to the Purchaser.

6. Purchaser discourages advance payment terms. In case of advance payment, for the purpose of evaluation, interest shall be loaded on the amount so paid as advance for the delivery period quoted as per MCLR of State Bank of India prevailing on the date of tender opening. Further, for any delay in executing the contract, Purchaser shall recover interest on the amount paid as advance for the delayed period at the MCLR of State Bank of India prevailing on the date of the payment besides other remedies available for breach of the contract.

7. If a Tenderer quotes NIL charges/consideration in case of Service contracts, the bid shall be treated as unresponsive and will not be considered

8. Evaluation of the bids shall not be done on the basis of conditional discounts

9. Purchaser reserves the right to give preference for procurement of goods in terms of product reservation and preferential / mandatory purchase policy as notified by Government of India from time to time. Tenderers claiming any preference shall submit relevant and valid registration certificate along with the tender. No certificate claiming any concession shall be considered after Tender due date

10. Purchaser reserves the option to increase /decrease the quantity to the extent of 25% of the tendered quantity

11. Purchaser reserves the right to accept or reject any quotation in full or part thereof by recording the reasons. The Purchaser shall be under no obligation to accept the lowest or any tender and reserves the right to accept whole or any part of the tender or part of the quantity offered and the Tenderers shall supply the same at the rates quoted

12. Purchaser also reserves the right to reject any offer in the event of non-compliance to tender terms and conditions.

13. Tenderers are advised to refrain from contacting by any means, either URSC and/or their employees/representatives on matters related to the tender which are under consideration. Adherence to this Clause is compulsory or otherwise the Tender will be rejected

14. The tender evaluation and process of award of works is done by duly authorized URSC Committee and this Committee is authorized to discuss and get clarification/s from the Tenderers, if any. The Tenderer/s may be asked to give a presentation on their technical bid and arrange for functional demonstration of the stores offered. No change in the substance of the bid or the price thereof shall be sought/offered/permitted.

15. Payment Terms:

16. All interim payments made shall be regarded as payments by way of advance against the final payment only, and not as payment for work actually completed and shall not preclude defective/imperfect/incomplete work to be removed. It will not be considered as an admission on the part of the Purchaser of the due performance of Contract or any part thereof nor shall it preclude, determine or affect in any way the powers of the Purchaser to determine the quality and quantity of work and issue such directions, as may be necessary to the Contractor

17. Terms of Payment

18. The Contractor[s] Bill will be processed 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 U R Rao Satellite Centre [URSC

19. For any Services, payment will be made after satisfactory completion of the services and certification to that effect from the Purchaser.

20. Any other payment terms offered by the Tenderers may be considered by the Purchaser provided that all such payments shall be against receipt of the items / satisfactory completion of service / identified verifiable milestones.

21. Bank Guarantee:

22. Performance Security [PS]:

Within 20 days from the date of issue of the Purchase Order or with in such extended time as may be granted by the Purchaser in writing, the Contractor shall execute an irrevocable interest free Performance Security for 3% only of the Contract value to ensure due Performance of the Contract including the fulfilment of the Warranty obligation. The proceeds of the performance security shall be payable to the Purchaser as compensation for any loss resulting from the Tenderer's failure to complete his obligations under the contract. The Purchaser shall discharge the performance security bond after completion of Tenderer's performance obligations including the warranty and post-warranty obligations under the contract.

23. Security Deposit [SD]:

Within 20 days from the date of issue of the Purchase Order or with in such extended time as may be granted by the Purchaser in writing, the Contractor shall execute an irrevocable interest free Security Deposit for 3% only of the Contract value to ensure due Performance of the Contract. The proceeds of the Security Deposit shall be payable to the Purchaser as compensation for any loss resulting from the Tenderer's failure to complete his obligations under the contract. The Purchaser shall discharge the

security deposit after completion of Contractor's obligations till acceptance of the items by URSC

24. Performance Bank Guarantee [PBG]:

The Contractor shall execute Performance Bank Guarantee for 3% value of the Purchase Order for fulfilment of Warranty obligations. The PBG shall be executed as per our specimen. The PBG shall be executed before claiming payment

25. The Contractor shall submit either (a) Performance Security OR (b) Security Deposit & Performance Bank Guarantee as mentioned above.

26. The Performance Security/Security Deposit/Performance Bank Guarantee may either be furnished in the form of an Account Payee Demand Draft; or Fixed Deposit Receipt from a Nationalized or Scheduled Bank, or Bank Guarantee from a Nationalized or Scheduled Bank or Online Payment in favour of Accounts Officer, U R Rao Satellite Centre [URSC], Bengaluru. The Bank Guarantee must be valid till its contractual obligation plus an additional period of 60 days beyond the date of completion of all contractual obligations

27. In the event the work is not completed within the stipulated period, the contractor shall get the Performance Security/Security Deposit be extended

28. The Bank Guarantee shall be executed on a Non-judicial stamp paper of appropriate value as per Specimen.

29. The Performance Security/Security Deposit/Performance Bank Guarantee will not carry any interest and shall be returned after completion of all the obligations of the Contract with a 'NO CLAIM CERTIFICATE ' issued by Contractor as per our Specimen enclosed.

30. In the event the Contractor fails to furnish the Performance Security/Security Deposit within 20 Days as stipulated hereinabove, i.e. after the receipt of Purchase Order or on signing of the Contract or any extension thereof, the Purchase Order/ Contract shall be cancelled and terminated at the Contractor's risk, cost and liability. The Earnest Money Deposit, if any executed shall be forfeited and appropriate penal and legal action shall be initiated.

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

32. Bank Guarantee towards Free Issue Materials (FIM):

a. The successful Tenderers shall furnish Bank Guarantee (BG) towards the cost of Free Issue Materials issued by Purchaser (if any) towards adequate Security for the FIM for the execution of the Contract and the said Tenderer will be duly authorized by PURCHASER to collect the free issue

materials from URSC's site subject to the furnishing of the aforesaid Bank Guarantee. The BG is to be kept valid till supply and acceptance of the final product. Adherence to this Clause is compulsory or otherwise the Tender will be rejected.

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

34. c. For Fabrication of items, in case FIM issued by URSC, the Supplier should quote the rates considering the Scrap Materials generated and taken over by Supplier

35. The Bank guarantee issued by the Issuing Bank on behalf of contractor/ supplier in favour of U R RAO SATELLITE CENTRE shall be in paper form as well as issued under Structured Financial Messaging System.

The details of beneficiary for issue of BG under SFMS platform is furnished below:

Name of the Beneficiary : U R Rao Satellite Centre,
Beneficiary Bank Name : State Bank of India,
Beneficiary Branch IFSC : SBIN0009048
Beneficiary Branch Name: ISRO Vimanapura Branch,
Bank Address : State Bank of India
ISRO Vimanapura Branch,
URSC Campus, HAL Airport Road,
Bengaluru : 560017

36. Packaging:

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.

37. High Sea Sale:

Tenderers submitting offer[s] against High Sea Sale Trade shall not be considered.

4. GENERAL TERMS AND CONDITIONS [4 of 9]

1. (b) ISRO Satellite Integration and Test Establishment (ISITE), Outer Ring Road, Marathahalli, Bengaluru 560 037

2. The Purchaser upon a written notice of default to the Contractor, shall be entitled to terminate the Contract by giving 30 days prior notice, in whole or in part, at the sole risk and cost of the Contractor, in circumstances detailed hereunder:-

3. 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

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

5. Guaranteed Time of Delivery:

6. Delivery period shall be specified in Tender. In case the tender calls for installation then the Tenderers shall mention the schedule for supply and installation separately. Time required for installation post supply shall be clearly defined to avoid any lag period between supply and installation/commissioning

7. The date of delivery of the stores stipulated in the Purchase Order/Contract shall be deemed to be the essence of the Purchase Order/Contract and delivery must be completed on or before the specified dates. In case of failure, Purchaser reserves the right to terminate/cancel the Order/Contract at his discretion.

8. Where erection or assembly or commissioning is a part of the Contract, it should be done immediately on notification. The Contractor shall be responsible for any loss / damage sustained due to the delay in fulfilling this responsibility.

9. For items having shelf life, those with maximum shelf life should be supplied if order is placed.

10. 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.

11. Mode of Dispatch: RAIL/ROAD

12. Ultimate Consignee:

13. Senior Purchase & Stores Officer [Stores]

14. (a)U R Rao Satellite Centre, P.B.No.1795, HAL Airport Road, Vimanapura Post, Bengaluru 560 017, India.

15. Insurance of the Stores:

No Insurance is required at U R Rao Satellite Centre [URSC] cost. The Contractor shall be responsible for insuring the Stores wherever considered necessary. The necessity or otherwise of Insurance will be as indicated in the Purchase Order.

16. Inspection and Acceptance Tests:

17. If in the opinion of the Purchaser, it becomes necessary to repair, replace or renew any defective Stores, such repair, replacement or renewal shall be made by the Contractor Free of all Cost 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 12 Months from the date of acceptance of Stores thereof

18. 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 Purchasers representative permission to inspect, examine and test and shall not release the Contractor from the obligations under this Contract.

19. 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.

20. 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

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

22. Pre-Delivery Inspection: Pre-Delivery Inspection if required, shall be carried out by URSC Engineers at the Contractors Factory Premises at our cost. The Contractor need not extend any Hospitality to our representatives.

23. Acceptance of Stores:

24. 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.

25. 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.

26. 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 will be rejected and the decision as to the rejection by the Purchaser shall be final and binding on the Contractor.

27. If the whole or any part of the Stores supplied are rejected 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

28. 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.

29. Contractor[s] Default Liability:

30. In the event of Purchaser terminating the Contract in whole or in part thereof, as provided hereinabove, 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 4(49-50) until such reasonable time as may be required for the final supply of Stores.

31. If Contract is terminated as provided in Clause 4(30-34) 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.

32. a) Any completed Stores

33. b) 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.

34. In the event, the Purchaser does not exercise its right to terminate the Contract as provided in Clause 4(30-34), 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 4(49-50) until the Stores are accepted

35. 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.

36. Rejection:

If the Stores supplied by the Contractor are found to be 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 repair, rectify, replace 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:-

37. a] Repair, Replace or rectify such defective Stores and recover extra cost so involved from the Contractor; or

38. b] Terminate the Contract for default as provided under Clause 5(2-13) above. The right to terminate and the right to replace the Stores shall not be derogatory to one another and shall mutually complement one another. In other words, the Purchaser shall be entitled to take either decision, or both.

39. Force Majeure:

40. 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 defects 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 12 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.

41. Neither party shall bear responsibility for 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

42. 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. The warranty for such replaced/repared items/stores shall be for 24 months from the date of handing over of such replaced/repared stores in complete and satisfactory condition to the Purchaser.

43. 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. The Warranty/Guarantee certificate has to accompany the shipment.

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

45. Even while the 12 months guarantee applies to all Stores in case where a greater period is called for by our Specifications then such a specification shall apply, in such cases the period of 12 months referred to in Clause 6(10-14) shall be the 'asked for' guarantee period plus 2 Months.

46. The party for whom it has become impossible to meet the obligation under this contract due to force majeure condition shall notify the other party in writing not later than 7 days from the date of the occurrence and cessation of the force majeure condition/s. In the event of delay lasting over one month, arising from force majeure causes, the Purchaser reserves the right to cancel the contract without any obligation to compensate the Tenderer in any manner. 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

47. Any Certificate issued by the Chamber of Commerce or any other competent authority or organization shall be sufficient proof of commencement and cessation of the above circumstances. In case of failure to carryout 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.

48. The Force Majeure condition is applicable only to the prime Contractor and Purchaser.

49. Delay in Completion/Liquidated Damages:

50. The time and date stipulated in the contract for completion of the work shall be deemed to be the essence of the contract. If the Contractor fails to deliver the Stores within the time specified in the

Contract or any extension thereof or if the Contractor fails to maintain the required progress or comply with the relevant provisions of the general conditions of contract or special conditions of contract, if any and clear the site on or before the contract or extended date of completion, the Purchaser shall, without prejudice to any other right or remedy available under the law to Purchaser on account of such breach, recover from the Contractor as Liquidated Damages a sum one-half of one percent [0.5 percent] of the Contract price of the undelivered Stores for each calendar week of delay or part thereof. The total Liquidated Damages shall not exceed Ten percent [10 percent] of the Contract price of the unit or units so delayed. Adherence and acceptance to this Clause is Compulsory or otherwise the Tender will be rejected.

51. In case of delay in delivery of the Stores beyond the delivery date stipulated in the Purchase Order/Contract or any extension thereof, such Stores shall be received without prejudice to the right of the Purchaser to claim Liquidated Damages and without prejudice to the terms and conditions of the Purchase Order/Contract.

52. Erection of Plant, Machinery and Installation of Software:

53. Wherever Erection of Plant or Machinery and Installation of Software is the responsibility of the Contractor as per the terms of the Contract and in case the Contractor fails to carry out the Erection and Installation of the Software 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 and Installation of the Software etc., done through any source/agency 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/payment due to such an action by the Purchaser.

54. If it appears to the authorised representative of the Purchaser that any work has been executed with unsound, imperfect or unskilful workmanship or with materials of any inferior quality or description, or that any materials or articles procured by the tenderer for the execution of the work are of unsound quality or of a quality inferior to that contracted for or otherwise not in accordance with the contract, the tenderer shall on demand in writing within 03 Months of the completion of the work from the said Authorised Representative notwithstanding that the same may have been passed, certified and paid for forthwith rectify, or remove and reconstruct the work so specified in whole or in part as the case may require remove the materials or articles so specified and provide other proper and suitable materials or articles at its own cost. In the event Tenderer fails to rectify or remove and re-execute the work or remove and replace with others, the material or articles complained of, as the case may be, it shall be so strictly at the risk and expense in all respects of the Tenderer, including the right to refund of payment received and also cost of rectification

55. Standard Warranty/Guarantee:

56. All products/stores supplied against the bid shall be of high reliability and shall carry

comprehensive free of cost warranty. The Contractor shall guarantee and certify that the Stores supplied shall comply fully with the specifications laid down, for material, workmanship and performance. The Purchaser expects the stores to be highly reliable which would result in lower maintenance and repair cost.

5. GENERAL TERMS AND CONDITIONS [5 of 9]

1. a) For repeated non-performance in the execution of Purchase Order/Contract.
2. b) If the Contractor fails to deliver the final Product within the stipulated delivery schedule or any extension thereof, granted by U R Rao Satellite Centre [URSC].
3. c) If the Stores repeatedly fails in the Inspection and does not pass Inspection and Quality requirements of Purchase Order/Contract and/or the Contractor is not in a position to either rectify the defects or offer the Stores conforming to the contracted Quality Standards.
4. d) If the Contractor is unable to rectify the defects or offer replacements in lieu of defective items.
5. e) If the final Product does not pass Inspection and Quality requirements of Purchase Order/Contract.
6. f) If the Contractor fails to perform any other obligations under P.O/Contract.
7. g) If the Contractor becomes bankrupt or otherwise insolvent.
8. h) Owing to deficiency of service, breach of Contract.
9. Under the normal circumstances, Termination/Short Closing of the Purchase Order/Contract is not foreseen. However, the Purchaser reserves the right to terminate the Contract in whole or in part by giving 30 days prior notice under any of the following circumstances:
 10. Termination:
 11. i) For inefficiency, indiscipline, irregularity, insincerity, indifference in work, indulges in corrupt practices, disobedience, doubtful credentials/integrity, etc., at any point of time during the Contract period.
 12. j) To terminate the Purchase Order/Contract at any time by giving 30 days prior notice
 13. k) If the Contractor becomes bankrupt or otherwise insolvent or any petition seeking its insolvency

is admitted by a Court/Tribunal of competent jurisdiction or if the Contractor applies for voluntary insolvency or enters into any arrangement for deferred payment to its creditors.

14. Parallel Contract: Purchaser reserves the right to enter into Parallel Contract/s with one or more Contractors for procurement of Stores or any portion thereof that is covered by this Contract.

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

16. 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 or disclosed 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 in favour of the Purchaser. 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, and shall be accompanied with a certificate of the Contractor signed by an authorised signatory that such technical information, drawings, etc. have been returned to the Purchaser and that the Contractor has not retained any copy/ies thereof with him.

17. Arbitration:

In the event of any dispute/s, difference/s or claim/s arising out of or relating to the interpretation and application of the Contract, such dispute/s or difference/s or claim/s shall be settled amicably by mutual consultations of the good Offices of the respective Parties and recognizing their mutual interests attempt to reach a solution satisfactory to both the parties. If such a resolution is not possible, within 30 days from the date of receipt of written notice of the existence of such dispute/s, then the unresolved dispute/s or difference/s or claim/s shall be referred to the Sole Arbitrator appointed by the Parties by mutual consent, in accordance with the rules and procedures of Arbitration and Conciliation Act 1996 together with amendments thereto or any modification thereof. The Arbitration shall be conducted in Bengaluru in the Arbitration and Conciliation Centre-Bengaluru (Domestic and International) as per its rules and regulations

18. The expenses for the Arbitration shall be shared equally or as may be determined by the Arbitrator. The considered and written decision of the Arbitrator shall be final and binding between the Parties.

The applicable language for Arbitration shall be 'English' only. Work under the contract shall be continued by the Tenderer during the pendency of arbitration proceedings, without prejudice to a final adjustment in the accordance with the decision of the Arbitrator unless otherwise directed in writing by the Purchaser or unless the matter is such that the works cannot be possibly continued until the decision (whether final or interim) of the Arbitrator is obtained. Adherence and acceptance to this Clause is Compulsory or otherwise the Tender will be rejected

19. 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 taken up by either party for resolution through AMRCD

20. 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. Any document originally in a language other than English must be accompanied with certified English translation and the same shall be considered for evaluation.

21. Applicable Law and Jurisdiction:

The Contract shall be interpreted, construed and governed by the Laws of India and the Courts in Bengaluru City alone shall have exclusive jurisdiction in this regard, to the extent permissible under the Arbitration and Conciliation Act, 1996 and subsequent Amendment, if any. Adherence and acceptance to this Clause is Compulsory or otherwise the Tender will be rejected

22. Indemnity:

The Contractor shall warrant and deemed to have warranted that all Stores supplied against this Contract are free and clean of infringement of any third party 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 third party 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 fulfilment of the Contract. The Contractor shall indemnify and keep indemnified the Purchaser against payments to be made under and for the observance of the applicable laws without prejudice to his right to claim indemnity from his sub-contractors, if any.

23. Counter Terms & Conditions:

Where counter terms and conditions printed or cyclostyled condition have been offered by the supplier as part of its bid, the same shall not be deemed to have been accepted by the Purchaser, unless specific written acceptance thereof, is obtained and incorporated into the Agreement to be entered into between the Parties, upon award of the Tender/Contract.

24. 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.

25. 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.

26. Purchase Preference to Public Sector Undertakings:

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

27. Risk Purchase:

28. In the event of failure of the supplier to deliver or dispatch the stores within the stipulated date/period of the supply order or in the event of breach of any of the terms and conditions mentioned in the supply order/ contract, Purchaser shall have the right to purchase the stores from elsewhere after due notice to the defaulting supplier at the risk and cost of the defaulting supplier. In the event of failure of the supplier as detailed above, the cost as per risk purchase exercise may be recovered from the Earnest Money Deposit/ Security Deposit/ Performance Security of the supplier and/or bills submitted by the supplier against the same contract or any other contract. GST will be charged / levied on Risk Purchase as per the provision of GST Act Rule thereon.

29. Risk purchase action may be initiated under any of the following conditions:

30. a) When the supplier fails to deliver the materials even after extending the delivery period.

31. b) When the supplier fails to respond to purchaser request for supply of the materials and fails to provide any genuine and bonafide reason for the delay in supply.

32. c) When the supplier breaches any of the terms and conditions of the supply order/ contract and as a result fails to execute the order satisfactorily.

33. Fall Clause:

34. 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 sells the Stores/Services or offer to sell the Stores/Services 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 Contract is completed.

35. 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 of 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 to the same lower rate.

6. GENERAL TERMS AND CONDITIONS [6 of 9]

1. Limitation of Liability:

2. The remedies stated in the 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 the contract, the Contractor's total liability to the Purchaser, whether in Contract shall not exceed the total amount paid to the Contractor under the Contract

3. 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

4. The Purchaser shall not be liable to the Contractor for any loss or damages suffered by it during the term of the Contract or subsequently, 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 the Contract, the Contract having been satisfactorily completed, the Purchaser's total liability to the Contractor, shall not exceed the total amount to be paid to the Contractor under the Contract.

5. Buy Back Offer:

Wherever it is 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

6. Rejection of Bids:

Canvassing by the Tenderer in any form, unsolicited letter and post-tender correction may invoke

summary rejection of Bids. Conditional Tenders will be rejected. The Tenderer shall not impose any conditions on the bid i.e. the bid must be unconditional

7. Conditional Discounts Offers will not be considered.

8. 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. Purchaser 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

9. Changes in the Name and Address of the Supplier:

In the event of Change in Name and Address of Tenderer/Contractor, Documentary Proof issued by the Appropriate Government Authorities shall be produced for making such change in the Contract and its procedures, in the absence of which PO/Amendment/Payment will not be released.

10. Annual Maintenance Contract [AMC]/Extended Warranty:

11. 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

12. Payment for Extended warranty support: After the completion of Standard warranty period, the payment towards extended warranty support shall be released on monthly/quarterly/half yearly/yearly after successful completion of service

13. Payment for Annual Maintenance contract: The payment towards annual maintenance contract shall be released monthly/quarterly/half yearly/yearly basis after successful completion of the maintenance services

14. In case of Non-Comprehensive AMC, Tenderers shall provide essential spare list with its price. In case of TWO PART Tender, same shall be provided along with PRICE BID as any disclosure of Price in Techno-commercial bid amounts for rejection.

15. Validity of Offer:

The offer should be valid for a minimum period of 90 days for single part tender and 180 days for two part tender from the date of opening of the tender.

16. Financial Viability

17. Average Financial Turnover for the preceding 03 Financial Years has to be provided by the Tenderer along with the Quotation otherwise the Bid will be rejected. This should be supported with three years Profit and Loss Account and Balance Sheet duly authenticated by Chartered Accountant.

18. Details of Financial capacity of the Firm Viz., details of Audited Balance Sheet including Profit and Loss account for the last 03 years certified by Chartered Accountant along with comments of Auditors has to be submitted by the Tenderer along with the Quotation

19. Self-assessment technical and organizational competence to Supply the Stores of this nature and magnitude.

20. The Tenderer shall propose a viable Financial Plan/Model for successful execution of the Project, explaining Liquidity and Solvency capacity of the Firm which is equivalent to 100% of the Contract Value. The same shall be supported with documentary proof obtained from the Bankers.

21. The Financial Statements/Documents requested hereinabove wherever applicable, depends upon the value of PO/Contract/Project which is solely at the discretion of URSC and the Tenderers shall not have any right to contest/question the discretion of URSC.

22. Preparation of Comparative Statement of Tenders:

23. While preparing the Comparative Statement of Tenders [CST] appropriate Marginal Cost of funds based Lending Rate [MCLR] or any other rate as notified by Reserve Bank of India from time to time, shall be loaded in all cases where the Vendors have demanded for Advance Payment / Milestone Payment in order to arrive at Landed Cost of the quotations received and evaluation of quotations shall be made accordingly.

24. Tenderer[s] are requested to acknowledge the receipt of Tender Document. In the event, Tenderer[s] are unable to submit their offer[s] for various reasons, we appreciate if you can kindly send us a regret letter.

7. GENERAL TERMS AND CONDITIONS [7 of 9]

1. (c) Class-II local supplier will not get purchase preference

2. Verification of local content:

3. 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 herein before, including any agency branch or office controlled by such person, participating in a procurement process.

4. Government Policies & Guidelines:

5. Start-ups

The facilities/benefits will be extended for start-ups as per the Guidelines issued by Government of India, only if they technically qualify for tendered specifications

6. Public Procurement [Preference to Make in India]:

7. Public Procurement (Preference to Make in India) order 2017- revision issued by Government of India, Department of Promotion of Industry and Internal Trade [DPIIT] Public Procurement [preference to Make in India] vide Order No P-45021/2/2017-PP(BE II) dated 16/09/2020 or as amended thereafter. The Tenders submitted are subjected these orders

8. Bidders are required to submit necessary certificates & documents as detailed in the above referred GOI Order in support of their claim to avail benefit against this order. The bidders who claim Purchase Preference under Make in India Policy shall fulfill all requirements of tender document applicable for Indigenous Manufacturer. FAILURE TO SUBMIT THE REQUIRED DOCUMENTS MAY RENDER A TENDER UNACCEPTABLE.

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

10. Local Supplier: Class-I Local Supplier means a supplier whose product offered for procurement has local content equal to or more than 50%. Class-II Local Supplier means a supplier whose product offered for procurement has local content more than 20% but less than 50%. Non-Local Supplier means a supplier whose product

11. Margin of Purchase Preference: For being eligible for purchase preference under this clause, the Margin of purchase preference shall be 20% (i.e. L1 + 20% band).

12. Preference: Purchase Preference shall be given to Class-I Local Supplier only in the manner specified here under:

13. (a) In the procurement of Goods which are divisible in nature:

14. i. If L1 is from a Class-I local supplier, the contract for full quantity will be awarded to L1.

15. ii. If L1 is not a Class-I local supplier, 50% of the order quantity shall be awarded to L1. Thereafter, the lowest bidder among the Class-I local supplier will be invited to match the L1 price for the remaining 50% quantity subject to the Class-I local supplier(s) quoted price falling within the margin of purchase preference, and contract for that quantity shall be awarded to such Class-I local supplier subject to matching the L1 price. In case such lowest eligible Class-I local supplier fails to match the L1 price or accepts less than the offered quantity, the next higher Class-I local supplier within the margin of purchase preference shall be invited to match the L1 price for remaining quantity and so on, and contract shall be awarded accordingly. In case some quantity is still left uncovered on Class-I local supplier, then such balance quantity may also be ordered on the L1 bidder

16. (b) In the procurement of Goods which are not divisible in nature:

17. i. If L1 is Class-I local supplier, the contract for full quantity will be awarded to L1

18. ii. If L1 is not Class-I local supplier, the lowest bidder among the Class-I local supplier will be invited to match the L1 price subject to the Class-I local supplier(s) quoted price falling within the margin of purchase preference, and the contract shall be awarded to such local supplier subject to matching the L1 price.

19. iii. In case such lowest eligible Class-I local supplier fails to match the L1, the Class-I local supplier with the next higher bid within the margin of purchase preference shall be invited to match the L1 price and so on and contract shall be awarded accordingly. In case none of the local suppliers within the margin of purchase preference matches the L1 price, then the contract may be awarded to the L1 bidder

20. i. The Class-I local supplier / Class-II local supplier at the time of bidding shall be required to indicate percentage of Local Content and provide self-certification that the items offered meet the local content required for Class-I local supplier/ Class-II local supplier and shall give the details of the location(s) at which the local value addition is made .

21. ii. False declarations will attract banning of business of the bidder or its successor(s) for a minimum period of three years along with any other penal action as may be deemed fit including rejection of the offer, forfeiture of all dues including EMD/ Security Deposit / banning of the firm.

22. iii. A supplier who has been debarred by any procuring entity for violation of this order shall not be eligible for preference for procurement for the duration of debarment. It will be the bidders responsibility to provide self-certification, clearly stating that the bidder is not serving debarment from any procuring entity for the tendered item at the time of tendering.

23. Restrictions under Rule 144 (xi) of the General Financial Rules (GFR), 2017:

24. 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. The Competent authority for the purpose of registration shall be the Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT), Government of India

25. Bidder from a country which shares a land border with India for the purpose of this order means:

26. i) An entity incorporated, established or registered in such a country; or

27. ii) A subsidiary of an entity incorporated, established or registered in such a country; or

28. iii) An entity substantially controlled through entities incorporated, established or registered in such a country; or

29. iv) An entity whose beneficial owner is situated in such a country; or

30. v) An Indian (or other) agent of such an entity; or

31. vi) A natural person who is a citizen of such a country; or

32. vii) A consortium or joint venture where any member of the consortium or joint venture falls under any of the above.

33. The beneficial owner for the purpose of above will be as under:

34. i) In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together or through one or more juridical person, has a controlling ownership interest or who exercises control through other means

35. Explanation --- Controlling Ownership Interest means ownership of or entitlement to more than twenty-five per cent of shares or capital or profits of the company;

36. Control shall include the right to appoint majority of the Directors or to control management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;

37. 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 per cent of capital or profits of the partnership;

38. 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 per cent of the property or capital or profits of such association or body of individuals;

39. 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;

40. 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 per cent 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.

41. vi) An agent is a person employed to do any act for another, or to represent another in dealings with third person.

42. vii) The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with a Competent Authority.

43. Model Certificate for Tenders

44. I have read the clause regarding restriction 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 fulfils all requirement in this regard and is eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority shall be attached.]

45. Model Certificate for Tenders for Works involving possibility of sub-contracting:

46. I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India or sub-contracting to contractors 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 for any work to a contractor from such countries unless such contractor is registered with the Competent Authority. I hereby certify that this bidder fulfils all requirements in this regard and is eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority shall be attached.]

47. Government e-Market place [GeM]:

48. In terms of Rule No.149 of GFR 2017 Purchaser is authorized to procure Goods and Services through Online Government e-Market place [GeM] for common use Goods and Services which are available in GeM.

49. As per Office Memorandum No 6/9/2020-PPD dated 24/08/2020 of Department of Expenditure, it shall be mandatory for sellers providing Goods and Services to Central Government Organizations to be registered on GeM and obtain a Unique GeM Seller ID, at the time of Placement of Order/acceptance of contract. Tenderers shall ensure the same

8. GENERAL TERMS AND CONDITIONS [8 of 9]

1. *We [name of manufacturer] hereby confirm in respect of quoted item(s) that Local Content is more than 20% but less than 50% and come under Class-II Local Supplier Category.

2. The details of the location(s) at which the local value addition made is/are as under:

3. 1.XXXXXXXXXXXXXXXXXX

4. 2.XXXXXXXXXXXXXXXXXX

5. 3. XXXXXXXXXXXXXXXX

6. * Strike out whichever is not applicable

7. Date:

8. Seal & Signature of the Bidder:

9. Self-Certificate for Local Content:

10. *We [name of manufacturer] hereby confirm in respect of quoted item(s) that Local Content is equal to or more than 50% and come under Class-I Local Supplier Category. As being Class-I Local Supplier, we are eligible for Preference to Make in India) order 2017- revision issued by Government of India, Department of Promotion of Industry and Internal Trade [DPIIT] Public Procurement [preference to Make in India] vide Order No P-45021/2/2017-PP(BE II) dated 16/09/2020 or as amended thereafter.

11. ---OR---

9. GENERAL TERMS AND CONDITIONS [9 of 9]

1. [on Company Letterhead]

2. Sub: Contract Agreement No. _____ dated _____ for supply of _____

3. We have received the sum of Rs. _____ [Rupees _____ Only] in full and final settlement of all the payments due to us for providing the services of _____ under the above mentioned contract agreement, between us and Government of India. We hereby unconditionally and without any reservation whatsoever, certify that with this payment, we shall have no claim whatsoever, on any account, against procuring entity, against aforesaid contract agreement executed by us. We further declare unequivocally, that with this payment, we have received all the amounts payable to us, and have no dispute of any description whatsoever, regarding the amounts worked out as payable to us and received by us, and that we shall continue to be bound the terms and conditions of the contract agreement, as regards performance of the contract

4. Yours faithfully,

5. Signatures of Contractor or Officer
authorized to sign the contract
documents On behalf of the
contractor [Company stamp]

6. Date: _____

7. Place: _____

C. Bid Templates

C.1 Technical Bid - Embedded Software Defined Radio Transceiver

1. Embedded Software Defined Radio Transceiver

Item specifications for Embedded Software Defined Radio Transceiver

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Operating Modes	1.Standalone (Embedded) Mode-I,Q samples processed in embedded System on Chip 2.Host PC based(Network Streaming) Mode-I,Q samples streamed to host PC for signal processing	Yes / No / Explain		
2	Number of Receivers	2	Yes / No / Explain		
3	Number of Transmitters	2	Yes / No / Explain		
4	Frequency	70 MHz to 6 GHz	Yes / No / Explain		
5	Maximum Instantaneous RF Bandwidth	56 MHz or better	Yes / No / Explain		
6	Tunable Channel Bandwidth	200 KHz to 56 MHz or better	Yes / No / Explain		
7	Power Output	0 dBm or better	Yes / No / Explain		
8	Maximum Receiver - Input power	-15 dBm	Yes / No / Explain		
9	Receive Noise Figure	Less than 8 dB	Yes / No / Explain		
10	Gain Control	Automatic Gain Control & Manual Gain control	Yes / No / Explain		
11	Receiver Front end Analog gain	60 dB or greater	Yes / No / Explain		

12	LO Leakage (measured at receiver front end input)	-90 dBm or better	Yes / No / Explain		
13	RF input and output, GPS reference signal , External Reference , PPS input connector type	SMA-F	Yes / No / Explain		
14	RF Front End Programmability	Receive and Transmit Chains should be individually programmable with separate LOs.	Yes / No / Explain		
15	Synchronization Specifications	Integrated GPS Disciplined Oscillator (GPSDO) Provision for External 10 MHz Clock reference Provision for External PPS time reference	Yes / No / Explain		
16	GPSDO PPS accuracy to UTC	Less than 8 ns	Yes / No / Explain		
17	Frequency Stability over Temperature (0 deg to + 60 deg Celsius) of internal TCXO without GPS Lock	+/- 0.1 ppm or better	Yes / No / Explain		
18	Phase noise of internal oscillator @ 1KHz offset	Less than -135 dBc/Hz	Yes / No / Explain		
19	Maximum ADC Sample rate	60 Mega Samples per Second(MS/s) or better	Yes / No / Explain		
20	ADC resolution	12 bits or better	Yes / No / Explain		
21	Maximum DAC Sample rate	60 Mega Samples per Second(MS/s) or better	Yes / No / Explain		
22	DAC resolution	12 bits or better	Yes / No / Explain		
23	Maximum Sample rate to host PC over 1/10 Gigabit Ethernet (1 Sample = 16 bit I + 16 bit Q)	60 Mega Samples per Second(MS/s) or better	Yes / No / Explain		
24	Network Port for Near Real time Sample streaming to External Host Computer	1 SFP+ port(10 Gigabit Ethernet, 1 Gigabit Ethernet) or better	Yes / No / Explain		

25	Network Port for accessing Embedded Computer	1 Gigabit Ethernet (RJ 45) port or better	Yes / No / Explain		
26	USB	1 port minimum Type A USB host port	Yes / No / Explain		
27	Micro-USB	1 port minimum micro-USB port (serial console, JTAG))	Yes / No / Explain		
28	Processor	800 MHZ Dual Core CPU with 1 GB DDR3 RAM or better	Yes / No / Explain		
29	FPGA-Programmable Logic Cells	350K or better	Yes / No / Explain		
30	FPGA- DSP Slices (18x25 MACCs)	900 or better	Yes / No / Explain		
31	FPGA-RAM	2 GB DDR3 RAM or better	Yes / No / Explain		
32	Non Volatile Memory	8 GB or better	Yes / No / Explain		
33	Specifications of SDR Transceiver Hardware Driver for HOST PC	1.Hardware Driver Compatible and Installable on Fedora / Debian based Linux Operating System on External HOST PC 2.Hardware driver installed on Linux based External HOST PC should have C/C++ based API for programming SDR Transceiver settings & data streaming 3.Compatible with GNU Radio / Linux OS on External HOST PC	Yes / No / Explain		
34	Specifications of Software installed on Embedded system in SDR Transceiver	Pre-Installed Open Embedded Linux Operating System for deploying applications in standalone mode	Yes / No / Explain		
35	Operating Temperature	10 to 45 deg C	Yes / No / Explain		
36	Operating Humidity	10 -90 %	Yes / No / Explain		

37	Operating Mechanical shock	Shall meet MIL-PRF-28800F Class 2 limits	Yes / No / Explain		
38	Form Factor	19" rack mountable 2U Maximum OR Table top with full enclosure and passive cooling	Yes / No / Explain		
39	Power supply	220 V (± 10 %) 50 Hz nominal or DC power with a compatible adaptor shall be supplied	Yes / No / Explain		
40	Accessories	1 G SFP + to RJ 45 Adapter 10 G SFP + to RJ 45 Adapter Micro USB Cable	Yes / No / Explain		
41	Warranty	Standard 1 Year manufacturer warranty	Yes / No / Explain		
42	Certifications	RoHS Compliance	Yes / No / Explain		

43	Important terms and conditions:	<p>1. Point to point compliance statement to be attached with datasheet, please note that without this, quote is liable to be rejected.</p> <p>2.Quote should be from OEM (Original Equipment manufacturer) or their valid authorized Indian representative only. Latest authorization certificate shall be enclosed</p> <p>3.All applicable accessories to be supplied by vendor</p> <p>4.All the hardware and firmware support required to derive the above specifications shall be pre-installed on the equipment and shall work on standalone basis</p> <p>5.All software upgrade within warranty period from the date of Installation & acceptance shall be provided free of cost</p> <p>6.Vendor shall quote for the latest model of the equipment</p>	Yes / No / Explain		
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Common Specifications (Applicable for all items)

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	Operating Modes	<ul style="list-style-type: none"> •Standalone (Embedded) Mode-I,Q samples processed in embedded System on Chip •Host PC based(Network Streaming) Mode-I,Q samples streamed to host PC for signal processing 	Yes / No / Explain		
2	Number of Receivers	2	Yes / No / Explain		

3	Number of Transmitters	2	Yes / No / Explain		
4	Frequency	70 MHz to 6 GHz	Yes / No / Explain		
5	Maximum Instantaneous RF Bandwidth	56 MHz or better	Yes / No / Explain		
6	Tunable Channel Bandwidth	200 KHz to 56 MHz or better	Yes / No / Explain		
7	Power Output	0 dBm or better	Yes / No / Explain		
8	Maximum Receiver - Input power	-15 dBm	Yes / No / Explain		
9	Receive Noise Figure	Less than 8 dB	Yes / No / Explain		
10	Gain Control	Automatic Gain Control & Manual Gain control	Yes / No / Explain		
11	Receiver Front end Analog gain	60 dB or greater	Yes / No / Explain		
12	LO Leakage (measured at receiver front end input)	-90 dBm or better	Yes / No / Explain		
13	RF input and output, GPS reference signal , External Reference , PPS input connector type	SMA-F	Yes / No / Explain		
14	RF Front End Programmability	Receive and Transmit Chains should be individually programmable with separate LO's	Yes / No / Explain		
15	Synchronization Specifications	1.Integrated GPS Disciplined Oscillator (GPSDO) 2. Provision for External 10 MHz Clock reference 3.Provision for External PPS time reference	Yes / No / Explain		
16	GPSDO PPS accuracy to UTC	Less than 8 ns	Yes / No / Explain		

17	Frequency Stability over Temperature (0 deg to + 60 deg Celsius) of internal TCXO without GPS Lock	+/- 0.1 ppm or better	Yes / No / Explain		
18	Phase noise of internal oscillator @ 1KHz offset	Less than -135 dBc/Hz	Yes / No / Explain		
19	Maximum ADC Sample rate	60 Mega Samples per Second(MS/s) or better	Yes / No / Explain		
20	ADC resolution	12 bits or better	Yes / No / Explain		
21	Maximum DAC Sample rate	60 Mega Samples per Second(MS/s) or better	Yes / No / Explain		
22	DAC resolution	12 bits or better	Yes / No / Explain		
23	Maximum Sample rate to host PC over 1/10 Gigabit Ethernet (1 Sample = 16 bit I + 16 bit Q)	60 Mega Samples per Second(MS/s) or better	Yes / No / Explain		
24	Network Port for Near Real time Sample streaming to External Host Computer	1 SFP+ port(10 Gigabit Ethernet, 1 Gigabit Ethernet) or better	Yes / No / Explain		
25	Network Port for accessing Embedded Computer	1 Gigabit Ethernet (RJ 45) port or better	Yes / No / Explain		
26	USB	1 port minimum Type A USB host port	Yes / No / Explain		
27	Micro-USB	1 port minimum micro-USB port (serial console, JTAG))	Yes / No / Explain		
28	Processor	800 MHZ Dual Core CPU with 1 GB DDR3 RAM or better	Yes / No / Explain		
29	FPGA- Programmable Logic Cells	350K or better	Yes / No / Explain		
30	FPGA- DSP Slices (18x25 MACCs)	900 or better	Yes / No / Explain		

31	FPGA-RAM	2 GB DDR3 RAM or better	Yes / No / Explain		
32	Non Volatile Memory	8 GB or better	Yes / No / Explain		
33	Specifications of SDR Transceiver Hardware Driver for HOST PC	1.Hardware Driver Compatible and Installable on Fedora / Debian based Linux Operating System on External HOST PC 2.Hardware driver installed on Linux based External HOST PC should have C/C++ based API for programming SDR Transceiver settings & data streaming 3.Compatible with GNU Radio / Linux OS on External HOST PC	Yes / No / Explain		
34	Specifications of Software installed on Embedded system in SDR Transceiver	Pre-Installed Open Embedded Linux Operating System for deploying applications in standalone mode	Yes / No / Explain		
35	Operating Temperature	10 to 45 deg C	Yes / No / Explain		
36	Operating Humidity	10 – 90 %	Yes / No / Explain		
37	Operating Mechanical shock	Shall meet MIL-PRF-28800F Class 2 limits	Yes / No / Explain		
38	Form Factor	19" rack mountable 2U Maximum OR Table top with full enclosure and passive cooling	Yes / No / Explain		
39	Power supply	220 V (\pm 10 %) 50 Hz nominal or DC power with a compatible adaptor shall be supplied	Yes / No / Explain		
40	Accessories	1 G SFP + to RJ 45 Adapter 10 G SFP + to RJ 45 Adapter Micro USB Cable	Yes / No / Explain		
41	Warranty	Standard 1 Year manufacturer warranty.	Yes / No / Explain		
42	Certifications	RoHS Compliance	Yes / No / Explain		

43	Important terms and conditions:	<ul style="list-style-type: none"> •Point to point compliance statement to be attached with datasheet, please note that without this, quote is liable to be rejected. •Quote should be from OEM (Original Equipment manufacturer) or their valid authorized Indian representative only. Latest authorization certificate shall be enclosed. •All applicable accessories to be supplied by vendor. •All the hardware and firmware support required to derive the above specifications shall be pre-installed on the equipment and shall work on standalone basis. •All software upgrade within warranty period from the date of Installation & acceptance shall be provided free of cost. •Vendor shall quote for the latest model of the equipment. 	Yes / No / Explain		
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Supporting Documents required from Vendor

1. OEM Authorization Certificate

2. Point to point compliance statement with Specifications

3. Technical data sheets

5 additional documents can be uploaded by the vendor

C.2 Price Bid

Sl. No.	Item	Quantity	Unit Price	Currency	Total Price	Remark
1	Embedded Software Defined Radio Transceiver	1.0 - 4.0 Each		-		
		5.0 - 8.0 Each		-		
		9.0 - 12.0 Each		-		