

ESPI contribution to the EU Space Programme mid-term review

This document constitutes ESPI's **initial feedback** to the call for the Mid-term evaluation of the EU Space Programme published by the European Commission. The European Space Policy Institute will continue to provide inputs throughout the evaluation period.

ESPI is the European think tank for space with the purpose of promoting European space policy on a global level - for a strong Europe as a partner to the world - to develop approaches to European space policy and facilitate an active forum for the analysis and discussion of European needs, capabilities, and long-term prospects in space activities. On the occasion of ESPI's 20th anniversary, ESPI launched [ESPI 2040](#), a policy vision for Europe addressing European policymakers and institutions.

Europe has all the prerequisites to develop into a full space power, by bringing together, federating and developing the excellence of its European, national and industrial capacities. However, what is missing is a clear political will and a whole-of-Europe vision beyond the perceived bounds of space systems, which would precipitate policy impact.

To date, European space policy and programmatic action are mostly concerned with **Space Capabilities**, such as satellites and launchers, and less so with the policy impact of space and the foundations that enable steps towards acquiring Space Power status. **Policy impact** includes efforts to integrate space into other policy sectors, including security and defence, and climate, while the **Foundation** layer focuses on building the required environment for reinforced industrial competitiveness, scientific and technological excellence, innovation, talent, and financing.



The EU Space Programme represents the largest EU investment in space and a considerable share (roughly 20%) of the overall European public space expenditure. The MFF evaluation is therefore an important step in calibrating the programme's impact under the current MFF envelope and preparing the next MFF, where ESPI believes the EU Space Programme should receive a further boost in funding. In this context, this contribution does not focus on existing (and planned) capabilities, but rather on key identified priorities that go beyond the current perimeter.

1. Space for Security & Defence (Focus: [Policy Impact & Space Capability](#))

In light of the war in Ukraine and other ongoing conflicts in the EU's neighbourhood, the **lack of security and defence capabilities of European space actors is exposed and increasingly acute**, as also affirmed by the contribution of the [Danish Ministry of Climate, Energy and Utilities & the Danish Ministry of Higher Education and Science](#) in this ongoing consultation process. The Agency notes that *"it is an issue that the current program components only to a very limited degree are able to provide relevant services in relation to European security and defence needs"*.

The role of space for security and defence, as well as the protection of space assets, are more important than ever, as also recognized by the March 2023 EU Space Strategy for Security and Defence. This policy recognition must be translated towards increased funding if Europe is serious about the concept of **European strategic autonomy**. In the 2024 U.S. budget proposal, the U.S. Space Force alone is requested to receive \$30 billion (\$3.7 billion more than enacted in 2023). Implementing the EU Space Strategy for Security and Defence is crucial not only to increase synergies between the space and defence sectors but is primarily a question of European readiness to address future threats and challenges – and ultimately a question of the survival of European ideals and the European way of life.

The EU and its member states need to overcome the *"dual use challenge"*. Moreover, as outlined in ESPI 2040, Europe needs to adapt its understanding of security and defence to new forms of warfare and security challenges which we can see in current ongoing armed conflicts. In doing so Europe must leverage the respective strengths of its Member States, including national militaries and Ministries of Defence, the European Commission, ESA, as well as SatCen, the EDA, and the EEAS (including EUMS).

2. Market Creation for Space Services (Focus: Policy Impact)

Beyond developing capabilities, the European Union, including through the EU Space Programme, must better leverage its regulatory strengths and considerable market size to foster the demand for new space services. The EU's robust regulatory framework can serve as a catalyst for innovation by strategically shaping regulations that encourage the use and uptake of space services, with the European Commission spearheading a surge in demand for such offerings. This is also in line with the 2021 [European Court of Auditors Report](#) noting that while capabilities have been developed, and services under the EU Space Programme have been launched, the true value of space can only be exploited through further boosting the uptake of existing (and new) services.

Such demand generation, coupled with the EU's significant market size, creates fertile ground for the growth of a diverse range of space services and the influx of private investment, inherently driving the development of new capabilities and innovative solutions. This relationship between regulatory support, market demand, and capability development can also ensure the sustainability and competitiveness of Europe's space industry in the long run. In this context, the EU Space Programme, in cooperation with ESA and other relevant European and national actors, should act as a catalyst for the increased uptake of space solutions transversally across the full portfolio of the European Commission. This includes an increased recognition of the value of space in the European Green Deal and more specifically linking initiatives such as the recently agreed [Regulation on tracking and reducing methane emissions in the energy sector with the development](#) to existing and proposed space capabilities for [global methane \(and other GHG\) tracking](#).

Furthermore, European space capabilities and derived services could also be better tied with the EU's global pledges, such as the recent commitment to the [Climate Damage Fund](#) to take place at COP28 as announced by Wopke Hoekstra, the European Commissioner for Climate Action. A similar logic could be applied to ocean conservation and Europe's commitment to the High Seas Treaty as explored in [ESPI's Brief 64](#), whereby efforts of the European Maritime, Fisheries and Aquaculture Fund (EMFAF) could be further supported by space.

3. Space Safety & Sustainability (Focus: Space Capability)

Safety and Sustainability are topics continuously discussed in European and Global fora, public events, and among policymaking communities. While regulatory approaches are welcome and will be addressed in a separate ESPI Contribution, it is key to understand the importance of directed programmatic funding if European commitment to space safety and sustainability is to make a difference.

As analysed in a recent [ESPI Report "Space Safety and Sustainability Momentum"](#) the topic is increasingly present in national space strategies and policies. While Member States are **increasing contributions** through their military budgets, European capabilities are still far away from achieving strategic autonomy on SSA. The topic however goes well beyond SSA and includes (*i.a.*) R&D and Market creation in debris removal, EoL operations, collision avoidance, and multiple applications in the realm of on-orbit servicing.

The current lack of funding however contradicts this political recognition, as well as Europe's growing vulnerability to disruptions caused by space hazards (and threats). This topic of **generational importance** deserves a full suite of attention, beyond regulatory action, as initiated through the proposed EU Space Law. National and EU ambition should be supported by a comprehensive European masterplan, comprised of funding, and directed innovation policies, fostering a European space safety and sustainability ecosystem, including through interaction with the PROTECT Accelerator. At the European level, funding devoted to space safety and sustainability (including SSA, on-orbit Servicing and space weather-related R&D) is estimated between roughly 1-3% of the overall expenditure, a glaringly low figure considering the importance and attention the topic receives throughout European space policy debates.

4. Directed Innovation Policy and Growth (Focus: Foundation)

The European Commission and the EU ecosystem at large (including the EIB Group) offer a number of **funding opportunities for the space industry**; startups, SMEs and established companies. Beyond R&D

grants targeting selected topics through Horizon Europe, most opportunities, including Cassini (in direct relation to the EU Space Programme), InvestEU, and the EIC Fund, are closer to the so-called open innovation policy paradigm. An open-innovation policy approach focuses on creating a favourable environment for innovation, rather than specifying targeted goals and objectives in terms of capabilities that a public actor would eventually use.

Increased levels of prescriptive policies can provide a structured framework and guidance, **steering efforts towards specific strategic goals**. This can be particularly beneficial in industries where targeted innovation is essential to attain strategic objectives such as increased autonomy in a technology domain and aligning innovation towards public actors' needs and wider societal benefits.

Moreover, in sectors requiring significant investments, such as space infrastructure, prescriptive policies can incentivize private sector involvement (and investment) by offering **signals for future market development** and demand. Striking a balance between open and prescriptive approaches allows for a dynamic innovation landscape that enables bottom-up innovation but more importantly provides the necessary structure for impactful, strategic, and purposeful public expenditure.

5. International Relations (Focus: Policy Impact & Foundation)

The EU Space Programme should take a central role in the diplomatic endeavours of the EEAS and international cooperation of the European Commission. Not only through existing initiatives such as the EU Global Action on Space, which despite best efforts remains contained within a limited perimeter but to truly **use space as a tool for diplomacy** at the highest political level of the European Commission.

Space capabilities and joint endeavours in space can be a unique asset in building new partnerships and forging stronger relationships in a multipolar world, transcending geopolitical boundaries, and providing a nucleus for future cooperative opportunities.

Further to pure diplomatic benefits, international relations should not only offer a platform for collaboration but also a strategic avenue to promote the European space industry. In regions where space ambitions are on the rise, Europe can strategically position itself as a key partner by showcasing its technological expertise and fostering cooperation, including through establishing mutually beneficial joint ventures.

As the EU navigates the competitive landscape of the global space market, international relations become paramount for positioning the European space industry as a preferred and influential partner in the rapidly evolving sector. While European industry must continue to dedicate efforts in capturing these markets, public actors must also **recognise the strategic benefit of positioning European industry at the core of diplomatic relations**. The recent contract between **Thales Alenia Space, and the Mongolian Ministry of Digital Development and Communication**, signed in the presence of President Emmanuel Macron, during the Mongolian President's state visit to France, offers a prime example of such dynamics.

6. Europe as a Space Power (Focus: Policy Impact)

Finally, as analysed in ESPI's recent **Brief on Europe as a Space Power**, Europe must step up its commitment to space if it wishes to claim the status of a full-fledged space power. ESPI 2040 calls for a fresh approach to addressing space policy in Europe. While capabilities are an important enabler of space power, the EU Space Programme should not be exclusively focused on capabilities, but also dedicate strong efforts towards policy impact that fully leverages them and justifies increased public expenditures.

In this context, roles and responsibilities within the European space governance landscape should be streamlined and strengths of respective actors better exploited, as noted throughout **ESPI's 17th Autumn Conference** focusing on European Space Governance. This includes considerations on a formal and fully operational European Space Council, as reflected on by ESPI in 2019 (**Brief 29**, and reiterated several times thereafter), as the need for clear and authoritative policy direction is further crystalized today in the face of multiple crises Europe is confronting.

Finally, in line with **ESPI 2040**, ESPI is determined to fulfil its mission and to support Europe's decision-makers and institutions in their ambitions and remains fully convinced that Europe today has all it takes to develop into a full space power and a strong global partner.