

Quantum Flagship



Nature of the Initiative	European Project International Project	
Mission	To consolidate and expand European scientific leadership and excellence in this research area, to kick-start a competitive European industry in Quantum Technologies and to make Europe a dynamic and attractive region for innovative research, business and investments in this field.	
Sector(s) addressed	EOSC (Research)	
Leading organisation	European Commission	
Members (approx.)	5,000+	
Founded (Year)	2018	
Social Media Presence	LinkedIn Twitter - X YouTube	
Relevance for Industry 4.0	It acts as a central hub for the various initiatives, ensuring efficient linkage and complementarity of activities. These include education – from school level all the way up to professional (re)training – and Europe’s flourishing quantum tech industry.	
Key Information	Levels	Important Links
Data Space Technical Specifications	★	Website
Data Space Governance	★★★★	Document Library
Data Space Demonstration	★★★★	Events , Mobile World Congress 2024 , EQTC – European Quantum Technologies Conference
Data Space Adoption	★★★★	Quantum Technology Ecosystem
Connected Initiatives	6GSNS , ETP 4 HPC , Chips JU (formerly known as KDT JU)	
Additional Information		
Contact (Name/E-mail)	Quantum Flagship info@qt.eu	

What is Quantum Technology Flagship?

The Quantum Technologies Flagship is a long-term research and innovation initiative that aims to support the work of hundreds of quantum researchers over 10 years, with an expected budget of €1 billion from the EU.

Following the Quantum Manifesto in 2016, the Flagship was launched in 2018, bringing together research institutions, and industry and public funders, consolidating and expanding European scientific leadership and excellence in quantum technologies.

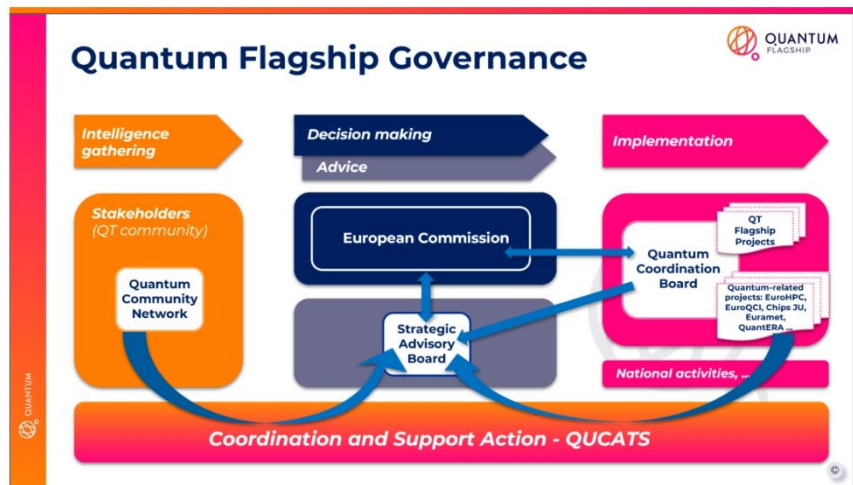
Mission & Objectives

Its mission is to support the transformation of European research into commercial applications that make full use of the disruptive potential of quantum. It is funding projects in four core application areas: quantum computing, quantum simulation, quantum communication, and quantum sensing and metrology.

Structure & Governance

The Quantum Flagship Governance structure consists of different bodies, interacting with each other:

1. Boost and drive EU Quantum industry
2. Expand EU scientific leadership
3. Make EU an attractive region for innovative business and investments
4. Benefit from QT in other areas, such as energy, health, security and environment



Bodies of the Quantum Flagship

- **Coordination and Support Action (CSA) – QUCATS:** The coordination and support action (CSA) “QUCATS” provides the Quantum Flagship Secretariat and assists the other governance bodies in the tasks and organize the participation of the quantum stakeholders.
- **Strategic Advisory Board (SAB):** The Strategic Advisory Board (SAB) is a group of high-level and renown independent quantum experts to monitor the progress of the QFS and provide input to the Strategic Research Agenda (SRA). They advise the decision-making bodies on any subject of relevance. The SAB consists of 40% industry, 40% academy and 20% RTO.
- **Quantum Coordination Board (QCB):** The Quantum Coordination Board (QCB) coordinates and aligns European Commission funding initiatives in Quantum Technologies (QT). QCB's responsibilities include coordinating and aligning Quantum Flagship Research and Innovation project activities, identifying cross-cutting topics and proposing common solutions, and it exists for the duration of the Quantum Flagship initiative.
- **Quantum Community Network (QCN):** The Quantum Community Network (QCN) represents the QT communities of EU member state and associated state in the Quantum Flagship. It consists of 1 member and 1 deputy member per member state and associated state. The QCN member mandate lasts 4 years. All members are high-profile experts with a large network in the national quantum community. The core objective is the coordination of the Flagship with national programs to identify, engage and involve relevant national stakeholders and to be the go-to-persons for all Quantum Flagship related questions in their countries.

Quantum Technology Ecosystem ([Link](#))

The European Quantum Technologies ecosystem goes far beyond R&I projects and far beyond the Quantum Flagship itself. Nonetheless, the Quantum Flagship acts a central hub for the various initiatives, ensuring efficient linkage and complementarity of activities. These include education – from school level all the way up to professional (re)training – and Europe’s flourishing quantum tech industry. There are also infrastructure deployment initiatives in quantum computing and communication. It’s not all about Europe though – international cooperation is an important part of Europe’s quantum strategy too.

Events

- Mobile World Congress 2024: The European Quantum Zone, organised by the European Quantum Flagship, showcases the innovation and development in Quantum Technologies that the European Union is driving forward. The space shows some of the latest advancements in this field, especially in quantum communication, sensing and computing. Several companies and initiatives will be present in the space.
- European Quantum Technologies Conference (EQTC): The next edition of EQTC, the European Quantum Technologies Conference, will take place on 18-20 November 2024, in Lisbon, Portugal, organised by PQI – Portuguese Quantum Institute. EQTC is a Quantum Flagship event aiming at showcasing the latest developments of research and innovation in Quantum Information Science and Technology, and discussing the corresponding scientific and technological challenges ahead. The conference features invited talks, panel discussions, poster sessions, and an exhibition.