

TEN YEARS OF SPACE LAW IN FRANCE

Prof. Philippe Achilleas
Director of IDEST and
Master in Space & Telecommunications Law
University Paris Saclay



Outline

Introduction

I. Law of space operations

II. Law of satellite applications

Introduction

- A. Institutional framework
- B. Economic framework
- C. Sources of space law

A. Institutional framework

1. CNES
2. Others

1. CNES



- Created in 1961 by General de Gaulle
- “Etablissement public à caractère industriel et commercial” (EPIC)
- Joint supervision of the Ministries of Research and Defense
- Mission : develop, propose to the Government and implement the national space strategy
- Budget : 2334 million € (2017) incl. the share paid to the ESA (833 million €) – 35 euros per inhabitant

2. Others

- Ministry of Research and Higher Education
- Commandement interarmées de l'espace (CIE) / Space Joint Command
- Agence nationale des fréquences (ANFr) / National frequency agency
- Autorité de régulation des postes et des communications électroniques (ARCEP) / Posts & Telecom Regulatory Authority
- Conseil supérieur de l'audiovisuel (CSA) / French Broadcasting Authority



B. Economic framework

- Major world space industry companies

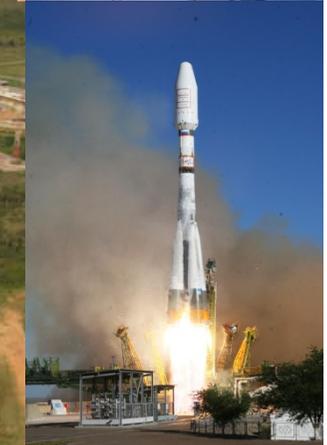
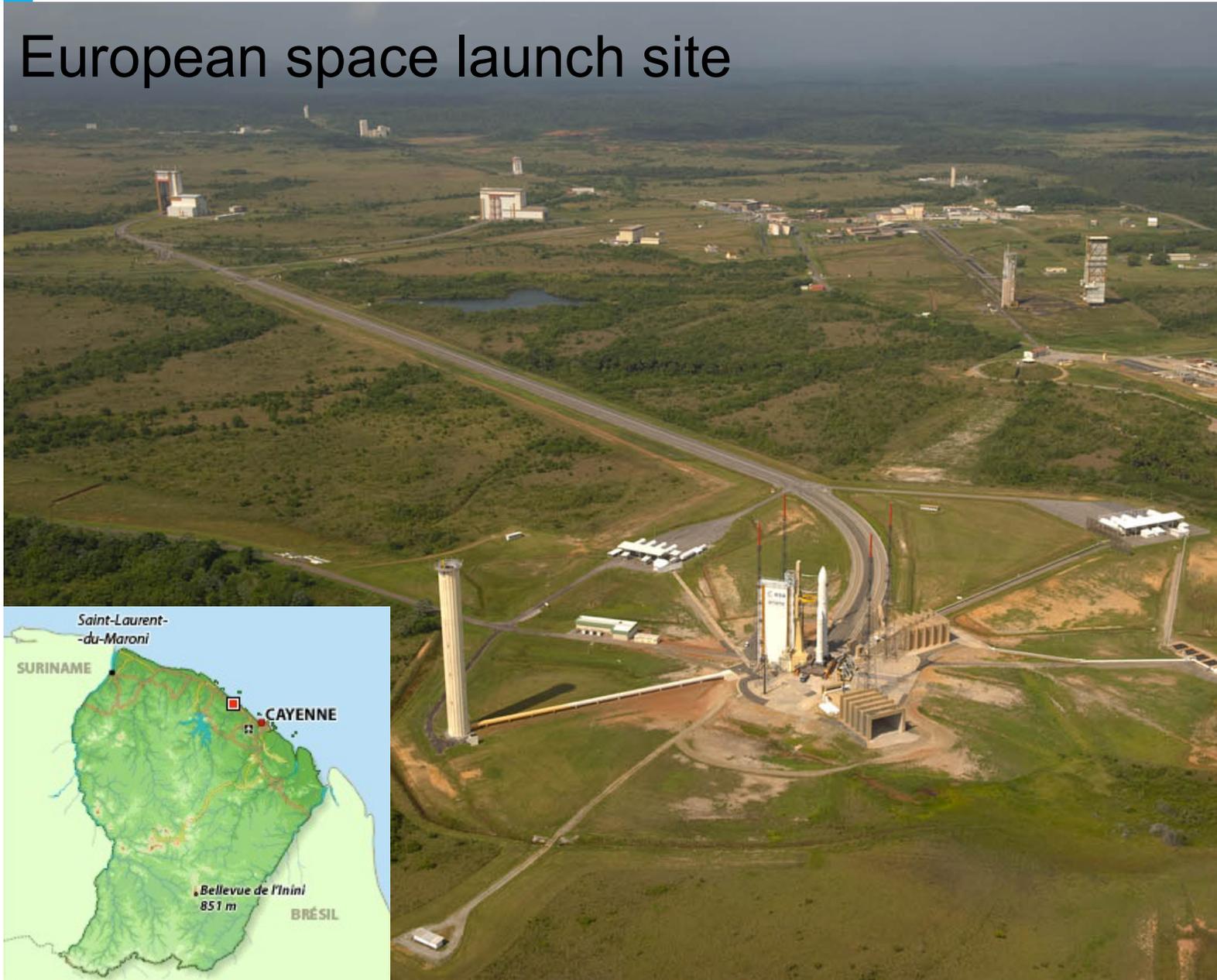


- Leading space service providers



B. Economic framework

European space launch site



C. Sources of space law

1. International law
2. National law

1. International law

- Ratification of
 - Outer space treaty - OST (1967)
 - Rescue agreement (1968)
 - Liability convention (1972)
 - Registration convention (1975)

- Signature of
 - Moon agreement (1979)

- Member of
 - COPUOS, ITU (ITU-R)
 - ESA, Eumetsat, Intelsat, Eutelsat, Inmarsat

2. National law

- Space law
 - Act n° 61-1382 establishing the National Centre for Space Studies (1961)
 - Act n° 2008-518 on space operations (2008) / LOS (Loi relative aux opérations spatiales)
 - Decree No 2009-643 on authorizations issued (2009)
 - Order on technical regulations (2011)
- Telecommunications law (including space telecom)
 - Code on Posts and Electronic communications
 - EU directives on telecoms market regulation (2002, 2009, 2015)
- Broadcasting law (including satellite broadcasting)
 - Broadcasting Act n° 82-652 (1992)
 - EU Directive on audiovisual medias (2010)

I. Law of space operations

Introduction

- A. Authorization
- B. Control
- C. Registration
- D. Liability
- E. Sanctions

Introduction

Interaction international space law / French space law

Principle	International law	French law
Authorization	OST, Art. VI	LOS, Art 2 - 6
Control	OST, Art. VIII	LOS, Art. 7 - 11
Registration	OST, Art. VIII Registration Convention	LOS, Art. 12
Liability	OST, Art. VII Liability convention	LOS, Art. 13-15

OST : Outer Space Treaty

LOS : Loi relative aux opérations spatiales / Act on space operations

A. Authorization

1. Operations subject to authorization
2. Procedure of issue of authorization
3. Obligations associated to authorization

1. Operations subject to authorization (LOS, Art. 2)

- launch by
 - Any operator, whatever its nationality
 - from the French territory or
 - using resources or facilities under French jurisdiction
 - French operator
 - from the territory of a foreign State or a territory not subject to the jurisdiction of a State or
 - Using resources or facilities under the jurisdiction of a foreign State

1. Operations subject to authorization (LOS, Art. 2)

- Return by
 - any operator, whatever its nationality
 - in the French territory
 - using resources or facilities under French jurisdiction
 - Any French operator
 - in the territory of a foreign state, or a territory not subject to the jurisdiction of a State
 - using resources or facilities under the jurisdiction of a foreign State

1. Operations subject to authorization (LOS, Art. 2)

- Control of a space object in outer space by a French person
- Transfer to a third party of the control of a space object authorized under the LOS (LOS, Art. 3)
- Take of control by a French operator of a space object whose launch or control was not authorized under the LOS (LOS, Art. 3)

1. Operations subject to authorization (LOS, Art. 2)

- Control of a space object in outer space by a French person
- Transfer to a third party of the control of a space object authorized under the LOS (LOS, Art. 3)
- Take of control by a French operator of a space object whose launch or control was not authorized under the LOS (LOS, Art. 3)

1. Operations subject to authorization

- Exclusion
 - launching and guiding, for the purposes of national defense, engines whose trajectory crosses outer space, including ballistic missiles (LOS art. 26)
 - Spacecrafts operated by CNES as part of a public mission

2. Procedure (LOS, Art. 4)

- Authorization issued by the Ministry of Research and Higher Education...
- ...after verification by CNES of the applicant's
 - legal , financial and professional guarantees
 - compliance with the technical regulations enacted

2. Procedure (LOS, Art. 4)

- Authorization can't be granted when the operations planned, are likely to jeopardize :
 - the interests of national defense or
 - the compliance by France with its international commitments

3. Obligations associated to the authorization (LOS, Art. 5)

- Conditions set forth in the interest of the
 - safety of persons and property
 - the protection of public health and the environment, especially in order to limit the risks space debris
 - national defense
 - the compliance by France with its international commitments

3. Obligations associated to the authorization (LOS, Art. 6)

- Financial guaranties :
 - insurance coverage or other financial guaranties
 - to cover the risk of having to compensate a potential damage caused to third parties in the space operation
 - amounting to 60,000 €

List of operators authorized

- Operators authorized : Arianespace, Eutelsat, Globalstar, University of Montpellier 2, Airbus Defense & Space, Thales Alenia Space
- Satellites operated by CNES, excluded from the application of the authorization regime pursuant to Article 27 of the LOS, have received authorization from the CNES President, on the basis of a control of similar to the one for satellites authorized by the Ministry of research
- Vega launches in the qualification phase (the first three launches), operated by ESA and not by Arianespace, have received a certificate of compliance from CNES under an agreement between CNES and ESA - (the LOS is not automatically applicable to ESA)

B. Control

1. Verification of compliance with the obligations of the authorization
2. Safety

1. Verification (LOS, Article 7)

- Controls may be decided by
 - CNES
 - Ministry of Research and Higher Education
 - Ministry of Defense
 - Ministry of Environment

1. Verification (LOS, Article 7)

- The visit shall be authorized by order of the judge of freedoms and detention

- Agents have access at all times to
 - institutions and installations where space operations are performed
 - space objects
 - any relevant documents

- The licensee is informed and may be assisted by any person of his choice, or be represented

2. Safety (LOS, Art. 8)

- CNES and governmental officers may at any time impose any measures they consider necessary regarding the launch or control of a space object in the interest of the safety of persons and property and the protection of public health and the environment
- Prior consultation of the operator, except in cases where an immediate hazard exists

C. Registration (LOS, Art. 12)

- In accordance with the provisions of the 1975 Registration Convention :
 - CNES is responsible for the national registry
 - The Ministry of foreign affairs is responsible for the information to be sent to UN Secretary general

D. Liability

1. Liability in respect of third parties
2. Liability in respect of persons involved in the operation space

1. Liability in respect of third parties

- a. Liability of the operator
- b. Right of recourse against the operator
- c. Right to State guarantee

a. Liability of the operator (LOS, Art. 13)

- The operator is solely responsible for damages caused to third parties due to space operations
- Absolute liability for damages on Earth or in the airspace
- Fault-based liability for damages in outer space / exception : fault of the victim

a. Liability of the operator (LOS, Art. 13)

- Except in cases of willful misconduct , the liability ends
 - when all the obligations of the authorization are satisfied or,
 - at the latest one year after the date on which these obligations have been met
- The French government replaces the operator for damage occurring after this period

b. Right of recourse (LOS, Art. 14)

- Rule : where, under the provisions of 1967 Outer Space Treaty or the 1972 liability Convention, the French government has repaired a damage, he may exercise a right of recourse against the operator responsible for the damage which led to the international responsibility of France

c. Right to State guarantee (LOS, Art. 15)

- Rule : When a operator has been ordered to compensate a third party for a damage caused by a space object, it shall benefit from the State guarantee beyond the ceiling of € 60,000
- Condition : the operation was conducted from the territory of France or another EU member or from means or facilities under the jurisdiction of France or another EU member
- Exception : willful misconduct of the operator

2. Liability in respect of persons involved in the operation space (LOS, Art. 20-21)

- Cross waiver liability principle
- In case of multiple participants to a space operation or to the production of a space object, the liability of one of the participants can not be sought by another participant for a damage caused to a third party or to one of the participants
- Exception : willful misconduct

E. Sanctions and penalties (LOS, Art. 9-11)

- Authorizations may be revoked or suspended
 - for failure of the holder to fulfill its obligations
 - or if the operations for which they were solicited appear likely to jeopardize the interests of national defense or compliance by France with its international commitments

E. Sanctions and penalties (LOS, Art. 9-11)

- Shall be punishable by a fine of 200,000 €
 - any person carrying on a space operation without authorization
 - the continuation of a space operation in breach of an action or a decision to stop or suspend the activity
 - the continuation of space operation without complying with a notice to comply with a prescription
- Any obstruction to inspections

II. Law of space Applications

- A. Earth observation
- B. Satellite telecommunications
- C. Satellite broadcasting

A. Earth observation

- LOS, Art. 23 – 25

- Declaration to enter the market : Any data provider at a primary stage has to make a prior declaration to the *Secrétariat général de la défense et de la sécurité nationale* (SGDSN)

- The French legislation only deals with activities carried on in France by French or foreign persons

- Exceptions
 - Data originated from military satellites or collected on behalf of Ministry of Defense are excluded from the scope of the law since they are subject to direct governmental control (Art. 27)
 - Data collected by CNES for its public service missions

A. Earth observation

- SGDSN shall control that the operator does not interfere with the fundamental interest of the nation and impose restrictions
 - Temporary comprehensive or partial immediate suspension of data collection/distribution
 - Temporary obligation to defer data collection/distribution
 - Permanent data collection/distribution ban
 - Limitation of the quality of data
 - Geographical limitation zones shots

- A person declared not complying with any data restriction imposed is sanctioned by a fine of 200,000 euros

B. Satellite telecommunications

1. Use of « spectrum-orbit » resource
2. Provision space telecommunications networks and services

1. Use of « spectrum-orbit » resource

- French Code on Posts and Telecommunications
- ANFr is responsible for the international coordination of the use of frequencies/orbits at ITU
- After coordination, ANFr issues assignment (authorization)
- The person requesting authorization has to prove his/her capacity to control the entire system's stations in order to react in case of harmful interference

1. Use of « spectrum-orbit » resource

- Grounds that may be used for refusing the authorization:
 - protection of public order
 - incompatibility of the request with France's international obligations relating to radiocomms
 - potential interferences with existing systems coordinated through ITU by France
- The authorization is null and void if the use of frequencies is incompatible with future coordination agreements

1. Use of « spectrum-orbit » resource

- 3 categories of assignment
 - Private operators or manufacturers: Eutelsat, Airbus, Thales, O3b, OneWeb, Echostar (11 assignments)...
 - Governemental operators: Army, CNES, ...
 - Intergovernmental organizations: Eutelsat IGO, Galileo, ESA, ...

1. Use of « spectrum-orbit » resource

- General declaration to ARCEP
- Special authorisation to use spectrum to operate ground stations
- Compliance with French and European Telecommunications law and competition law
- Consequence : privatization of Eutelsat in 2001

C. Satellite broadcasting

C. Satellite broadcasting

1. Provision of satellite broadcasting services
2. Obligations regarding content

1. Provision of satellite broadcasting services

- 1982 Broadcasting Act
- Free satellite broadcasting over Europe
- Authorization issued by CSA for
 - broadcasters established in France
 - Foreign broadcasters uplinked to satellites by French operators
 - Foreign broadcasters broadcasted via French satellites
- Authorization is valid for all European States (single Authorization)

2. Obligations regarding content

- Protection of minors and human dignity
- Protection of cultural diversity (50% of European works)
- Compliance with European rules on advertising, sponsoring and teleshopping
- Free-to-air access to major sports events

ありがとうございました

Merci