# Telecom Engineering Centre (Department of Telecommunications) Khurshid Lal Bhawan, Janpath, New Delhi-110001

# Open RAN testing fee w.r.t. MoU between TEC and M/s VVDN Tech.

The Competent Authority has approved the mutually agreed fee structure between TEC and M/s VVDN Tech. for testing of Open RAN products as detailed below:

### A. Test Equipment Usage Fee:

Test Equipment	Usage Fee including setup Per Day (₹) (For others*)	Usage Fee including setup Per Day (₹) for registered Startups & MSMEs**
Oscilloscope (4GHz)	1000	800
Portable Spectrum Analyser	1000	800
Analog Signal Generator	1000	800
40GHz		
Arbitrary Waveform	9000	7200
Generator		
Vector Signal Generator	7000	5600
/Analyser (sub 6GHz)		
Vector Signal Generator	11000	8800
/Analyser (mm Wave)		
Vector Network Analyser	9000	7200

<sup>\*</sup>Government/Academic/R&D/PSUs/Non-MSME/Non-Indian entity other than registered Startups & MSMEs \*\*20% Subsidized testing fee for DPIIT registered StartUps & registered MSMEs

### **B.** Technical Manpower Support Fee:

The Fee for the Technical Manpower (For others): ₹ 8,000/- per person day of effort exclusive of applicable GST.

The Fee for the Technical Manpower for registered Startups & MSMEs: ₹ 6,400/- per person day of effort exclusive of applicable GST.

#### C. List of Services and Service Usage Fee:

S.	Services	Involved Subsystems	Fee (₹)	Fee (₹) for registered
No		and Access	(For others)	Startups & MSMEs **
1	End to end	1 UE+1 NG-RAN+1 5G	Service Usage Fee	Service Usage Fee
	Test Bed	Core & Management	₹10,000/- per day +	₹8,000/- per day +
	Usage	with Access to Logs and	Agreed Manpower	Agreed Manpower
	Service	Messages	Support Fee	Support Fee
2	RAN level	1 UE+1 NG-RAN with	Service Usage Fee ₹	Service Usage Fee ₹
	Test Bed	Access to Logs and	8,000/- per day +	6,400/- per day + Agreed
	Usage	Messages, Access to	Agreed Manpower	Manpower Support Fee
	without RF	APIs, Access to	Support Fee	
	Equipment	Proprietary interfaces of		
		components		
3	RAN level	1 UE+1 NG-RAN with	Service Usage Fee ₹	Service Usage Fee ₹
	Test Bed	RF Equipment with	8,000/- per day + RF	6,400/- per day + RF Test
	Usage with	Access to Logs and	Test Equipment	Equipment Usage Fee+
	RF	Messages. Access to	Usage Fee+ Agreed	Agreed Manpower
	Equipment	APIs, Access to	Manpower Support	Support Fee
		Proprietary interfaces of	Fee	
		components		
4	PHY level	1 RRH+ 1 BB with RF	Service Usage Fee	Service Usage Fee ₹
	Test Bed	Equipment with Access	₹ 6,500/- per day +	5,200/- per day + RF Test
	Usage with	to Logs and Messages,	RF Test Equipment	Equipment Usage Fee +
	RF	Access to APIs, Access	Usage Fee + Agreed	Agreed Manpower
	Equipment	to Proprietary interfaces	Manpower Support	Support Fee
		of components	Fee	
5	Emulated	1 RAN Emulator + 1 5G	Service Usage Fee	Service Usage Fee
	End to End	Core & Management	₹5,000/- per day +	₹4,000/- per day +
	Test Bed	with Access to Logs and	Agreed Manpower	Agreed Manpower
	(RAN Emu	Messages. Access to	Support Fee	Support Fee
	+5G Core)	APIs, Access to		
		Proprietary interfaces of		
	0/ 0 1 11 1/	components	11 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	

<sup>\*\*20%</sup> Subsidized testing fee for DPIIT registered StartUps & registered MSMEs

Further, the additional requirements with respect to Open RAN testing by M/s VVDN Technologies using their existing facility is as follows:

- i) Any other equipment which is not mentioned above will be charged separately and the same may be decided mutually between M/s VVDN Technologies and the applicant/Institute/Enterprise;
- ii) Tentative days required for testing for the actual Scope of work and test cases will be intimated by M/s VVDN Technologies to the applicant before start of the testing;
- iii) Final Cost will be calculated based on Service Usage fee+ Manpower Support Fee + Equipment Usage fee;
- iv) M/s VVDN Tech. will utilize the existing equipment on the best-case basis for the testing;

The fee structure as above is applicable for a period of six months w.e.f. 09.11.2022. Thereafter, the same may be reviewed by TEC.