

European Data Gateways as a key element of the EU's Digital Decade

Ministerial Declaration

1. THE IMPORTANCE OF CONNECTIVITY

The European Council of October 2, 2020 concluded that: “To be digitally sovereign, the EU must build a truly digital single market, reinforce its ability to define its own rules, to make autonomous technological choices, and to develop and deploy strategic digital capacities and infrastructure (...). At the international level, the EU will leverage its tools and regulatory powers to help shape global rules and standards. The EU will remain open to all companies complying with European rules and standards. Digital development must safeguard our values, fundamental rights and security, and be socially balanced.”

Europe's digital sovereignty and global competitiveness depend on strong and secure internal and external connectivity. Leveraging both dimensions is a precondition for the EU to become “the most attractive, most secure and most dynamic data-agile economy in the world”.

2. EUROPEAN DATA GATEWAYS

The EU has the potential to become a world-class data hub where data is stored, shared and processed in a secure way, bringing benefits to our economy, citizens and the environment. Besides a strong legal framework and high quality internal infrastructure, the EU needs to ensure future proof high quality connections to the rest of the world if it is to become such a hub and ensure that the services provided can be offered on a world-wide basis. It is also of critical importance that European security and prosperity is not undermined by high-risk vendors.

An increased focus on international connectivity through terrestrial and submarine cables, satellites, Internet Exchange points, data centres, and other technologies would complement the vision of a united and outward-focussed EU, as set out in the Communication on Shaping Europe's Digital Future, and in the Communication on Europe's Digital Decade, which proposes the creation of a Digital Connectivity Fund. This vision is also reflected in the European Strategy for Data, the Space Strategy for Europe, the White Paper on Artificial Intelligence, the EU Security Union Strategy, and the Action Plan on synergies between civil, defence and space industries and.

The connectivity networks around the EU **can be viewed** as four platforms, each of which has a specific geopolitical significance:

- the EU-Atlantic Data Gateway Platform;
- the EU-Mediterranean Data Gateway Platform;
- the EU-North Sea & Arctic Data Gateway Platform;
- and the EU-Baltic-to-Black Sea Data Gateway Platform.

Under the Portuguese Presidency, the EU-Atlantic Data Gateway Platform will be strengthened with the inauguration of the EU co-financed Ellalink Cable¹, connecting Europe (through Sines, Portugal) to Latin America (through Fortaleza, Brazil).

It's important to identify and analyse the current status of existing digital international connectivity infrastructures, before launching more initiatives of this kind, to ensure that connectivity between the EU and other parts of the world, such as the Western Balkans and its northern, eastern and southern neighbourhood,² the Arctic region, Africa³, South and South East Asia, have the speed and the capacity to keep up with increasing requirements in terms of internet traffic and data flows. Such connections provide alternative routes for global internet traffic and support the security, stability and resilience of the Internet.

A stronger EU approach to digital connectivity will contribute to the 2030 Agenda for Sustainable Development, where telecommunications and ICT are key instruments to enable and accelerate social, economic and environmentally sustainable growth and development for everyone, including the uptake of green ICT in partner countries and regions. It would also respond to the report by the European Parliament Committee on Foreign Affairs on [Connectivity and EU-Asia relations](#).

3. A CALL TO ACTION

Our call to action aims to improve the conditions for the EU to develop into a competitive world-class data hub by strengthening the EU's internal and external communication capacity and thereby protecting its interests, while promoting its values. It has the following objectives:

- **Expanding the reach of EU data storage and processing services:** Four market players account for the vast majority of the world market of data storage and processing/management services. Greater international connectivity, including data centres and Internet Exchange Points, could allow and facilitate the exchange of more data, helping to develop European strategic technologies, digital services and research, while simultaneously upholding European values. . It could also complement the development of cross-border trusted data spaces and plans to set up a European Alliance on Industrial Data and Cloud. Indeed, increasing the capacity to access diverse data sources would sustain the EU's position as a global data manager and provider of high-quality digital services and capabilities (e.g. in Artificial Intelligence, High Performance Computing, Quantum Communication Infrastructure, management of high-value datasets and Blockchain).
- **Increasing where needed and securing submarine connectivity:** Submarine cables are essential in order to sustain the exponential increase in internet traffic volumes⁴ and ensure the security, stability and resilience of the open internet on which our

¹ As part of the [BELLA Programme](#).

² This is in line with EU priorities in supporting the green and digital transitions, as outlined in the Economic and Investment Plan for the Western Balkans (COM(2020) 641 final) and the Eastern Partnership policy beyond 2020 (JOIN(2020) 7 final) and the Renewed partnership with the Southern Neighbourhood, A new Agenda for the Mediterranean (JOIN(2021) 2 final).

³ [Joint Communication: Towards a Comprehensive Strategy with Africa](#).

⁴ Data traffic across the Atlantic is doubling every two years, creating a continuous need for more submarine cables.

economy and society depend. New, secure cable infrastructures can benefit from sources of growth in the European Neighbourhood and Western Balkans, the Arctic region, Africa, South and South East Asia for mutual benefit. In this respect, the outermost regions and overseas countries and territories can play a crucial role in the expansion of international connectivity networks. Increased international connectivity would need to be matched by increased local connectivity in the regions and countries concerned, in particular as regards developing countries. At the same time, the existing EU submarine cable infrastructures are ageing,⁵ and Europe needs to strengthen knowledge in all domains of this technology by retaining talent and reinforcing expertise.

- **Expanding space-based secure connectivity:** As a means to increase international connectivity, satellites and submarine cables are complementary. Together they **build on existing initiatives** and strengthen the capacity of communication networks and can help to increase the overall resilience, strategic autonomy and cybersecurity of the EU. Satellites provide an important, flexible⁶ and resilient international link between the EU and the rest of the world, especially for island nations and land-locked countries, and which can be very rapidly deployed globally. Europe is fortunate to be home to world-leading satellite operators and manufacturers, which could create a global satellite network, helping ensure access to high-speed broadband and securing autonomy. Building on existing assets, satellite networks can be very rapidly and cost efficiently deployed globally. While the concrete objectives and the governance of a Space-based Secure Connectivity initiative are currently being studied by the European Commission, three potential outcomes of such a system could be to : (i) provide secure satellite governmental⁷ communications (ii) bring local connectivity to remote areas, such as large parts of Africa, which are not covered by existing services, and (iii) provide resilient and flexible connectivity allowing Europe to remain connected at all times, including in the event of large-scale cyber-attacks. In addition, such an initiative could be complementary to the Galileo signal providing to Copernicus data relay capacity for real-time missions, or hosting extra payload space-based sensors to perform space surveillance and tracking directly from space. In this context, the European Space Agency (ESA) and the future EU Agency for the Space Program (EUSPA) would be key players. It will also be crucial for the development of telecommunication services in areas without or with insufficient coverage.
- **Keeping the continent safely and securely connected:** Cyber incidents and attacks are putting communication networks at risk and in order to tackle this a combination of solutions is needed. Further exploring both space and land-based communication infrastructure possibilities would enhance Europe's capacity to withstand cyber related issues. The EuroQCI cooperation framework, as proposed in 2019 ([Declaration here](#)) has the potential to act as starting point for the design and the development of a certified terrestrial, submarine and space-based secure end-to-end Quantum Communication Infrastructure.
- **A tool for international partnerships:** The Ellalink Cable demonstrates the value of cooperating with strategic partners such as Brazil to increase international connectivity to the benefit of both parties. Connectivity Partnerships such as the one

⁵ The average age of the submarine cable systems, that connect the EU Member States with each other or with the rest of the world, is seventeen years.

⁶ Such as that enabled by the High-Altitude Pseudo-Satellites (HAPS).

⁷ [GOVSATCOM](#)

signed with Japan in 2019 offer a tool to demonstrate the gains from alliances of like-minded partners, including order to cooperate in multilateral fora.

4. A MINISTERIAL DECLARATION ON EUROPEAN DATA GATEWAYS AS A KEY ELEMENT OF THE EU'S DIGITAL DECADE

Against this background, we, the subscribing EU Member States commit to align our own digital initiatives to focus on the international connectivity pillar, where possible and taking into consideration the national circumstances, by:

1. Allocating funding under the **Recovery & Resilience Facility**, where appropriate, reinforcing national connectivity of international entry points, or connections between and within EU Member States, where private investments are not forthcoming or sufficient. This can complement internal EU connectivity projects that may be funded by the **Connecting Europe Facility**, the **Digital Europe Programme**, **Structural Funds or other EU financial instruments**, thus improving the resilience of the overall European connectivity strategy, ensuring sufficient redundancy, and preparing Europe to receive an exponential flow of data going to and coming from the rest of the world.
2. Working within the **Digital for Development** (“D4D”) Hub, in close coordination with EU Member States and their development agencies, the European private sector, civil society and academia, the European Investment Bank and development finance institutions, as well as multilateral development banks, to identify international connectivity projects and local connectivity projects in partner countries;
3. Proposing **Team Europe Initiatives**, developed by EU Member States and EU institutions, that can support the objectives of this declaration, such as the proposed Building Europe to Africa programme and the EU-AU Data Flagship initiative;
4. Exploring with the European Commission the possibilities of further strengthen space-based secure connectivity capabilities in Europe;
5. Working with the European Commission to explore the need and design of a **mandatory reporting system** for submarine cable operators to report cable outages.

The subscribing Member States welcome the inclusion of the European **Data Gateway Platforms** concept in Europe’s Digital Decade Communication and call on the European Commission to:

1. Conduct a study to **map digital public and private connectivity infrastructures** (terrestrial, submarine and space) outside of the EU; analyse the main stakeholders in digital connectivity; forecast infrastructure growth in the next ten years and make a gap analysis of digital connectivity infrastructure needs.
2. **Estimate the incoming/outgoing data flow** volumes to/from the different parts of the World, capitalizing on the ongoing European Commission’s work related to the mapping of cloud-based data flows, and benchmark those against the EU’s current and future international connectivity availability and capacity;
3. Continue to develop the global **Géant network**, which is a key element of the EU’s overall digital connectivity strategy. This includes R&D funding for submarine cables technologies and support for Africa Connect, EUMEDConnect, EaPConnect, the Trans-Eurasia Information Network, RedClara and CAE-100, as well as the access tools such as EduRoam. New possible Géant partners include Nordunet, which is planning a

- development in the Arctic region.
4. Explore the need for targeted **support from the external cooperation instruments** (NDICI and IPA)⁸ to investments in submarine cable systems and satellite communication networks, complementing and extending existing infrastructure, with a focus on expanding high-quality digital connectivity to underserved populations and areas, while promoting and ensuring network and data security as well as ecological sustainability, resource and energy efficiency and seismic detection, in line with the UN Sustainable Development Goals (SDG);
 5. Explore the feasibility of a **Digital Connectivity Fund**, as proposed in the Digital Decade, together with our partners and in a Team Europe approach. Such a Fund could bring together all the relevant funding instruments in a strategic way for maximum impact of connectivity investments;
 6. Ensure that connectivity investments in third countries should not be taken forward in isolation, but should be part of **digital economy packages** that comprehensively address all aspects of digitalisation – including data protection and cybersecurity frameworks – guaranteeing the promotion of a human-centric model of digital development.
 7. Designate submarine cables as part of the EU’s **critical infrastructure**. This would subsequently require supporting actions such as improving cybersecurity, licensing, authorization and registration of submarine cables; guidelines for licensing satellite communication systems and for sharing and colocation of terrestrial network connectivity to submarine landing stations.
 8. Where appropriate, seek opportunities for cooperation on international connectivity with **like-minded partners** that share the EU’s vision of a human-centric digital transformation.

⁸ Neighbourhood, Development and International Cooperation Instrument (NDICI) and Instrument for Pre-Accession Assistance (IPA)