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**NOTE**

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From: Presidency  
To: Permanent Representatives Committee/Council

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Subject: *Preparation of the Competitiveness Council on 1-2 December 2022*  
EU Space data exploitation  
*Policy debate*

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Delegations will find in the [Annex](#) a background document in view of the policy debate in the Competitiveness Council - Space part on 2 December 2022.

COMPETITIVENESS COUNCIL - INTERNAL MARKET, INDUSTRY, RESEARCH AND  
SPACE - 2 December 2022

*Political discussion*

*on*

*EU Space Data Exploitation*

**Context**

**We live in the Age of data.** There are more data and data sources available than ever before. However, the **ongoing challenge is to exploit their full potential** and acknowledge their intrinsic value, particularly in applications.

Thanks to years of concerted efforts and cooperation among major European space players, in particular the European Commission, the Member States, the European Union Agency for the Space Programme (EUSPA) and the European Space Agency (ESA), high technology satellite navigation and Earth observation systems have been developed and deployed.

**EGNOS** has been providing valuable corrections to satellite navigation signals for several years, **Galileo** provides robust services with high spatial and time accuracy. **Copernicus** became the worldwide reference for Earth observation, it is the backbone of European Earth observation, and it offers data for a wide range of uses.

GOVSATCOM component of the EU Space programme and the Secure Connectivity initiative will develop them further.

In addition to technical tools, which enable signal and data processing, such as machine learning/artificial intelligence, advanced GNSS signals processing technologies, advanced cryptography and others, it is important to have a systematic approach to user uptake and to create a **favourable environment supporting further EU space data exploitation.**

## **Acknowledgement of Space data benefits and role of users**

The main effort in the early stage of the Copernicus, Galileo and EGNOS programmes was to put in place the necessary infrastructure (space and ground) necessary for the provision of space data and services. These services are operational today and the focus on **users and their requirements is at the heart of the EU Space Programme**. Every day it becomes clearer that increasing numbers of users and strengthening their role in space activities opened new dimensions demonstrating the importance of space to EU citizens and to the EU economy and society. It also makes more compelling the need to invest into new technologies to be able to prepare robust and resilient operational space infrastructures and new services.

Higher uptake of space by EU citizens and enhanced trust in space will be continuously bringing new user requirements. In response to the new user requirements, EU space infrastructures will be step-by-step further developed to offer new added value services and enable development and deployment of new space-based applications.

The **benefits of space-based applications were recognised by studies, proofed in practice, and also acknowledged by several Council Conclusions** in the last few years.<sup>1</sup> **Space data and signals are at the heart of innovation**, because they are major enablers for higher efficiency on a wide range of economic sectors. EUSPA has identified 17 market segments<sup>2</sup> based on satellite navigation and Earth observation across all economic activities that cater for our competitiveness. Space data and signals are also of great importance in the field of security and defence.

In spite of proven benefits, we are still facing too **limited awareness of their real potential**, which is one of the biggest blockers. It is quite obvious that every market segment has its own dynamics and specificities, as well as different readiness to adopt space-based solutions.

## Actions

Development of space downstream sector has started much later than infrastructure development. However, this sector has significantly accelerated in the recent past, and much faster development of space downstream sector is expected in near future – and this provides important opportunities to the EU private sector. To support space downstream development in Europe, all stakeholders should work together to create favourable conditions and environment.

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<sup>1</sup> E.g. Council conclusions on "A Space Strategy for Europe" as adopted by the Council at its meeting on 30 May 2017; Council conclusions on "Space solutions of a sustainable Arctic", adopted by the Council at its 3733rd meeting held on 29 November 2019; Council conclusions on "Orientations on the European contribution in establishing key principles for the global space economy" adopted by written procedure on 11 November 2020; Council conclusions on "Space as an enabler", adopted by the, Council at its 3694th meeting held on 28 May 2019; Council conclusions on "Space for a sustainable Europe", adopted by written procedure on 4 June 2020; Council conclusions on Space for everyone, adopted by the Council at its 3830th meeting held on 26 November 2021; Council conclusions on "New Space for People", adopted by the Council at its 3797th meeting held on 28 May 2021; Council conclusions on "Space for People in European coastal areas", adopted by the Council at its 3797th meeting held on 28 May 2021; Council conclusions on "Copernicus by 2035", adopted by the Council at its 3877th meeting held on 10 June 2022; and others.

<sup>2</sup> Agriculture, aviation and drones, biodiversity, ecosystems and natural capital, climate services, consumer solutions, tourism and health, emergency management and humanitarian aid, energy and raw materials, environmental monitoring, fisheries and aquaculture, forestry, infrastructure, insurance and finance, maritime and inland waterways, rail, road and automotive, urban development and cultural heritage, space.

The next steps should be structured and coordinated in order to reap their economic and social benefits in the EU. To **increase further penetration of space data and signals into practice**, it is necessary to recognise them as a powerful tool of daily use which helps also to implement the EU and national policies.

Following the actual division of tasks in the EU Space Programme implementation, while it is the overall task of the Commission to ensure the uptake and use of EU space data and services, EUSPA is well positioned to have the role of a **coordinator of Europe's space downstream market uptake strategy definition and implementation**. EUSPA should actively liaise and work with all stakeholders to prepare the robust and effective utilization of space data and services, and to create a competitive space downstream ecosystem in Europe.

Respecting roles and competences of various entities in the space ecosystem building value chain, Europe's space downstream market uptake strategy should be structured along the market segments and include the wide range of topics and activities such as:

- Awareness raising.
- Education, training, support of young professionals,
- Capacity building across Europe, entrepreneurships,
- Lessons learned and knowledge exchange,
- Collection and evaluation of user requirements,
- User uptake and user consultations,
- Start-ups and incubation schemes,
- Identification of high added value application and valuable synergies among EU satellite systems products,
- Metrics to evaluate the benefits of the Union's satellite systems on regular bases,
- Standardization and legislation.

## Questions:

- 1) **From EU Member States perspective, how should EU institutions and EU Member States better interact to support broader use of space data in various market segments and being part of the EU and national policies, where appropriate? In particular, how would your ministry work in synergy with EU Institutions and national institutions in other MS to better work/liaise with other relevant public and private stakeholders in respective market segments, both at national and European level?**
  
  - 2) **In which market segments do you see regulatory or administrative barriers that are hindering the uptake of EU space services on European or national level? What could be done at the EU level to remove such barriers?**
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