### The Draghi Report: It Takes a Village

#### 1. Space: A pillar of Europe's future prosperity and peace

A report on the future of European competitiveness, prepared by Mario Draghi to guide future EU strategy recognises space as a key strategic sector that will define Europe's prosperity for decades to come (Draghi, 2024). This recognition is well aligned with the recent speech of Emmanuel Macron on the future of Europe, where space was among the five most strategic sectors, along with AI, quantum computing, biotech and new energy.

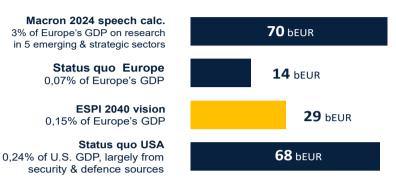
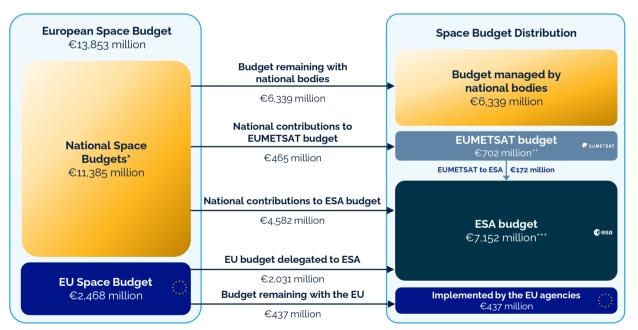


Figure 1: Levels of current funding for space and proposed ambitions (ESPI)

Despite this recognition, Europe today lacks the political will at the true scale of its economic power and talent to become a full space power. While this goal is still within reach, the gap is widening (<u>ESPI</u>, 2022) and clear funding commitments (CM25, MFF, CM28) and strategic direction are preconditions to avoid Europe being pushed further down the global competitiveness scale, not only in space but across all sectors of the economy enabled and transformed by it.



- \* National Space Budgets include all budgets of EU and ESA member states excluding Canada
- \*\* EUMETSAT budget includes €237 million from other sources including the contribution from Turkey
- \*\*\* ESA budget includes €367 million from other sources including the contribution from Canada

Figure 2: Consolidated European Space Budget in 2022 (ESPI, 2024)

It also resonates with ESPI's policy vision (<u>ESPI, 2023</u>) holding that if the gap in the space sector between Europe and existing and emerging global space powers is allowed to widen further, Europe **risks losing the heritage and excellence it acquired** over past decades, and become increasingly dependent similar to what happened in digital and semiconductor industries, where Europe has not been able to reap the commercial benefits of industries it once helped innovate and build.

#### 2. An in-depth analysis in-vacuum

While the Draghi report identifies **the long-term effects of current inertia with pinpoint precision** (deepening strategic dependencies, erosion of the industrial base, missing out on commercial opportunities), the analysis of **root causes** and resulting proposals targeting space, fail to deliver impact, at scale and with a schedule of urgency.

The outlook on **Satellite communications**, the key pillar in sustaining the European space sector until the late 2010s (in both satellite manufacturing and launch services, mostly for GEO orbits) and **currently the key transformative driver of the global LEO space economy**, do not develop the enormous potential of public-private partnerships in stimulating a commercial market as a first priority. Instead, **IRIS**<sup>2</sup> is described as a linear evolution of GOVSATCOM, focusing on governmental services like other components of the EU space programme, rather than a catalyst for a paradigm shift and a space programme leveraging market forces.

Similarly to parts of the report addressing the digital sector (<u>Bruegel, 2024</u>), the space-related chapter **fails to recognise the power of B2B and B2C markets**, requiring incentivising policies and market creation measures, in segments where Europe can further leverage its established commercial operators (e.g. EUTELSAT Group, SES, Hispasat) and manufacturing powerhouses (e.g. Thales Alenia Space, Airbus Defence and Space, OHB, Beyond Gravity) operating in global markets, as well as SMEs and the emerging NewSpace ecosystem.

Other parts devoted to the **success of the EU Space Programme** fail to recognise the symbiotic relationship and interdependence between the EU & ESA in implementing Copernicus and Galileo, as leading application infrastructures. While lauding technological leadership in **Copernicus**, the report neglects failures to develop commercial EO markets on par with the U.S. (<u>EUSPA</u>, 2024), also exemplified by low patent filings in space-borne sensing compared with the U.S. and China (<u>EPO & ESPI</u>, 2023).

Without nitpicking on numerous contentious data points, the claim of direct support to 250,000 jobs by the EU Space Programme (which would amount to less than EUR 10,000 of direct impact per job, given the limited size of the EU Space Programme) stands out as it serves as an epitome of a systematic confusion that fails to distinguish between the EU Space Programme and Europe's space ecosystem at large, acknowledging national, commercial, ESA, EUMETSAT and EU programmes.

More positively, the report acknowledges over **USD 3 trillion of value that space solutions generate beyond the confines of the space sector (ESPI, 2024)**, acting as a transformer enabler (like AI) positively impacting industries like agriculture, defence, energy, finance & insurance and telecommunications - a crucial benchmark when considering the ambition, design and implementation of future space programmes. However, despite this acknowledgement, no proposals are presented on how to support the verticalization of space into key sectors of the economy.

#### 3. Proposals in context: It takes a village

The Draghi report provides a loud wake-up call on challenges facing Europe; the innovation gap, decarbonisation and reducing dependencies, and **proposes a set of relevant horizontal policy measures following a clear logic**. From leveraging national development banks for PPPs (<u>ESPI, 2024</u>), and facilitating the emergence of pension funds, to directing FP10 towards European strategic priorities, and assessing security and resilience in M&A assessments.

When moving onto the space sector, the report does highlight key areas for future policy but tends to **overlook alternative options and fails to address the complexity of funding, governance, and growth drivers** in the sector when designing proposals.

The proposals seem to be a product of short-term policy goals and predetermined programmatic action. While the Report, in general, rightly calls for greater ambition and clearer direction, the three identified *new large space programmes* focus on launchers, Earth observation, and In-orbit services, which hardly stand at the core of the space economy. This predetermined focus **misses the opportunity to provide pathways for greater integration of space vertically across sectors** (<u>ECA</u>, 2021) and fails to propose a larger ambition in security & defence and human exploration, key drivers, next to broadband constellations, for innovation in any space power.

While ESPI is continuously addressing these and similar ideas in more depth and detail, an initial reaction to the recommendations is provided in the remainder of this Brief.

# 1. Reform the European space governance framework to reduce complexity, fragmentation and overlap

Medium -term

Recognising the global transformation of the space sector, it is crucial to examine how the revolution happening around Europe compares to the evolution within Europe, and how European space governance may need to adapt for Europe to play a leading role in this shift.

It is a **no-brainer that EU and European space governance are complex**, involving multiple organizations each with distinct programmatic priorities and policies and operating under various funding models for their programmes. However, an inclusive governance system for space, embracing and federating national, EU and tailored entities like ESA all in their individual strength, can **counteract the effects of homophily**, reinforce the resilience of a European solution, foster the exchange of knowledge, and formation of partnerships (<u>Beaumier et al., 2023</u>). More broadly, only such a constructive structure can compensate for the weakness of the static MFF cycles, responding to the urgencies of the time, and **leveraging the greater reactivity of national support**, including via ESA.

The proposal to reform the European space governance framework in a medium-term schedule will only prolong an already long-lasting conversation (with very limited success). Instead of once again challenging the role and responsibility of existing actors, like done over the last 20 years or more, Europe should better deal with and (on the contrary) leverage the realities and strength of its multi-stakeholder environment, with pragmatic implementation of existing provisions. This would most urgently require a definition of a clear and compelling policy and strategic direction between ESA, EU and respective member states, jointly identifying ambitious goals pursued in concert and leveraging them as partners at the global level. These goals should be mapped to respond to the megatrends correctly identified by Draghi. In this context, a reinforced role of the EU in ESA (e.g. investigating the possibility of establishing a European Chamber to further coordinate activities between the EU and ESA related to the EU space programme), and a more prominent role of ESA in the COMPET Council are welcomed.

### 2. Remove the ESA's geographical return principle to reduce the fragmentation of the EU's industrial base and modernise EU procurement rule

Shortterm

The report calls for a deeper alignment of procurement rules between ESA and the EU, suggesting the removal of ESA's geographical return policy in favour of a more competitive approach, and more agile procedural approach in the EU through a modernisation of procurement rules.

Acknowledging its boundaries, the ESA's approach remains a crucial mechanism in attracting substantial funding, fostering intra-European competition, and shaping a diverse space ecosystem across Europe, which also strengthens Europe's resilience in a critical technology field through diversifying supply chains. ESA has shown awareness of the competitiveness challenges surrounding its industrial policy model and has initiated internal reforms. These include expanding the fair contribution policy, which adjusts contributions based on the actual market share gained by national industries in industrial competitions, particularly in telecommunications. Other measures are also being explored, such as relaxing the global guaranteed return level and making adjustments within programme families.

Recommendations to eliminate this principle do not adequately address the risk of losing Member State's funding or the need to balance ESA contributions with investments from "emerging" Member States. **Drastically altering this scheme could undermine operational flexibility and resilience**. Notwithstanding, as highlighted in the Report, modernising this approach should also focus on its **implementation**, particularly in addressing underperformance, which affects project timelines and costs, and improving agility and industrial autonomy in supplier selection.

At the EU level, the limitations of EU procurement practices have become evident. The procurement process for the IRIS<sup>2</sup> programme allowed it to proceed with very limited competition, relying on one single consortium, and facing significant direct political pressure from governments, resulting in significant delays and increased pricing to the European taxpayer.

In both ESA and the EU, policymakers should broaden their view of competitiveness beyond procurement rules, contextualising it in line with other aspects such as market direction, market creation, aggregation, anchor roles, and **the transition from innovation to commercialisation**. Only such a broader framework can ensure a more comprehensive and effective approach to fostering competitiveness in the space sector.

# 3. Establish a functioning Single Market for space, through a common EU legislative framework

Shortterm

The ambition to develop and implement a single market for the space sector through an EU Space Law is well known within the space community. The primary objective of the EU Space Law revolves around actions necessary to improve competition within the EU space industry. With a common legislative framework, the EU aims to tackle these diverse national legislations among Member States and create a more level playing field. However, 13 ESA member states (including 11 EU members, Norway, and the UK) have their own space-related legislation. It remains to be seen how already existing national space laws and national best practices will be considered in the formulation of the upcoming EU Space Law.

From a security standpoint, proper **implementation** of the tenets of the Law will also foster the resilience of space assets through capacity-building initiatives and best practice exchanges. Vulnerability of space systems to physical and cyber threats from both Earth and space—standardising baseline resilience measures and response protocols will strengthen European space assets and extend their operational lifespans.

Moreover, cross-border issues such as taxation, export controls, and labour laws pose additional challenges for businesses operating across multiple EU jurisdictions. It remains unclear whether the EU Space Law will address these critical concerns, which may require separate legislation beyond the scope of the Space Law. Yet it is crucial to acknowledge that a Law alone will not resolve the need to beef up and diversify the internal market for space services, which is a precondition for discussing the establishment of a truly unified space market (ESPI, 2023).

- 4. Establish a multi-purpose EU Space Fund at the EU level
- 5. Improve access to finance for EU space SMEs, start-ups and scale-ups to ensure they can grow in the EU

Medium-term Short-term

While over the past years, private funding reached new heights across the European space startup landscape, the trend is currently facing an **unsurprising slowdown** (<u>ESPI, 2024</u>). Despite relatively successful EU initiatives such as CASSINI, and the EIC Accelerator, the United Kingdom continues to lead the way in terms of invested amounts and the number of deals.

Irrespective of national differences, access to finance, particularly to scale, is a well-known struggle across the European deep tech landscape, with the risk of companies fleeing to other markets, or losing strategic assets altogether. In tightening markets, public action is crucial in maintaining a pipeline of innovation and providing a scaleup route, where deemed strategic.

This dynamic is exemplified in parts of the space sector due to a high CAPEX and long development timelines. Increasing the risk-taking ability of the EIB lending is therefore highly relevant, and welcome in tackling the woes of both emerging and established actors alike, along with other financing structures beyond VC.

Ultimately, access to capital is to a high degree a function of the low demand by Europe's institutional and commercial markets, which will ultimately define the Rol of an investor. In this context, a multi-purpose **Space Fund, if implemented well, is therefore a welcome proposal**, aligned with ESPI's preliminary blueprint for such a vehicle (ESPI, 2024). However, the fund needs to **act upon a strong well-defined strategic direction**, either targeting a critical capability area or a bold (long-term) public programme, rather than spreading its portfolio across the sector.

Sound implementation will also consider functionally separating the vehicle financing multi-country projects **from the vehicle acting as an anchor customer**, helping to measure the success of each scheme and providing greater transparency, crucial to crowding in private investments.

With the latter point in mind, while fully recognising the importance of economic security and FDI screening, the ability to acquire strategic and critical companies on the European market **could raise grave concerns among investors as a potential high-stake exit might be ruled oout**, in favour of a sale to a pre-identified buyer.

## 6. Introduce targeted European preference rules for the space sector to support the scale up of European companies

Shortterm

A procurement process for space-based systems or services that includes the possibility of a preference clause as an award criterion, could positively impact the European space market. Such a measure would help **ensure critical mass for European industry**, **enhance competitiveness in the global market**, and **support technological autonomy**.

Indeed, without actively promoting a level playing field with international competitors that allows the European space industry to continue expanding, Europe's competitiveness risks slipping further. Other space-faring nations have enacted various policies, either directly or indirectly, to bolster their domestic space industries, preventing European companies from accessing parts of their markets. This is most evident in Chinese, Indian and U.S. policies, such as the U.S. Buy American Act, though similar practices can also be found in African countries.

In contrast, Europe consistently supports fully open international competition, advocating for mutual recognition and benefits with foreign competitors, thereby placing itself at a disadvantage in comparison to others.

Europe should maintain international cooperation and trade flows while implementing policies that empower the European space industry. The concept of a "Buy European Act" has been under debate for at least two decades. Notwithstanding, the establishment of a European preference principle to secure Europe's non-dependence and sovereignty should be tailored for specific target areas, finding its most relevant applicability in strategic domains. Additionally, a preference clause should be balanced with the fact that, after decades of globalisation, many European companies have become de facto global enterprises, heavily dependent on access to international markets.

### 7. Define joint strategic priorities for space R&I, to be supported by increased coordination, funding and the pooling of resources at the nat. and EU levels

Longterm

On the back of Space Council Conclusions calling to reinforce the ESA-EU strategic coordination for the development of the overall European Space Policy (Council, 2024), Draghi's recognition of the lack of strategic cooperation between EU Member States in space policy-making comes as no surprise. However, its classification as a long-term proposal fails to recognise the urgency and raises immediate concerns. Cooperation on common strategic goals is urgently required and needs to occur simultaneously at three institutional levels:

- nationally, where some Member States, e.g. Italy through the creation of the COMINT, have made great strides over recent years;
- at the EU level, where the COMPET setup can indeed serve as a relevant platform; and
- in a wider European context, including ESA and EUMETSAT;

as well as considering the industrial ecosystem.

These processes, while at different levels, should not imply subordinacy but rather recognise the interdependence and accept also overlap of national, EU and wider European priorities and the **inherent resilience of a joint European solution**, as perhaps epitomised by the UK's bail-out of Copernicus in December 2023.

Despite the acute need to improve coordination and define joint strategic priorities, this proposal is the only one defined in a long-term implementation timeframe of <5 years. Europe simply cannot afford to wait until the 2030s to understand its priorities and only then start acting on them. It must make use also of national flagships such as IRIDE or the Atlantic Constellation (and not dismiss all national efforts as **small national research projects)**, be interested in their follow-up and sustainability, leverage existing programme mechanics (EU Space Programme, ESA optional programmes) and **strengthen the reinstated Space Council** setup with a deepened political mandate.

In a broader context, policy should also focus on **improving the transition from R&D and innovation to profitability and job creation**, ensuring a smoother pipeline from innovation to commercialisation —a challenge that Europe currently struggles with, and well addressed in the Horizontal part of the Report.

### 8. Further exploit the synergies between space and defence industrial policies

Medium -term

Since the Cold War, space has consistently been a key element of U.S. national security spending exemplified by the Space Force's FY2024 spending of \$29 billion. The strategic importance of space defence is also supported by a robust institutional framework through the National Space Council.

In contrast, despite a war on its borders, **European funding in this area remains very modest**, as Europe is only beginning to respond to the geopolitical shifts. As an example, the European Defence Fund (EDF) has a budget of 8 billion with 10% - i.e. approx. 800M€ - on space-related projects (as little as 50M in the 2024 call) (EDF, 2024). The European Defence Investment Programme (EDIP) through 2027 allocates just €1.5 billion, which is only 1.5% of the €100 billion goal set up by Commissioner Breton in February 2024 (ESPI, 2024). The incoming European Commission is likely to prioritise geopolitical goals, including developing its statecraft to ensure economic security and defence.

While the role of space in security and defence has gained unprecedented recognition at the policy level, the institutional and programmatic scale of support is still missing, and the **industrial dimension is still undervalued**. The challenge requires more serious attention, calling for a coherent Europe-wide defence industrial policy, including space. The European Defence Industrial Strategy (Commission, 2024) marks a valuable first step in this direction, yet without a clear route of implementation.

Be this as it may, the industrial aspect of defence is only one facet of the **broader geopolitical and foreign policy agenda**. While the Report argues for a medium-term implementation, the new commissioner for Defence and Space represents the impulse for urgently changing scale, bringing space higher on the political agenda - but also showing the need for a **realignment of responsibilities within the constraints of EU treaties and national sovereignty**.

EU funding alone will not be sufficient to respond to the urgencies of the time to raise Europe's investment in space for security and defence to levels comparable to the U.S. and China, with related global public spending in this sector estimated at \$50 billion annually. Only a **combination of EU**, **national, ESA (leveraging more reactive funding cycles), and private funding** can effectively secure the future of Europe's space industry in the global space race, strengthen supply chain resilience, drive the necessary innovation, and support its security & defence objectives.

## 9. Define an EU policy framework for launchers aiming to ensure autonomous access to space

Shortterm

The European launcher sector is clearly far from its glory days when Ariane dominated global markets. While improved governance and project management are a welcome discussion with improvements underway, the future of the launch sector will be defined by disruptive capabilities that can change the economics of launch at scale. The push for developing these will, however, not originate in the launcher itself, but rather in its intended use and purpose (ESPI, 2024).

Therefore, this proposal **tackles the wrong end of the stick**. While autonomous access to space is indeed strategically significant, it will be the **overall ambition and the subsequent level of institutional and commercial demand** for European launch services that will define whether a paradigm shift and consequently European competitiveness can be (re)attained. If such conditions are met, autonomous access to space will become a routine capability.

To this end, institutional **demand aggregation** indicated in the report is a crucial and welcome element of such a demand-driven future. On the other hand, the inclusion of commercial demand in the aggregation sticks out and would need to be further elaborated, as commercial operators with a responsibility to their shareholders would need to prioritise availability & price, rather than leaving time-to-orbit, cost-to-orbit and overall negotiations to a publicly driven framework.

#### 10. Promote further access to international space markets

Mediumterm

Compared to competitors like Japan, Europe has so far utilised economic diplomacy less effectively to support its companies in global export markets. Alongside domestic-focused tools, services and products intended for export for European space industries, along with support mechanisms for

export market access, should be a fundamental component of industrial policy. This should include a larger involvement of space actors in **economic diplomacy** networks. Institutional backing for foreign markets could be strengthened through integration with other EU policies, such as development and **trade policies and mechanisms** (e.g., targeted Export Credit, especially in a time of high capital costs).

These instruments can help partially offset the limited domestic demand by addressing access asymmetries, maximising market access, and promoting European companies' presence in emerging space markets. Effective coordination among Member States and EU stakeholders (e.g., EEAS, DG DEFIS, DG TRADE) is essential to identify export opportunities by leveraging synergies between various EU directorates and their respective policies.

Beyond space diplomacy, it is important to recognise the **role of space as a tool of diplomacy and the value of fostering close, long-lasting cooperation beyond the space sector.** In this context, Europe needs to be actively involved in major international programmes and establish leadership roles and strong partnerships with global collaborators.

#### 4. Navigating rough waters between competition, innovation, resilience and protectionism

More broadly, the debate will have to centre around two opposing narratives one advocating for consolidating internal governance and protecting national champions or monopolies to maintain global leadership; and the other acknowledges that (quasi)monopolies often fail to sustain dynamism and deliver breakthrough innovations (Khan, 2024). **Protecting innovation from monopolies is** critical.

In the long-term, the logic of **consolidation can transform into a strategic weakness** as seen in other sectors such as defence and semiconductors. A diversification of actors, including in geographic terms, strong antitrust enforcement, and lowering barriers for innovation are essential in fostering a future-proof and resilient environment. Embracing complexity by acknowledging the need for a multi-stakeholder approach is beneficial, particularly in **reinforcing resilience**.

Yet, the report also proves that the **broader political and economic context** in which space policy finds itself will inevitably impact the sector's future. Proposals targeting more integrated capital markets, systematised joint debt, or the 5<sup>th</sup> freedom on R&I proposed earlier this year by Enrico Letta, could imply the necessity of a Treaty Reform (<u>Lindseth, Leino-Sandberg, 2024</u>), consequently taking years. Finding the political will and alignment across all Member States will not be easy, given the asymmetry and prolonged surfacing of symptoms in the competitiveness crisis.

Yet, the competitiveness and innovation gap across the European space sector needs to be acutely addressed here and now. The outlook is exacerbated, given that national budgets are heading towards fiscal consolidation. With crucial programme and funding decisions within the 2025-2028 period (ESA CM25, ESA CM28, EU MFF) on the horizon, the European space ecosystem, starting with policymakers, needs to ensure the competitiveness slip is reversed by:

- Providing an integrated European space policy with clear strategic direction; and
- Responding to the most urgent challenges, including in security & defence and climate adaptation

**fully leveraging the mechanisms and frameworks at hand** of all stakeholders, and accelerating the long-term ambitions presented in the Draghi report.

The **Mission Letter** for the new Commissioner-designate for Defence and Space already **provides an opening** beyond the Draghi Report, **for a more engaging way forward**, including the security & defence dimension and, as a joint effort, leveraging the capabilities of all European actors in space.

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