

THE FUTURE OF SPACE GOVERNANCE

Findings and recommendations of the SciencesPo/ESA joint workshop on Advancing Multistakeholder Governance in the Space Sector



On 2 September 2026, ahead of the International Space Summit in Paris, 40+ space governance experts from international organizations, public institutions, private sector, academia, and civil society convened at Sciences Po for a joint workshop dedicated to the future of space governance, co-organized by the PSIA Tech & Global Affairs Innovation Hub and the European Space Agency. This behind closed doors conversation was designed to address the evolution of multistakeholder governance of space activities in face of emerging challenges, with Space Traffic Management as a prominent test case. This document summarizes the essence of the conversation, including recommendations, and will be submitted to the International Space Summit, UNISPACE IV and the ITU.

THE SPACE GOVERNANCE SYSTEM IS UNDER UNPRECEDENTED STRAIN

The core rules of space law date largely from another era. The 1967 Outer Space Treaty established fundamental principles, including that outer space shall remain free for exploration and use by all. International institutions inherited from the Cold War era were designed for a dialog between a few states. They must now adapt to a new multipolar landscape, with new spacefaring nations (the number of countries with satellites in orbit has doubled over the past 15 years), regional space agencies (a model ESA pioneered), private companies, and local stakeholders, including publics with a fundamental relationship to the visible sky (Indigenous communities, amateur and professional astronomers...).

On top of the effective inclusion of these new actors, space governance must grapple with the acceleration in exploration efforts and orbital activities stemming from a renewed Space Race that is putting some of its fundamental principles to the test. Such challenges, whose development pace often outrun policy cycles, notably include: the elaboration of space-based quantum and AI technologies, the deployment of dual-use technologies, the exploration and establishment of permanent settlements on the Moon accompanied by the exploitation of space resources, and of course the intensification of space traffic.

Since 2010, the number of satellites orbiting the Earth has been multiplied by 18, straining the management of orbits and the frequency spectrum as a global common every nation should be able to peacefully access. This heightened traffic induces rising competition for access to space (frequency and orbit allocation, launch slots), increasing costs (necessary collision-avoidance manoeuvres), negative externalities (light pollution, damages of the atmosphere), and catastrophic risks (the Kessler Syndrome: accumulating debris increase the risk of disastrous chain reaction in case of collision).

These challenges are complex as they often sit at the intersection between economic stakes, geopolitical competition, environmental and symbolic issues. No single policy framework or technical innovation can solve all these issues without political will and governance transformation.

Of course, the space community is not unaware of these challenges, but the proliferation of fora and the progressive adoption of new regulations (soft and binding) created a lack of legal clarity and now impose a heavy compliance and participation burden, especially problematic for smaller actors, while dominant companies concentrate capabilities and possess considerable influence over the space environment.

COMMON GROUND FOR A FUTURE-READY MULTISTAKEHOLDER GOVERNANCE

Despite a fragmented sector with some asymmetric stakeholders concentrating a lot of power, absolutely all actors stand to benefit from participating in governance mechanisms addressing shared existential risks—first among them, preventing the Kessler Syndrome.

Multistakeholder governance, while challenging given the number and diversity of actors to be included in the conversation, represents a realistic opportunity to build new bridges between actors, for example increased cooperation across regions. It is also a chance to reduce structural inequalities and to increase participation of underrepresented groups in shaping governance and perspectives on space: gender-based (women represent only around 23% of the space workforce and approximately 11% of leadership roles), geographic, socio-economic or generational.

This is both a matter of equity, of accountability, and of good governance: decisions taken today about access to orbit, sustainability and emerging technologies will ultimately affect societies far beyond the relatively small number of actors currently setting the agenda. Creating horizontal spaces where knowledge, perspectives, and experience circulate beyond traditional institutional boundaries, with deliberate balance between women and men, Global North and Global South, and representation from industry, start-ups, academia and civil society, reinforces our collective capacity to bring together different visions of our future in space and to better anticipate and adapt to the uncertainty inherent to space activities.

This effort, which can draw inspiration from the UN's approach to AI governance, yields immediate and long-term societal and economic benefits as it opens new partnership opportunities and unlocks troves of new talents. Grounded in ethics, this form of long-term stewardship includes end-users of space services and communities bearing environmental

costs of launch activities to align innovation, security, sustainability, resilience, and competitiveness with the common good.

There is no single path to successful multistakeholder space governance. Large multilateral treaties modelled after those adopted between 1967 and 1984 are unlikely to be achievable in the current geopolitical climate even though we see promising developments as with the BBNJ, the High Seas Treaty which entered into force this year. Nonetheless, progressive norm-building offers a realistic and already proven path, as illustrated, for example, by the Zero Debris Charter. Launched by ESA with 40 founding actors and now endorsed by 235+ stakeholders and 20+ countries it proves that when credible first-movers collaboratively establish and demonstrate standards and guidelines, these norms tend to diffuse and bring together broad coalitions.

Some inclusive institutional models facilitating evolutive treaties or norms, with periodical, collaborative review based on evidence have also proven their efficacy. The decision-making process of the ITU for the reevaluation of the Radio Regulations offers a valuable blueprint.

To be successful at scale, both technical solutions and policymaking depend on better, standardized data exchange. Neutral international organizations have an essential role to play in establishing reporting standards, aggregating, and sharing information from and to all spacefaring stakeholders. This renovated mandate should be assorted with measurable outcomes to track space objects and orbital trajectories. The European Union Space Surveillance and Tracking, the Traffic Coordination System for Space, and their ongoing coordination efforts offer promising models in that regard.

Another key success factor for multistakeholder space governance is the identification of clear mechanisms to incentivize the sustainable behaviour of all actors. This can be done through procurement rules, prioritized frequency, orbital or launch slots attribution favouring actors aligned with consensual norms, such as the UN COPUOS Long-Term Sustainability Guidelines. The same tools can be used by states as potent levers against behaviours incompatible with the sustainability and universality of access to space.

Dialogues such as this one, in line with the ambition of the International Space Summit, the commitments of ESA and all the participants, can not only foster necessary governance innovation, but also empower every stakeholder — especially the next generation of space governance practitioners — to help shape a common, sustainable, and desirable future for space.

RECOMMENDATIONS FOR DECISION-MAKING

Taking the lead on the global scene, Europe should work on norm setting with other space middle powers and emerging actors in inclusive norm setting processes, following a polycentric approach:

- **Implementing incentives and regulatory tools to make a responsible and sustainable space sector the norm**

Sustainability requirements need to be incorporated into launch licences and procurement decisions. Strong socio-environmental criteria can reduce conflicts with local communities and environmental destruction, going beyond community consultation to achieve meaningful community participation. Mechanisms could include space sustainability scores, preferential access to spectrum, differentiated launch procedures, and improved access to financing for responsible actors. This should be accompanied by enforceable frameworks to deter the destruction of the near-Earth space environment.

- **Strengthening participation of regions, communities, and women as well as younger generations**

Space governance frameworks should include regions as users and innovation centres. Communities need to participate meaningfully in decisions that have environmental consequences on the Earth and space ecosystems, such as local communities participating in launch sites decisions and scientists in potential geoengineering efforts and orbital exploitation. Students and young professionals should also be given structured, gender-balanced opportunities to enter the field before becoming established experts, helping to bridge disciplinary divisions and better include future perspectives.

- **Developing shared data and reporting standards**

Governments, international organisations, and industry should collaborate towards common systems for sharing information on launches, satellite operations, civil and commercial activities, and potential collisions. Common reporting standards and measurable outcomes would help establish a baseline for safer and more sustainable operations. Legal and regulatory efforts have to seek the best achievable harmonisation on and between all levels.

While the workshop was convened jointly by SciencesPo and ESA, this summary may not necessarily reflect the official position of either institution.

Contacts:

Constance de Leusse, constance.deleusse@sciencespo.fr

Pierre Noro, pierre.noro@sciencespo.fr

Kai-Uwe Schrogl, kai-uwe.schrogl@esa.int

Students co-rapporteurs: Ieda Giriboni de Mello e Silva, Chloe Mossberg, Niklas Uhl.