DoT signs MoU with VVDN for 5G Open RAN Testing

written by iasexam.com | 12/05/2022

[GS Paper 3 – IT, Science and Technology]

Context – The Telecommunication Engineering Centre recently signed a memorandum of understanding for open Radio Access Networks.

Telecommunication Engineering Centre, a technical arm of the Department of telecommunications signed an MoU with VVDN Technologies Pvt Ltd.

Key Developments

- The signing of the MoU will facilitate registering startups innovators and MSMEs working in the field of the open brand to get their products tested at the existing lab of VVDN.

- The tenure of MoU is 5 years and is signed to set up a 5G Open Radio Access Network (RAN) with an objective to drive research innovation and domestic design and manufacturing.

- This is the first of its kind MoU signed by TEC as a step towards leveraging the existing open RAN testing ecosystem and partnership with the private firm.

- The official release stated, "it is aimed that India shall be emerging as a design leader in 5G/ORAN. This test certification ecosystem will make India a design testing and certification hub in Asia."

About Open Radio Access Network

- O-RAN is an ongoing shift in the mobile network architecture, consisting of networks to be built using subcomponents from multiple vendors.

- It is a totally disaggregated approach to deploying mobile networks built entirely on cloud-native principles.

- O-RAN uses software to make hardware manufactured by different companies work together.

- The key concept is: opening the protocols and interfaces between the various sub-components (radios, hardware, and software) in the RAN.

- The key elements of RAN are: The Radio Unit, The Distributed Unit, The Centralised Unit.

Advantages with O-RAN

- **Innovation and Options –** An open environment expands the ecosystem, and with more vendors providing the building blocks, there is more innovation and more options for the Operators. They can also add new services.

- **New Opportunities –** It will open new opportunities for Indian entities to enter into the network equipment market.

- **Cost Saving –** The benefits of this approach also include increased network agility and flexibility, and cost savings. It is expected to make 5G more flexible and cost efficient.