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From: General Secretariat of the Council
To: Permanent Representatives Committee/Council

Subject: *Preparation of the Council (Competitiveness (Internal Market, Industry, Research and Space)) on 28-29 November 2024*
The future of the Union space policy
- *Exchange of views*

Delegations will find attached a Presidency note on "**The future of the Union space policy**" with a view to the exchange of views at the Competitiveness Council on 29 November 2024.

The future of the Union space policy

EU's Space Policy – Defence Synergies within a Civilian Space Programme

Abstract

In the current geopolitical context, the European Union is at a pivotal moment in its space policy. As global competitors increasingly integrate space capabilities into their defence strategies, the EU aims at developing its civilian-led space programmes by offering more services to defence users, relying on dual-use space assets and increased security requirements, whilst also maintaining its commitment to promote peace and stability.

I. Context: Space as a Strategic and Contested Domain

The global space race is intensifying, driven by the strategic importance of space systems including but not limited to security and defence, geopolitical influence and economic growth. The EU has historically maintained a civilian-first approach to space, as seen in programmes like Galileo and Copernicus.

However, the highly tense geopolitical context has led to a change of paradigm in the way the EU approaches its space programmes. As highlighted in the EU Space Strategy for Security and Defence (EU SSSD) adopted in March 2023, the EU space programme should offer more services to defence users while remaining under civilian control, building on dual-use space assets. Indeed, defence missions and operations are increasingly relying on space for intelligence, surveillance, and reconnaissance, secured communications and positioning, navigation and timing services which are essential for collaborative combat.

The space domain is also increasingly contested, with important risks of collisions and threats developing at fast pace.

Thus, as recalled in the Strategy, the EU space policy should:

1. Ensure the resilience and security of space systems and services in the EU;
2. Strengthen security of supply and technological sovereignty for critical space technologies;
3. Lead in setting norms for the responsible use of space in line with UN initiatives on responsible behaviour in outer space.

II. Key Priorities for Defence Integration in Space initiatives

A. Technological Sovereignty and Strategic Autonomy

A key goal of the EU's space is reducing reliance on non-European technologies and services, particularly in times of geopolitical tension. It is therefore essential to enhance its technological sovereignty, including by increasing public and private investment along the value chain, starting from R&I and including ensuring autonomous access to space. Moreover, expanding investment in dual-use technologies, such as for satellite navigation, satellite communications, space surveillance, and Earth observation could ensure that EU space programmes are adaptable and respond to both civilian and defence needs. Attracting further private investment would also help to leverage the innovative potential of commercial actors in this domain and address existing technology gaps. Simplification and a higher risk tolerance in public contracts, while ensuring adherence to stringent standards, are vital to accelerate space commercialization in the EU, enhancing competitiveness and sovereignty. In addition, it is important to continue building close cooperation with strategic partners on space, including to strengthen the security of the EU and its Member States.

B. Space - Defence Synergies throughout the EU space programme

EU space flagships are already integrating defence requirements in the area of satellite navigation. The Galileo Public Regulated Service (PRS) offers highly secured positioning, navigation and timing services to defence users. The IRIS² will be developed as a dual use by design constellation, offering secured connectivity services that may be of use by the military.

Earth observation and space situational awareness (SSA) are other areas with an important potential for dual-use. The EU's leadership in free, full and open access to Earth observation data thanks to Copernicus could be complemented by a potential future EU Earth Observation Governmental Service that could meet the growing demand for secure real-time data for security and defence use cases. SSA needs to be enhanced at EU level, to better detect risks and potential threats in space, thus serving both civilian and governmental needs. In addition, in-space operations and services will offer both commercial and governmental applications in the future, and require therefore a close coordination with defence.

The development of EU space-based services for defence would be a key contribution to interoperability and CSDP missions and operations and to the potential evolution of the EU to a European Defence Union, which ranks high on the agenda of the President-elect and of the future Commissioner for defence and space. These services and governance dimensions will support the Union and its Member States readiness against potential extreme military contingencies.

C. Resilient and Secure Space Infrastructure

The resilience of EU space infrastructure is critical for both civilian services and national security, including for protecting space critical infrastructure from cyberattacks, spoofing, jamming or physical threats. Future EU space programmes should embed security considerations from the outset. Moreover, the envisaged EU Space Law (EUSL) should enhance the level of protection of all space assets and all relevant segments (ground, space and links segments). A comprehensive and tailored resilience baseline will contribute to safeguarding the availability and integrity of space-based services and avoiding disruptions and outages in the supply of services and products. Defence actors can also provide relevant input on such risk and threat scenarios and contribute to the development of more coherent and adapted resilience strategies, while maintaining civilian control of space programmes. Structured mechanisms should in this context be established for channelling the defence-related input, particularly when it comes to satellite security and ensuring operational continuity.

D. Sustainability as a Strategic Priority

Challenges such as space debris, orbital congestion, and the environmental impact of certain use cases of space must be addressed to ensure the long-term accessibility of space. The EU can lead in setting norms for sustainable space “usage”. Investing in green technologies such as fuel-efficient launch systems and debris mitigation strategies will ensure EU’s space activities align with its broader sustainability goals.

III. Implementing the Vision: A more Coordinated Approach to Defence and Civilian Space Policy

A. Expanding on Public-Private Partnerships

Public-private partnerships (PPPs) could be a key driver of innovation across the civilian and defence space sectors. Fostering collaboration between reliable private industry, government agencies, and defence actors could accelerate the development of technologies that serve multiple sectors. Such partnerships could support the growth of Europe’s space industry, especially innovative small and medium-sized enterprises (SMEs), while ensuring defence requirements are integrated into future space systems.

B. Fostering Civil-Defence Collaboration

The EU should enhance collaboration between civil, security and defence actors in space policy. As underlined in EU SSSD, the Commission will take into account long-term military requirements (time horizon 2035) for space-based defence services when developing future EU space programmes. Defence actors could provide input and requirements for capability development without compromising the civilian nature and control of the EU space programme.

The Strategy also stresses the need to facilitate synergies at the level of innovation, research and development. Structured platforms for regular dialogue and collaborative research projects could enable civil, security and defence actors to frame the development of technologies serving both civilian and security and defence needs. While developing dual-use EU space capabilities, the EU shall also ensure synergies with relevant space projects supported through the European Defence Fund and the future European Defence Industry Programme ensuring complementarity with existing and planned assets and, possibly, identifying projects of common European interest.

C. Building Capacity and Skills for a Dual-Use Future

The future of Europe's space industry depends on developing, attracting and maintaining a skilled workforce capable of harnessing the synergies between civilian and defence space activities. The EU, without prejudice to Member State competences, should support inclusive education and training programmes, with attention to underrepresented groups to prepare experts for this dual-use space landscape, ensuring the competitiveness and resilience of the EU space sector.

IV. Questions for Consideration

1. How should the EU space programme evolve to best address the growing security challenges in Europe?
2. How can the EU, while maintaining civilian leadership in space, further respond to defence and security needs for space-based services and strengthen the resilience and security of its space infrastructure in view of growing threats?
3. Which dual-use initiatives should the EU prioritize in its next wave of space assets to ensure not only market growth and security capabilities, but also that defence-related space activities are aligned with its sustainability and competitiveness goals?