

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

**LOK SABHA
UNSTARRED QUESTION NO. 689
ANSWERED ON 23RD JULY, 2025**

THIRD INTERNATIONAL QUANTUM COMMUNICATION CONCLAVE

689. SMT. APARAJITA SARANGI:

Will the Minister of COMMUNICATION be pleased to state:

- (a) the key documents unveiled during the Third International Quantum Communication Conclave and their significance in advancing quantum secure technologies in the country;
- (b) the contributions of the Telecommunication Engineering Centre (TEC) and the Centre for Development of Telematics (C-DOT) in setting standards and releasing technical reports for quantum secure communication; and
- (c) the initiatives undertaken by the Government to promote standardization, testing, and stakeholder collaboration in the field of quantum-safe technologies?

ANSWER

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

(a) & (b) The documents that were unveiled during the 3rd International Quantum Communication Conclave held on 25th April 2025 with an objective to standardise, create awareness and promote adoption of quantum-secure technologies in India are as under:

- i. Standard for Quantum Random Number Generator (QRNG).
- ii. Technical Report on Migration to Post Quantum Cryptography (PQC).
- iii. Technical Report on Quantum Secure 5G / beyond 5G Core using Post Quantum Cryptography (PQC).

In addition to the above, Telecommunication Engineering Centre (TEC) has released the following standards for quantum secure communications:

- i. Standard for Quantum Key Distribution (QKD) System.
- ii. Standard for Quantum Safe and Classical Cryptographic Systems.

All above standards and technical reports have been formulated in consultation with stakeholders including Centre for Development of Telematics (C-DOT).

(c) The Department of Telecommunications (DoT) has released standards through TEC for quantum-secure products and solutions as mentioned in para (a) & (b) above and issued Test Guide on Quantum Key Distribution System to support testing of quantum secure products. Further, DoT has formed a National Working Group on Quantum Technology (NWG-QT) to foster collaboration among experts from academia, industry, and government.
