

DECLARATION OF COOPERATION

Between

Royaume de Belgique/Koninkrijk België

and

Bundesrepublik Deutschland

and

Reino de España

and

Repubblica italiana

and

Grand-Duché de Luxembourg

and

Repubblika ta' Malta

and

Koninkrijk der Nederlanden

The signing Member States plan to work together for exploring how to make available across the EU an integrated Quantum-secure Communication Infrastructure, which would upraise Europe's scientific and technological capabilities in cybersecurity, quantum technologies and industrial competitiveness and its strategic autonomy.

Background

In 2018, the European Commission adopted a series of proposals for Regulations of the European Parliament and of the Council establishing the Digital Europe Programme and the European Cybersecurity Industrial, Technology and Research Competence Centre and the Network of National Coordination Centres. These proposals aim, among others, to further develop and reinforce Europe's capacities in advanced digital technologies, including those in the areas of cybersecurity, quantum and smart data infrastructures, to provide high quality and secure space-related data, information and services, and enhance the security of the Union and its Member States, and its strategic autonomy, and to stimulate the European cybersecurity technological and industrial ecosystem and help the Union retain and develop the capacities necessary to secure its Digital Single Market.

In October 2018, under the Horizon 2020 Research Framework Programme, the European Commission launched the Quantum Technologies FET Flagship with the support of the Member States. The Flagship is a long-term, large-scale research initiative pooling resources around a commonly agreed science and technology roadmap. The underpinning vision of the Flagship is to develop in Europe the Quantum Internet, interconnecting quantum computers, simulators and sensors to distribute information and quantum resources securely all over Europe. The Flagship kick-starts a competitive European industry in quantum technologies to make Europe a leader in the future global industrial landscape.

This Declaration also builds on the technological advances made by the Union's space programmes and by the European Space Agency (ESA) to significantly boosting Europe's capabilities in optical communications and cybersecurity. One of their objectives is to use satellite technologies for delivering Quantum Key Distribution (QKD) services (a technology that uses the principles of quantum mechanics to perform cryptographic tasks), which are not achievable by terrestrial solutions alone.

This Declaration recognises the progress made in the national programmes and initiatives of several Member States focusing on the development of quantum technologies, cybersecurity and quantum-secure communication networks, including in Austria, France, Germany, Italy, the Netherlands, Poland and Spain.

Purpose

The participating Member States:

1. Plan to work together to establish a cooperation framework – EuroQCI – for exploring within the next 12 months, the possibility of developing and deploying in the Union, within the next 10 years, a certified secure end-to-end quantum communication infrastructure (QCI) composed of space-based and terrestrial-based solutions, enabling information and data to be transmitted and stored ultra-securely and capable of linking critical public communication assets all over the Union.
2. Plan, in the context of EuroQCI, to work together and with the European Commission, and with the support of the European Space Agency, to prepare preferably before the end of 2020, an action plan that would explore the benefits and the feasibility, including the best available options, for putting in place the above mentioned QCI by addressing the following:
 - 2.1 The high-level architectural system options underpinning the feasibility of the QCI that optimally address the relevant public user requirements and use cases, including the best available combination of terrestrial and satellite technologies and their interfacing.
 - 2.2 An overview of the possible Implementation Roadmap of the QCI activities under the new EU multiannual financial framework covering the period 2021-2027, that could include:
 - The technical and operational requirements needed to design, develop, test, deploy and validate the QCI;
 - The associated development, and deployment activities;
 - An infrastructure that could become available across the EU for assessing the compliance of technologies with the QCI infrastructure and their certification and validation in view of their possible integration in the QCI;
 - An estimate of the required financial resources needed for addressing the above.
 - 2.3 An overview of relevant security schemes that would be required for QCI to support sensitive applications. This includes the definition of the broad security objectives that would need to be met in the design and implementation phases of the QCI and an associated security management plan.

2.4 The further development of a high-quality competitive European cybersecurity and quantum technology and its integration in the QCI, increasing Europe's digital autonomy.

3. Agree that the target quantum-secure communication infrastructure should focus on the growing security needs of the public sector, while also exploring ways and conditions to open the availability of this infrastructure to users from industry, while guaranteeing the best use of the infrastructure for public use and for promoting an innovative and competitive European industry.
4. Invite all Member States to join the EuroQCI cooperation framework.
5. The signatories of this declaration commit to regularly discuss the progress made on the matters agreed above and to adopt appropriate measures in order to adequately react to the emerging opportunities and challenges related thereto. Additional signatories may adhere at any time.

This declaration does not create any rights or obligations under international law.

Done in Bucharest on 13 June 2019 in one original in the English language.

**For the Royaume de Belgique/
Koninkrijk België**



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