

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

**RAJYA SABHA
UNSTARRED QUESTION NO. 3693
TO BE ANSWERED ON 3RD APRIL, 2025**

CENTRES FOR EXCELLENCE UNDER THE MINISTRY

**3693 SHRI RYAGA KRISHNAIAH:
SHRI MASTHAN RAO YADAV BEEDHA:**

Will the Minister of Communications be pleased to state:

- (a) the list of Centres for Excellence proposed, under construction and presently established under the Ministry over the last five years;
- (b) the details of research and associated activities carried out by each Centre of Excellence specified above over the last five years;
- (c) the total amount of funding allocated and utilised for the establishment and working of each Centre of Excellence over the last five years; and
- (d) the total number of individuals associated and/or employed by each Centre of Excellence across India, State -wise?

ANSWER

**MINISTER OF STATE FOR COMMUNICATIONS AND RURAL DEVELOPMENT
(DR. PEMMASANI CHANDRA SEKHAR)**

- (a) to (d) The details of Centres of Excellence proposed, under construction and presently under Ministry over the last five years is placed as **Annexure-I**.

Details of Centres for Excellence under the Ministry

S.No.	Name of Centre of Excellence	Setup by	List of research and associated activities carried	Total amount of funding allocated and utilised for the establishment and working of each centre of excellence	Total number of individuals associated and/or employed by each center of Excellence across India in a State-wise manner
i.	Centre for Broadband Proliferation in Rural Areas (CBBPiR)	National Communication Academy -T, Ghaziabad, an Apex Training Institute under Department of Telecommunications	<ul style="list-style-type: none"> • A National Workshop on "Creating Ecosystem for Faster Broadband Proliferation in Rural India" was organised by CBBPiR on 15.03.2024 having wider participation by concerned stakeholders. A detailed report of the workshop was prepared and subsequently published on 16.7.2024. • A Base Paper on "Rural Broadband" was published by CBBPiR on 15.03.2024 • A Comprehensive Study Report on "Broadband for All" was prepared by CBBPiR after thorough study and consultation with concerned stakeholders and the same was submitted on 04.12.2024 • CBBPiR carried out mapping between outcome/deliverables enlisted in NBM 2.0 document vis-à-vis suggestions contained in the Comprehensive Study Report on "Broadband for All" and submitted the same to Mission Director, NBM, Digital Bharat Nidhi. 	The CBBPiR is working under aegis of NCA-T, Ghaziabad since beginning. No exclusive budget has been allocated so far.	<p>Presently, no regular manpower is posted in the CBBPiR. All the activities of the CBBPiR are being carried out by NCA-T officers on looking after basis.</p> <p>CBBPiR has hired two Research Associates on contractual basis from 17.09.2024 and 05.11.2024 respectively for carrying out activities of the centre.</p>

ii.	Centre for Digital Communication Security India (CDCSI)		Under process		
iii.	Centre of Excellence in Telecom Security	National Center for Communication Security, Bangalore	Under process		
iv.	Center of Excellence for Mobile Communication-4G/5G and Beyond	Centre for Development of Telematics(C-DOT), the telecom R&D centre of Department of Telecommunications	<ul style="list-style-type: none"> • Development of 4G/5G Core and 4G RAN • 4G for LTE-R applications (for Railways) • Development of 5G NSA/SA and 5G RAN • 4G & 5G Network management system & automation. • Mission Critical Applications (MCX for Railways) • Study on 6G 	No separate CoE-wise funding has been provided to C-DOT. The development of the projects are carried out through the grant-in-aid allotted to C-DOT every year.	C-DOT has two research centres- Delhi and Bengaluru with a staff strength of around 1550 involved in research and development activities and working in various projects under these CoEs
v.	Center of Excellence for Advanced Optical and Quantum Communication Technologies		<ul style="list-style-type: none"> • Design and development of Quantum Key distribution (QKD) system, Measurement Device Independent (MDI-QKD) • Design and development of Single Photon Detector (SPD) module and IM-PM Modulator Driver • Development of Post Quantum Cryptography (PQC) solutions • Development of Quantum Secure Smart Video IP Phone • Development of L1 Encryptor • Fiber based secure communication network with Integrated Key Relay Nodes • Development of Carrier Transport for 5G Back Haul 		

vi.	Center of Excellence for Advanced Telecom Security	<ul style="list-style-type: none"> • Development of Telecom Security Operation Centre (TSOC) • Development of Digital Intelligence Unit (DIU) • Design and development of National Trust Centre (NTC) for IoT/M2M • Design and development of Centralized International Out Roamer (CIOR) • Design and development of Privacy-Enhancing Analytics Platform (PEAP) • Design and development of Enterprise Security Solution (ESOC) 		
vii.	Center of Excellence for Advanced Telecom Applications	<ul style="list-style-type: none"> • Design and development of CAP Compliant Early Warning Platform for disaster management • Design and development of Cell Broadcast Centre (CCBC) for 2G, 3G and 4G Technologies • Design and development of IoT/Machine-to-Machine communication • Design and development of secured communication platform for Government officials (PriMe) • Design and development of Secure Video conferencing platform • Design and development of Platform of Online Certification for NCCS of Telecom Equipment • Design and development of PM-WANI Central Registry • Design and development of Network management system for different networks 		
viii.	Center of Excellence for Artificial Intelligence	<ul style="list-style-type: none"> • Design and development of AI for security • Design and development of Artificial Intelligence in 5G & 6G Network 		

			<ul style="list-style-type: none"> • Design and development of AI Based Sim Subscriber Detection 		
ix.	Centre of Excellence on Classical and Quantum Communications for 6G at IIT Madras	Sub Centres of Telecom Centre of Excellence, a society registered by DoT	<ul style="list-style-type: none"> • Classical and Quantum communication • Supporting the research proposal under "Accelerated Research in 6G Ecosystem" by DoT 	No fund allocated	One Manpower is allocated at IIT Madras subcentre for support to "Accelerated Research in 6G Ecosystem"
x.	Malware Lab at National Forensic Sciences University (NFSU) Goa		<ul style="list-style-type: none"> • Malware threat analytics • Collaboration, Joint workshops and seminars • Training, skill development, Entrepreneurship 	Allocated 97 Lakhs	
xi.	Centres of Excellence on Telecom Security at National Forensic Sciences University (NFSU), Gandhinagar		<ul style="list-style-type: none"> • Indian Telecom network secured stack. • Secure public & Private 5G network • Collaboration, Joint workshops and seminars • Training, skill development, Entrepreneurship 	No fund allocated	
xii.	Centre of Excellence in "Quantum Technology, associated 5G/6G Technologies etc." at Visvesvaraya Technological University (VTU) – Visvesvaraya Research &		<ul style="list-style-type: none"> • Advancement in Technology (Quantum Technology) • Collaboration, Joint workshops and seminars • Training, Skill Development, Entrepreneurship 	No fund allocated	

	Innovation Foundation (VRIF) Bangalore				
xiii.	Centres of Excellence in integrated sensing communications at Madhav Institute of Technology & Science (MITS) Gwalior		<ul style="list-style-type: none"> • Advancement in Technology (Integrated sensing communication) • Collaboration, Joint workshops and seminars • Training, skill development, Entrepreneurship 	No fund allocated	
