

# National Quantum Mission

**I**NDIA is recording numerous innovative achievements in the fields of science and technology. Be it the establishment of the National Research Foundation, research, or the field of space explorations such as Mangalyaan, Chandrayaan, Aditya L1, and Gaganyaan. These critical research achievements have demonstrated India's scientific and technological capabilities to the world. Consequently, India has become one of the few selected countries globally, marking it a remarkable achievement.

National Quantum Mission is also one such technological breakthrough being implemented in the country. The Union Cabinet, chaired by the Hon'ble Prime Minister Shri Narendra Modi, approved the National Quantum Mission (NQM) at a total cost of Rs 6003.65 crore from

2023-24 to 2030-31, aiming to seed, nurture and scale up scientific and industrial R&D and create a vibrant & innovative ecosystem in Quantum Technology (QT). This will accelerate QT-led economic growth, promote the ecosystem in the country and make India one of the leading nations in the development of Quantum Technologies & Applications (QTA).

The mission objectives include developing intermediate-scale quantum computers with 50-1000 physical qubits in 8 years on various platforms like superconducting and photonic technology. Satellite-based secure quantum communications between ground stations over a range of 2000 kilometres within India, long-distance secure quantum communications with other countries, inter-city quantum key distribution over 2000 km and multi-node quantum networks with

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