



ETSI TC QT Quantum Technologies

ETSI creates a New Committee on Quantum Technologies To Consolidate Current Standards and Address Future Market Needs

ETSI TC QT develops deliverables to support the deployment and operation of Quantum Technologies in the fields of Quantum Communications, Quantum Networks, and related domains.

Key Areas of Activity

Quantum Technologies

- Quantum Communications: Secure and efficient information transfer using superposition and entanglement
- Quantum Networking: Connecting devices for distributed computing, cryptography, and advanced sensing
- Quantum Sensing: Ultra-precise measurements for communication networks
- Satellite Quantum Communications: Standards for beacon signals, interfaces, and OGS security in space-based QKD systems
- Quantum Random Number Generators (QRNG): Secure randomness for cryptography and simulations

Quantum Security / Hacking Strategies

- Standardising methodologies to assess QKD vulnerabilities and hardware security
- Developing frameworks to test, validate, and safeguard against side-channel attacks
- Collaboration between theoreticians and experimental physicists

Future Quantum Technologies

- Scoping out new work areas aligned with industry needs
- Supporting Specialist Task Forces (STFs) on emerging technologies

European Policy & EuroQCI

- Supporting European Quantum Communication Infrastructure (EuroQCI)
- Collaborating closely with the European Commission and EU Quantum initiatives

Why It Matters

Quantum technologies are set to redefine security, communications, and computing. ETSI TC QT ensures global standards are ready to:

- Enable interoperability
- Guarantee security and resilience
- Support European and global policy needs

Get Involved


Join ETSI TC QT to help shape the future of quantum technologies.

Together, we can ensure trust, innovation, and leadership in Europe and beyond.

Contact ETSI TC QT

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About ETSI

ETSI is one of only three bodies officially recognised by the European Union as a European Standards Organisation (ESO). It is an independent, not-for-profit body dedicated to ICT standardisation. With over 900 member organisations from more than 60 countries across five continents, ETSI offers an open and inclusive environment for members representing large and small private companies, research institutions, academia, governments, and public organisations. ETSI supports the timely development, ratification, and testing of globally applicable standards for ICT-enabled systems, applications, and services across all sectors of industry and society.

