NEW SPACE

LEGAL ISSUES

Philippe Achilleas
Full Prof. of Public Law
University Caen - Normandy

Director
IDEST
Master in Space and Telecommunications Law
University Paris Sud
Outline

- New dimension in the exploration and use of outer space
- New dynamics in the law applicable to space activities
NEW DIMENSION IN THE EXPLORATION AND USE OF OUTER SPACE
New concept

- New entrants, in particular in the US market, consisting of private actors mainly from the digital industry supported by rich and successful entrepreneurs

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<tr>
<th>New space companies</th>
<th>Traditional space companies</th>
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<td>- Flatter, flexible organizations</td>
<td>- Hierarchical</td>
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<td>- Consumer-focused, innovative, and willing to take risks</td>
<td>- Focused on established lines of business, often with the government</td>
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<td>- Focused on new technology solutions</td>
<td>- Established in sectors with high value, low sales volume, and low growth</td>
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Tauri Group (AIAA 2009-6400)
New space explorers

- Young people from post Appolo era and the digital revolution
- Mixture of dreamers and serious entrepreneurs
- Common vision of the new frontier
- Model of the conquest of the West by entrepreneur farmers

![Images of Google, Facebook, Amazon, SpaceX, Virgin, PayPal, Alphabet]
**New programmes**

32 projects of constellations / 1100 satellites

**Satellite applications**

Fidelity
New programmes

Space Flight/transportation
New programmes

Exploitation of space resources
New space race

BLUE ORIGIN

SPACEX
Direct consequences

- Access to space could be facilitated by reducing costs

- New industrial policy due to the need of accelerated production and launch of space objects
NEW DYNAMICS IN THE LAW APPLICABLE TO SPACE ACTIVITIES
The entrepreneurial approach contaminates space law

- New models of partnership between space agencies/industries
  - Privatization of some missions conducted by public agencies / e.g. Commercial Orbital Transportation Services (COTS) - NASA program to coordinate the delivery of crew and cargo to the ISS by private companies
  - New space could become a suitable field to new PPP

- Restructuration of traditional space companies to reduce costs
  - e.g. Joint venture Airbus Safran Launchers to compete with SpaceX
  - Increasing importance of corporate law in the space sector
The entrepreneurial approach contaminates space law

- Encouragement of private investment
  - by adopting adequate regulatory frameworks to encourage emerging markets
    - E.g. U.S. Commercial Space Launch Amendment Act of 2004 = US commercial suborbital industry (7 main service providers; 4 launch sites)
    - French Taskforce on “surborbital aircrafts” (2015 – 2016)

- by granting property rights
  - 2015 Space Resource Exploration and Utilization Act - facilitate the commercial exploration for and commercial recovery of space resources by U.S. citizens
  - 2016 Luxembourg’s Asteroid Mining Plan
Law of space applications prevails over space law

- Digital law

  - Network development
    - Access to the “orbit-spectrum” resource
    - Interconnection with terrestrial networks

  - Regulation of applications
    - Content regulation
    - Data policy including big data law
    - Personal data protection

  - Regulation and competition law in the digital market

  - Security of networks and data
Law of space applications prevails over space law

- Transportation law

- The regulation of suborbital flights is more a matter of air law than a matter of space law (certification, protection of passengers, airworthiness ...)

ICAO
Conclusion

- We have entered a new era of space exploration and space use
- Private entrepreneurs will be increasingly present
- International law must establish the balance between respect for the main principles of space law and the need to support private initiatives
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