



SPATIO

Space Professional Association for
Technical and Institutional affairs in Orbit

2025 | ROUNDTABLE

FRENCH LAW ON SPACE OPERATIONS

Overview, prospects and
future challenges

Moderator:

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Panellists:

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Chehineze Bouafia, Eutelsat Group

EXECUTIVE SUMMARY

- **Legislative framework and legal stability**

Legislative framework and legal stability The 2008 law on space operations establishes a strict and reliable regulatory framework, which is essential for space operators, guaranteeing objective and transparent enforcement.

- **CNES support role**

CNES supports operators by providing compliance tools and plays a key role in the technical supervision of French space activities.

- **Responsibility and liability**

The law imposes strict criteria in terms of authorisation, safety, environment and defence, while clarifying the responsibility of operators in the event of space damage..

- **Balance between a strict framework and the need for competitiveness**

Although French law is rigorous and recognised internationally, it can generate additional costs and distortions of competition, which is why it is important to strike an appropriate balance.

- **Recent developments in the legal framework**

Revisions now include issues such as space debris management, cybersecurity and the impact of satellite constellations on astronomy.

- **Specific challenges for new players**

While traditional operators have taken onboard these obligations, emerging players may find it difficult to adapt, justifying specific support measures.

- **The French framework sets an legal example**

The French model is a benchmark for other countries, particularly in terms of technical regulation and responsible practices for the sustainability of space activities.

- **The concrete impact of the EU Space Act**

France is playing an active role in the development of a European space legal framework, with the proposed EU Space Act to harmonise practices and strengthen regulation of the sector.

FRENCH LAW ON SPACE OPERATIONS:

Overview, prospects and future challenges



Summary report, March 2025

In order to shed light on the **legal and operational stakes related to the French legal framework** applicable to space activities, and in particular **Law No. 2008-518 of 3 June 2008 on space operations**, on 17 March 2025, **SPATIO** organised a roundtable bringing together **experts from the institutional, industrial and academic sectors**.

This report summarises the points discussed at the round table. It was drafted by a team tasked with rendering the exchanges. The report aims to faithfully reflect the content and views expressed, highlighting the main conclusions and recommendations. The writing of this report benefited from the support of DGRIS.

Moderated by **Frédéric Destal** (De Gaulle Fleurance Avocats Notaires), this roundtable featured **Hugo Lopez** (Centre National d'Études Spatiales), **Chehineze Bouafia** (Eutelsat Group) and **Muriel Bernard** (Centre Spatial de l'Université de Montpellier), providing a cross-section of perspectives on the application and development of this legislative framework.

During the discussions, the panellists highlighted the **uniqueness and modernity** of this framework, underlining its **structuring role** for stakeholders in space activities. Between regulatory requirements, the accountability of satellite operators and adaptation to technological challenges, this discussion explored the many facets of **a law that is now a benchmark** well beyond France's borders and promotes cooperation between the various players in the sector.



LEGAL FRAMEWORK STATE OF PLAY

The French law no. 2008-518 of 3 June 2008 on space operations establishes a legal framework for space activities carried out under French jurisdiction.

It requires operators (French or foreign wishing to carry out a launch from the French territory) to have prior authorisation, granted by the ministry in charge of space provided they meet certain requirements.

The law also sets out the liability of operators in the event of damage caused by their activities, lays down obligations in terms of insurance and technical control, and introduces a system of continuous monitoring to ensure the protection of people, property and the environment.

Liability is not actually related to authorisation: a French operator who causes damage and has never been authorised will still be held liable (and will not benefit from the State guarantee).

Despite the requirements it entails, the law on space operations has one undeniable quality in that it offers operators a stable and predictable legal framework. This predictability is essential for all players in the sector, who need to be sure that the regulatory authority will apply objective and transparent criteria when awarding licences. In this way, an operator that complies with the established requirements can anticipate the granting of its authorisation within the given timeframe, without the risk of administrative arbitrariness.

To date, no penalties have been imposed for non-compliance, and the mechanisms for unannounced checks, although provided for, have never had to be implemented.

According to the panellists, there have never been any disputes relating to the law because this system, although demanding, offers operators a reassuring legal framework enabling them to anticipate constraints and integrate these requirements into their economic strategy.



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The technical regulations applicable to space operations are drafted in consultation with all stakeholders in the sector.

Although certain provisions may be perceived as strict by some operators, they are the result of a process of consultation and arbitration aimed at reconciling safety requirements and industrial imperatives.

Authorisation may be denied if the operation is likely to jeopardise France's international commitments or national defence interests (or if the operator fails to comply with the requirements mentioned).

Although French law is recognised as one of the strictest regulatory frameworks in the world, the Centre National d'Études Spatiales (CNES) is regularly called upon internationally to share its expertise on these legal frameworks, demonstrating its role as a model for other countries.

The rigour of these regulations is not necessarily a burden for operators, as the French legal framework is also complemented by a range of support measures to facilitate compliance.

For example, the law on space operations is presented as an effective framework that reconciles regulatory requirements and support for industry players, while guaranteeing the safety of operations and compliance with international standards.



REQUEST FOR AUTHORISATION

The authorisation application is based on the submission by the operator of a file structured into different parts:

ADMINISTRATIVE

Moral, financial and professional guarantees (for example, insurance or proof of financial guarantee).

TECHNICAL

Assessment by CNES (on behalf of the French space ministry) of the project's compliance with technical regulations, established in the interests of the safety of people and property, as well as the protection of public health and the environment.

DEFENSE

Analysis of compliance with national defence interests, following advice from the Ministry of Defence.

Following assessment and approval of these elements, authorisation may be issued by the minister responsible for space, thereby ensuring that the operation complies with both national regulations and France's international commitments.

CNES SUPPORT ROLE

CNES is responsible for steering France's space policy. As a programme agency, technical centre and space operator, it plays a central role in the design, development and implementation of French space programmes, often in collaboration with international partners.

CNES keeps the national registration registry on behalf of the French State and sends the updated information each year to the Ministry of Europe and International Affairs, which then forwards it to the United Nations Office for Outer Space Affairs for entry in the United Nations Register of Objects Launched into Outer Space. In all cases where France has to register, the operator must provide the necessary information to CNES within 60 days.

CNES acts as a technical expert and verifies the conformity of the systems on behalf of the ministry responsible for space, in accordance with the provisions of the French Research Code.

CNES also provides various tools to support operators in applying the regulations, including a "Guide to Good Practice for orbital systems and launchers" (in French).

Another important mechanism is preliminary compliance, which is aimed at manufacturers of space systems or sub-systems intended to be integrated into an operation requiring authorisation. This mechanism, which is entirely free of charge, enables players in the sector to obtain authorisation.

Although it does not constitute formal authorisation, this preliminary opinion is a valuable tool for anticipating regulatory requirements and reducing technical uncertainties.



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Balancing regulation and competitiveness

The panellists pointed out that compliance with national regulations entails significant costs for space operators, particularly at the satellite manufacturing stage, with the integration of specific technical requirements right from the design phase (e.g. deorbit capability, communication standards, fuel storage for the end of the satellite's life).

The disparities between national regulations create situations of distortion of competition: some operators benefit from a more favourable environment than others, who are subject to additional costs that can directly affect their competitiveness.

As the space sector continues to grow, the issue of aligning the rules applicable at international level is becoming a major challenge to ensure the safety, security and viability of space activities while guaranteeing fair competition.

During the work to update the French regulatory framework, CNES and the government consulted widely with operators in order to develop pragmatic measures that do not undermine the competitiveness of the various stakeholders while ensuring the maintenance of a clear and predictable framework applicable to space activities and reducing the risks of distortion of competition.



CNES MISSIONS AT THE GUIANA SPACE CENTRE

At the Guiana Space Centre (CSG), the President of CNES has special police powers with regard to the safety of operations, in accordance with the provisions of the decree on special police regulations for the operation of CSG facilities.

This concerns the rules to be respected in terms of safeguards, neutralisation of the launcher and flight corridors, as well as slightly more standard rules on the highway code that applies around the space centre, with the aim of guaranteeing the safety of property, people, the environment and health.

THE ACTIVITIES OF A COMMERCIAL OPERATOR **THE EXAMPLE OF EUTELSAT**

Eutelsat Group, a French satellite operator, operates a fleet of thirty-six geostationary satellites governed by French law and, more recently, the OneWeb low-Earth orbit constellation, which is subject to UK law.

Eutelsat's two main activities are the transmission of television channels worldwide and satellite connectivity. In particular, Eutelsat's mission is to connect so-called 'white zones' and to provide on-the-go connectivity services to the maritime and aviation sectors.

Eutelsat works in cooperation with CNES, in its capacity as technical assessor, to maintain the conformity of its systems and obtain authorisations and licences.

ACADEMIC OPERATIONS **SPACE CENTER OF THE UNIVERSITY OF MONTPELLIER**

Now in its 10th year, the Centre Spatial de l'Université de Montpellier (CSUM) is the first university space centre in France and launches nano-satellites weighing several kilograms. To do this, its teams have to comply with the regulations in force, submit applications for launch authorisation and control in orbit, whether for launches in France, from French Guiana, or for launches from other countries.

In addition to negotiating launch contracts and their specifications, the CSUM provides training for students in regulatory aspects and export control issues, particularly with regard to the choice of components, compliance with the public procurement code and taking into account the social and environmental challenges of the activity.



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According to the panellists, the law on space operations confers on France a robust regulatory framework that reconciles security and safety imperatives, regulatory requirements and the need to support stakeholders in the sector in implementing responsible practices. This regulatory clarity is a major advantage for established operators, who work in consultation with CNES and have been able to adapt their technical and organisational processes accordingly.

For these actors, the obligations imposed by the law are perceived more as a framework integrated into their operational practices. However, for emerging or less experienced operators, these requirements can represent an additional challenge. That's why support measures are still needed to make it easier for them to comply with a demanding regulatory framework that also guarantees the security and long-term viability of their space investments.

DEVELOPMENTS IN THE LEGAL FRAMEWORK

The new topics included in the revisions to the French legal framework respond to current trends in the space sector, in particular in-orbit services, satellite life extension and satellite constellations, with a view to clarifying the roles and responsibilities of operators and service providers.

In the context of requirements linked to constellations (where reliability cannot be the same for each object in the constellation as for "classic" operations consisting of a single object), the risks need to be recalculated to take account of the number of objects in the constellation and thus ensure reliability similar to that of a classic operation.

Another key element is the existence of transitional provisions, which allow the application of certain rules to be deferred to give operators time to adapt. This flexibility is important because it makes the transition easier, both technically and organisationally.

THE PERCEPTION OF FRENCH LAW INTERNATIONALLY

It is worth highlighting the avant-garde nature of French regulations, particularly through the recent developments in its technical provisions.

Since the 2000s, France has followed an internal policy aligned with international recommendations and standards that are regularly updated by the scientific and legal community specialising in space.

It would appear that the main problem lies not in the national legal framework itself, but rather in the lack of harmonisation at international level. Indeed, the fragmentation of the regulatory and legal landscape for space is a major challenge, generating disparities between the different national regimes and potentially creating distortions of competition.

The concern is therefore not so much with the rigour of the French framework as with the lack of global coordination or compensation mechanisms for the obligations it imposes on operators.

ADOPTING RESPONSIBLE BEHAVIOUR

- **Reducing space debris**

The space debris management policy was already being implemented in France before the law was passed in 2008. One of the major innovations in the French legal framework concerns the duration of stay in orbit after the end of a mission.

While the initial rule was that the spacecraft had to be removed from orbit within 25 years, France has opted for a more proportional approach. From now on, the maximum time in orbit after the end of a mission is three times the planned operational life of the space object, with an absolute limit of 25 years. This approach is designed to take better account of the technical constraints and specific features of different missions, avoiding a single arbitrary constraint.

Another key point concerns the impact of the regulatory framework on space research and innovation. University projects, nanosatellites and, more generally, new space players are subject to the same rules as traditional players and must learn industry standards from the outset.

It's not a question of looking at the size of the object or the nature of the operator, but rather the operational lifetime. In all cases, deorbiting is not required in less than 3 years. For example, for an object with an operational life of 6 months, de-orbiting is required after 3 years.

In other countries, operators sometimes choose to operate their satellites until they run out of fuel, thereby maximising their profitability, to the detriment of good practice in space debris management.

- **Preserving Dark and Quiet Skies**

The French legal framework includes innovative standards for reducing the impact of satellite constellations on astronomical observations.

Inspired by international recommendations, these requirements are unprecedented on a global scale. In particular, they impose specific techniques to limit light pollution and set a reference threshold.

This addition, which was omitted from the initial 2008 version, illustrates France's determination to remain at the forefront of contemporary space issues and to anticipate emerging challenges in the sector.

PRACTICAL IMPACT OF THE EU SPACE ACT

The law of space is currently undergoing major changes at European level, notably with the introduction of the EU Space Act, which is expected to be published in 2025.


France has one of the most demanding legal regimes in Europe and, as a result, it is unlikely that substantial new obligations will be imposed on national operators. On the other hand, one of the major challenges will be to avoid additional administrative complexity.

Care will have to be taken to ensure that European regulations do not unnecessarily overlap with national procedures, otherwise operators will have to deal with an excessively cumbersome process and there will be excessive delays in obtaining authorisations.

The practical impact of the EU Space Act will depend on how it is adopted and transposed into national law, particularly as regards its implementation, which could be designed to avoid overcomplicating administrative procedures, so that European operators can continue to operate within a clear and effective regulatory framework.

A number of questions remain concerning the implementation of these regulations. The principle that the authorisation of space activities is a national competence is based on international treaties and should not be called into question.

On the other hand, technical requirements could be introduced, making it easier for operators to comply at European level.



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