

RFP No. FSID/IOSMCN/05-01 Dated: 03rd June 2024

Foundation for Science Innovation and Development (FSID)



REQUEST FOR QUOTATIONS (RFQ) DOCUMENT

FOR

**Supply of RAN Server for 5G Radio Access Network
Product**

**India Open Source for Mobile Communication
Network (IOS MCN) Project**

**Foundation for Science Innovation and Development
IISc, Bengaluru**

Notice Inviting RFQ



TENDER

NOTICE NO. FSID/IOSMCN/05-01

Dated: 03rd June 2024

BID SCHEDULE			
Sl. No.	Bid Activity	Date	Time
1	Notification	03/06/24	10:00 AM
2	Bid Query	10/06/24	5:00 PM
3	Answers to Bid Queries	12/06/24	10:00 AM
4	Submission of Bid	22/06/24	5:00 PM
5	Opening of Technical Bid	22/06/24	10:00 AM
6	Completion of Technical interaction and Demonstration of bidder's Technical Solution to the Technical Evaluation Committee	06/07/24	5:00 PM
7	Completion of Technical Evaluation	07/07/24	5:00 PM
8	Opening of financial Bid	09/07/24	10:00 AM

Pre-bid queries should be addressed to email: smohammed@fsid-iisc.in and Cc: Vinay Kulkarni vinay@fsid-iisc.in

Mode of Bid Submission: Please refer to Para 5 for instructions.

Technical Bid: Can be submitted by email. In addition, a hard copy has to be sent to the address.

Financial Bid: Quotes for the product must be enclosed in a password-protected PDF file emailed to Puja Srivastava at puja.srivastava@datakaveri.org, cc: Chethan at chethan@fsid-iisc.in or sent a hard copy in a sealed envelope @ Address: 5G Lab, Dept. of Electrical Communication Engineering, Indian Institute of Science, Bangalore – 560 012.

Date:

Address: 5G Lab, Dept. of Electrical Communication Engineering

Indian Institute of Science, Bangalore – 560 012
Tel. 080-2293-2464


Chief Project Investigator
Chandra R. Murthy, Ph.D.
Professor, ECE Department
Indian Institute of Science
Bangalore 560 012, India



REQUEST FOR QUOTATIONS.

1. INTRODUCTION

As part of the MeitY-funded India Open Source for Mobile Communication Networks project the procurement is being done for setting up the lab infrastructure. We seek quotations from qualified vendors for the procurement of server systems to support the development and testing of Radio Access Network (RAN) infrastructure. The selected server systems will be utilized for testing, simulation, and development purposes in our telecommunications research and development initiatives.

2. SCOPE OF WORK:

Provide server systems configured to meet the specifications outlined below, including all necessary hardware, software, and peripherals required for development and testing activities. The delivery should also include transceivers, optical cables, power cords and appropriate ethernet cables which facilitate the development and testing activities. Ensure compatibility with virtualization platforms, software-defined networking (SDN), and network function virtualization (NFV) frameworks commonly used in RAN development environments. Deliver server systems that offer scalability, reliability, and performance to accommodate future expansion and evolving project requirements. Include warranty, technical support, and maintenance services to ensure the continued operation and reliability of the server systems.

3. TECHNICAL REQUIREMENTS

Mentioned below are the server specifications that are must for the quote to be sent for development of the RAN system.

Please refer to the table below ANNEXURE-1 **Specifications**

Please refer to the table below ANNEXURE-2 **PoC (Proof of Compliance)**

Please refer to the table below ANNEXURE-5 **BoQ (Bill of Quantity)**



4. QUANTITY OF REQUIREMENTS

The hardware specified in the mentioned specifications, along with all contingency requirements, is required in the quantity of **5 (Five)** units. Vendors are requested to provide quotations that include the following:

Per Unit Price: Please specify the price per unit of the hardware, inclusive of all specified components and features, as well as any additional contingency provisions.

Total Quantity Price: Calculate the total price for the specified quantity of units, incorporating all contingency requirements.

5. SUBMISSION REQUIREMENTS

The quotation should be submitted in the form of 2 separate documents as specified below:

1. **TECHNICAL EVALUATION DOCUMENT:** This should contain the following:

- a. A checklist indicating compliance with or deviation from the above technical requirements.
- b. technical datasheet of the server which includes all or subset of the requirements specified in the technical requirements.
- c. Certifications and compliance documentation if any should be included with the quotation.

2. **COMMERCIAL BID DOCUMENT:**

- a. Quotations should include detailed pricing, including unit prices, taxes, shipping costs, and any additional fees.
- b. Provide information on warranty terms, technical support services, and maintenance agreements.
- c. Include company profile, relevant experience, and references from past projects.
- d. Quotes for the product must be enclosed in a password-protected PDF file emailed to **Puja Srivastava** at puja.srivastava@datakaveri.org, cc: **Chethan** at chethan@fsid-iisc.in or sent a hard copy in a sealed envelope @ **Address: 5G Lab, Dept. of Electrical Communication Engineering, Indian Institute of Science, Bangalore – 560 012.**

Tel. 080-2293-2464



e. Quotations must be addressed to

Director,

Foundation for Science Innovation and Development

Innovation Centre, IISc Campus Near Maramma Circle gate

Bengaluru 560012 GSTIN: 29AAECF1802E1Z1

IMPORTANT: Vendors must submit their quotations no later than the specified deadline.

6. EVALUATION CRITERIA

The evaluation criteria include considering the quote and awarding with the purchase.

order include,

- Compliance with RFQ requirements and specifications.
- Price competitiveness.
- Vendor experience, and track record.
- Warranty and support offerings.
- Technical capabilities and compatibility with existing infrastructure.

7. IMPORTANT NOTES

- The lowest-priced quotation may not necessarily be selected. Quality, reliability, and vendor reputation will also be considered.
- IOS MCN reserves the right to reject any or all quotations and to award the purchase order on its own evaluation criteria.
- Any clarifications or questions regarding this RFQ should be directed to the contact person listed above.

8. Delivery & Penalty notes:

- 4 to 6 weeks from the date PO
- After 6 weeks, a penalty @1% per week for delays in delivery will be applied. The maximum limit of penalty would be 10%



ANNEXURE-1

RAN Server Specifications for Bidder Compliance

Component	Specification
CPU	Intel® Xeon® Gold 6544Y @3.6GHz 32-Core (or) Intel® Xeon® Gold 6354 @ 3GHz 36-Core
Memory	128 GB DDR5 memory
Storage	6 TB HDD storage RAID 1
Storage	2 TB SSD storage RAID 1
Motherboard	Dual CPU socket E-ATX formfactor
PCIe Slot	4 x PCIe Gen4 x16
USB Port	1 x USB 2.0, 1 x USB 3.0
USB Port	1 x Remote Management Ethernet
Network adapter	Intel E810 XXV DA4T
Operating System Support	Ubuntu Server
Remote management	IPMI 2.0
Power supply	Power supply compliant with the server
Formfactor	1RU server
Contingency Requirements (as appropriate)	
24RU Server rack, fans and power supply which facilitate the development and testing activities, sliding rails and mounts etc	
Technical Support for issues	

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Major issues	Within 24 hours
Others	Within 3 days



ANNEXURE-2

Proof of Compliance.

Seq. No.	Specification	COMPLIANCE/ Observation/Remarks
1	Intel® Xeon® Gold 6544Y @3.6GHz 32-Core (preferred)	
2	Intel® Xeon® Gold 6354 @ 3GHz 36-Core	
3	128 GB DDR5 memory	
4	6 TiB HDD storage RAID 1	
5	2 TiB SSD storage RAID 1	
6	Dual CPU socket E-ATX form factor	
7	4 x PCIe Gen4 x16	
8	1 x USB 2.0, 1 x USB 3.0	
9	1 x Remote Management Ethernet	
10	Intel E810 XXV DA4T	
11	Ubuntu Server: v 22.4 or later	
12	IPMI 2.0	
13	Power supply compliant with the server	
14	2x SFP Transceivers, 1x optical cables and 1x Cat 6 ethernet cable	
15	1U server	



ANNEXURE-3

Self-declaration is to be given by the bidder.

RFQ Reference No.

Date:

Bidder's Name & Address:

Person to be contacted:

Designation:

Telephone No:

Fax No:

Email:

To,

Director,

FSID, IISc Bangalore-560012

We, the undersigned Bidder, having carefully read and examined in detail the Terms and Conditions, specifications, and all bidding documents regarding the supply of the RAN server at FSID accept the same.

We also hereby declare that.

1. We have not been blacklisted/debarred by any Government/Undertaking.
2. The rates quoted are not higher than the rates quoted for the same item for any Government/Undertaking.
3. The bid submitted by us is properly sealed and prepared to prevent any subsequent alteration and replacement.

For and on behalf of the firm

(Firms Name & Address)

(Signature of Authorized
Signatory)

Name:

Date: -----

Designation:

Place: -----

Seal

Phone No:



ANNEXURE – 4

Bidder Organisation Details Format for RFQ No. FSID/IOSMCN/05-01 Dated 03/06/24		
To, Director, FSID, IISc Bangalore-560012		
1	Bidder Name	
2	Website Address	
3	Email Address	
4	Address for Communication	
5	Telephone Number	
6	Fax/Telefax Number	
7	Authorised Person Name	
8	Designation:	
9	Mobile No.	
10	Email ID	
11	Alternate Person Name	
12	Designation:	
13	Mobile No.	
14	Email ID	
15	PAN Number	
16	GST Regn. No. with Address	
17	Beneficiary's complete Bank Details.	
18	Bank Account No.	
19	IFSC / NEFT Code	
20	Name of the Bank	
21	Turnover of the Bidder in last 3 years	
22	2023	
23	2022	
24	2021	
25	Are you a MSME Unit. If yes, please furnish. Registration Details, Name of the DIC/State.	
26	If you are MSME, is it owned by SC/ST Entrepreneurs or Women Entrepreneurs? If Yes, please specify the Name of the Owner who is SC or ST or Women Entrepreneur (as applicable)	
27	Following Documents are to be submitted	
28	Certificate of Incorporation	
29	PAN No	
30	GST Registration No.	
31	DECLARATION S) We have read and understood the terms & conditions of the above-mentioned tender and comply to all Terms & Conditions of the Tender.	Signature of Authorised Signatory with Seal (Name)



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	(In case of any deviation, the Bidder must attach a separate sheet clearly mentioning the Clause No. of the Tender and Deviation thereto) 2) We certify that the information mentioned above are true and correct to best of our knowledge.	
32	Place	

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ANNEXURE-5

BoQ

RFQ No: FSID/IOSMCN/05-01 Dt 03/06/24 for Supply of RAN server				
Sl. No	Equipment/Devices	HSN Code	Qty	Compliance (Yes/No)
1.	RAN server		5	
2.	Server rack		1	



ANNEXURE-6

Format: Letter of undertaking

(Company letterhead)

To,

Director,
FSID, IISc Bangalore-560012

Sir,

Sub: Undertaking on non-disclosure of contract documents

I/We do hereby undertake that we shall not disclose the contract or any provision, specification, plan, design, pattern, sample, or information to any third party for a period of three years from the termination of the contract.

I/We do hereby undertake that except with the written consent of the Buyer/Seller, the other party shall not disclose the contract or any provision, specification, plan, design, pattern, sample or information to any third party.

I/We do hereby undertake not to copy the AS-IS documentation captured in this tender document in any form Xerox, electronic, or via DMS or any other physical/electronic means. For any purpose but for the bidding process.

For and on behalf of the
Bidder

(Signature)

(Name of the Authorized Signatory)

Date:



ANNEXURE-7

Financial Bid Format

RFQ No: FSID/IOSMCN/05-01 Dt 03/06/24 for Supply of RAN server					
Sl. No	Equipment/Devices	Qty	Unit Rate in INR	GST in INR	Total with GST in INR

- **Delivery charges**
- **Installation charges**
- **AMC charges for 3 years**

END THE DOCUMENT