

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

**RAJYA SABHA
STARRED QUESTION NO. 53
ANSWERED ON 24TH JULY, 2025**

3RD INTERNATIONAL QUANTUM COMMUNICATION CONFERENCE

53 # SHRI MANAN KUMAR MISHRA:

Will the Minister of Communications be pleased to state:

- (a) the key documents unveiled during the 3rd International Quantum Communication Conference and their significance and the extent of significance in advancing quantum secure technologies in the country;
- (b) the contribution of Telecommunication Engineering Centre (TEC) and Centre for Development of Telematics (C-DOT) in setting standards and releasing technical reports for quantum secure communications; and
- (c) the details of the initiative taken by Government to promote standardization, testing and stakeholder collaboration in the field of quantum-secure technologies?

ANSWER

**MINISTER OF COMMUNICATIONS AND DEVELOPMENT OF NORTH EASTERN
REGION
(SHRI JYOTIRADITYA M. SCINDIA)**

- (a) to (c) A statement is laid on the Table of the House.

STATEMENT TO BE LAID ON THE TABLE OF RAJYA SABHA IN RESPECT OF PARTS (a) TO (c) OF THE RAJYA SABHA STARRED QUESTION NO.53 FOR 24TH JULY, 2025 REGARDING “3RD INTERNATIONAL QUANTUM COMMUNICATION CONFERENCE.”

(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.
