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# Request for Quotation

## 1. Overview

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. One of the components is an indoor radio unit. The radio unit should be ORAN specification compliant for 7.2 category A split radio. This document invites manufacturers and suppliers to provide quotations as per the specifications detailed below.

## 2. RFQ details

RFQ Number: FSID/IOSMCN/03  
RFQ Issue Date: 15<sup>th</sup> February 2024  
RFQ Deadline: 21<sup>st</sup> February 2024  
Delivery Date: 15<sup>th</sup> April 2024  
Delivery Location: IISc, Bangalore  
Contact Person: Rajini B (+91 9845603978)

## 3. Scope of work

The scope of the work includes the timely delivery of the radio along with installation and integration into the open-source radio access network framework and ensuring compatibility with other network components.

Ensuring compliance with all relevant laws, regulations, standards, and contractual obligations throughout the procurement process and project implementation.

Technical support for the duration of the project.

## 4. Technical requirements

Mentioned below are the radio specifications that are must for the quote to be sent for 5G ORAN compliant 7.2 category A split radio.

NR Radio specifications	Requirement
Band	n78
Bandwidth (max)	100MHz
Duplex Mode	TDD
Modulation	QAM 256/64/16/QPSK
Carriers	1

Antenna configuration	4T4R Internal
RF output power per port	250mW/ 24dBm
Connectivity specifications	
Physical:	10G Base-T Eth over SFP
Interface Protocol	ORAN split 7-2 CAT-A
Time and synchronization	IEEE 1588v2, ITU T G.8275.1
Specification compliance	
3GPP spec compliance	>= Release 15
O RAN compliance CUS	>= V2
O RAN compliance M plane	>=ORAN WG4. MP.0-v01
Interoperable with opensource RAN	OAI and/or SRS
Contingency Requirements (as appropriate)	
Fans, Stand, cables, antennas, power supply, JTAG as appropriate	
Technical Support for issues	
Major issues	Within 24 hours
Others	Within 3 days

## 5. Quantity of requirements

The hardware as above, along with appropriate contingency requirements is required in the quantity of **7 (Seven)** 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.

## 6. 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 radio which includes all or subset of the requirements specified in the technical requirements.
  - c. Demo of the working setup of the radio with opensource or any other radio access network.
  - d. Provide detailed test evaluation of the radio along with the quote for the product which includes any/all tests done with radio.
  - e. Specify the deployments done with the radio including the radio access network it was deployed with, may or may not be opensource.
  - f. Include the certifications done on the Radio Unit which includes EMC testing.
2. COMMERCIAL BID DOCUMENT:
  - a. Quotations should include detailed pricing, including unit prices, taxes, shipping costs, and any additional fees.
  - b. Quote for the product must be enclosed in a password protected PDF file format.
  - c. 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.

## **7. Evaluation criteria**

The evaluation criteria for considering the quote and issuing the purchase order includes,

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

## **8. Important Notes**

- The lowest-priced quotation may not necessarily be selected; quality, reliability, interoperability/compatibility, technical support, 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.