

Brussels, 16 November 2022 (OR. en)

14231/1/22 REV 1

ESPACE 112

NOTE

From:	Presidency
To:	Permanent Representatives Committee/Council
Subject:	Preparation of the Competitiveness Council on 1-2 December 2022
	EU Space data exploitation
	Policy debate

Delegations will find in the <u>Annex</u> a background document in view of the policy debate in the Competitiveness Council - Space part on 2 December 2022.

14231/1/22 REV 1 CDP/nj 1
COMPET 2

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 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.

The GOVSATCOM component of the EU Space programme and the Secure Connectivity initiative will create further opportunities for data creation and management.

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 the numbers of users and strengthening their role in space activities opened new dimensions, showing the importance of space to EU citizens and to the EU economy and society. It also makes more compelling the need to invest in new technologies to be able to prepare robust and resilient operational space infrastructures and new services.

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

The benefits of applications based on space data and services were recognised by studies, proven in practice, and also acknowledged by several Council Conclusions in the last few years¹. Space data and services are at the heart of innovation, as they are major enablers for higher efficiency in a wide range of economic sectors. EUSPA has identified 17 market segments² based on satellite navigation and Earth observation across all economic activities that cater for our competitiveness. Space data and services 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 obstacles. 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 recently, and a much faster development of space downstream sector is expected in near future. This provides important opportunities to the EU private sector. All stakeholders should work together to create more favourable conditions and environment to support the space downstream development in Europe.

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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.

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 economic and social benefits of space data and services in the EU. In order to **increase their dissemination in practice**, it is necessary to recognise them as an important tool for daily use which helps also to implement the EU and national policies.

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 **coordinator for the definition and implementation of Europe's space downstream market uptake strategy.** 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 a wide range of topics and activities such as:

- Awareness raising,
- Training and 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 regulation.

Questions:

- 1) From the Member States perspective, how should EU institutions and Member States better interact to support broader use of space data and services in various market segments as well as in EU and national policies, where appropriate? In particular, how would your Ministry contribute to broader coordination between EU and national institutions and other relevant public and private stakeholders in the respective market segments?
- 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?