# **European Commission - Press release**





# Space: EU initiates a satellite-based connectivity system and boosts action on management of space traffic for a more digital and resilient Europe

Strasbourg, 15 February 2022

Today, the EU is acting on its space ambitions by tabling two initiatives - a proposal for a Regulation on a **space-based secure connectivity** and a Joint Communication on an **EU approach on Space Traffic Management (STM)**. Space technology is essential for facilitating our daily lives, contributing to a more digital, green and resilient future for our planet. As a major space power, the EU's Space Programme already provides valuable data and services for a wide array of daily applications from transport, agriculture, and crisis response to the fight against climate change, to name a few.

However, due to new challenges and increased international competition, the EU's space policy needs to constantly evolve and adapt if we want to continue enjoying freely the benefits that space brings. Today's initiatives will help safeguard the efficiency and security of our current assets while developing European cutting-edge space technology to the benefit of our citizens and economy.

# Space-based secure connectivity

In today's digital world, space-based connectivity is a strategic asset for EU's resilience. It enables our economic power, digital leadership and technological sovereignty, competitiveness and societal progress. Secure connectivity has become a public good for European governments and citizens. The Commission is thus putting forward an ambitious plan for an **EU space-based secure communication system** that will:

- Ensure the long-term availability of worldwide uninterrupted access to secure and costeffective satellite communication services. It will support the protection of critical infrastructures, surveillance, external actions, crisis management and applications that are critical for Member States' economy, security and defence;
- Allow for the provision of commercial services by the private sector that can enable access to
  advanced, reliable and fast connections to citizens and businesses across Europe,
  including in communication dead zones ensuring cohesion across Member States. This is one of
  the targets of the proposed 2030 Digital Decade. The system will also provide connectivity over
  geographical areas of strategic interest, for instance Africa and the Arctic, as part of the EU
  Global Gateway strategy.

Both governmental user needs and satellite communication solutions are changing rapidly. The EU space-based secure communication system seeks to meet these increased and evolving needs, and will also include the latest quantum communication technologies for secure encryption. It will be based on the development of innovative and disruptive technologies, and on the leveraging of the New Space ecosystem.

The total cost is estimated at €6 billion. The Union's contribution to the Programme from 2022 until 2027 is €2.4 billion at current prices. The funding will come from different sources of the public sector (EU budget, Member States, European Space Agency's (ESA) contributions) and private sector investments.

This initiative will further boost the competitiveness of the EU space ecosystem, as the development of a new infrastructure would provide a gross value added (GVA) of  $\in$ 17-24 billion and additional jobs in the EU space industry, with further positive spill-over effects on the economy through the downstream sectors using the innovative connectivity services. Citizens would also benefit from the technological advantages, reliability and operational performance of such satellite communication services ensuring high-speed internet connections across the EU.

## **Space Traffic Management**

With an exponential increase in the number of satellites in orbit due to new developments in reusable launchers, small satellites and private initiatives in space, the resilience and safety of EU and Member States' space assets are at serious risk. It is critical to protect the long-term viability of

space activities by ensuring that space remains a safe, secure and sustainable environment. This makes Space Traffic Management a priority public policy issue, which requires the EU to act now, collectively and at a multilateral level, if we are to ensure a safe, secure and sustainable use of space for the generations to come.

Against this background, the Joint Communication establishes an EU approach on Space Traffic Management. The goal is to develop concrete initiatives, including operations and legislation, to promote the safe, secure and sustainable use of space while preserving the EU's strategic autonomy and industry's competitiveness.

The EU approach focuses on four elements:

- Assessing the STM civilian and military requirements and impacts for the EU;
- Strengthening our **technological capability** to identify and track spacecraft and space debris;
- Setting out the appropriate normative and legislative framework;
- Establishing international partnerships on STM and engaging at a multilateral level.

# Members of College said:

Executive Vice-President Margrethe **Vestager** said: "Space technology is essential for our everyday life and security. Today's initiatives will ensure secure, efficient connectivity at all times. It is benefitting both citizens and governments. It will play a key role in Europe's digital transformation. And make us more competitive. I hope that an EU approach to space traffic management and space technology will guarantee a safe and sustainable use of space in the long run."

The High Representative of the Union for Foreign Affairs and Security Policy, Josep **Borrell**, stated: "Space has become more crowded than ever, increasing the complexity and the risks related to space operations. To address this global challenge, we propose today an EU approach to Space Traffic Management. We will develop concrete capabilities, set norms and engage with key partners and in multilateral fora to ensure a safe, secure and sustainable use of space. While STM is a civilian endeavour, European security and defence depend on a safe, secure and autonomous access to space."

Thierry **Breton**, Commissioner for the Internal Market, said: "Space plays a growing role in our daily lives, our economic growth, our security, and our geopolitical weight. Our new connectivity infrastructure will deliver high-speed internet access, serve as a back-up to our current internet infrastructure, increase our resilience and cyber security, and provide connectivity to the whole of Europe and Africa. It will be a truly pan-European project allowing our many start-ups and Europe as a whole to be at the forefront of technological innovation."

## **Background**

The two initiatives adopted today are concrete deliverables of the <u>Action Plan on Synergies between</u> <u>civil, defence and space industries</u>, where these two flagship projects are mentioned.

#### **Secure Connectivity**

To implement this new space-based initiative ensuring secure connectivity across Europe, the Commission launched in December 2020 an initial system study to explore technical aspects and the potential service provision models.

Meanwhile, the Commission published an additional call to also involve the European New Space ecosystem to integrate technologically cutting-edge, innovative ideas by SMEs and start-ups. Two contracts were awarded in December 2021 and the technical work is now ongoing with results expected by June 2022.

## **Space Traffic Management**

Since 2016, the Union already has a Space Surveillance & Tracking capability (SST), implemented by the <u>EU SST Consortium</u>. More than 130 European organisations from 23 Member States have registered so far to the EU SST services (collision avoidance, fragmentation analysis, re-entry analysis). Today, more than 260 EU satellites, including the Galileo and Copernicus fleets, benefit from the collision avoidance service.

In 2021, partners of EU SST shared 100 million measurements through their data-sharing platform. Most recently, the EU SST fragmentation service confirmed the detection of and monitored space debris from destruction of a satellite in low orbit (COSMOS 1408) following an anti-satellite test conducted by Russia on 15 November 2021.

## More information

Questions and Answers on Secure Connectivity

Factsheet on Secure Connectivity

Questions and Answers on Space Traffic Management

Factsheet on Space Traffic Management

Webpage on the Space Package

Joint Communication: An EU Approach for Space Traffic Management - An EU contribution addressing a global challenge

Proposal for a Regulation establishing the Union Secure Connectivity Programme for the period 2023-2027

IP/22/921

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#### Related media

Sentinel: Space photos of the European Space Agency (ESA)