

# ***INTERNATIONAL SPACE LAW AND THE AUTHORIZATION ON THE NATIONAL LEVEL***

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# OUTLINE

- I. Authorization to operate VSS
- II. Other authorizations in relation with space activities

# I. AUTHORIZATION TO OPERATE VERY SMALL SATELLITES (VSS)

A. Obligation to authorize and supervise VSS

B. Procedure for authorizing VSS

C. Conditions associated to authorization

## A. OBLIGATION TO AUTHORIZE AND SUPERVISE VSS

- OST, 1967, art. VI : “States Parties to the Treaty shall bear international responsibility for national activities in outer space [...] carried on by governmental agencies or by non-governmental entities, and for assuring that national activities are carried out in conformity with the provisions set forth in the present Treaty. The activities of non-governmental entities in outer space, including the moon and other celestial bodies, shall require authorization and continuing supervision by the appropriate State Party to the Treaty [...]”
- OST, 1967, art. VII : liability of launching states for damages caused by space objects

## A. OBLIGATION TO AUTHORIZE AND SUPERVISE VSS

- Example national space legislations
- 1969 : Norway
- 1982 : Sweden
- 1984 : US
- 1986 : UK
- 1993 : Russia
- 1993 : South Africa
- 1995 : Kazakhstan
- 1996 : Ukraine
- 1997 : Hong Kong, China
- 1998 : Australia
- 2006 : Belgium
- 2007 : Netherlands
- 2008 : France
- 2011 : Austria
- ...

## A. OBLIGATION TO AUTHORIZE AND SUPERVISE VSS

- VSS shall not be excluded from the scope of national space legislation
  - VSS are space objects
  - Confirmation by the definition of " space object » in the French legislation : any object of human origin, functional or not during its launch, its stay in outer space or its return" (Regulations of 31 march 2011)
  - Question regarding the definition of « space activities » in the Dutch law : "the launch, the flight operation or the guidance of space objects in outer space" (Space Activities Act)
- Very small satellites shall be subject to national authorization

## B. PROCEDURE FOR AUTHORIZING VSS

### Licensing Authority

	Authority responsible for licensing	Authority consulted
USA	Federal Communications Commission	
UK	Secretary of State	-
France	Ministry of Research	CNES
Netherlands	Ministry of Economic Affairs	-

## C. CONDITIONS ASSOCIATED TO THE AUTHORIZATION

- Conditions for VSS operators
  - Obligation to have financial coverage (insurance)
    - The cost of insurance is very high compared to the cost of VSS
  - Obligation to comply with technical regulations in particular :
    - Ability to control the space object
    - Limitation of space debris
      - Difficult to meet these obligations because VSS are not controllable once orbited

## C. CONDITIONS ASSOCIATED TO THE AUTHORIZATION

- Obligations for States
  - Registration of VSS (national / UN) – difficulty of identify VSS in outer space in case of joint launching despite registration
  - Control of VSS - difficulty to control VSS
  - Liability for damages caused by VSS
- Obligations for VSS operators
  - Liability for damages caused by VSS

# QUESTIONS

- Should national laws cover VSS operations?
  - Yes to comply with OST obligations.
- If so, national legislations must be neutral from a technical standpoint to cover all satellites including VSS
  - e. g. French Technical regulations
    - does not require satellites to be equipped with propulsion systems
    - The rule preventing debris by reentry into the atmosphere either after the operational phase or before a period of 25 years after the operational phase is consistent with the characteristics of VSS

# QUESTIONS

- Shall states waive the liability and insurance requirement for the in-orbit operation of VSS?
  - to promote research/development and encourage access to outer space since VSS operators may find launch insurance costs prohibitive
  - To take into account the actual risks since VSS are unlikely to cause very much damage on Earth (but collisions with other space objects are still significant)

# QUESTIONS

- Shall states introduce new regulations for VSS?
  - Obligation of in-orbit maneuvering capability
  - Special liability limit

## II. OTHER NATIONAL AUTHORIZATIONS REQUIRED FOR VSS

- A. Authorization to provide space services
- B. Authorization to transfer technologies

## II. OTHER NATIONAL AUTHORIZATIONS REQUIRED FOR VSS

- Article III OST, " States Parties to the Treaty shall carry on activities in the exploration and use of outer space, including the moon and other celestial bodies, in accordance with international law, including the Charter of the United Nations, in the interest of maintaining international peace and security and promoting international co-operation and understanding"
- Article IX OST "If a State Party to the Treaty has reason to believe that an activity or experiment planned by it or its nationals in outer space [...] would cause potentially harmful interference with activities of other States Parties in the peaceful exploration and use of outer space [...] it shall undertake appropriate international consultations before proceeding with any such activity or experiment"

## A. AUTHORIZATION TO PROVIDE SPACE SERVICES

- Frequencies assignment for VSS - ITU Convention (1992), Constitution (1992) and Radio Regulations (2013)
- Authorization/declaration to operate remote sensing satellites / to provide space based data (US, France, German law)
- Authorization to provide satellites telecommunications networks (possibly)

## B. AUTHORIZATION TO EXPORT VSS GOODS AND TECHNOLOGIES

- 1996 Wassenaar arrangement on Export Controls for Conventional Arms and Dual-Use Goods and Technologies
- VSS and their components are included in the List of Dual-Use Goods and Technologies and in the Munitions List
- Authorization to transfert goods and technology
- Authorization to re-transfert goods and technology

## B. AUTHORIZATION TO EXPORT VSS GOODS AND TECHNOLOGIES

- Examples of legal texts implementing the principles of export control and introducing licensing authorization
  - USA : International Traffic in Arms Regulations - ITAR / The Export Administration Regulations – EAR
  - EU : Code of Conduct for Arms Export (1998 + December 8, 2008) / Council Regulation n° 1334/2000 (Dual-use items)
  - France : Code of Defense (Munition list)

# CONCLUSION

## LIST OF NATIONAL AUTORISATIONS (LICENCES) REQUESTED FOR VSS

Compulsory licenses / declarations			
Licences/Declaration	Objective	International legal basis	National legal basis
VSS operation	Implementation of the obligations of international responsibility of States for space activities	OST (1967) art. VI + art VII	National space laws (e. g 1986 UK Outer space act; 2008 French Law on space operations)
Assignment of VSS frequencies	Prevention of harmful interferences	ITU Radio Regulations (2013)	National telecoms law
Export control	Protection of national and international security	Wassenaar Arrangement (1996)	National regulations on export control

# CONCLUSION

## LIST OF NATIONAL AUTORISATIONS (LICENCES) REQUESTED FOR VSS

### Additional licenses/declaration depending on the possible satellite application

<b>Licences/Declaration</b>	<b>Objective</b>	<b>International legal basis</b>	<b>National legal basis</b>
Operation of a RS VSS or provision of space based data	Compliance with national security / international obligations	Principles of sovereignty and international cooperation	National remote sensing policies / acts
Provision of telecoms services via VSS	Entry into the telecommunications market	WTO Reference paper on telecoms (1996)	National telecoms acts

***THANK YOU***

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