

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

Tender for Checkout Hardware Realization, Testing and Delivery

Bids to be submitted online

Tender No.: URSC/PR/IS202500040001 dated 16-05-2025

A. Tender Details

Tender No : **URSC/PR/IS202500040001**

Tender Date : **16-05-2025**

Tender Classification: **GOODS**

Purchase Entity : **PR**

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

Checkout Hardware Realization, Testing and Delivery

1.Important Notice to Tenderer(s): 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 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.

2.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.

3.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.

4.All the tenderers shall furnish break-up values in their quotes that clearly indicates basic cost of the service/good and GST Separately Lump Sum/ All-inclusive price quotes shall not be entertained.

5.We are exempted from the Custom Duty Exemption Certificate under Customs Notification No.12/2012 Customs dated:17/03/2012 superseded by Customs Notification No.50/2017-customs dated:30/06/2017.

6.INTERSTATE: Government of India, Ministry of Finance (Department of Revenue) vide its Notification No. 6/2018-Central Tax (Rate), dated the 25th January, 2018, read with Notification No.24/2018-Central Tax (Rate) dated the 31st December, 2018, have inserted the serial number 243B under Chapter 88 or Any other chapter wherein it is specified that the CGST @ the rate of 2.5% shall be applicable for Scientific and technical instruments, apparatus, equipment, accessories, parts, components, spares, tools, mock ups and modules, raw material and consumables required for launch vehicles and satellites and payloads.

7.INTRASTATE: Government of India, Ministry of Finance (Department of Revenue) vide its Notification No. 7/2018-Integrated Tax (Rate), dated the 25th January, 2018, read with Notification No.25/2018-Integrated Tax (Rate) dated the 31st December, 2018, have inserted the serial number 243B under Chapter 88 or Any other chapter wherein it is specified that the IGST @ the rate of 5% shall be applicable for Scientific and technical instruments, apparatus, equipment, accessories, parts, components, spares, tools, mock ups and modules, raw material and consumables required for launch

vehicles and satellites and payloads.

8.Any bidder from a country which shares a land border with India will be eligible to bid in any procurement whether of goods, services (including consultancy services and non-consultancy services) or works (including turnkey projects) only if the bidder is registered with the Competent Authority. 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).

9.Please provide contact details.

10.Quotation shall be accepted in INR only.

A.1 Tender Schedule

Tender Publish Date : **16-05-2025 16:30**

Bid Clarification Due Date : **26-05-2025 10:00**

Bid Submission Start Date : **16-05-2025 16:30**

Bid Submission Due Date : **23-06-2025 14:00**

Bid Opening Date : **23-06-2025 15:00**

Price Bid Opening Date : **23-06-2025 16:00**

A.2 Pre-bid Meeting Details

Date : **26-05-2025 10:00**

Place : **First Floor-C&MG Conference Hall on 26.05.2025 @ 10.00 AM**

Location : **U. R. RAO SATELLITE CENTRE (URSC), BANGALORE, KARNATAKA**

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

Details : **No clarifications post pre-bid meeting will be entertained. Vendors are advised to come prepare with their queries on pre-bid meeting.**

B. Tender Attachments

Technical Write-up/Drawings

Document : 2. Technical document

Document : 1. RFP

Document : 10. Testing

Document : 9. HSDRS -

Document : 8. TTCP -

Document : 7. TMTC

Document : 6. SCOS -

Document : 5. STG -

Document : 4. SAS --

Document : 3. PCU-

Instructions To Vendors

C. Bid Templates

C.1 Technical Bid - Checkout Hardware Realization, Testing and Delivery

- 1. Checkout Hardware-Rack1-BHC-1 Rack-TM-TC Interface Unit**
- 2. Checkout Hardware-Rack1-BHC-1 Rack-BAS**
- 3. Checkout Hardware - Rack1-BHC-1 Rack-LP-BAS**
- 4. Checkout Hardware - Rack1-BHC-1 Rack-BCU**
- 5. Checkout Hardware - Rack1-BHC-1 Rack-SCOS Controller**
- 6. Checkout Hardware - Rack1-BHC-1 Rack-PCU**
- 7. Checkout Hardware - Rack1-BHC-1 Rack-SDU-LP**
- 8. Checkout Hardware - Rack1-BHC-1 Rack-SDU-HP**
- 9. Checkout Hardware - Rack1-BHC-1 Rack- 33U Rack & Accessories**
- 10. Checkout Hardware- Rack2-SAS Rack-SAS**
- 11. Checkout Hardware - Rack2-SAS Rack-BAS**
- 12. Checkout Hardware - Rack2-SAS Rack-SDU-SAS**
- 13. Checkout Hardware - Rack2-SAS Rack-STG**
- 14. Checkout Hardware - Rack2-SAS Rack-33U Rack & Accessories**

15. Checkout Hardware - Rack3-OCOS-Baseband-1 Rack-TTCP
16. Checkout Hardware - Rack3-OCOS-Baseband-1 Rack-AC Fluctuations Protector Unit
17. Checkout Hardware - Rack3-OCOS-Baseband-1 Rack-Network Switch-Type1
18. Checkout Hardware - Rack3-OCOS-Baseband-1 Rack-22U Rack & Accessories
19. Checkout Hardware - Rack4-OCOS-TTCRF-1 Rack-Switch Driver Unit
20. Checkout Hardware - Rack4-OCOS-TTCRF-1 Rack-RF Test Selection Matrix Unit
21. Checkout Hardware - Rack4-OCOS-TTCRF-1 Rack-S-Band-Up-Converter
22. Checkout Hardware - Rack4-OCOS-TTCRF-1 Rack-S-Band-Down-Converter
23. Checkout Hardware - Rack4-OCOS-TTCRF-1 Rack-AC-Fluctuations protector unit
24. Checkout Hardware - Rack4-OCOS-TTCRF-1 Rack-33U Rack & Accessories
25. Checkout Hardware - Rack5-Payload Rack-Ka-Band-Down-Converter
26. Checkout Hardware - Rack5-Payload Rack-ISL Tx/Rx
27. Checkout Hardware - Rack5-Payload Rack-AC-Fluctuations protector unit
28. Checkout Hardware - Rack5-Payload Rack-Network-Switch-Type2
29. Checkout Hardware - Rack5-Payload Rack-33U Rack & Accessories
30. Checkout Hardware - Rack6-BHC2 Rack-TM-TC-Interface-Unit

- 31. Checkout Hardware - Rack6-BHC2 Rack-BAS**
- 32. Checkout Hardware - Rack6-BHC2 Rack-BCU**
- 33. Checkout Hardware - Rack6-BHC2 Rack-SCOS-Controller**
- 34. Checkout Hardware - Rack6-BHC2 Rack-PCU**
- 35. Checkout Hardware - Rack6-BHC2 Rack-SDU-LP**
- 36. Checkout Hardware - Rack6-BHC2 Rack-SDU-HP**
- 37. Checkout Hardware - Rack6-BHC2 Rack-33U Rack & Accessories**
- 38. Checkout Hardware - Rack7-OCOS-Baseband-2 Rack-TTCP**
- 39. Checkout Hardware - Rack7-OCOS-Baseband-2 Rack-AC-Fluctuations protector unit**
- 40. Checkout Hardware - Rack7-OCOS-Baseband-2 Rack-Network-Switch-Type1**
- 41. Checkout Hardware - Rack7-OCOS-Baseband-2 Rack-22U Rack & Accessories**
- 42. Checkout Hardware - Rack8-OCOS-TTCRF-2 Rack-Switch-Driver-Unit**
- 43. Checkout Hardware - Rack8-OCOS-TTCRF-2 Rack-RF-Test-Selection-Matrix**
- 44. Checkout Hardware - Rack8-OCOS-TTCRF-2 Rack-S-Band-Up-Converter**
- 45. Checkout Hardware - Rack8-OCOS-TTCRF-2 Rack-S-Band-down-Converter**
- 46. Checkout Hardware - Rack8-OCOS-TTCRF-2 Rack-ISL-TX/RX**

47. Checkout Hardware - Rack8-OCOS-TTCRF-2 Rack-AC-Fluctuations protector unit
48. Checkout Hardware - Rack8-OCOS-TTCRF-2 Rack-33U Rack & Accessories
49. Checkout Hardware - Rack8-OCOS-TTCRF-2 Rack-Ka-Band-Down-Converter
50. Checkout Hardware - Stand -Alone-Equipments-Digital-Oscilloscope
51. Checkout Hardware - Stand -Alone-Equipments-Current-Probe
52. Checkout Hardware - Stand -Alone-Equipments-Digital Multimeter
53. Checkout Hardware - Stand -Alone-Equipments-Precision Multimeter
54. Checkout Hardware - Stand -Alone-Equipments-AC-Voltage-Fluctuation-Protector
55. Checkout Hardware- Stand -Alone-Equipments-SCC-Clients
56. Checkout Hardware - Stand -Alone-Equipments-High-End-Computer-Workstation
57. Checkout Hardware - Stand -Alone-Equipments-Junction-Box
58. Checkout Hardware - Stand -Alone-Equipments-Black and White Printer
59. Checkout Hardware - Stand -Alone-Equipments-Network-Switch-Type1
60. Checkout Hardware - Stand -Alone-Equipments-High-Data-Rate-Reception-System
61. Checkout Hardware - Stand -Alone-Equipments-Payload-Checkout-Computers
62. Checkout Hardware - Stand -Alone-Equipments-Network-Switch-Type-2

63. Checkout Hardware - Stand -Alone-Equipments-ISL-TX/RX

64. Checkout Hardware - Stand -Alone-Equipments-Power-Meter-with 2 -Power-sensors

65. Checkout Hardware - Stand -Alone-Equipments-Spectrum Analyser

66. Checkout Hardware - Stand -Alone-Equipments-Signal-Generator

67. Checkout Hardware - Interconnecting DC Harness & cables for Rack Assembly of Racks - 1,2 and 6(as per Technical document Section 3.10, Table 10)

68. Checkout Hardware - Baseband cables and LAN Cables for Rack-3 and 7(as per Technical document Section 3.11, Table 12)

69. Checkout Hardware - RF Accessories, Cables and Connectors (as per Technical document Section 3.12, Table- 14, 16, 18, 20 and 21)

70. Checkout Hardware - Fabrication ,Installation, and Testing for 18 RACKS

71. Checkout Hardware - Documentation for Set1 and Set2 deliverables

Common Specifications (Applicable for all items)

| SI No | Specification | Value | Compliance | Offered Specification | Remark |
|-------|--|--------------------------|--------------------|-----------------------|--------|
| 1 | As per the RFP and Technical document of Checkout Hardware Realization, Testing and Delivery | Included in the document | Yes / No / Explain | | |

Supporting Documents required from Vendor

5 additional documents can be uploaded by the vendor

C.2 Commercial Terms / Bid

| Sl. No. | Description | Compliance | Vendor Terms |
|---------|---|--------------------|--------------|
| 1 | nil | Yes / No / Explain | |
| 2 | Provide compliance for General terms and conditions which is attached as a separate sheet in a document folder. | Yes / No / Explain | |
| 3 | Indicate the applicable Rate of GST for the quoted item/s | Yes / No / Explain | |
| 4 | Taxes : 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. | Yes / No / Explain | |
| 5 | Indicate the applicable HSN code/s for the quoted item/s | Yes / No / Explain | |
| 6 | Have you noted the applicability of GST in clause 6.0 of our General Terms and conditions attached to this Tender | Yes / No / Explain | |

| | | | |
|---|--|--------------------|--|
| 7 | <p>Dispute resolution between the buyer and the seller / service provider: i. In the event of any conflict or dispute arising out of or in connection with the Contract placed through EGPS, the Parties shall endeavour to settle such disputes amicably. If a dispute is not resolved within 30, (thirty) days after a written notice of any dispute by one Party to the other, the same shall then be resolved through the mechanism of a Dispute Resolution Committee. This Dispute Resolution Committee shall comprise of representatives of both the Buyer and the Seller / Service Provider and shall be chaired by the Procuring entity or any other person as authorized by the Procuring entity.</p> <p>ii. If the Dispute Resolution Committee is not able to resolve the matter within 30(thirty) days of its formation, the dispute shall be dealt with in accordance to Guidelines for Arbitration and Mediation in Contracts of Domestic Public Procurement issued by Department of Expenditure via OM No. F.1/2/2024-PPD dated 03.06.2024, as amended from time to time.</p> <p>iii. The Contract shall be interpreted and governed in all respects in accordance with the laws of India. All disputes in connection with or arising out of the Contract, shall be subject to the exclusive jurisdiction of the Court within the local limits of whose jurisdiction principal place of business of the Buyer department / organization is located.</p> | Yes / No / Explain | |
| 8 | <p>Applicable Law and Jurisdiction: 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. Non-acceptance to this Clause will amount to rejection of the Tender.</p> | Yes / No / Explain | |

| | | | |
|----|--|--------------------|--|
| 9 | In case a bidder is an MSE, registered under NSIC or any other Government Agencies and would like to avail exemptions, offer should be accompanied with necessary registration certificate with declaration to consider their offer. Quotation received without such declaration and valid registration certificate will not be considered for exemptions under the Public Procurement Policy. | Yes / No / Explain | |
| 10 | Delivery Date/Completion Date: Compliance for delivery schedule is required as per Clause 6 of the RFP. | Yes / No / Explain | |
| 11 | Mode of Despatch (Rail/Road) | Yes / No / Explain | |
| 12 | Payment Terms: Compliance for payment schedule is required as per Clause 8 of the RFP. | Yes / No / Explain | |
| 13 | Name of Suppliers Banker & Account Number with IFSC code | Yes / No / Explain | |

| | | | |
|----|--|--------------------|--|
| 14 | <p>Security Deposit: The Supplier shall execute Security Deposit for 3% (THREE PERCENT) of the value of the Purchase Order to ensure satisfactory performance of the Purchase Order. The Security Deposit shall be executed within 20 days after receipt of Purchase Order or any extension thereof. The Security Deposit is to be furnished in the form of Insurance Surety Bond or Fixed Deposit Receipt or Bank Guarantee from Nationalized Bank/Scheduled Bank approved by RBI. The Security Deposit shall be executed on a Non-Judicial Stamp Paper of appropriate value as per the extant rules applicable in the state from where the SD is being issued and shall be valid for a period of 60 days beyond the date of completion of the P.O. In case the Supplier fails to furnish the Security Deposit within 20 days or any extension thereof the Purchase Order shall be cancelled or terminated and appropriate penal action shall be initiated. Any breach of the Terms and Conditions of the PO including Delivery Period, Security Deposit shall be forfeited and PO shall be terminated and cancelled at the Supplier's risk, cost and liability. The Security Deposit will not carry any interest and shall be returned after completely executing the order. Supplier shall ensure that Bank Guarantee is issued by Bank through Structured Financial Messaging System (SFMS), only after which paper Bank Guarantee shall become operative. Bank Guarantee format along with our Bank details are enclosed.</p> | Yes / No / Explain | |
|----|--|--------------------|--|

| | | | |
|----|---|--------------------|--|
| 15 | <p>Performance Bank Guarantee: The Supplier shall execute Performance Bank Guarantee for 3% (THREE PERCENT) value of the Purchase Order for fulfilment of Warranty obligations. The PBG shall be executed through Insurance Surety Bond / Fixed Deposit receipts or Bank Guarantee issued by a Nationalized Bank/Schedule Bank approved by RBI. The PBG shall be executed on a non-judicial Stamp Paper of appropriate value as per the extant rules applicable in the state from where the Bank Guarantee is being issued. The Performance Bank Guarantee shall be valid for a period of 60 days beyond the date of completion of all the terms and conditions of the P.O/expiry date of warranty period. The Performance Bank Guarantee shall be executed before claiming payment. The PBG will not carry any interest and shall be returned after completion of all the Contractual obligations of the Contract with a NO CLAIM CERTIFICATE issued by Supplier as per our Specimen enclosed. Supplier shall ensure that Bank Guarantee are issued by Bank through Structured Financial Messaging System (SFMS), only after which paper Bank Guarantee shall become operative. Bank Guarantee format along with our Bank details are enclosed</p> | Yes / No / Explain | |
| 16 | <p>Warranty/Guarantee: Period of warranty is specified for respective items in RFP/Scope of work/Technical RFP. Compliance for warranty is required as per RFP/Technical RFP/Scope of work.</p> | Yes / No / Explain | |
| 17 | <p>Liquidated Damages: Compliance is required for LD as per clause 8, point no.5 under Payment schedule.</p> | Yes / No / Explain | |
| 18 | <p>Validity of Offer: The Bid and the prices quoted shall remain valid for 90 days for Single Part Tender. In case of Two Part Tender, bid validity shall remain valid for 120 days from the date of opening Part-1 and 90 days from the date of opening of Part-2 bid. Adherence to this clause is compulsory or otherwise, the Tender will be rejected.</p> | Yes / No / Explain | |

| | | | |
|----|---|--------------------|--|
| 19 | Pre-Delivery Inspection [PDI] [if Required]: The successful Tenderer[s] has to arrange for the necessary PDI of the Stores at the Contractor Factory Premises to enable URSC Engineers to carry out PDI. The PDI is applicable wherever the RFP document/Scope of Work calls for such an inspection. | Yes / No / Explain | |
| 20 | Delivery Terms [Indigenous Supply]: Tenderer[s] shall quote the Price[s] on FOR, URSC/ISITE, Bengaluru. | Yes / No / Explain | |
| 21 | Factory Acceptance Testing [FAT] [if Required]: The successful Tenderer[s] has to arrange for the necessary FAT of the Stores at the Contractor Factory Premises to enable URSC Engineers to carry out FAT. The FAT is applicable wherever the RFP document/Scope of Work calls for such as FAT. | Yes / No / Explain | |
| 22 | Tenderer[s] are requested to mention whether Installation, Testing, Commissioning, Demonstration, Acceptance and imparting Training is necessary for the Tendered Stores. Do not mention any price under this column in case of Two-Part Tender. | Yes / No / Explain | |
| 23 | Do you have Unique GeM Seller ID? If YES, provide details If NO, 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. | Yes / No / Explain | |

| | | | |
|----|---|--------------------|--|
| 24 | <p>Please refer the following OMs/orders issued by Govt. of India while submitting the bid: (i) No. P-45021/2/2017-PP (BE-II) dated 16.09.2020 (ii) F.No.6/18/2019-PPD (Public Procurement No.1) dated 23.07.2020 (iii) F.No.6/18/2019-PPD (Public Procurement No.2) dated 23.07.2020 and (iv) F.No.6/18/2019-PPD (Public Procurement No.3) dated 24.07.2020. All the provisions mentioned in the above OMs/orders shall be complied. If any deviation from the above OMs/order, your offer will be liable for rejection. All Bidders fulfilling the above orders, shall submit a valid registration certificate made with DPIIT, without which the offer shall not be considered.</p> | Yes / No / Explain | |
| 25 | <p>Please refer the following OMs/orders issued by Govt. of India while submitting the bid:</p> <p>(i) No. P-45021/2/2017-PP (BE-II) dated 16.09.2020 (ii) F.No.6/18/2019-PPD (Public Procurement No.1) dated 23.07.2020 (iii) F.No.6/18/2019-PPD (Public Procurement No.2) dated 23.07.2020 and (iv) F.No.6/18/2019-PPD (Public Procurement No.3) dated 24.07.2020.</p> <p>All the provisions mentioned in the above OMs/orders shall be complied. If any deviation from the above OMs/order, your offer will be liable for rejection. All Bidders fulfilling the above orders, shall submit a valid registration certificate made with DPIIT, without which the offer shall not be considered.</p> | Yes / No / Explain | |
| 26 | <p>Country of Origin of quoted items. Adherence and acceptance to this Clause is Compulsory or otherwise the Tender will be rejected.</p> | Yes / No / Explain | |

| | | | |
|----|--|--------------------|--|
| 27 | Based on the GOI order dated 16.09.2020 as mentioned above, provide declaration in Company Letter head indicating the following: a) Percentage of Local Content in the quoted items alongwith its break-up (in percentage only). It may be noted that Local Content shall not include services such as Transportation, Insurance, Installation, Commissioning, Training and after sales service support like AMC/CMC etc. - Adherence and acceptance to this Clause is Compulsory or otherwise the Tender will be rejected. | Yes / No / Explain | |
| 28 | b) Details of the location(s) at which the local value addition is made. - Adherence and acceptance to this Clause is Compulsory or otherwise the Tender will be rejected. | Yes / No / Explain | |
| 29 | Evaluation Criteria: Overall L-1 will be selected. | Yes / No / Explain | |
| 30 | Other Terms: For all future correspondence, you may contact, Purchase & Stores Officer (Group C) email ID: pso_c@ursc.gov.in. | Yes / No / Explain | |

C.3 Price Bid

| Sl. No. | Item | Quantity | Unit Price | Currency | Total Price | Remark |
|---------|---|-----------|------------|----------|-------------|--------|
| 1 | Checkout Hardware-Rack1-BHC-1 Rack-TM-TC Interface Unit | 6.00 Nos. | | - | | |
| 2 | Checkout Hardware-Rack1-BHC-1 Rack-BAS | 6.00 Nos. | | - | | |
| 3 | Checkout Hardware - Rack1-BHC-1 Rack-LP-BAS | 6.00 Nos. | | - | | |
| 4 | Checkout Hardware - Rack1-BHC-1 Rack-BCU | 6.00 Nos. | | - | | |
| 5 | Checkout Hardware - Rack1-BHC-1 Rack-SCOS Controller | 9.00 Nos. | | - | | |

| | | | | | | |
|----|--|------------|--|---|--|--|
| 6 | Checkout Hardware - Rack1-BHC-1 Rack-PCU | 9.00 Nos. | | - | | |
| 7 | Checkout Hardware - Rack1-BHC-1 Rack-SDU- LP | 3.00 Nos. | | - | | |
| 8 | Checkout Hardware - Rack1-BHC-1 Rack-SDU- HP | 3.00 Nos. | | - | | |
| 9 | Checkout Hardware - Rack1-BHC-1 Rack- 33U Rack & Accessories | 3.00 Nos. | | - | | |
| 10 | Checkout Hardware- Rack2-SAS Rack-SAS | 66.00 Nos. | | - | | |
| 11 | Checkout Hardware - Rack2-SAS Rack-BAS | 3.00 Nos. | | - | | |
| 12 | Checkout Hardware - Rack2-SAS Rack-SDU- SAS | 3.00 Nos. | | - | | |
| 13 | Checkout Hardware - Rack2-SAS Rack-STG | 6.00 Nos. | | - | | |
| 14 | Checkout Hardware - Rack2-SAS Rack-33U Rack & Accessories | 3.00 Nos. | | - | | |
| 15 | Checkout Hardware - Rack3- OCOS- Baseband-1 Rack-TTCP | 9.00 Nos. | | - | | |
| 16 | Checkout Hardware - Rack3- OCOS- Baseband-1 Rack-AC Fluctuations Protector Unit | 6.00 Nos. | | - | | |

| | | | | | | |
|----|--|-----------|--|---|--|--|
| 17 | Checkout Hardware - Rack3- OCOS- Baseband-1 Rack- Network Switch-Type1 | 6.00 Nos. | | - | | |
| 18 | Checkout Hardware - Rack3- OCOS- Baseband-1 Rack-22U Rack & Accessories | 3.00 Nos. | | - | | |
| 19 | Checkout Hardware - Rack4- OCOS- TTCRF-1 Rack-Switch Driver Unit | 3.00 Nos. | | - | | |
| 20 | Checkout Hardware - Rack4- OCOS- TTCRF-1 Rack-RF Test Selection Matrix Unit | 3.00 Nos. | | - | | |
| 21 | Checkout Hardware - Rack4- OCOS- TTCRF-1 Rack-S- Band-Up- Converter | 6.00 Nos. | | - | | |
| 22 | Checkout Hardware - Rack4- OCOS- TTCRF-1 Rack-S- Band-Down- Converter | 6.00 Nos. | | - | | |
| 23 | Checkout Hardware - Rack4- OCOS- TTCRF-1 Rack-AC- Fluctuations protector unit | 6.00 Nos. | | - | | |

| | | | | | | |
|----|---|-----------|--|---|--|--|
| 24 | Checkout Hardware - Rack4- OCOS- TTCRF-1 Rack-33U Rack & Accessories | 3.00 Nos. | | - | | |
| 25 | Checkout Hardware - Rack5- Payload Rack-Ka- Band-Down- Converter | 6.00 Nos. | | - | | |
| 26 | Checkout Hardware - Rack5- Payload Rack-ISL Tx/Rx | 3.00 Nos. | | - | | |
| 27 | Checkout Hardware - Rack5- Payload Rack-AC- Fluctuations protector unit | 6.00 Nos. | | - | | |
| 28 | Checkout Hardware - Rack5- Payload Rack- Network- Switch-Type2 | 6.00 Nos. | | - | | |
| 29 | Checkout Hardware - Rack5- Payload Rack-33U Rack & Accessories | 3.00 Nos. | | - | | |
| 30 | Checkout Hardware - Rack6-BHC2 Rack-TM-TC- Interface-Unit | 1.00 Nos. | | - | | |
| 31 | Checkout Hardware - Rack6-BHC2 Rack-BAS | 2.00 Nos. | | - | | |
| 32 | Checkout Hardware - Rack6-BHC2 Rack-BCU | 1.00 Nos. | | - | | |

| | | | | | | |
|----|---|-----------|--|---|--|--|
| 33 | Checkout Hardware - Rack6-BHC2 Rack-SCOS- Controller | 2.00 Nos. | | - | | |
| 34 | Checkout Hardware - Rack6-BHC2 Rack-PCU | 2.00 Nos. | | - | | |
| 35 | Checkout Hardware - Rack6-BHC2 Rack-SDU- LP | 1.00 Nos. | | - | | |
| 36 | Checkout Hardware - Rack6-BHC2 Rack-SDU- HP | 1.00 Nos. | | - | | |
| 37 | Checkout Hardware - Rack6-BHC2 Rack-33U Rack & Accessories | 1.00 Nos. | | - | | |
| 38 | Checkout Hardware - Rack7- OCOS- Baseband-2 Rack-TTCP | 2.00 Nos. | | - | | |
| 39 | Checkout Hardware - Rack7- OCOS- Baseband-2 Rack-AC- Fluctuations protector unit | 2.00 Nos. | | - | | |
| 40 | Checkout Hardware - Rack7- OCOS- Baseband-2 Rack- Network- Switch-Type1 | 2.00 Nos. | | - | | |
| 41 | Checkout Hardware - Rack7- OCOS- Baseband-2 Rack-22U Rack & Accessories | 1.00 Nos. | | - | | |

| | | | | | | |
|----|--|-----------|--|---|--|--|
| 42 | Checkout Hardware - Rack8- OCOS- TTCRF-2 Rack-Switch- Driver-Unit | 1.00 Nos. | | - | | |
| 43 | Checkout Hardware - Rack8- OCOS- TTCRF-2 Rack-RF- Test- Selection- Matrix | 1.00 Nos. | | - | | |
| 44 | Checkout Hardware - Rack8- OCOS- TTCRF-2 Rack-S- Band-Up- Converter | 2.00 Nos. | | - | | |
| 45 | Checkout Hardware - Rack8- OCOS- TTCRF-2 Rack-S- Band-down- Converter | 2.00 Nos. | | - | | |
| 46 | Checkout Hardware - Rack8- OCOS- TTCRF-2 Rack-ISL- TX/RX | 1.00 Nos. | | - | | |
| 47 | Checkout Hardware - Rack8- OCOS- TTCRF-2 Rack-AC- Fluctuations protector unit | 2.00 Nos. | | - | | |
| 48 | Checkout Hardware - Rack8- OCOS- TTCRF-2 Rack-33U Rack & Accessories | 1.00 Nos. | | - | | |

| | | | | | | |
|----|--|------------|--|---|--|--|
| 49 | Checkout Hardware - Rack8- OCOS- TTCRF-2 Rack-Ka- Band-Down- Converter | 2.00 Nos. | | - | | |
| 50 | Checkout Hardware - Stand -Alone- Equipments- Digital- Oscilloscope | 2.00 Nos. | | - | | |
| 51 | Checkout Hardware - Stand -Alone- Equipments- Current- Probe | 2.00 Nos. | | - | | |
| 52 | Checkout Hardware - Stand -Alone- Equipments- Digital Multimeter | 2.00 Nos. | | - | | |
| 53 | Checkout Hardware - Stand -Alone- Equipments- Precision Multimeter | 2.00 Nos. | | - | | |
| 54 | Checkout Hardware - Stand -Alone- Equipments- AC-Voltage- Fluctuation- Protector | 2.00 Nos. | | - | | |
| 55 | Checkout Hardware- Stand -Alone- Equipments- SCC-Clients | 16.00 Nos. | | - | | |
| 56 | Checkout Hardware - Stand -Alone- Equipments- High-End- Computer- Workstation | 12.00 Nos. | | - | | |
| 57 | Checkout Hardware - Stand -Alone- Equipments- Junction-Box | 4.00 Nos. | | - | | |

| | | | | | | |
|----|--|-----------|--|---|--|--|
| 58 | Checkout Hardware - Stand -Alone-Equipments-Black and White Printer | 2.00 Nos. | | - | | |
| 59 | Checkout Hardware - Stand -Alone-Equipments-Network-Switch-Type1 | 2.00 Nos. | | - | | |
| 60 | Checkout Hardware - Stand -Alone-Equipments-High-Data-Rate-Reception-System | 2.00 Nos. | | - | | |
| 61 | Checkout Hardware - Stand -Alone-Equipments-Payload-Checkout-Computers | 6.00 Nos. | | - | | |
| 62 | Checkout Hardware - Stand -Alone-Equipments-Network-Switch-Type-2 | 1.00 Nos. | | - | | |
| 63 | Checkout Hardware - Stand -Alone-Equipments-ISL-TX/RX | 2.00 Nos. | | - | | |
| 64 | Checkout Hardware - Stand -Alone-Equipments-Power-Meter-with 2 - Power-sensors | 2.00 Nos. | | - | | |
| 65 | Checkout Hardware - Stand -Alone-Equipments-Spectrum Analyser | 2.00 Nos. | | - | | |
| 66 | Checkout Hardware - Stand -Alone-Equipments-Signal-Generator | 2.00 Nos. | | - | | |

| | | | | | | |
|----|--|------------|--|---|--|--|
| 67 | Checkout Hardware - Interconnecting DC Harness & cables for Rack Assembly of Racks -1,2 and 6(as per Technical document Section 3.10, Table 10) | 7.00 Sets | | - | | |
| 68 | Checkout Hardware - Baseband cables and LAN Cables for Rack-3 and 7(as per Technical document Section 3.11, Table 12) | 4.00 Sets | | - | | |
| 69 | Checkout Hardware - RF Accessories, Cables and Connectors (as per Technical document Section 3.12, Table- 14, 16, 18, 20 and 21) | 7.00 Sets | | - | | |
| 70 | Checkout Hardware - Fabrication ,Installation, and Testing for 18 RACKS | 18.00 Sets | | - | | |
| 71 | Checkout Hardware - Documentation for Set1 and Set2 deliverables | 2.00 Sets | | - | | |