



Event Summary – Korea-EU Quantum Research Forum. April 9-11, 2025



DPA areas of strategic support:

Policy Advice

Regulatory Convergence,
Standard Harmonisation,
Ethical frameworks; Digital
Services Interoperability

Technology Diplomacy

Artificial Intelligence (AI);
Semiconductors;
Data Governance and Online
Platforms; Digital Identity and
Interoperability; Quantum
Technologies and High-
Performance Computing;
Cybersecurity, Digital
Connectivity; 5G/6G Arctic
Submarine Cables

Research Cooperation

Facilitate networking and
partnership-building between
academic and industry
organisations including
through Study Visits, Outreach
and Joint Networking Events

The Korea–EU Digital Partnership & Horizon Europe (HE) Researcher’s Networking Forum held from April 9–11, 2025, in Brussels, marked an important moment in advancing international collaboration in quantum science and technology. Organised jointly by the European Commission (DG CNECT), Korea’s Ministry of Science and ICT (MSIT), and key partners including KE-QSTCC, K-QICO, NRF, and the Digital Partnerships in Action (DPA) initiative, the forum convened over 90 participants, including about 60 quantum researchers and experts involved in match-making sessions, across three days of discussion, thematic sessions and training, and a study visit for a selected group of participants.

This in-person forum built upon six previous online workshops held under the Digital Partnership established in 2022 between the EU and the Republic of Korea, and aimed to deepen cooperation in quantum computing, communication, and sensing, particularly with a view to Korea’s potential association with the Horizon Europe Programme.

The Korea–EU Digital Partnership & HE Researcher’s Networking Forum succeeded in laying the groundwork for sustained, strategic quantum cooperation. It demonstrated the value of aligning research agendas, fostering talent mobility, and encouraging joint innovation toward secure and inclusive technological progress.



- <https://digital-strategy.ec.europa.eu/en/policies/partnerships>
- <https://www.linkedin.com/company/digital-partnerships-in-action>
- <https://x.com/DPAinnovation>
- <https://eprd.pl/en/dpa>

Day 1: Plenary & Thematic Forums

The event opened with remarks by senior representatives from the Republic of Korea and the European Commission, followed by presentations on quantum science and technology policies, Horizon Europe initiatives, and the Republic of Korea's international quantum cooperation agenda.

Three parallel thematic sessions tackled the following key topics:

- **Quantum Computing & Simulation:** Researchers explored machine learning, scalable quantum hardware, fault-tolerant systems, and hybrid HPC-quantum architectures. Discussions highlighted joint interest in creating shared testbeds and training programs to build a skilled quantum workforce.
- **Quantum Communication:** The forum examined developments in QKD, secure communication protocols, and integration with classical networks. Joint standards, pilot projects, and AI-enhanced cybersecurity were identified as strategic priorities.
- **Quantum Sensing & Metrology:** Discussions centered around quantum sensors for healthcare, environmental monitoring, and industrial applications. Participants explored co-development of precision sensing technologies and cross-border test facilities.

Day 2: Matchmaking & Horizon Europe Consultations

Focused on deepening practical cooperation, Day 2 featured structured 1:1 matchmaking sessions and Horizon Europe application consulting. Experts from both the EU and Korea facilitated guidance on proposal development, eligibility criteria, and administrative best practices. Participants appreciated the opportunity to meet future potential partners and collaborators and gain hands-on support for forming competitive consortia.

Day 3: Study Visit to TU Delft

A select group of Korean researchers visited TU Delft in the Netherlands, one of Europe's leading quantum innovation hubs. The visit offered a firsthand view of European research infrastructure and reinforced the commitment to long-term, cross-border R&D partnerships in quantum technology.

Strategic Outlook and Recommendations

Feedback underscored the forum's value in fostering meaningful connections and catalysing collaborative research. Participants recommended: enhancing matchmaking tools and communication in future editions; offering ongoing support via proposal-writing workshops, institutional visits, and travel grants; structuring recurring events and co-funded testbeds to strengthen cooperation; creating mechanisms to support consortium-building and joint proposal submission.

Discussion among researchers highlighted shared ambitions to explore establishing in the longer-term joint infrastructures, harmonise standards and nurture human capital.

Suggestions for deepening cooperation were advanced by individual researchers, including

- Exploring the possibility to create shared testbeds and integrate software ecosystems;
- Assess the feasibility of developing hybrid quantum-HPC platforms and cross-border testing facilities;
- Promote launching joint training programs and mobility schemes for early-career researchers;
- Establish the EU-Korea forum as an annual flagship event to support further joint engagement.