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A Regional Balancing Act: European Union Space Act

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Introduction

The highly anticipated European Union (EU) Space Act (EUSA) proposal was finally unveiled on 25 June 2025, more than one year after its initially planned release date. It is the latest step in a series of ambitious initiatives by the EU to increase its global competitiveness in space and to reinforce the space dimension of its broader strategic autonomy goal. It aims to enhance the coherence of the Member State regulatory frameworks to respond to the challenges of the New Space era, defined by increased commercialisation, militarisation and a surge in the number of public and private actors in the space industry. As it is proposed as a regulation rather than a directive, it is a binding legislative instrument and will become immediately applicable in its entirety in all Member States upon approval, without requiring transposition into national law.

This proposed regulation reflects the European Union's increasingly important role as a regional actor in negotiating hybrid organisations and complex governance spaces. The EU's Space Strategy, as outlined in this proposed regulation, provides a comprehensive approach to supporting management of a global commons, whilst also printing its own strategic ambitions in a space that is increasingly seen less 'common' and more like a vacuum that needs to be filled with policy in order to ensure stability on the ground. The institutional complexity at a European level, as we show

Highlights

- Harmonisation and Innovation: The EUSA aims to harmonise member state regulations and boost regional innovation and security.
- Three Pillars: The EUSA proposal introduced by the European Commission comprises three pillars: safety, resilience, and environmental sustainability.
- Legislative Review: The legislative procedure will continue as the European Parliament and the Council of the European Union review the proposal to agree on a final text.
- Broad Impact: The EUSA will affect not only the EU space industry but also all actors providing services within the EU.
- Balancing Interests: The final text will require a delicate balancing act to leverage the overlapping and competing interests of the EU, the Member States, and their other regional commitments.)





below, is seen through various forums that have different legal bases and operational mandates. These mandates range from purely economic, to security-driven. The EU's Space Act attempts to provide some institutional certainty in this space, but also creates many opportunities for institutional capture and future cooperation beyond the European sphere.

contellations (consisting of at least 1000 spacecraft), small satellites and space debris in the Earth's orbits. It seeks to reduce the increasing risk of collisions and damage to EU space assets by ensuring the safe management of satellite traffic to and from space through mandatory requirements. In-space operations and services and debris removal

requirements are imposed in this category in Title IV, Chapter IV.

The EUSA is the latest step in a series of ambitious initiatives by the EU to increase its global competitiveness in spaceresilience, and environmental sustainability

The proposal introduces common standards and rules for EU space activities and operations and a framework for harmonising authorisation requirements to reduce internal market barriers caused by differences in or lack of member state regulations, thereby providing legal certainty for space market operators. The European Commission, the primary executive body of the EU, has now submitted the proposal to the European Parliament and the Council of the European Union for review and agreement on a final text. This legislative procedure aims to ensure that the final text is inclusive and reflects contributions from all stakeholders within the EU. However, it may take a considerable time, and the final text could differ significantly from the initial proposal. A recent example is the AI Act, which took more than three years to come into force after the European Commission's proposal. Once approved, however, EUSA will be the most comprehensive regional legislative instrument in the space industry. This paper examines its implications in the context of the regional commitments of Member States.

EUSA - An Overview

As a key constituent of broader EU space law, this legislative instrument is anticipated to serve as a model for balancing the diverse concerns and interests of various public and private stakeholders at national, regional, and multilateral levels beyond the EU. The relevant obligations set out in the Act will apply to EU space operators and their assets, as well as to any entities providing space services within the EU. Its key measures cover three pillars.

The safety pillar responds to the recent exponential increase in space objects, including satellites of mega-constellations (consisting of 100-999 operational space craft) and giga-

The resilience pillar complements the safety pillar. The measures set out in Title IV, Chapter II under this pillar are for protecting space infrastructures and assets against harmful threats, focusing on both

physical security and cybersecurity. There are requirements for risk management, incident reporting, and information exchange, supply chain risk management along with crossborder coordination and cooperation. In the section outlining the proposal's reasons and objectives, this reliance is highlighted as a central focus, with the cybersecurity needs of space infrastructure identified as key to ensuring resilience. The space-specific cybersecurity requirements set out in the resilience section are treated as lex specialis, qualifying space operators as essential or important entities under NIS 2. The establishment of a Union Space Resilience Network (Article 94) is intended to facilitate the achievement of these objectives.

The environmental sustainability pillar encompasses actions to ensure the long-term sustainability of space activities and operations. Under this pillar, the EUSA proposal includes legal provisions aimed at reducing light and radio pollution caused by increasing satellite numbers. A novel space-specific life cycle assessment methodology has been introduced to measure and reduce the environmental impact of space activities on Earth. These standards will be implemented through an 'Environmental Footprint (EF)' certificate (Article 98). Finally, the EUSA proposal places great emphasis on the increasing reliance on space-related services and space generated data and their significance for the EU's economic strategy and political agenda, social life, and security.

EUSA aims to set a harmonised regulatory framework for the EU and the EU Member States to rely on space as an important enabler of services and economic growth. **However,** the proposal does not include provisions specific to extraplanetary exploration or space tourism. Given the fast pace of the space industry, and the questions specific to these activities we can expect these issues to be covered by another regulatory instrument in the near future.

EU Competence in Space-Related Matters

The EU's competence in space-related matters is not absolute. Its various competencies under the Treaty on the EU (TEU) and the Treaty on the Functioning of the EU (TFEU), the primary sources of EU law, allow it to regulate different aspects of the space sector at the EU level. It has exclusive or shared competencies in areas where space activities have a bearing, including research and development, telecommunications, and the environment. While the foundations and questions regarding its competence have prompted numerous scholarly analyses, this section refers to the main provisions widely accepted to enable the adoption of EUSA.

It is appropriate to start with TFEU Article 189, which

specifically refers to the development of space policy at the EU level. This provision specifies the promotion of joint initiatives and the support of research and technological development as means of implementing EU space policies. It highlights that coordinating the efforts of Member States aims to

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foster scientific and technical progress and enhance industrial competitiveness through the exploration and exploitation of space. This provision has allowed the EU to expand the scope of its strategic goals and priorities to space activities. However, Article 189 also explicitly excludes the harmonisation of space laws and regulations of Member States. This is also reiterated in Article 4(3), which states that the EU may exercise that competence in a way that does not result in Member States being prevented from exercising theirs. Consequently, while the EU can pursue the stated objectives under this article, the specific laws and regulations governing space activities remain under the jurisdiction of individual Member States. It is essential to acknowledge that the impact of each provision will vary among Member States, influenced by their respective national interests, capacities, and industrial contexts.

The aforementioned limitations on the EU's competence do not impede it from exercising its competence in other areas. The legal basis for the EUSA proposal at issue relies on Article 114 TFEU, the relevant provision for harmonising the laws to achieve internal market objectives. The divergence of national

space regulations is deemed to have a negative effect on the competitiveness of the EU space industry and the security of the EU. This was acknowledged in a joint communication in 2022 calling for a consistent EU-wide approach on an EU Approach for Space Traffic Management. The European Space Strategy for Security and Defence (the 2023 Joint Communication) reiterated this concern in a wider context, where the High Representative and the Commission called for and EU space law to enhance the level of security and resilience of services and space operations in the EU, as well as their safety and sustainability. Balancing the growth of the space economy with the need to mitigate environmental impacts and protect the space ecosystem is emphasised as the preferred policy for the EU and its Member States. The European External Action Service is working to ensure the consistency of the EU's external action in the space domain in coordination with Member States. The relevant explanations for competence, subsidiarity and proportionality of the EUSA are provided for in the explanatory memorandum (page 3-5).

Navigating Multiple Regional Alliances: ESA, NATO, and the EU

The New Space era is led by the United States driven by significant private sector interest and investment, followed by China. They lead in this domain due to their scientific and technological prowess and influence in shaping how space activities will be governed. The EU is a significant space power in a global context. However, catching up with the leading space powers the United States, China and Russia and even remaining competitive requires a forward-looking, concerted policy followed by action and increased investment to revive innovation and the market. As proposed in the Draghi and the Letta reports, an EUSA initiative is integral to these more comprehensive endeavours. Though the benefits are clear, the production of the EUSA proposal has not been easy. Legislative efforts undertaken by the EU are always challenging, as they require concertation with 27 Member States. However, the EUSA process was also hindered due to space sector-specific challenges. A prime example is the discrepancy between members' expectations, and their

concerns. This was to be expected as some member states have advanced space industries and have already developed sophisticated national regulatory frameworks. In contrast, others have remained comparatively passive, prioritised other industries, and have not needed to implement sector-specific regulations. Another important challenge is the **resistance** from the space industry to regulation. Regulation is likely to impose additional procedural and financial burdens on their operations. A more delicate and significant concern is the fear of Member States on the EU's expansion of its defence-related competencies and the need to balance their national interests with the collective goals of the EU. Finally, harmonising space-related regulations faces unique difficulties due to members' intersecting regional commitments.

focused on peaceful exploration and use of space. This tension is further compounded by the membership composition of the ESA, specifically the inclusion of non-EU countries. The EUSA recoginizes the significant benefits of this close relationship (paragraph 33) and has dedicated Article 138 to define the future structure of this relationship. The EUSA calls for an agreement between the EU and ESA to set forth the conditions for the implementation of this Regulation to ESA.

Adding to the institutional complexity, in 2021, the EU established the European Union Agency for the Space Programme (EUSPA), a market-oriented space agency to handle the operational and user-related aspects of its space programmes. EUSPA and ESA have complementary roles

> and objectives and have, to other. ESA remains the regional agency responsible for research and development and ensures the roll-out of new satellite technology and architecture of the space systems. ESA and EUSPA collaborated on

> date, managed to reinforce each

significant projects like the EU's Earth Observation programme Copernicus and the EU's Global Satellite Navigation System Galileo. Their synergy ensured the successful implementation and utilisation of these programs, which produce data used for civilian and defence-related purposes. The European Commission is positioned as the policy maker for the EU and <u>coordinates</u> the joint programmes conducted by the agencies. In June 2021, the EU and ESA signed the Financial Framework Partnership Agreement (FFPA) at the EUSPA launch event to clarify institutional roles. The EUSA assigns an extended role to the EUSPA, granting it new tasks—particularly "to support and assist the Commission in the authorisation and supervision of Union space operators managing Union-owned assets, as well as in the registration of third-country space operators and international organisations providing spacebased data and services within the Union." With the increasing coordination at the EU level, the EU's relationship with ESA and, therefore, space governance in Europe will likely evolve.

In determining its space policies and initiatives in governing space, the EU also has to consider its members' commitments to NATO (North Atlantic Treaty Organisation). Twenty-three of the twenty-seven EU Member States are also members of the

In light of the intensifying securitisation of space programmes

viability of the mutually reinforcing relationship remains to be

and the rapidly shifting global dynamics, the long-term

seen.

The EU's growing emphasis on the defence dimension of space applications is putting pressure on its relations with ESA

Chief among these is their longstanding collaboration as members of the European Space Agency (ESA). Established in 1975, ESA holds observer status at the Committee on the Peaceful Uses of Outer Space (COPUOS) and the United Nations Office for Outer Space Affairs (UNOOSA). ESA, a civilian and scientific entity, has consistently represented European regional interests within multilateral forums and worked towards an integrated European Space Policy, as specified in the ESA Convention. The agency's four pillars are 1. enabling and support, 2. science and exploration, 3. applications, and 4. space safety and security. It has provided inspiration for other regional space organisations established years later. However, the ESA is not an EU institution. It is a 23-member intergovernmental body based in Paris with a membership that differs from the EU's. The United Kingdom, Switzerland, and Norway are non-EU members of ESA, while eight EU member states are not members of ESA. From the outset, EU space initiatives have been undertaken to recognise shared goals, considering the longstanding collaboration of member states under the ESA. The <u>Lisbon</u> Treaty, the treaty that gave the EU full legal personality in 2009, also established the EU's competence over space matters in Article 189, acknowledged its significance and called for the EU to establish appropriate relations with the ESA in undertaking its space-related tasks. The EU's growing emphasis on the defence dimension of space applications is putting pressure on its relations with ESA, which remains

Euro-Atlantic military alliance, which focuses on security and defence. In December 2019, defining space data, products and services as critical enablers and support for other operational domains, NATO declared space as the fifth operational domain, alongside air, land, maritime and cyberspace. NATO reiterated its decision to rely on member states' space

assets rather than developing their own space capabilities. The NATO space policies are very much influenced by the preeminent global space power member, the US, and its space policies and capabilities. A year later, NATO Defence Ministers agreed to create the NATO Space Centre in Germany to

EUSA's mandate remains confined to civil matters; however, the EU's space initiatives consistently feature security and defence aspects, as outlined in the Strategic Compass for Security and Defence. The 2023 Joint Communication also recognised space as a strategic domain. It is the European Commission's Directorate-General for Defence Industry

The proposal is not, and should not be, perceived as a standalone legislative instrument but rather as an integral component of the space-related aspects of the EU regulatory framework

coordinate allies' efforts in the space domain. About three years later, in the third Joint Declaration on EU-NATO cooperation, the EU authorities agreed to strengthen, deepen, and expand cooperation with NATO on space while preserving the decision-making autonomy of both organisations. Parties agreed to establish a structured dialogue on space at the staff-to-staff level, primarily to avoid unnecessary duplications and maintain adequate coherence and interoperability between the two organisations. Nevertheless, coordination and cooperation between the two organisations to preserve the mutually reinforcing relationship are becoming more challenging by the day. The differing membership compositions present a challenge that is less about the four EU member states—Austria, Cyprus, Ireland, and Malta—that are not NATO members and have maintained neutrality since the Cold War, and more about the non-EU NATO members and managing their occasionally diverging military priorities and interests. Additionally, the evolution of both organisations has led to overlaps in their domains. For example, NATO has developed agendas on infrastructure resilience against hybrid threats, innovation in emerging and disruptive technologies, and energy security—areas also within the EU's competence. Meanwhile, the EU has increased its ambitions as a global security and defence actor. To underscore its market focus, the Title 1, Article 2 of the EUSA explicitly excludes space objects exclusively used for defence or national security purposes as well as those temporarily deployed for defence purposes under military operation and control, for the duration of that specific space mission. Yet, the application of this provision may prove to be complicated given the dual-use nature of most space assets. These evolving organisational ambitions, coupled with shifting geopolitical dynamics, will influence the coordination and cooperation between these two organisations in space-related matters.

and Space (DG DEFIS) that is responsible for developing and enforcing the regulatory frameworks governing space activities. DG DEFIS works in coordination with the European External Action Service (EEAS) to ensure that the EU's space and defence initiatives are integrated with its broader foreign policy and security objectives. Commissioner Andrius Kubilius, who is the first to hold the protfolio for defense and space, has emphasised the importance of cooperation with NATO. He stated that the proposal will address safety, security, and sustainability requirements for space activities and operations, ensuring a consistent, EU-wide approach. This development is unsurprising, given that the space sector has always had a security and defence aspect, primarily due to the dual-use nature of most assets, components, and instruments used in the sector. As the white paper notes, 'Space has a security dimension, and security has a space dimension.' Consequently, EUSA will be evaluated based on its impact on the defence industry and defence alliances as well as the civil sector.

EUSA - A Model Regulatory Framework for Space Governance?

Through ESA and EUSPA, Europe boasts world-class strategic space assets and capabilities, with significant technical competencies. EUSA is a noteworthy endeavour in the EU's efforts to enhance its strategic autonomy and to remain competitive in the New Space era. This initiative requires a delicate balancing act that leverages the overlapping and competing interests of the Member States and their pre-existing regional commitments. From an international law perspective, it is also expected to defer to existing internationally agreed norms and principles and the roles of institutions given the EU's emphasised dedication to

international law and its institutions. With the EUSA, whether or not the EU's well-established status as a global regulatory power, dubbed the Brussels Effect, will extend to the space sector remains to be seen. The EU's approach may also trigger regional responses in other world regions, as Outer Space becomes increasingly geopoliticised. Other regions, for example in African Union has entered into a Africa - EU Space partnership programme, in which African Space Agency and ESA are also implementing partners, in what might also be a stepping stone to greater global governance mechanisms. Although there is a shared understanding of the need for new regulations and clarification of the existing international law framework, multilateral institutions have struggled to keep up with the growing industries of the major spacefaring nations. EUSA could well be one of the contributing factors building towards a stronger framework across regions for outer space.

The diverse range of stakeholders' responses to the proposal will be crucial to observe in the coming months, as they will reveal the tension points that have caused the delay in its release by the European Commission. Ultimately, the proposal is not, and should not be, perceived as a standalone legislative instrument but rather as an integral component of the space-related aspects of the EU regulatory framework, thereby instigating stakeholder negotiations to reconcile their multidimensional and multifaceted concerns. Once the final text is agreed upon, EUSA will impact not only the EU space industry but global space governance in matters of safety, resilience, sustainability, and other cross-border issues such as taxation and export controls. All these new regulations aim to create a more cohesive and supportive environment for the EU's space industry, whilst having global consequences for commercial, scientific, and military space policies. This initiative has the potential to underscore the EU's commitment to remaining competitive and autonomous in a fast-changing world while preserving its self-image by **upholding its commitment to international law**. If EUSA is indeed fit to meet these objectives, it will help boost the EU's competitiveness in a complex, increasingly securitised and fragmented global space industry and environment.

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