EU Quantum Act proposal explained: three pillars, supply chains and post-quantum security

26 November 2026 · 3 min read · blogs.iictp.org/eu-quantum-act-proposal-2026-explained

Short answer: the EU Quantum Act is a legislative proposal the European Commission announced on 25 November 2026 to turn European quantum research into products, strengthen supply chains and prepare digital systems for post-quantum cryptography. It has three pillars and lays groundwork for a Sovereign Tech Equity Fund. As a proposal, it creates no obligations yet.

TL;DR The short version

- The European Commission announced the EU Quantum Act on 25 November 2026, a proposal to turn quantum research into products, strengthen supply chains and prepare for post-quantum cryptography.
- It has three pillars and lays groundwork for a Sovereign Tech Equity Fund.
- As a proposal it creates no obligations yet, but organisations can start their post-quantum cryptography inventory now.

Read online, listen to it, or change the text size: https://blogs.iictp.org/eu-quantum-act-proposal-2026-explained

What is the EU Quantum Act?

It is a proposed framework with a stated aim, set out in the 2025 Quantum Europe Strategy, of making Europe a global leader in quantum technologies by 2030 through industrial leadership, market uptake and resilient supply chains.

How the proposal is organised

- **Research excellence.**
- **Bringing quantum technology into use.**
- **Keeping systems and supplies secure.**
- Delivery through a Quantum Europe Framework Initiative that brings EU and national programmes together around shared priorities.
- Groundwork for the Sovereign Tech Equity Fund.

What is new

The step is from strategy to proposed law, plus an investment vehicle. The Commission links industrial policy with security: preparing for cyber risks that come with quantum computing is named alongside manufacturing and supply chains.

What the Commission reports

- Executive Vice-President Henna Virkkunen said Europe needs to accelerate and turn research strength into industrial scale, resilient supply chains and secure deployment.
- The Commission names possible uses including navigation without satellites, faster drug discovery, advanced batteries and secure communications.
- The news item we read gives no budget figure.

Limitations and open questions

- A proposal must pass the EU legislative process and can change substantially.
- Funding size, eligibility, obligations and dates are not stated in the material we read; consult the proposal text, FAQ and factsheet.
- Claims about future applications are expectations, not delivered capabilities. Sources were read on 26 November 2026. Products, rules and standards change, so check the linked originals before you rely on any detail.

How organisations can respond now

1. Suppliers of quantum hardware, components or software: read the proposal and note eligibility and supply security provisions.
2. Security teams: build a cryptographic inventory, starting with data that must stay confidential for many years.
3. Prefer systems where algorithms can be changed without redesign.
4. Ask critical vendors for post-quantum migration plans and dates.
5. Assign someone to follow the legislative process and consultation opportunities.

What it means for technology leaders

The near-term action is cryptographic readiness, which is useful whatever happens to the proposal. Investment and market effects depend on final text and funding. Avoid buying quantum capability on the strength of policy announcements; define a problem and a test first. Related: post-quantum planning and the planned NIST TLS revision.

Frequently asked questions

- **What is the EU Quantum Act?** A Commission proposal for a framework to develop and secure quantum technology in Europe.
- **Is the EU Quantum Act law?** No. It was proposed on 25 November 2026.
- **What are its pillars?** Research excellence, bringing technology into use, and securing systems and supplies.
- **Does it require post-quantum cryptography today?** The proposal creates no current obligation; check other laws that apply to you.

Related reading

- Post-quantum privacy and Q-day planning
- NIST SP 800-52 revision
- Verified quantum algorithm search
- TPBOK standard

Related credential: Certified Technical Practitioner. Explore the exam facts and syllabus.

Sources and further reading

1. European Commission. Commission proposes Quantum Act and new Sovereign Tech Equity Fund to strengthen Europe's industrial capacity and security. 25 November 2026. digital-strategy.ec.europa.eu/en/news/commission-proposes-quantum-act-and-new-sovereign-tech-equity-fund-strengthen-europes-industrial
2. European Commission. Proposal for a Quantum Act. 25 November 2026. digital-strategy.ec.europa.eu/en/library/proposal-quantum-act

Published by IICTP, an independent technical credential body, on 26 November 2026. The current version of this post is at https://blogs.iictp.org/eu-quantum-act-proposal-2026-explained. More guides: blogs.iictp.org.