

CURRENT FRENCH PLANS FOR A NATIONAL LEGAL FRAMEWORK FOR SPACE ACTIVITIES

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Introduction

France bears the international obligation to authorise and supervise space activities under its jurisdiction and can be liable for damage caused by space objects launched from Kourou (French Guiana) and/or by companies registered in France¹. The current national framework for the activities carried out by Arianespace, Starsem, Eutelsat and for the Ariane European launcher operated from the Guiana Space Centre (CSG) is adequately regulated on the basis of a contractual and administrative legal regime. But in consequence of the liberalisation of the telecommunications market, of the privatisation of international organisations and State owned companies and of the increasing private demands to access CSG facilities, further regulations are needed.

In this context, the French Ministry of Research's Space Department has convened, during the last 2 years, more

than 100 technical and legal experts organised in several working groups to propose an upgraded national legal framework for space activities. This constituted working groups dealing with: launching (to implement a licence procedure, considering the responsibility of France and international competition rules), earth observation (for licensing and data policy), telecommunications and navigation, and space objects property and security regime (linked to the 1975 Registration Convention and the Unidroit Space Protocol).

The four working groups have now finalised their reports and a summary is to be presented to the Minister of Research by the end of 2001.

Philippe Clerc has been driving this overall study on behalf of the French Research Ministry's Space Department and Elda Garrouste, from CNES², has been leading the Space objects property and security regime working group. This paper will report their work outcomes.

Firstly, is presented the current internal regime, secondly the reasons and stakes for a renewed national legal framework, then a quick outlook on our work organization,

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followed by an overall presentation of the final report's outlines. At the end, the conclusion focuses on the groups' recommendations and the next steps to take.

I. Current Internal Regime

I-1. France's International Obligations

France is bound by the major United Nations Treaties and Principles on Outer Space³. Accordingly, France bears international responsibility under 1967 Outer Space Treaty article VI⁴ and, as the case may be, could be liable for damage caused by any of its space objects, as a Launching State under 1972 Liability Convention, article 1, and 1967 treaty article VII, when at least :

- The launch is operated under the responsibility of a French company (Arianespace, Starsem);
- The launch is carried out on French territory or uses French facilities (CSG French Guiana);
- The Space object is registered in France (including Ariane's upper stage, Eutelsat satellites...).

France is also considered as a "State of Registry" in accordance with the 1975 Convention on Registration of Objects Launched into Outer Space, article II (and the 1967 Treaty article VIII), which provides for a mandatory national registration system.

I-2 Current National Legal Framework

As the Outer Space Treaties mentioned here above have been signed, ratified, and regularly published by the "Journal Officiel de la République Française", their provisions are deemed to belong to internal law's corpus, although no specific transposition regulation would have been enacted. This means that , constitutionally,

no particular Space Law is necessary to enforce such treaties in French legislation. France is acting as a Space Power, officially since 1961, with the CNES constitution dated December 19th, 1961, but actually since 1965, with the first outer space launch of the *Diamant-A* three stage rocket, on November 26th, followed by the FR-1 Satellite, successfully launched by the US Scout Launcher on December, 6th 1965.

From these beginnings, Space activities have always been regulated through relevant programme provisions settled by their respective authorities, namely CNES⁵, French Ministry of Defense, Post and Telecommunication ministry and ESA⁶/French Republic agreements for Ariane's programs.

The Launching Activities Regime has been constructed empirically, through Diamant to Ariane's families programmes: especially the 1973 Ariane Production Declaration by some European Governments, the CSG respective Agreements between ESA, French Government, CNES, Arianespace on CSG⁷, all consistently with the ESA CSG Resolution. To such extent, Arianespace liability during the Ariane production phase is limited up to FF 400 million - Beyond this, the French Government shall be solely liable to pay any compensation for damage to the suffering party. Launch authorization and supervision is carried out under CNES acting as CSG safety and security authority⁸.

On Satellite Activities, currently there is no specific provision enacted. Beyond "direct effects" of UN⁹ Space Treaties provisions already mentioned, French law on services, intellectual property information, telecommunication, or business will apply as relevant.

However, mention has to be made of the ongoing national legislation project related

to "Space Frequencies" assignment and use (based on ITU¹⁰ Radio-frequency Regulation, Art 24): This project has been initiated by an Interdepartmental Working Group initiated by the Telecom Department of the Ministry of Finance and Industry (DiGITIP). The result is a Draft Act ¹¹ related to satellite licenses presently forwarded to the State Council (*Conseil d'Etat*) for advice, prior to submission to Parliament.

The French Space Object Registry is held and maintained by the Ministry of Foreign Affairs. Registration procedure is organized between this Ministry and CNES.

Lastly, Governmental control and supervision of Space objects at an operational level are merely delegated to CNES, and the Air Force Department¹²

To summarize the French current regime, assessment is made that France fulfills its national and international responsibility with Space activities **under a contractual and administrative legal regime established programme by programme**. Thus, the fact that France still has not enacted any Space legislation shall not mean that there is no enforcing law in France for space activities.

However, as a consequence of the liberalization and privatization of space activities which occurred in the last decade, questions now arise on the opportunity to adapt the French legal framework.

II - Reasons and Stakes for a National Space "Legislation"¹³

II-1. Context evolution

As many other space powers, France has had to face telecommunications liberalization brought about by General Agreement on Trade and Services (GATS), World Trade Organization (WTO) and European Community Directives as well as

the privatization of major space companies (Aerospatiale and partially, Arianespace and Spot Image) and that of international organizations such as Eutelsat which has its main office in France.

In this context, there are also private demands to open Guiana Space Center for launchers other than Ariane (Soyuz, Eurokot...).

The emergence of a mature private space sector leads us to rethink the Space Agencies' missions (new strategy and mission, partnership concept toward industry, sectorial privatization).

Meanwhile, space policy has to be more demand oriented rather than technology pushed as it was. User's needs (private and public) should be considered thoroughly to monitor new space programmes priorities (fleet management, precision farming, Earth monitoring, transport navigation, search and rescue, natural disasters management, internet and mobile telecommunications,...).

II-2 Stakes to consider

Assessing the opportunity to enact a Space legislation in France should lead us to go beyond space law matters (application of UN space treaty, responsibility, liability, registration, properties regime, EC and domestic law...) to address economical, social and political issues.

In particular, Space legislation has to combine support to private activities and fair competition and maintain French and European autonomy of access to space applications, as far as their sovereignty is concerned.

To this extent, we must consider French and European independence and policies towards the implementation of information society, public services needs, national security constraints, defense requirements, foreign policy purposes, industrial policy supports (European competitiveness, technology innovation, facilitating

establishment of domestic and foreign space companies), the establishment of an European Space strategy framework between the European Union and the European Space Agency (ESA).

Downstream, citizens wishes for new services and ethical considerations (Space debris threats, astro-biology) must also be taken into account...

III - Task force Organization

To deal with such issues, the French Space Department at the Ministry of Research decided to launch, in May 1999, an Interdepartmental Study in association with Space Industry on the opportunity, terms and conditions of a French regulation for Space activities.

A drafting Task force, managed by the present author, organized around 4 thematic working groups (Launchers WG, Earth Observation WG, Radio-communications WG, Space objects property and security regime WG) and was mandated to achieve a study report, under the supervision of a re-reading committee.

The Launchers WG was responsible for private operators license procedures, assessment of different levels of liability/responsibility between governments, operators, manufacturers - International competition rules.

The Earth Observation WG was in charge of licensing for private EO systems, Data Policy, Public Service regimes.

The Radio-communications WG played a subsidiary role towards the Telecommunication Ministry. It focused on space telecommunications market barriers access and navigation legal and institutional matters.

Space objects property and security regime WG: Linked with the 1975 Convention on

the registration regime and with the Unidroit "Space Protocol" project.

50 organizations were represented: ministries of research, defense, finance, foreign affairs, industry and telecommunications, justice, transport and public organizations: CNES, ANFR, ART, Meteo France, CEA, CNRS¹⁴ - 4 Universities - Law firms - Space Industry: 15 companies - Space Insurance Brokers and Banks. This study then mobilized more than 100 technical or legal experts from France and Europe. The ADDEF, the French Space Law Society, has played a major role in organizing our work and providing experts.

IV - Broad Outlines of the Final Report

Firstly, mention has to be made that the document is not fully completed and cannot be released at this stage. It will be completed by the end of 2001.

This report, made under the responsibility of the French Space Department, provides a wide survey on domestic space law issues for the Minister of Research. **It does not assert any draft Act nor any procedure of doing so.**

Its purpose is to help the Minister, as Space Minister and political decision-maker, to make up his own mind on which action should be taken in the field of domestic space law.

The current document contains an introduction explaining, like this paper, the reasons and stakes for a national space legislation review, and a summary written by a State Council Member.

Then the study is divided into three parts : (1) State (and Public Sector) missions provisions, (2) Space market development and private initiative promotion measures (including Space objects' property and security regime) and (3) specific conditions regarding Launching activities, Earth Observation, Radiocommunication and Navigation Services.

This report's list of items has been made consistent with the "Building Blocks" for national Space Laws established by The Project 2001 Working Group on National Space Law¹⁵, in Munich on 5/6 December 2000¹⁶.

IV-1. State and public sector missions.

Emphasis is placed on the burden of France's international responsibility and liability as a launching State, especially toward private activities undertaken under French Jurisdiction. For such private activities, an appropriate legal regime has to be settled between the State and private sector to set up space activities authorization, performing and control general terms and conditions, namely:

- Space activities related (definition);
- Application regime;
- Liability/indemnification;
- Insurance and financial; requirements;
- Technical certification; Safety regime;
- Security and Defense restrictions;
- Registration regime (links with Property Security regime);
- Control and supervision authorities;
- Tax and duties;
- Interfaces with others authorization (frequencies, services).

Space applications for public utilities in the fields of meteorology, earth observation, navigation, search and rescue, environment and natural disaster monitoring are also carefully thought about with regard to competition law, data policy regime, special rights granted and particular legal status (Public Private Partnership concept, Economic Public Services, European Joint Undertaking, art 171 EC Treaty...)

Beside State responsibility concerns, consideration was also given to facilitating access to the market, supporting European

industry competitiveness while encouraging fair competition.

IV-2. Space market development and private initiative promotion

The enforceability of the liability regime between private actors has been addressed (waivers, warranties, insurance law, liability product regime, consumer protection ...). Suggestions have been made to improve the legibility (not the reliability...) of the French contractual liability exception system.

Regarding intellectual property rights (IPR) on space assets¹⁷, it has been recommended to extend the French patent territory protection to all the space objects under French jurisdiction and to adopt some internal provision on the temporary presence exemption. Conformity of current satellite data policy and data legal protection regime were regarded through competition law, French copyright law and the European Directive on data base protection (copyright or *sui generis* protection).

Another way to support private activities and development of new space markets, especially on behalf of developing countries, is to improve space assets financing techniques. Space assets can be used as a guaranty (suretyship) to secure repayments to creditors (suppliers or bankers). Then property and security regimes on space object have to be clarified at national and international levels.

The Space objects' property and security regime Working Group (GW N°4) was created for this purpose.

The space object property and security status was regarded through relevant Civil Code provisions, comparative law, international law and potential law and priority conflicts.

Practical conditions of satellite seizures were also enlightened by CNES engineers. On 8th February 2000, we organized a meeting with the UNIDROIT Secretariat and the "Space Working Group"¹⁸ to debate the draft Convention on International Interests in Mobile Equipment and the preliminary draft Space Property Protocol.

We also helped bringing together the Office for Outer Space Affairs and UNIDROIT for consideration of its project at the 40th session of the Legal Subcommittee of the United Nations Committee on the Peaceful Uses of Outer Space in April, 2001.

The main difficulties we have had to face at the national and international level have been :

- the changing status of space objects between ground (where ordinary law can be enforced with analogy with land vehicles, vessels, aircraft, mobile equipment property and security regimes...) and Outer Space (UN Space Law enforcement, no physical seizure, 1975 registration convention);
- the relevance of Space Property security international regime assuming the harmonization of "Accessory Rights assignation" does not succeed. These accessory rights consist of authorisations granted or issued by a national or intergovernmental body or authority to control, use and operate the space property, including orbital use authorisations and authorisations to transmit and receive radio signals to and from space. In most developed countries such accessory rights are granted "*intuitu personae*" and cannot be assigned without prior consent of the granted authority. Without "Associated Rights", the value of the security agreement for the creditor is equivocal.

V-3. Specific conditions on Launching services, Earth Observation, Radio-communication and Navigation Services

This part addresses specific points on each branch of activity (fair competition regulation, special licensing terms and conditions, data property). Reports of WG1, WG2 and WG 3 are appended in this part.

VI - Conclusions

VI-1. Main recommendations

Finally, the report concludes on the necessity:

- to establish an appropriate legal regime linking the French Government and national private companies to authorize and control their activities (responsibility and liability constraints);
- to design a public-private partnership status adapted to Space activities (Earth observation, navigation, public data policy...);
- to promote the development of Space applications: i.e. to facilitate access to the market, to support the European industry competitiveness while encouraging fair competition.

VI-2 Next steps

The report to the Minister of Research is to be finalized by the end of 2001. The drafting Task force will call a meeting by the end of November (2001) with WG representatives/experts and the re-reading committee to debate on the report's final version.

After submission to the Minister, conclusions of the report could be released to the public and the next step will be the organization of a Symposium with European participation at the beginning of 2002.

¹ Art. VI of the 1967 Outer Space Treaty, and Liability Convention, 1972.

² CNES: acronym for Centre National d'Etudes Spatiales, the French Space Agency.

³ In particular the 1967 Outer Space Treaty, the 1968 Agreement on the rescue of astronauts, the return of astronauts and the return of objects launched into outer space, the 1972 Liability Convention, the 1975 Convention on Registration of objects launched into outer space.

⁴ Which provides that "States Parties to the Treaty shall bear international responsibility for national activities in outer space (...) whether such activities are carried on by governmental agencies or by non governmental entities (...). The activities of non governmental entities (...) shall require authorization and continuing supervision by the appropriate State Party."

⁵ CNES was created by Law (*Loi*) N° 61-1382, dated 19/12/1961 JO 20/12. Its organization and functioning is regulated by the Decree n° 84-510, dated 28th June 1984 named "Décret relatif au Centre national d'études spatiales" (JO 29/06), modified by decree n° 89-77 (6/2/1989), decree n° 93-277 (3/03/1993, decree n° 93-1441 (27/12/1993) and decree n° 96-308 (10/04/1996).

⁶ ESA : European Space Agency.

⁷ CSG is the acronym for Centre Spatial Guyanais, the Kourou European Spaceport.

⁸Cf. CSG Agreement between ESA and French Government. French decree - N° 89-314 of 16/05/89 "relatif à la coordination des actions de sécurité des opérations de lancement en Guyane".

⁹ Acronym for United Nations.

¹⁰ Acronym for International Telecommunication Union.

¹¹ Information Society Act Project, "Projet de loi sur la société de l'information (LSI), Chapitre 2^{ème} : Développement des systèmes satellitaires," which will complete "Livre II du Code des postes et télécommunications" by a new Title VIII named : "Assignation de fréquences à des systèmes à satellites".

¹²Air and Space Warning : D 75-930, 10/10/75 modified by D 94-222, 18/03/94.

¹³Whatever the legislation status may be: special space Act, adaptation of existing law or regulation, public guidelines, special rights granted...

¹⁴ ANFR: "Agence Nationale des Fréquences", The French Frequency Board; ART: "Autorité de Régulation des Télécommunication", the Telecommunication (services) Regulation Authority; CEA: "Commissariat à l'Energie Atomique", the French civil nuclear agency ; CNRS: "Centre National de Recherche Scientifique"; ADDEF: "Association pour le Développement du Droit Spatial en France", The French space law society.

¹⁵ Project 2001 "Legal Framework for the Commercial Use of Outer Space, Institute of Air and Space Law & Chair of International Business Law of the University of Cologne, Director and Chair-Holder: Prof. Dr. Karl-Heinz Böckstiegel co-sponsored by: Deutsches Zentrum für Luft- und Raumfahrt e.V. DLR - German Aerospace Center.

¹⁶ See Proceedings, page 184.

¹⁷ Patent application terms and conditions, field of protection.

¹⁸ Martin Stanford from the Unidroit Secretariat and by PETER D. NESGOS, Partner, *Milbank, Tweed, Hadley & McCloy LLP*, New York, Chairman of the SWG.