GOVERNMENT OF INDIA MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLOGY LOK SABHA

UNSTARRED QUESTION NO. 3

TO BE ANSWERED ON 02.02.2022

5G TECHNOLOGY IN TELECOM

3.SHRI MADDILA GURUMOORTHY: DR. BEESETTI VENKATA SATYAVATHI:

Will the Minister of ELECTRONICS AND INFORMATION TECHNOLOGY be pleased to state:

- (a) whether it is a fact that India would require as much as 2.2 Crore 5G-backed skilled manpower by the year 2025 as per the Telecom Sector Skill Council; and is so, the details thereof;
- (b) whether the Government is taking any steps to skill or upskill people in 5G based technologies such as Internet of Things (IoT), Artificial Intelligence, Cloud Computing, automation, etc:
- (c) if so, the details thereof; and
- (d) if not, the reasons therefor?

ANSWER

MINISTER OF STATE FOR ELECTRONICS AND INFORMATION TECHNOLOGY (SHRI RAJEEV CHANDRASEKHAR)

- (a): No such study has been undertaken by MeitY on the requirement of 2.2 crore 5G-backed skilled manpower by the year of 2025. However, as figured out by the TSSC under the Skill India Mission referred requirement of 2.2 crore of 5G- backed manpower in India 2025 directly and indirectly needed in the field of 5G, IoT, AI, M2M, Machine Learning, Big Data Analytics and all other adjacent domains. The said information is however unverified and not been studied by the Ministry.
- (b) to (d): Yes, Sir. Government is taking multiple steps to skill manpower and build the capacity to skill or upskill people in 5G based technologies such as Internet of Things (IoT), Artificial Intelligence, Cloud Computing, automation, etc. as under:
 - i) Department of Telecommunications(DoT) under the Ministry of Communications has informed that the National Telecommunication Institute for Policy Research Innovation & Training (NTIPRIT) has formulated expert committees and have formulated various courses around 5G and allied technologies considering holistic approach e.g.— one of them has been launched for training in 5G course for Officers of DoT and other stakeholders.

- ii) 5G TestBeds have been built in premier institutes like IIT Hyderabad, Madras, Bombay, Delhi, Indian Institute of Science (IISc), Center of Excellence in Wireless Technology (CEWiT), and Society for Applied Microwave Electronics Engineering & Research (SAMEER) with the support of the Department of Telecommunications (DoT), Govt. of India.
- iii) The telecom industry is also actively making themselves 5G and allied tech ready by continuously skilling/upskilling the candidates on their customized trainings.
- iv) Indian Institute of Technology (IITs) Delhi, Kanpur, Roorkee, Madras provide online certification programs in 5G Wireless technology and its applications (AI, IoT, etc.).
- v) Ministry of Electronics and IT (MeitY) & NASSCOM have jointly initiated a programme titled FutureSkills PRIME (www.futureskillsprime.in), a framework for re-skilling/ up-skilling of IT professionals in 10 emerging technologies, namely, Internet of Things, Big Data Analytics, Artificial Intelligence, Robotic Process Automation, Additive Manufacturing/ 3D Printing, Cloud Computing, Social & Mobile, Cyber Security, Augmented Reality/Virtual Reality, and Blockchain. The programme aims to cover a target of 4.12 Lakh beneficiaries over 3 years, which includes 4 Lakh IT Professionals, 10,000 Government Officials and 2000 Trainers. So far, around 5.63 Lakh candidates have signed-up on the FutureSkills PRIME Portal, out of which, 1,08,436 candidates have completed their course. In addition, 524 Trainers and 4074 Government Officials have been trained on these technologies by NIELIT/C-DAC Resource Centres, and around 73206 unique learners have collectively earned 4,64,951 'badges' in recognition of having completed bite-sized digital fluency content.
- vi) Telecom Sector Skill Council (TSSC) is working in integrating 5G and allied courses by the private global players in the 'National Skill Qualification Framework' (NSQF) e.g. courses by Ericsson, Huawei, etc around 5G RAN, RF, etc and also creating capacity by building 'Centres of Excellence' on IoT, ML, AI, robotics, etc in-conjunctions with the academic institutes of repute e.g. NIT Patna, NIT Chhattisgarh, etc
