



BELGIAN SCIENCE POLICY



KATHOLIEKE UNIVERSITEIT  
**LEUVEN**



*Towards a legal framework for space activities and applications:  
Belgian, comparative and European perspectives*

# **The Belgian Law on the activities of launching, operating and monitoring of space objects**

Brussels, Belgian Senate,  
April 26, 2006

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## History and Context

1999: Belgium reactivates its participation in UNCOPUOS at the occasion of the UNISPACE III Conference

Belgian position within UNCOPUOS:

- pragmatic approach taking into account the reality of space activities;
- strong commitment in the application of the 5 UN space treaties
- recognition of new actors in international space activities (private enterprises, NGO, emerging space faring nations,...)

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## **Year 2000**

- starting the drafting of the Belgian space law
- taking into account the **political** situation of Belgium within the world space community:
  - a small country
  - with no launching facilities
  - but with relatively strong space R&D capacities
  - investing public money in space (160 M€/year)
  - party to the ESA Convention and to other international space organizations
  - hosting many international organizations (including the European Community, ESA, NATO, EUROCONTROL, etc.) as well as many multinational companies

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- and taking into account the **legal** situation of Belgium within the world space community:
  - party to the 5 UN space treaties (party to the 1979 Moon Agreement in July 2004)
  - member State of main European organizations active in the space domain (ESA, EU, EUMETSAT, ECMWF, ESO, EUTELSAT)
  - party to the 1998 International Space Station Intergovernmental Agreement and to the Ariane Production Declaration
  - party to several bilateral space cooperation agreements (with France, with Argentina, with Russia)

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## Main elements of the Belgian Space Law

Considering the **political** and the **legal** situation of Belgium, the basic elements of the Belgian space law were:

- legal obligation to set up an authorization and supervision mechanism (Article VI 1967 Outer Space Treaty)
- necessity to ensure participation of the operator in the liability related to the space object (Article VII 1967 Outer Space Treaty + 1972 Liability Convention)
- necessity to set up a national registration system for space objects (Article VIII 1967 Outer Space Treaty + 1975 Registration Convention)

*but adapting these 3 basic elements to Belgium's features*

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« ***adapting*** » means:

- (4) to take into account the actual need to regulate and to avoid over-regulating :
- (5) to implement the international obligations of Belgium in the most efficient way considering the latest evolution of space activities

the Belgian space law is **integrated** in the existing legal framework

examples:

- administrative mechanisms applicable to the authorization (procedure, filing, terms) ;
- assessment of the environmental impact as provided by EU law ;
- counterclaims and action against the operator's insurer (liability law)

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## **the scope of the Belgian space law**

### ***(a) space objects operations :***

excluding:

- payload exploitation and data collection or transmission
- regulation of space applications / services / markets

### ***(b) activities located under the Belgian jurisdiction***

except: when an international agreement between Belgium and the State of the location of the activities provides otherwise

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**the notion of « Belgian jurisdiction »  
according to the Belgian space law**

This notion is based on Belgium's position with regard to Articles VI, VII and VIII of the 1967 Outer Space Treaty:

**Art. VI**

- « Belgium's national space activities » means activities located on the Belgian territory or using facilities under Belgian jurisdiction or control

**Art. VII**

- Belgium is not to be considered as « Launching State » of any object launched by its national private companies or citizens

**Art. VIII**

- Belgium can only register space objects of which it is considered as (one of) the Launching State(s)

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## **rational of the Belgian position (1)**

- Belgium is a potential hosting country for space (institutional or commercial) operators
- **Without any agreement, Belgium has no guarantee to be able to authorize and supervise activities of its national companies or citizens located under the jurisdiction of another State**
- **International space responsibility (Art. VI OST) should be seen as a specific case of the general theory of international responsibility according which States are responsible for the violation of their international obligations (and not for the activities of their national citizens)**
- International space liability (Art. VII OST) should be seen as an exorbitant obligation and should interpreted accordingly in a restrictive meaning

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## **rational of the Belgian position (2)**

- Broad interpretation of Arts. VI and VII OST might prejudice a larger participation in the outer space treaties
- **Broad interpretation of Arts. VI and VII OST doesn't allow a State party to exonerate itself by denying / refusing the authorization to a particular activity (launch, operation, property management, etc.)**
- **In the absence of any multilateral consensus on Arts. VI and VII OST, the Belgian position fosters the conclusion of specific agreements between States participating in the operation of the space object**
- Precedents are known as the *New Skies Satellites* and the *Mircorp* cases: Belgium cannot bear international responsibility / liability of that kind with respect to the *nationality* of the operator:
  - *Quid* when the operator changes its nationality ?
  - *Quid* when the activity is transferred abroad ?

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# The « pillars » principles of the Belgian space law and their implementation

## **IV. authorization and supervision regime**

### **application**

- the authorization is granted by the Minister for Science Policy to the operator on his request *as personal and non transferable*
- authorization may be requested for the operation of a set of space objects (i.e. constellation)

### **the operator**

- the one who holds the *actual control* on the space object

### **conditions**

- the authorization is subject to a *general legal condition*: compliance of the activity with Belgium's international obligations
- the King may impose conditions applicable to all authorization
- the Minister may impose specific conditions to each authorization (a formal motivation is required for that purpose)
- conditions may be adapted or modified in the course of the activity (but providing transitional measures)

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### **content of the application file**

- information & data on *the operator*
- identification of *the manufacturer(s)* of the space object
- identification of *the procurer(s)* of the activities
- information on & description of *the activity*
- information & data on the *space object* (cf. National Register)
- prior *assessment of environmental impacts* (as required by EC law) – further assessment may be required in the course and at the end of the activity
- special notification and information in case of *use of NPS*
- +
- *any other information of which the operator cannot ignore the relevance for the granting of the authorization by the Minister*
- *any information requested by the Minister (frequencies, launching, etc.)*

### **external experts**

The Minister may request the assistance of external experts for the purpose of :

- *investigating the application*
- *controlling the information & data provided by the operator*
- *supervising the activity*

External experts have access to the premises, the information and the data used by the operator for the purpose of the activity but are bound by a *confidentiality obligation*

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### **procedure**

- timeframe for the Minister's decision: 90 to 120 days
- if no decision happens in that time, the request is deemed refused
- a recourse is then open against the Minister's decision according to general administrative law

### **withdrawal or suspension of the authorization**

The Minister may withdraw or suspend the authorization

- *in case of non-compliance by the operator with the general or special conditions applicable to his activity ;*
- *in case of necessity with regard to public safety (persons or properties)*

Transitional measures can be taken by the Minister:

- *on the operator's request for the sake of his activity (fulfillment of his contractual obligations towards third parties, etc.)*
- *on the Minister's initiative for the safety of persons or properties*

### **alert procedure**

- In case of malfunction of or control breakdown on the space object generating a danger or a risk of damage, the operator must immediately inform the designated governmental crisis management centre and report all relevant information to it

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**I. transfer of activities**

- Any transfer of activity is subject to authorization by the Minister
- “*transfer of activity*” means “*transfer of the actual control on the space object*” (cf. definition of “*operator*”)
- When the activity is transferred by an operator under Belgian jurisdiction (*the transferor*) to an operator established outside Belgium (*the transferee*), the Minister may subject the authorization of transfer to the prior conclusion of an agreement with the State of the transferee
- The same procedure applies as for new activities. Conditions may be imposed to the transferor and to the transferee.

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## **I. the National Register of Space Objects**

- contains information required by the 1975 Registration Convention and other information (manufacturer, etc.)
- the Register is public (internet open access)
- update of the information by the operator
- completed by a repertory of the authorizations with conditions imposed to the each activity (internet open access)

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## **I. compensation claim against the operator**

- Whenever the Belgian State is held liable according to Art. VII OST or the 1972 Liability Convention, it may claim compensation from the operator
- « Damage » includes damage caused to Belgian citizens
- The compensation claim may be limited by the King to a ceiling amount (i.e. according to the operator's average turnover)
- That limitation is not applicable in case of violation, by the operator, of the provisions of the law or of the conditions applicable to his activity: the operator is then liable for the total amount paid by the Belgian State
- The compensation claim does not prevent other claims against the operator, without prejudice to Art. XI, (1) and (2), of the 1972 Liability Convention
- The operator may participate in the damage value estimation process between the States involved and may voice his own interests

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## **I. other provisions**

### **recovery of space objects**

- Space objects or parts of space objects found on the Belgian soil are *not subject to appropriation*. They must be handed over to authorities after securing potential victims' rights and interests

### **fees and penalties**

- cost of the application charged to the operator:  
application fee (limited to administrative costs to be fixed by the King) + cost of the assessment(s) of environmental impact + cost of external experts + cost of updating of the National Register of Space Objects
- penalties and criminal sanctions for non compliance with the law (activities without authorization or authorization based on false information)

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## The Belgian space law in the international framework

The law provides for the possibility to conclude international agreements in two cases:

5. in case of activity performed by a Belgian company or citizen from a place located under the jurisdiction of another State
6. in case of transfer of activity from a Belgian operator to an operator established in another State

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Such agreements should provide for:

- (3) settlement of the « nationality » of the activity according to Art. VI OST (which State is responsible ? Which law shall apply ?)
- (4) settlement of the liability compensation apportionment (Art. VII OST and Arts. V, (2), and XXIII of the 1972 Liability Convention)
- (5) exchange of information, visit procedure, supervision modalities, etc.

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## Conclusion

- The Belgian space law is built on the assumption of a multilateral cooperation in the application of the UN space treaties
- It takes into account the reality of today's international space activities and cooperation: everybody takes profit of space applications: space law principles should not penalize national endeavors in space but provide them with an appropriate framework
- Activities non covered by the Belgian space law (i.e. acquisition and commercialization of EO data, telecommunications, etc.) are subject to other existing legislations, but further legal developments might be seen as necessary (specific export control procedures, exercise of in-orbit jurisdiction, etc.)
- Harmonization at the EU level is suitable to some extent: this would be easier if space activities remain subject to general law as far as possible
- EU has become a space actor: EC should make a declaration of acceptance of the 1968 Rescue Agreement, the 1972 Liability Convention and the 1975 Registration Convention and should integrate and implement the principles of the 1967 Outer Space Treaty
- way forward: adoption of the Royal implementing decree (end 2006)