This is an unofficial translation of France's "LOI no 2008-518 du 3 juin 2008 relative aux opérations spatiales". It is being offered to the readership of the JOURNAL OF SPACE LAW as a convenience.¹

TITLE I

DEFINITIONS

Article 1

For the purposes of this Act:

- 1° The term "damage" means damage to persons or property, and in particular to public health or to the environment, directly caused by a space object as part of a space operation, to the exclusion of the consequences arising from the use of the signal transmitted by this object for users;
- 2° The term "space operator", thereafter referred to as "the operator": means any natural or juridical person carrying out a space operation under its responsibility and independently;
- 3° The term "space operation" means any activity consisting in launching or attempting to launch an object into outer space, or of ensuring the commanding of a space object during its journey in outer space, including the Moon and other celestial bodies, and, if necessary, during its return to Earth;
- 4° The term "launching phase" means the period of time which, as part of a space operation, starts at the moment when the launching operations become irreversible and which, without prejudice to provisions contained, if necessary, in the authorization granted pursuant to the present act, ends when the object to be put in outer space is separated from its launch vehicle.
- 5° The term "phase of command" means the period of time starting as part of a space operation at the moment when the

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object to be put in outer space is separated from its launch vehicle and ending when the first of the following events occurs:

- when the final manoeuvres for de-orbiting and the passivation activities have been completed;
- when the operator has lost control over the space object;
- the return to Earth or the full disintegration of the space object into the atmosphere;
- 6° The term "third party to a space operation" means any natural or juridical person other than those taking part in the space operation or in the production of the space object(s) the launch or command of which is part of the operation. In particular, the space operator, its contractors, its subcontractors and its customers, as the contractors and subcontractors of its customers, are not regarded as third parties.
- 7° The term "space-based data primary operator" means any natural or juridical person ensuring the programming of an Earth observation satellite system or the reception of Earth observation data from outer space.

TITLE II

AUTHORIZATION OF SPACE OPERATIONS

CHAPTER 1

OPERATIONS SUBJECT TO AUTHORIZATION

Article 2

The following shall obtain an authorization from the administrative authority:

1° Any operator, whatever its nationality, intending to proceed with the launching of a space object from the national territory or from means or facilities falling under French jurisdiction, or intending to proceed with the return of such an object onto the national territory or onto facilities falling under French jurisdiction;

- 2° Any French operator intending to proceed with the launching of a space object from the territory of a foreign State or from means or facilities falling under the jurisdiction of a foreign State or from an area that is not subject to the sovereignty of a State, or intending to proceed with the return of such an object onto the territory of a foreign State or onto means and facilities falling under the jurisdiction of a foreign State or onto an area that is not subject to the sovereignty of a State;
- 3° Any natural person having French nationality or juridical person whose headquarters are located in France, whether it is an operator or not, intending to procure the launching of a space object or any French operator intending to command such an object during its journey in outer space.

The transfer to a third party of the commanding of a space object which has been authorized pursuant to the terms of the present act is subject to prior authorization from the administrative authority.

Pursuant to the provisions of paragraph 3 of Article 2, any French operator intending to take the control of a space object whose launching or control has not been authorized under the present act shall obtain to this end a prior authorization from the administrative authority.

The terms of application of the present article are set forth by decree passed at the Council of State.

CHAPTER 2

CONDITIONS FOR GRANTING AUTHORIZATIONS

Article 4

Authorizations to launch, to command or to transfer the commanding of a space object launched and to proceed with its return to Earth are granted once the administrative authority has checked the moral, financial and professional guarantees of the applicant, and if necessary of its shareholders, and has ascertained that the systems and procedures that it intends to

implement are compliant with the technical regulations set forth, in particular for the safety of persons and property, the protection of public health and the environment.

Authorizations cannot be granted when the operations for which they were requested, regarding in particular the systems intended to be implemented, are likely to jeopardise national defence interests or the respect by France of its international commitments.

Licenses certifying for a determined time period that a space operator satisfies moral, financial and professional guarantees may be granted by the administrative authority competent for issuing authorizations. These licenses may also attest the compliance of the systems and procedures referred to in the first paragraph with the technical regulations set forth. Lastly, these licenses may be equivalent to authorizations for certain operations.

A decree passed at the Council of State shall set forth the terms of application of the present article. It shall specify in particular:

- 1° The information and documents to be provided to support applications for authorizations, as well as the granting procedure for these authorizations;
- 2° The administrative authority competent for granting authorizations and for setting forth the technical regulations referred to in the first paragraph;
- 3° The conditions in which the licenses mentioned in the third paragraph can be granted, and the modes in which the beneficiary of such a license informs the administrative authority of the space operations he undertakes;
- 4° When an authorization is solicited for an operation which is to be carried out from the territory of a foreign State or from means or facilities falling under the jurisdiction of a foreign State, the conditions in which the administrative authority may exempt the applicant from all or any part of the compliance checking mentioned in the first paragraph, when the national and international commitments made by that State as well as its legislation and practices include sufficient guarantees re-

garding the safety of persons and property and the protection of public health and the environment, and liability matters.

CHAPTER III

OBLIGATIONS OF AUTHORIZATIONS HOLDERS

Article 5

The authorizations granted pursuant to the present act may include requirements set forth for the safety of persons and property, protection of public health and the environment, in particular in order to limit risks related to space debris.

These requirements may also be set forth in order to protect the national defence interests or to ensure the respect by France of its international commitments.

Article 6

I. – Any operator subject to authorization pursuant to the present act shall have and maintain, as long as it can be held liable pursuant to Article 13 and for the amount set out in Articles 16 and 17, insurance or another financial guarantee approved by the competent authority.

A decree passed at the Council of State shall set forth the terms of insurance, the nature of the financial guarantees that may be accepted by the competent authority and the conditions in which the fulfilment of the requirements referred to in the previous paragraph is proved to the authority having granted the authorization. It also specifies conditions in which the administrative authority may exempt the operator from the requirements set out in the previous paragraph.

- II. The insurance or financial guarantee must cover the risk of having to compensate for the damages that could be caused to third parties to the space operation up to the amount mentioned in the first paragraph.
- III. The insurance or financial guarantee must cover the following persons to the extent of their liability for the damage caused by a space object:

- 1° The Government and its public bodies;
- 2° The European Space Agency and its Member States;
- 3° The operator and the persons having taken part in the production of the space object or in the space operation.

- I. The following are empowered to proceed with the necessary controls in order to ascertain that the obligations set out in the present chapter are fulfilled:
- 1° The agents commissioned by the administrative authority mentioned in Article 2 in the conditions set forth in a decree passed at the Council of State, and belonging to the Government departments in charge of Space, Defence, Research, Environment or to its public bodies carrying out their missions in the same fields:
- 2° The agents empowered to perform technical checkings aboard aircrafts;
- 3° The members of the Insurance Control Body mentioned in Article L. 310-13 of the Insurance Code;
- 4° The agents mentioned in Article L. 1421-1 of the Public Health Code;
- 5° The administrators and inspectors of maritime affairs, the officers from the technical and administrative body of maritime affairs, the maritime affairs controller, the commandants of the State ships and aircrafts in charge of maritime surveillance.

The agents mentioned above are bound by professional confidentiality under the conditions and penalties set out by Article 226-13 and 226-14 of the Penal Code.

II. – Agents mentioned in part I. above shall have access at any time to the buildings, premises and facilities where space operations are conducted and to the space object itself. These provisions are not applicable to the part of the premises being used as a residence, except between 6 a.m. and 9 p.m. upon authorization from the President of the *tribunal de grande in-*

stance (court of first instance of general jurisdiction) or by the judge it empowered to do so.

The operator is informed at the latest when the controlling operations begin that he may attend the operations and be assisted by any person of his choice, or that he can be represented for that purpose.

III. – As part of their controlling assignment, the agents mentioned in part I. above can ask for any document or useful item, irrespective of their *medium*. They can make copies and gather any necessary information and justification, *in situ* or upon notification.

The agents can take documents away only after having established a list countersigned by the operator. This list specifies the nature and quantity of the documents.

The operator shall be informed by the administrative authority mentioned in Article 2 of the control follow up and may transmit its observations.

If the operator or the person empowered to grant access to the building, premise or facility can not be contacted or if he denies access, the agents mentioned in part I. above may seek permission from the President of the *Tribunal de grande instance*, or from the judge empowered to do so.

Article 8

Concerning the launching or the control of the space object, the administrative authority, or the agents acting on its authority and empowered by it to this end, may at any moment give instructions and require any measures they consider necessary for the safety of persons and property, the protection of public health and the environment.

The administrative authority and the agents acting on its authority shall consult the operator beforehand, unless there is an immediate danger.

A decree passed at the Council of State shall specify the terms of delegation and capacitation of the agents in charge of the enforcement of the present article.

CHAPTER IV

ADMINISTRATIVE AND PENAL SANCTIONS

Article 9

The authorizations granted according to the terms of the present Act can be revoked or suspended in case the holder contravenes to its obligations, or when the operations for which they were sought are likely to jeopardise the national defence interests or the respect by France of its international commitments.

In case of suspension or withdrawal of the authorization to command a launched space object, the administrative authority may enjoin the operator to take, at its own expenses, the appropriate measures regarding the commonly admitted good rules of conduct to limit the risks of damage due to that object.

Article 10

In addition to the judicial police officers and agents acting following the prescriptions of the Code of Criminal Procedure, the sworn agents mentioned in the first paragraph of Article 7 are authorized to investigate and record breaches to the prescriptions of the present Chapter and of the texts issued for its enforcement. To this end, they exercise the powers set out in paragraphs II. and IV. of the same article.

They record these breaches in reports which are considered authentic unless the contrary is proved. They are sent to the *Procureur de la République* (Head of the Prosecution Department at courts of first instance of general jurisdiction) within five days after their issuing.

A decree adopted passed at the Council of State shall set forth the terms of application of the present article.

Article 11

- I. The following shall give rise to a fine of € 200 000:
- 1° Any operator, whatever its nationality, proceeding without authorization to the launching of a space object from the na-

tional territory or from means or facilities falling under French jurisdiction, or to the return of such an object onto the national territory or onto means or facilities falling under French jurisdiction;

- 2° Any French operator proceeding without authorization to the launching of a space object from the territory of a foreign State, from means or facilities falling under the jurisdiction of a foreign State, or from an area not subject to a State's sovereignty or to the return of such an object onto the territory of a foreign State, onto means or facilities falling under the jurisdiction of a foreign State or onto an area not subject to a State's sovereignty.
- 3° Any natural person having French nationality or juridical person having its headquarters in France procuring the launching of a space object without authorization, or commanding it without authorization during its journey into outer space.
- II. The following shall give rise to a fine of € 200 000:
- 1° Transferring to a third party without authorization the commanding of a space object which launching or commanding has been authorized according to the terms of the present act;
- 2° Any French operator undertaking without authorization the commanding of a space object which launching has not been authorized according to the present law.
- III. An operator shall be fined ≤ 200000 in the case of:
- 1° pursuing the space operation in breach of an administrative measure or court decision ordering its ceasing or suspension;
- 2° pursuing the space operation without complying with an administrative summon to comply with a prescription.
- IV. Is fined \leq 200 000 the fact for operators or individuals to prevent controls undertaken pursuant to Article 7.

TITLE III

REGISTRATION OF LAUNCHED SPACE OBJECTS

Article 12

In the event France has a registration obligation according to Article II of the Convention dated 14 September 1975 relating to Registration of objects launched into outer space, and, if necessary, of other international agreements, the launched space objects are registered in a registry hold by the Centre National d'Etudes Spatiales on behalf of the State, following the prescriptions set out in a decree passed at the Council of State.

TITLE IV

LIABILITY

CHAPTER 1

LIABILITY TOWARDS THIRD PARTIES

Article 13

The operator shall be solely liable for damages caused to third parties by the space operations which it conducts in the following conditions:

- 1° He shall be absolutely liable for damages caused on the ground or in airspace;
- 2° He shall be liable only due to his fault for damages caused elsewhere than on the ground or in airspace.

This liability may only be reduced or set aside in case the fault of the victim is proven.

Except in case of wilful misconduct, the liability set forth in 1° and 2° ends when all the obligations set out in the authorization or the license are fulfilled, or at the latest one year after the date on which these obligations should have been fulfilled. The Government shall be liable in the operator's place for damages occurring after this period.

When the Government has paid compensation for damage according to the stipulations of the Treaty dated 27 January 1967 relating to Principles Governing the Activities of States in the Exploration and Use of outer Space, including the Moon and other Celestial Bodies, or of the Convention dated 19 march 1972 relating to International Liability for Damage caused by Space Objects, it may present a claim for indemnification against the operator having caused the damage for which France was held internationally liable, to the extent that the Government has not already benefited from the insurance or financial guarantees of the operator up to the amount of the compensation.

If the damage was caused by a space object used as a part of an operation authorized according to the terms of the present Act, the claim for indemnification may be brought:

1° within the limit of the amount set out pursuant to the conditions mentioned in article 16 in the case of damage caused during the launching phase;

2° within the limit of the amount set out pursuant to the conditions mentioned in Article 17 in the case of damage caused after the launching phase, including when the space object returns to Earth.

In case of a wilful misconduct of the operator, the limitations set out in 1° and 2° shall not apply.

The Government shall not present a claim for indemnification if the damage was caused by a space object used as a part of an operation authorized according to the terms of the present Act and resulting from acts targeting governmental interests.

Article 15

When an operator has been condemned to compensate a third party for a damage caused by a space object used as a part of an operation authorized according to the terms of the present Act, and if that operation has been undertaken from the French territory or from the territory of another Member State of the European Union or from the territory of a State party to the European Economic Area Agreement, or from means or facilities falling under the jurisdiction of France or another Member State of the European Union or of a State party to the European Economic Area Agreement, that operator shall benefit, except in case of a wilful misconduct, from the governmental guarantee, according to the terms of the Finance Act:

- 1° For the part of the compensation exceeding the amount set out in the conditions mentioned in Article 16, in the case of a damage caused during the launching phase;
- 2° For the part of the compensation exceeding the amount set out in the conditions mentioned in Article 17, in the case of a damage caused on the ground or in airspace after the launching phase, including when the space object returns to Earth.

In the case of damage caused during the launching phase, the governmental guarantee shall benefit, if necessary and in the conditions set out in the paragraphs above, to the persons who are not third parties to a space operation pursuant to the present Act.

Article 16

Within the framework set forth in the Finance Act, the authorization granted pursuant to the present Act shall set out, given the risks incurred and regarding in particular the characteristics of the launching site, the amount respectively below and beyond which the claim for indemnification is exercised and the governmental guarantee is granted, in the case of a damage caused during the launching phase.

Article 17

Within the framework set forth in the Finance Act, the authorization granted pursuant to the present Act shall set out, given the risks incurred, the amount respectively below and beyond which the claim for indemnification is exercised and the governmental guarantee is granted, in the case of a damage caused after the launching phase.

Any person questioned before a court because of a damage for which he could benefit from the governmental guarantee shall inform the competent administrative authority, which may exercise all the defence rights in the proceedings on behalf of the Government. If he fails to do so, the questioned person shall be deemed to having waived to the governmental guarantee.

CHAPTER II

LIABILITY TOWARDS PERSONS TAKING PART IN THE SPACE OPERATION

Article 19

When the insurance or financial guarantee mentioned in Article 6 as well as, if necessary, the governmental guarantee have been laid out to indemnify a third party, one of the persons having taken part in the space operation or in the production of the space object which caused the damage cannot be held liable by another of these persons, except in case of a wilful misconduct.

Article 20

In the case of a damage caused by a space operation or the production of a space object to a person taking part in this operation or in that production, any other person taking part in the space operation or in the production of the space object having caused the damage and bound to the previous one by a contract cannot be held liable because of that damage, unless otherwise expressly stipulated regarding the damage caused during the production phase of a space object which is to be commanded in outer space or during its commanding in orbit, or in case of a wilful misconduct.

TITLE V

PROVISIONS RELATING TO THE RESEARCH CODE

Article 21

The Research Code is amended as follows:

1° Article L. 331-6 is drafted as follows:

"Art. L. 331-6. — I. — The President of the Centre National d'Etudes Spatiales shall exercise on behalf of the State the special Police for the exploitation of the facilities of the Guiana Space Centre, within a perimeter defined by the competent administrative authority. As such, it shall be in charge of a general mission of safeguard consisting in controlling the technical risks related to the preparation and carrying out of the launches from the Guiana Space Centre in order to ensure the protection of persons, property, public health and the environment, on the ground and during the flight, and it shall set out to this end the specific regulations applicable within the limits of the perimeter defined above.

"II. Under the authority of the Government representative in the *Département* of Guiana, the President of the Centre National d'Etudes Spatiales shall coordinate the implementation by companies and other entities settled in the perimeter defined in part I. above of measures taken in order to ensure the security of the facilities and of the activities undertaken therein, and shall verify that those companies and agencies fulfil their obligations in this respect.

"III. To the extent strictly necessary for the accomplishment of the missions set out in parts I. and II., the agents empowered by the President of the Centre National d'Etudes Spatiales have access to the land and premises used exclusively for professional purposes and occupied by the companies and agencies settled at the Guiana Space Centre in the perimeter defined in part I. above."

2°Articles L. 331-7 and L. 331-8 are inserted after Article L. 331-6 and are drafted as follows:

"Art. L. 331-7. – The President of the Centre National d'Etudes Spatiales may take for any space operation, by delegation of the administrative authority mentioned in Article 8 of the Act n° 2008-518 dated June 3rd relating to space operations, the necessary measures provided for in the same article to ensure the safety of persons and property, as well as the protection of public health and the environment."

"Art. L. 331-8. – A decree passed at the Council of State shall set forth the terms of application of the present chapter, particularly the conditions in which the President of the Centre National d'Etudes Spatiales may delegate its competence mentioned in Article L. 331-6."

TITLE VI

INTELLECTUAL PROPERTY

Article 22

I. – Article L. 611-1 of the Intellectual Property Code is completed by a paragraph drafted as follows:

"Unless otherwise provided in an international agreement to which France is a party, the provisions of the present article apply to the inventions made or used in outer space, including onto celestial bodies and into or onto space objects placed under national jurisdiction according to article VIII of the Treaty dated 27 January 1967 relating to Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and other celestial bodies."

- II. Article L. 613-5 of the same Code is completed by an e) drafted as follows:
- "e) To the objects intended to be launched in outer space brought onto the French territory."

TITLE VII

SPACE-BASED DATA

Article 23

Any primary space-based data operator undertaking in France an activity having certain technical characteristics defined in a decree passed at the Council of State must preliminarily declare it to the competent administrative authority.

These technical characteristics are related in particular to the resolution, location accuracy, observation frequency band and quality of the Earth observation data which are received or for which a satellite system is programmed.

Article 24

The competent administrative authority ascertains that the activity undertaken by the primary operators of space-based data does not harm fundamental interests of the Nation, particularly defence matters, foreign policy and international commitments of France.

To this end, it may at any time prescribe measures restraining the activity of the primary space-based data operators, which are necessary to safeguard these interests.

Article 25

Any primary space-based data operator undertaking an activity showing the technical characteristics mentioned in Article 23 shall be fined € 200 000 in the case:

- 1° it fails to proceed with the declaration mentioned in Article 23;
- 2° it fails to comply with the restriction measures taken pursuant to Article 24.

TITLE VIII

TRANSITORY AND FINAL PROVISIONS

Article 26

The present Act does not apply to the launching and guiding, for the needs of national defence, of vehicles which trajectory passes through outer space, in particular ballistic missiles.

The activities of the Ministry of Defence acting as primary space-based data operator are not subject to the provisions of Title VII.

Article 27

As they fall under the scope of a public mission assigned to the Centre National d'Etudes Spatiales after approval by the administrative authority pursuant to paragraph 4 of Article L. 331-2 of the Research Code, the operations of launching, returning to Earth, commanding or transfer of commanding of a space object are not subject to the provisions of Titles II and IV, and the Earth observation satellite activities and the reception of Earth observation data are not subject to the provisions of Title VII

Article 28

Article L. 331-2 of the Research Code is completed by an *f*), a *g*) and an *h*) drafted as follows:

- "f) To assist the Government in the definition of the technical regulations relating to space operations;
- "g) To verify, by delegation of the minister in charge of space, that the systems and procedures implemented by the space operators comply with the technical regulation mentioned in paragraph f);
- "h) To hold the register of the space objects on behalf of the Government."

Articles 16 and 17 of the present Act shall enter into force at the date of publication of the Finance Act setting out the minimum and the maximum amounts between which is included the amount beyond which the governmental guarantee is granted.

Article 30

The provisions of the present Act are applicable in New-Caledonia, in French Polynesia, in the Islands of Wallis and Futuna and in the French southern and Antarctic lands.

This Act shall be implemented as a State Act.

Paris, 3rd of June 2008