GOVERNMENT OF INDIA
MINISTRY OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF SCIENCE AND TECHNOLOGY
RAJYA SABHA
UNSTARRED QUESTION No. 3159
ANSWERED ON 27/03/2025

DEVELOPMENT OF COUNTRY'S QUANTUM COMPUTING ECOSYSTEM

3159 SMT. RANJEET RANJAN:

Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) the developments made under the National Quantum Mission since its launch;

(b) the funds allocated and utilised for quantum research and development projects in 2024; and

(c) the partnerships established with academic institutions and private industry to accelerate quantum technology development?

ANSWER

MINISTER OF STATE (INDEPENDENT CHARGE) FOR THE
MINISTRY OF SCIENCE AND TECHNOLOGY & EARTH SCIENCES
(DR. JITENDRA SINGH)

(a) The following developments have been made under National Quantum Mission (NQM) since its launch:

i. The Department of Science and Technology (DST) has established four Thematic Hubs (T-Hubs), in key technology verticals namely Quantum Computing at Indian Institute of Science, Bengaluru; Quantum Communication at Indian Institute of Technology, Madras in association with Centre for Development of Telematics, New Delhi; Quantum Sensing & Metrology at Indian Institute of Technology, Bombay and Quantum Materials & Devices at Indian Institute of Technology, Delhi.

ii. Defense Research and Development Organization (DRDO), in collaboration with Tata Institute of Fundamental Research (TIFR) Mumbai has demonstrated 6-qubit quantum processor based on superconducting circuit technology.

iii. Department of Space (DOS) has demonstrated free-space Quantum Key Distribution over a distance of 300m with real-time processing and live exchanges of quantum-secured text, images and video calls.

(b) The funds allocated and utilized for quantum research and development projects in 2024 is given below:

S.No.	Ministry/Department	Fund Allocated (Rs. In Crore)	Fund Utilized (Rs. In Crore)
1.	Department of Science & Technology	31.848	19.915
2.	Ministry of Electronics and Information Technology	68.032	28.823
3.	Defense Research & Development Organization	8.570	2.57
4.	Department of Space	18.5	18.5

(c) The four T-Hubs have been established under NQM in consortia that foster collaborative synergy among academic institutions, with a provision for the involvement of private industry to accelerate quantum technology development. These hubs bring together a total of 152 researchers from 43 institutions across India.

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