

YEESS Position Paper on the EU Space Law

[submitted as an attachment to the targeted and public consultation on the EU Space Law]

Brussels, 28 November, 2023

The Young European Enterprises Syndicate for Space (YEESS) welcomes the initiative to develop the EU Space Law, which aims to provide a unique and exemplary European answer to some of the main challenges the space sector is facing today. Our members share the European Commission's view and objective to ensure a safe, resilient and sustainable use of space.

The European Commission's Space Law initiative is an opportunity to harmonize European best practices and could foster the competitiveness of the European industry, while making it more safe, secure and sustainable.

To ensure that the selected approach by the European institutions is successful, as well as inclusive of new and emerging companies, YEESS members would like to highlight some key factors to consider in drafting the legislation. These remarks are based on our actual comprehension of the different policy options and might evolve based on the first draft issued.

1. The EU Space Law should harmonize the existing and future space legislation in the EU Member States. Ensuring a strong and common EU Single Market by adopting common standards and policies. The EU Space Law should take inspiration from, and ensure alignment with existing ambitious EU Member States policies and legislations.

We support the Commission's aims to create a legal framework for a more safe, secure and sustainable use of space. We note existing EU Member State legislations in this regard and **encourage the European institutions to refer to those ambitious frameworks** when developing the draft Space Law.

Especially, members of YEESS encourage the Commission to refer to existing legislation but also ensure adequate stakeholder input to the draft Space Law, so as not to create additional or new burden to SMEs who already adhere to policies and legislations that already provide solutions for a more secure and sustainable space.

2. The European space ecosystem requires a robust European market fostered by a durable, clear and precise EU Space Law.

The EU Space Law must be **durable, clear and precise** to create the right framework incentivising long-term investment, providing guidance for public and private players, while ensuring future space activities are safe, sustainable and secure. A precise law developed with strategic foresight will create a robust system that still enables innovative and growing players to thrive, and prevents from hampering the competitiveness of the European space industry.

This is why YEESS members are not in favor of a scenario only relying on soft law as pushed by **Policy option 1**. To obtain a **seamless space sector across the single market**, we consider we need an effective framework whose basis is built on hard law. Otherwise, forum shopping will increase more and more, and diminish the leverage available for Europe to build an effectively secure and sustainable space power.

3. A successful EU Space Law should create the right conditions for a more secure and sustainable European space ecosystem, without limiting innovation and growth.

On top of ensuring greater coherence among European regulations, we are also convinced that stimulating innovation is **both a source of competitiveness and one of the major levers to enhance European space sector security and sustainability**. As such, new solutions need to be fuelled today and ensured to be in the conditions to thrive, to make sure we meet our ambitious objectives.

There are some areas where **hard law is a necessary basis needed to channel activities** in the right direction, and its application will also foster new players' development next to incumbent ones. Other aspects are more prospective, fast evolving and hard law could be more threatening. Notably, **the fast-pace commercial innovation shall be treated with a softer approach at some point**, and with positive incentives rather than penalties when we introduce labelling.

YEESS members support the development of a Space Label but remain cautious on the expansive application of some elements such as around cybersecurity and standards. We encourage a **differentiation of applicability of stringent standard**, for instance, between small standard commercial missions in LEO and more high-security missions in GEO. While YEESS members strive to achieve the highest level of debris mitigation and security on missions, this should not hinder neither innovation, nor commercial development.

As such, YEESS members support **Policy Option 2+**, and its hybrid approach, which allows for flexibility necessary for SMEs thanks to adaptive mechanisms such as labels, while not compromising the basic standards needed to create a secure and sustainable space.

- For the **Space Situational Awareness** requirements, the supply of data as well as the overall coordination in Europe are key for the security of all actors in space. This initiative is particularly relevant to **creating the right conditions for the development of reliable and sovereign solutions**, both on the technical and operational sides, and hence shall be given a strong legislative base. It is the best way to foster investments in this area. We then favor the approach of the Policy Option 2+.
- Regarding **cybersecurity**, we agree that generalizing **cybersecurity-by-design** processes in program management, and in mission operations, is an essential first step to be coherent with the increasing requirements of secure space activities. In this regard, the relevance of applying the NISE2 directive to the space sector shall be evaluated, to converge collectively toward more resilient cybersecurity standards, but with a **clear adaptation to the mission's specificities**.

On hardware and software, **some basic requirements could be implemented by law**. Though, for some missions - notably sovereign - a **higher ranked cybersecurity label** shall be introduced to comply with specific necessities of the program, without applying this standard to the whole industry - hence hindering the component competitiveness in international competition. Same remark applies on the continuity of the business and detailed risk evaluation of cyber threats requirements, when applied for commercial services which do not provide highly sensitive missions.

- As per **debris mitigation**, the same philosophy stands. **The basic standards shall be implemented through a legal framework that is common across Europe**, to deter legal forum shopping for operators and ensure a collective responsibility corresponding to the criticality level of the debris issue. Though, given on the mission profile, labels could be the right tool to adapt requirements.

Here again, the space activities in different altitude, as well as long and short missions shall be treated differently. For instance, **a system of points, granted with every measure could ensure to operate with a minimum to be met to ensure sufficient sustainability for all actors, while modulated to increase the requirements** based on the length of the mission, its altitude and risk associated with, for instance. This could correspond to a gradation in a European space sustainable label.

- **To make sure that the SMEs and growing actors are incentivized to set standards at the highest, without penalties, they need economic support.** It is necessary if we want them to build internal competences and dedicated R&T to match higher standards.

Here again, Policy option 2+ is a good option with the possibilities offered by the **Directive**. Though, if we really want to have SMEs and growing players to set their standard higher thanks to the EU dedicated budget, **we need to streamline the process and accelerate the time to grant support.** Otherwise, we will not be able to use this lever effectively and raise the standards of SMEs and fast-growing companies.

4. Ensure an efficient, resilient and competitive supply chain in Europe.

The geopolitical context of recent years has also reminded us that **supply chain resilience is crucial** for European industry and autonomy. We call on European authorities to remain vigilant and to fully cooperate with the stakeholders to ensure this issue is an integral part of the reflections, as well as followed by dedicated and tangible actions carried out within the European-wide industrial policy regarding space activities.

We regret that no forum dedicated to supply chain matters is proposed through the Policy options. We do think that a dedicated budget and clear process to identify and foster the development of key components and know-hows, with the right level of standardization, is key in the long run.

Another argument in favor of Policy option 2+, as labels - and modularity of the requirements associated - are also essential for the **sustainability of the supply chain**. If the whole European space sector becomes reliant on only high-EU-standards components, there will be a clear gap between the overall production available and the one necessary to address the European space demand. In this regard, the US Space Development Agency provides a good example, with its layered-projects, putting the American industry under a lot of pressure to deliver these ambitious programs. As a consequence, the US industry turns more and more to the outside, with derogations on their rules and regulations, to meet the schedule target. **We need to anticipate, to make sure that the EU missions rely on the right level of standards for each mission**, and secure the sufficient availability of high-standards components, as well as of the one fitter for international competition.

Ensuring the resilience of European space assets also requires better preparation and response to the growing risks and threats. Notably, Europe must continue and **step up its efforts to ensure that it has sovereign, diverse, and flexible access to space** capabilities in the years to come. The launchers are not included in the first scope of this EU Space law, though a European preference for launchers is necessary to ensure the necessary investments towards the advent of multiple European launch solutions.

Today, most of the newspace business rely on SpaceX rideshare capabilities and we need Europe to secure a “European transporter offer” with legacy and new launchers’ capacities.

5. Space for Earth while preserving both terrestrial and orbital environments.

Preserving the terrestrial environment is a major concern of YEESS members, whose technologies and services make a unique contribution to understanding and monitoring climate change, as well as to the development of tools aiming at adapting and mitigating its effects. The same applies to the **preservation of the extra-atmospheric environment**, for which free, safe, and sustainable access and use are essential to ensure the competitiveness of the space sector and its activities in the long run; to the benefit of the prosperity and security of European citizens.

We shall add, on the environmental aspects, that there is a lack of knowledge regarding the **consolidated impacts of the space sector on Earth**, particularly because of an absence of a global life-cycle analysis model, and a lack of harmonized indicators regarding the sustainability of space activities. Support for research in this field is necessary to assess the sector's real impact on the terrestrial and spatial environment — particularly for launch activities, atmospheric re-entry, or the growing number of ground stations and terminals.

In this regard, ensuring a common understanding and framework for Environmental impact assessment of European space activities is key today. We welcome the proposal introduced by the EU Space law, notably relying on the proven PEF Method, and would like to suggest a few points.

- First, this effort should be **coordinated with the Environmental Social and Governance (ESG) standards approach**. On top of being another way to foster investment across Europe for space activities - because the framework is known by the financial sector, it also aligns with objectives of the **Corporate Sustainability Reporting Directive (CSRD)**.
- **The ESG and sustainability aspects shall not exclude the use of space in orbits**. Though not carbon-equivalent focused, measuring space sustainability is something that is in debate internationally, and notably with American players discussing the notion of Orbital carrying capacity. Europe shall not remain outside of these discussions.
- **Policy option 2** introduces the **life cycle assessment for space activities**, which is something we have to collectively tend to, as there is no efficient measure taken without first and foremost the identification of the impacts. Here again, the SMEs and new space actors will need to be provided with support. For new companies, whose products tend to be fast evolving, and whose teams are not extended, these types of assessments are difficult to set.
- **Policy option 2+** introduces the plan for mitigation. Same here, the level of mitigation bear by company shall be thought in regards with the capacity and impact of each company.

Pending the standards under definition, and in order to contribute to the quantitative documentation of the subject, as well as to feed this research, **YEESS is willing to launch discussions towards concrete actions**. YEESS is well positioned to assist with these discussions in Europe, given that our members represent the full space value chain, we can provide a holistic response to the multi-faceted nature of a global life-cycle analysis model.

6. The EU Space Law should be an occasion to have a weighing position on the international stage, ensuring a strong and common “Level Playing Field” on the global stage.

Today's international space market is represented by a growing number of States and private players. The globalization of this market and the increase of its value is leading to a skyrocketing number of in-space (and related terrestrial) activities, with more launches and more satellites in orbit, as well as with new sovereign ambitions — such as manned exploration, exploitation of space resources, or the militarization of space.

The European Union should fully endorse its role as a driving force to ensure the **competitive yet sustainable use of space globally**. It is imperative the Union focuses first on creating a **successful EU Space Law, as a catalyst to international cooperation**, because even with the best practices in Europe - without cooperation this initiative will remain pointless.

The **Policy Option 3** suggests that building upon the **Policy Option 2+**, the Commission could go further into providing international commitment on the questions of security and sustainability of the space sector. YEESS members are welcoming any consolidation of the European position outside of the Union and notably to weigh amidst other space powers.

Though, **we do think that, first and foremost, a consolidated and strong European position is needed before extending the range of the discussions abroad**. The impact of decisions inside Europe can have a clear impact, notably across the Pond. As such, we encourage not to haste discussions on this point which might be held as a next step, and concentrate efforts in building a common and strong European position.

In the meantime, aware that the safe and sustainable use of space is a common good, we share the Commission's opinion on the necessity to strengthen EU and Member-States diplomatic efforts to their partners. **Notably, a focus inside the relevant international forums of regulation and normalization of space activities could be considered**.

On that point, we must pay particular attention to the definition of standards, guidelines and good practices that promote effective technical and operational coordination of the overall space ecosystem. YEESS emphasizes specifically the importance of the **technical forums dedicated to standardization**, in which both the Commission and Member-States should intensify their efforts to defend the European vision in a context of growing international competition. Similarly, Europe shall build its own position to actively partake in the ongoing technical **definition of orbital sustainability** discussed at the international level.

7. We ask for continued engagement with the SME and scaling-up space ecosystem for a successful and sustainable EU Space Law

For SMEs and startups-scaleups, the legally binding measures envisaged in the EU Space Law are necessary but can be burdensome and very costly to achieve - notably the smaller the actor, the more expensive it will be. Also, the small enterprises are very different from the mid-caps, same as traditional small companies differ from startups and scaleups and therefore can't be imposed equal requirements.

YEESS members remain open for any consultation or conversation with the European Commission so as to outline the ramifications of more strict measures and how they could potentially apply to SMEs. The draft Law should be created with broad stakeholder engagement to clearly understand the ramifications, notably upon SMEs, as well as the competitiveness of the overall European space ecosystem.

Young European Enterprises Syndicate for Space - YEESS

Our goal is to gather European startups and innovative SMEs of the space sector to collectively represent new and growing space companies' interests in the collective path to future European space ambitions.

We are a collection of dynamic space companies with a collaborative spirit engaging together to represent and continue creating a thriving European space ecosystem.

Our three priorities underscoring our mission are:

1. **Collaboration** to continue creating a thriving European space ecosystem.
2. Encouraging **innovation** by supporting the right investment strategies for collective growth.
3. Fostering the future of the global space ecosystem and ensuring participation through **competition**.

