

New Strategic Research Agenda on Quantum technologies

On 3 March, the chair of the Flagship's Strategic Advisory Board, Prof. J. Mlynek, presented the new Strategic Research Agenda for the Quantum Flagship to Roberto Viola, the Director General of the Communications Networks, Content and Technology (Connect) at the European Commission. The document aims at setting a clear direction for the future development of quantum research and innovation in Europe.



European commission

This 70-page document was drafted after a consultation with more than 2000 quantum experts across Europe over an 18-month period. It includes ambitious goals for the Quantum Flagship over the next three years, with a broader outlook for the next six to ten years.

These goals are structured around the four major applied areas of quantum technologies:

- communication;
- computing;
- simulation;
- sensing and metrology.

These four areas are anchored by a common basis in basic science, and will be supported by work in cross-cutting areas like engineering and education and training.

Roberto Viola, Director General of DG Connect said :

Quantum is a highly strategic area for Europe. We must master it, both to deliver life-changing benefits for our citizens in fields like health, energy and cybersecurity, and to secure our technological sovereignty in a competitive field. The Quantum Flagship's Strategic Research Agenda will be crucial to shaping European quantum researchers' work in the next few years, and it will also inform the wide-ranging European strategy in quantum technologies that the Commission is currently preparing.

Prof. Mlynek, chair of the Strategic Advisory Board of the Quantum Flagship stated:

The presentation of this key document to the European Commission signifies a great achievement for the entire quantum community. Its completion has been possible thanks to the effort of more than 2000 quantum experts across Europe who have been consulted in an open and transparent process over the last 18 months to put together a document that represents the research and innovation that is taking place in Europe in this field.

Background

In October 2018, the European Commission launched the Quantum Technologies Flagship, a large-scale initiative pooling resources of research institutions, industry and public funders to consolidate and expand European scientific leadership and excellence in this field.

The Flagship will run for ten years, with an expected budget of €1 billion. In its ramp-up phase (October 2018 - September 2021), it will provide €132 million of funding for 20 projects.

In June 2019, several EU countries signed a declaration agreeing to explore together how to develop and deploy a quantum communication infrastructure (QCI) across the EU within the next ten years. Since then, 24 Member States have become part of this ambitious EuroQCI initiative.

In the period 2021-2027, quantum technologies will be supported by the Digital Europe programme, which will develop and reinforce Europe's strategic digital capacities, as well as the Commission's Horizon Europe programme, contributing to research applications.

More information

- [Press release of the Quantum Flagship](#)

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