

**GOVERNMENT OF INDIA  
MINISTRY OF COMMUNICATIONS  
DEPARTMENT OF TELECOMMUNICATIONS**

**LOK SABHA  
UNSTARRED QUESTION NO. 616  
TO BE ANSWERED ON 20<sup>TH</sup> JULY, 2022**

**5G ECOSYSTEM**

616. SHRI CHANDRA SEKHAR SAHU:  
SHRI GIRISH BHALCHANDRA BAPAT:  
SHRI RAHUL RAMESH SHEWALE:

Will the Minister of COMMUNICATIONS be pleased to state:

- (a) whether Centre for Development of Telematics (C-DOT) has proposed to build robust partnerships with various stakeholders of indigenous 5G ecosystem including local industry and start-ups;
- (b) if so, the details thereof;
- (c) the details of the partnerships so far finalised by C-DOT for collaborative development of end-to-end 5G Radio Access Network products and solutions; and
- (d) the details of the steps taken by the Government towards strengthening these collaborative partnership for development of indigenous 5G and further expanding it to other areas of mutual interest of the country?

ANSWER

**MINISTER OF STATE FOR COMMUNICATIONS  
(SHRI DEVUSINH CHAUHAN)**

(a) to (b) Centre for Development of Telematics (C-DOT) has formulated a collaborative research policy and a framework to build robust partnership with various stakeholders of indigenous 5G ecosystem with focus on local industry and start-ups. C-DoT has set up 'India 5G Alliance' which intends to deliver a complete suite of 5G products. This alliance proposes an umbrella project and provide necessary support including financial assistance wherever needed to the ecosystem partners for 5G development and deployment.

(c) As of now, C-DoT has signed a Memorandum of Understanding (MoU) with M/s VVDN Technologies Private Limited and M/s WiSig Networks Private Limited for development of Open RAN based Radio Access network for 5G solution. C-DoT has also signed an MoU with M/s Galore Networks Private Limited for development of end-to-end 5G Non-Stand-alone (NSA) and Stand-alone (SA) systems.

(d) The following steps have been taken towards strengthening collaborative partnership for development of indigenous 5G and further expanding it to other areas of mutual interest of the country:

- (i) Financial grant of Rs. 224.01 crores has been provided to set up ‘Indigenous 5G Test Bed’ for a multi-institutes collaborative project. The eight collaborating institutes in the project are Centre of Excellence in Wireless Technology (CEWiT), Indian Institute of Technology (IIT) Bombay, IIT Delhi, IIT Hyderabad, IIT Madras, IIT Kanpur, Indian Institute of Sciences (IISc) Bangalore and Society for Applied Microwave Electronics Engineering & Research (SAMEER). The Test Bed is available at five locations namely IIT Madras, IIT Delhi, IIT Kanpur, IIT Hyderabad and IISc Bangalore.
- (ii) Department of Telecommunications (DoT), under Digital Communication Innovation Square Initiative, has sanctioned Rs. 112 crores for funding Micro Small & Medium Enterprises (MSMEs) / Start-ups to develop indigenous telecom products including 5G products for a period of 2022-23 to 2025-26.
- (iii) An inter-ministerial committee is constituted by DoT with representatives from different ministries / departments having relevant socioeconomic verticals to facilitate collaborative efforts across 5G ecosystem.
- (iv) DoT has invited Expression of Interest from stakeholders under “5G Vertical Engagement and Partnership Program (VEPP)” to build collaboration partnerships among 5G solution providers and users. The Program facilitates user verticals as potential breeding grounds for innovative 5G use cases in close collaboration with the service providers, solution providers and partner original equipment manufacturers.
- (v) C-DOT has set up a Technology Advisory Board for 5G Technology consisting of national and international experts from industry and academia to advise on 5G technological development.

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