## CSIR- NATIONAL PHYSICAL LABORATORY

Dr. K.S. Krishnan Marg, New Delhi – 110012 (INDIA)

> Contact: 011 4560 8624 Email: <a href="mailto:sr.cosp@nplindia.org">sr.cosp@nplindia.org</a> purchase-so1@nplindia.org

From: Director, CSIR-NPL

Tender No. 14-VI/DDS(1121)23PB/T-105

Dated: 11.10.2023

## CORRIGENDUM

With reference to NPL's Global Tender ID: 2023\_CSIR\_728481\_1 for "Vector Network Analyzer". Some changes have been made in the technical specification of captioned tender. Revised specifications are as follows:

	Specification		
1	Frequency Range	10 MHz to 20 GHz or wider	
2	Relative Accuracy in Frequency Measurement	0.5 ppm or better	
3	Frequency resolution	1 Hz or better	
4	Stability	0.1 ppm or better	
5	Number of ports	two or more	
6	Dynamic range	100 dB or better for the frequency range 10 MHz to 20 GHz	
7	Trace noise	<0.006 dB trace noise	
8	IF Bandwidth	10 Hz to 500 kHz or wider	
9	Directivity over the full frequency range	40 dB or better	
10	Source and load match over full frequency range	30 dB or better	
11	Reflection tracking over full frequency range	± 0.1 dB or better	
12	Transmission tracking over full frequency range	± 0.15 dB or better	
13	Test port output power range	-30 dBm to +6 dBm or wider	
14	Power	As per Indian standard	
	Accessories		
15	Mounting Rack, Calibration kit	Mounting Rack with 3 compartments and wheel arrangement, Calibration kit	
16	Flexible cables (02 Nos), Phase-stable cables (04 Nos)	Flexible cables (02 Nos), Phase-stable cables (04 Nos)	
17	Data Acquisition System	Suitable separate Data Acquisition Systems with software and VNA Shall be suitable to measure the TM and TE modes in Copper	

		Spherical Cavity Resonator using SP 2 mode NPL Cavity Dimension: 10 cm diameter, copper spherical cavity
18	Acceptance Criteria	All the quoted capabilities must be demonstrated by the supplying firm at CSIR-NPL

All other terms & conditions of said tender will remain the same.

Sr. Controller of Stores & Purchase

## Minutes of the Meeting (MOM) of the Pre-Bid Conference

Date: 03/10/2023

a Pre-Bid Conference was held on 03/10/2023 (Tuesday) at 3.00 PM in the Second Floor Conference Room, Main Building CSIR-NPL, New Delhi under Chairmanship of Dr. H. K. Singh. With reference to the File No. 14-VI/DDS(1121)23/PB dated 17.04.2023, regarding Pre-Bid conference for procurement of "Vector Network Analyzer".

Following vendors & their representatives participated in Pre-Bid Conference

- 1. Mr. Suvrat Verma, M/s Rhode & Schwarz India Pvt. Ltd., Mathura Road New Delhi 110044 along with their Authorized Channel Partner M/s Balaji Enterprises, Shahadara, Delhi
- 2. Mr. Vinod Dass, M/s Anritsu India Pvt. Ltd., Noida 201301 (UP) along with their Authorized supplier M/s RDK Tech Solutions India Pvt. Ltd., Shahadara, Delhi -110032
- 3. Mr. Surender Singh, M/s Agmatel India Pvt. Ltd, Vikas Marg, New Delhi along with their OEM M/s Keysight India

The following members attended the meeting:

- Dr. H. K. Singh, Chief Scientist
- Dr. Anjana Dogra, Senior Principal Scientist
- Dr. Subhasis Panja, Senior Principal Scientist
- w 4. Dr. S. K. Dubey, Principal Scientist
- Dr. D. D. Shivagan, Senior Principal Scientist Dr. Komal Bapna, Scientist

vendors are given below:-

Expert Expert Member Co-PI Member Chairman

Indenter, PI

members. The queries received from vendor during the pre-bid meeting were discussed and clarified. The details specification and responses from Dr. D.D. Shivagan, presented the tendered specifications to the pre-bid participants. Each and every point was discussed in details by the committee