



European  
Commission

## All Member States now committed to building an EU quantum communication infrastructure

Ireland is the 27th EU Member State to sign the EuroQCI Declaration. This means that all 27 EU Member States have signed it.

**DECLARATION ON A  
QUANTUM COMMUNICATION  
INFRASTRUCTURE  
FOR THE EU**

**All 27 EU Member States**  
have signed a declaration agreeing to work together to explore how to build a quantum communication infrastructure (QCI) across Europe, boosting European capabilities in quantum technologies, cybersecurity and industrial competitiveness.

@FutureTechEU #EuroQCI

## All Member States are now committed to building an EU quantum communication infrastructure

Ireland has now signed the EuroQCI Declaration. This means that all 27 EU Member States have committed to working together alongside the European Commission and the European Space Agency (ESA) to build the EuroQCI — a secure quantum communication infrastructure that will span the whole EU. The EuroQCI will be part of the space-based secure connectivity system currently being planned by the Commission.

High-performing, secure communications networks are essential for Europe's businesses, educational institutions and governments, both to enable them to run smoothly every day, and to share information and adapt quickly in times of crisis. The Commission is therefore planning to launch a satellite-based secure connectivity system that will make high-speed broadband available everywhere in Europe to provide reliable, secure and cost-effective connectivity services. It will include the EuroQCI, a quantum communication infrastructure safeguarding the EU's sensitive communications and data and protecting critical infrastructures.

The EuroQCI will integrate quantum cryptography and innovative and secure quantum-based systems into conventional communication infrastructures, complementing them with an additional layer of security based on quantum physics. For example, by providing services based on quantum key distribution, a highly secure form of encryption. This will protect data transmission between Europe's government institutions, municipalities and embassies, as well as key sites such as hospitals and energy grids.

The EuroQCI will consist of a terrestrial segment, where fibre communication networks link strategic sites at national and cross-border level, and a space segment based on satellites, and linking national quantum communication networks all over the EU and worldwide. The EuroQCI Declaration was launched in June 2019, and since then the participating Member States along with the Commission and the ESA have met regularly to plan the initiative's implementation. The aim is for it to be fully functional by 2027.

## **Next steps for the EuroQCI**

In 2021 and 2022, Digital Europe programme and Connecting Europe Facility actions will support the development of national and cross-border quantum communication networks, the development of European devices and systems, and a testing and certification infrastructure to prepare for the use of new technologies in the EuroQCI. Meanwhile, the Commission, participating Member States and the ESA are discussing the development and deployment of the initiative's space segment.

## **Downloads**

Signature of Irish Minister Of State Ossian Smyth  
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