

NEW SPACE

LEGAL ISSUES

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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

New space companies

- Flatter, flexible organizations
- Consumer-focused, innovative, and willing to take risks
- Focused on new technology solutions

Tauri Group (AIAA 2009-6400)

Traditional space companies

- Hierarchical
- Focused on established lines of business, often with the government
- Established in sectors with high value, low sales volume, and low growth

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

New programmes

32 projects of constellations /
1100 satellites

A 3D visualization of the OneWeb satellite constellation over the African continent. The constellation consists of numerous small satellite icons connected by a network of blue lines. The OneWeb logo is in the top left, and the Virgin and Qualcomm logos are in the bottom right.

OneWeb
ACCESS FOR EVERYONE

Virgin

QUALCOMM

A 3D visualization of the Fidelity satellite constellation over the Earth. The constellation is shown as a dense network of blue lines connecting many bright satellite nodes. The Fidelity logo is in the top left, and the SpaceX and Google logos are in the bottom left.

Fidelity

SPACEX

Google

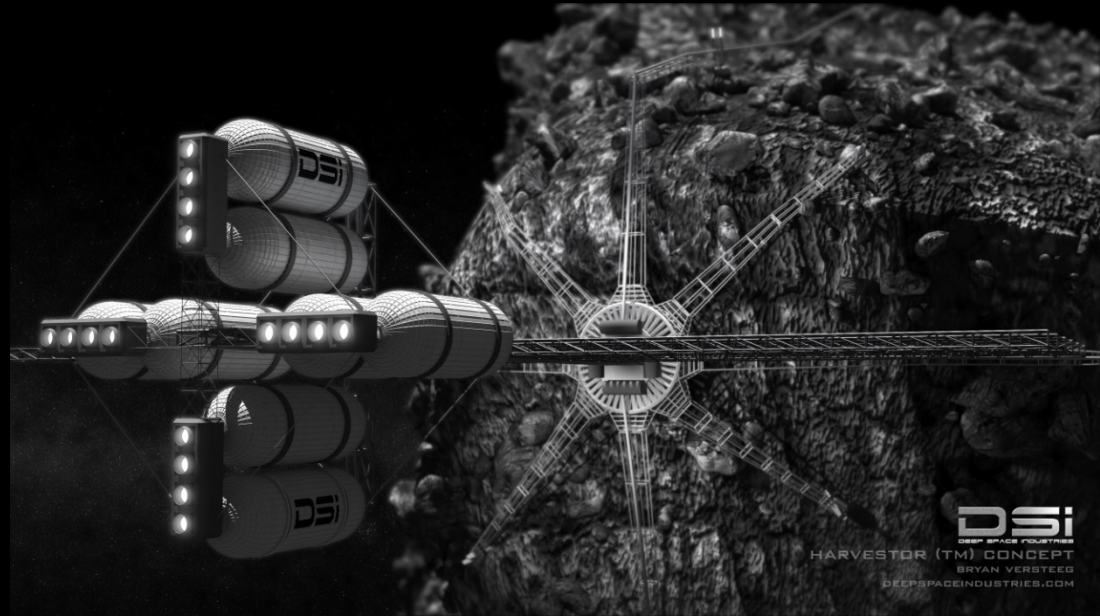
Satellite applications

New programmes

*Space Flight/
transportation*



New programmes



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HARVESTOR (TM) CONCEPT
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 **PLANETARY
RESOURCES™**

*Exploitation of
space resources*

New space race



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 “suborbital 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

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

UN / UNESCO/WIPO
 - Regulation and competition law in the digital market
 - Security of networks and data

WTO

ITU / UN

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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