

Dear Quantum Flagship member,

We have another packed newsletter for you, as Europe's quantum tech ecosystem seems to grow faster than ever.

You can get a first look at the EQTC 2025 programme, with Copenhagen only a few weeks away. Meanwhile you can join our online training on quantum sensing, a webinar on fault-tolerant quantum computing, or free quantum technology courses from Quantum Delta.

EuroHPC launches its *Quantum Grand Challenge* call, an exciting opportunity for Europe's quantum computing startups.

Explore breakthroughs from Quantum Flagship projects, delve into ethical questions around fair access to quantum computing, a first European quantum technology standard, QuIC's white paper on the '28th Regime', and much more.

If you would like to inform the community on quantum technology (QT) activities or events within your national or regional community, or provide feedback to the Quantum Flagship newsletter, please get in touch at newsletter@qt.eu.

Best regards,

The Quantum Flagship Coordination Team

- EQTC 2025: A glimpse of the programme
- Register now: Workshop on FTQC and Quantum Software
- Register now: QT training for Policymakers
- EuroHPC opens Quantum Grand Challenge call
- Quantum imaging research could improve retinal scans
- Interconnecting quantum memories for the quantum internet
- What does fair access to quantum computing mean?
- QuIC white paper on The 28th Regime and Innovative Quantum Companies
- JTC22 publishes its first standard: layered model for quantum computing meetings
- Apply for the Quantum City Prize
- Quantum Delta launches 'International Quantum Course'

Call for consultation: Data sources, indicators and resources on QT

News from the Quantum Flagship

Quantum Flagship event news

EQTC 2025: A glimpse of the programme

EQTC 2025 is just weeks away, taking place from **10-12 November** in **Copenhagen** – the hometown of Niels Bohr.



The 2025 edition will feature three parallel tracks - Scientific, Business and Policy - designed to reflect the diversity of the field and its stakeholders. Participants will be able to engage in sessions covering topics such as quantum information theory, the development of the quantum industry, and funding models for startups.

A selection of keynote speakers has already been announced, including:

- Professor Peter Zoller, University of Innsbruck and IQOQI
- Chief Scientific Officer, **Lene Oddershede**, Planetary Science & Technology, Novo Nordisk Foundation
- Professor Jörg Wrachtrup, University of Stuttgart
- Managing Director, **Kristine Helen Falgren**, Danish Quantum Community
- Associate Professor Kim Splittorff, NQCP, The Niels Bohr Institute, University of Copenhagen

Further speakers and sessions will be revealed in the coming weeks. For updates and programme details, keep an eye on the **ECTC** website.

EQTC 2025 will also feature a dedicated exhibition area, where research organisations, startups, industry actors and ecosystem initiatives will present their work. This space offers a chance to explore current developments, engage in dialogue and discover new collaborations. Among this year's exhibitors is Sparrow Quantum, a global leader in photonic quantum chip technology. Whis video, Sparrow Quantum gives a sense of the type of work attendees can expect to encounter at EQTC2025, and why they are looking forward to it.

The full list of exhibitors will be released on the EQTC website soon.

Quantum Flagship event news

Register now: Workshop on FTQC and Quantum Software

On behalf of the European Commission, the Quantum Flagship is hosting an online workshop on Quantum Software and Quantum Utility on **5 November**, **15:30–18:00 CET**.

Bringing together research, industry, and policy stakeholders, it will discuss Europe's roadmap toward fault-tolerant quantum computing (FTQC) and achieving quantum utility by 2030–2032. Aligned with the Quantum Europe Strategy, the Quantum Act, and the EU Quantum Computing Roadmap, the workshop will explore the trajectory from NISQ systems to FTQC, covering software, HPC integration, and industrial applications, and define steps to strengthen Europe's technological sovereignty and competitiveness.

Register now via the button below to join the strategic dialogue and help define the concrete steps and collaborations needed for Europe to lead the transition.

REGISTER NOW

Quantum Flagship event news

Register now: QT training for Policymakers



Register now for a new session of our successful QT online trainings for policymakers taking place on 6 November 2025, 11:00–12:00 CET.

This session focusses on quantum sensing
- from the human eye to planet earth.
While Dr. Patrick Bowen Montague will
delve into quantum optical coherence
tomography for retinal imaging, Dr. Jean
Lautier-Gaud will speak about the quantum
gravity network for earth monitoring. Take the
opportunity to ask your questions to the
experts during this enlightening session.

Find further information and register via the button below.



News from the European Commission

Funding for QT

EuroHPC opens Quantum Grand Challenge call

The EuroHPC Joint Undertaking has launched a *Quantum Grand Challenge* call, using a new instrument to support European start-ups and scale-ups with the maturation of their quantum computers. It invites startups to develop integrated hardware–software quantum computing solutions with strong market potential.

Implemented in two phases, start-ups will first receive financial support to develop roadmaps and prototypes over four months. The most promising projects will then be invited to submit proposals to the European Investment Bank, which may offer long-term loans backed by €100mil as part of the InvestEU initiative.

The deadline to apply for the first phase is **8 January 2026**. Find out more via the button below, and stay up to date with all the latest calls on our Funding Opportunities page.

READ MORE

News from QT projects

SEQUOIA project news

Quantum imaging research could improve retinal scans

We have profiled the SEQUOIA project, in which European research consortium is exploring a new quantum imaging technique which could one day help clinicians see the earliest signs of eye disease.

Developed under the €4.5 million Quantum Flagship project, the technique combines quantum physics and artificial intelligence to push beyond the limits of Optical Coherence Tomography (OCT). The project brings together experts in quantum physics, artificial intelligence, photonics, and clinical imaging from across Europe – including Poland, Germany, Denmark, Spain, and Italy.

QIA project news

Interconnecting quantum memories for the quantum internet

As part of the Quantum Internet Alliance (QIA) project, researchers at ICFO have recently achieved a milestone towards the distribution of entanglement over long distances. In particular, they have implemented a proof-of-principle entangled link between two solid-state quantum memories, which can store entangled photons encoding quantum information and retrieve them on-demand. Their results were published in *Physical Review X* this month.

This ability to store and retrieve entanglement on-demand is a crucial feature for the temporal synchronization of the different sections of quantum repeaters, which aim to extend quantum communication over vast distances and, as such, are crucial for establishing a worldwide quantum internet.

READ MORE

News from OpenSuperQPlus

What does fair access to quantum computing mean?

Developing quantum computers is closely linked to technological progress and innovation. However, the quantum future will impact the lives of many people and, as such, raise numerous ethical and social questions. The OpenSuperQPlus project therefore not only focuses on the technical and physical aspects of quantum computing, but it also addresses the issue of fair access to quantum computing.

Delve deeper into this topic and follow our three-part article series, in which Benedict Lane (TU Delft) and Pieter Vermaas (TU Delft) explore the ethical, social, and political dimensions of allocating access to quantum technology. They discuss questions ranging from meaningful use and potential end users to the relationship between open science and security. The articles will be published **weekly from 14 October 2025 onwards**.

STAY TUNED

News from the Community

News from QuIC

QuIC white paper on The 28th Regime and Innovative Quantum Companies

The European Quantum Industry Consortium (QuIC) has published a new white paper titled *The 28th Regime and Innovative Quantum Companies*. The paper presents a forward-looking idea: to support Europe's growing quantum sector, a new legal framework is needed – one that allows quantum companies to scale efficiently across borders within the European Union.

This concept, often referred to as the "28th Regime," proposes an EU-level company form that would function alongside national legal systems. It would allow businesses to incorporate once and operate throughout the Union. For deep tech start-ups, including those in the quantum space, this could reduce legal complexity, speed up administrative processes, and build trust with investors and partners.

TO WHITE PAPER

News from CEN-CENELEC JTC22

JTC22 publishes its first standard: layered model for quantum computing meetings

Headline

This month, CEN-CENELEC JTC22 has published its first standard: 'Layer model of Quantum Computing'. The document defines a layer model that covers the entire stack of universal gate-based quantum computers. The higher-up in the stack, the more agnostic it will be from underlying layers. Reducing the dependencies between higher and lower layers is a crucial point for optimised quantum computations. Highlighting commonalities between multiple physical systems such as transmon, spin-qubit, ion-trap, neutral-atom, and others, these imply a market for products usable for this wide range of quantum computing technologies.

The work was led by Delft Circuits, with written contributions from TNO, CINI, ParityQC, DLR, QDeepTech, Alice&Bob and Pasqal. One can obtain a copy of the standard from their National Standards Body. More information via Rob van den Brink (Delft Circuits).

TO JTC22 STANDARDISATION

News from World Quantum Day

Apply for the Quantum City Prize



World Quantum Day was celebrated worldwide on 14 April with a range of inspiring activities and events. Following this celebration, the Quantum City Prize was launched to reward creative projects that bring quantum science and technology into public city spaces, transforming urban environments into stages for scientific discovery.

This initiative invites projects that naturally integrate quantum content into everyday urban life, without the need for formal events or dedicated venues.

The submission deadline has now been extended until 14 November 2025.

Get creative. Let's Quantum and bring science to people, wherever they are. Celebrate World Quantum Day – every day, everywhere, in 2025.

READ MORE

News from Quantum Delta NL

Quantum Delta launches 'International Quantum Course'

The 'International Quantum Course' was launched on July 11th during the closing ceremony of ITU's AI & Quantum for Good Summit in Geneva, part of the UN International Year of Quantum Science and Technology.

Funded by Quantum Delta NL, developed by experts led by Jim Stolze, and launched with UNICC and ITU, the free online course aims to demystify quantum mechanics, showcase current developments, and explore its future impact. It is currently available in Dutch, German and English, with more languages coming soon.

Accessible to anyone with internet access, the course provides a low-barrier introduction to QT and awards participants a certificate—proof of their first steps into the quantum world and a seat in one of today's most important technological conversations.

READ MORE

Call for consultation: Data sources, indicators and resources on QT

The OECD is launching a consultation to identify data sources, indicators, and curated resources to strengthen its evidence base on quantum technologies. Building on the OECD.Al model, this initiative will shape how quantum-related information is presented and analysed across OECD work.

How to contribute:

Send details of relevant public or acquirable datasets to gftech@oecd.org by 30 October 2025, covering areas such as R&I activity, business trends, skills, benchmarking (e.g., Metriq), or qualitative collections.

© Selection criteria to be considered:

- Data quality and transparency: clear methodology, reliable sources and regular updates.
- Country and technology coverage: inclusion of OECD and non-member economies, and coverage across quantum computing, communication, and/or sensing.
- Accessibility: whether data are open or licensable.

CONTRIBUTE NOW







Responsibility

This newsletter is operated by the project "QUCATS – the Quantum Flagship Coordination and Support Action", which is funded by the European Commission.

Responsible for the content of this newsletter is:

VDI Technologiezentrum GmbH VDI-Platz 1 D-40468 Düsseldorf Germany

Email: info@qt.eu

Unsubscribe