# Managing Space Debris Issues under National Space Law

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## Belgian Space Law

- Law 17/09/2005 (revised on 01/12/2013)
- Royal Decree 19/03/2008 (in revision)
- 2 additional agreements:
  - agreement on technical assessment by ESA upon Belgium's request
  - SSA agreement with USSTRATCOM on in-orbit tracking
- ➤ authorization granted on basis of several documents, including an environmental impact assessment
  - impact on the ground
  - impact in orbit (incl. space debris)

# Space Debris and Liability

- international liability for damage caused by space object = State liability
- liability ceiling for compliant operator (10% of yearly budget / turnover)
- non-compliance by the operator: no liability ceiling but fault still to be established
- PROBLEM: 'fault' liability + restricted damage definition
- SOLUTION: to be replaced by non-compliance liability + lump sum indemnification (except gross negligence / intentional misconduct)

#### **Technical Standards**

- guidelines are no standards ("what should be done" vs "how it should be done")
- which standards? by whom? for whom?
- economic necessity: flexibility vs. effectiveness
- legal necessity: national (administrative) law principles (equality, fair treatment, proportionality, etc.)
- political necessity: refrain from imposing unnecessary burden to national operators with respect to foreign competitors

## A Role for Europe?

- Art. 189 TFEU excludes harmonization of national space laws
- concept of 'level of standards' leaving option for equivalent standards open to manufacturers / operators
- harmonized liability regime is a must
- how to ensure compliance with a coherent, common, effective level of standards against space debris?

**ESA** 

European (soft) intergovernmental harmonization (through EU?)

### Space Debris Remediation Technics

- mitigation (design / manufacture / launch / operation of spacecraft)
- in-orbit orientation / maneuvering
- in-orbit servicing / maintenance / repair
- active removal

➤ All those technics require international cooperation and common standards for which Europe should be first

#### Links

#### Check out:

http://www.belspo.be/belspo/space/beLaw\_en.stm

Facebook/Belgian Space Law

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