International Space Law and Private Space Activities

Frans G. von der Dunk

Harvey & Susan Perlman Alumni / Othmer Professor of Space Law University of Nebraska-Lincoln Director, Black Holes B.V. space law & policy consultancy

Licensing Executive Society 2021 Annual Meeting Lincoln, Nebraska, 28 September 2021

The peculiarity of space activities Three main characteristics of space activities









Why even spend money on space?Traditionally three rationales





A domain of States

- Only States were interested in investing in military security, prestige & science
- & Few States had technology, could provide funds& could afford risks involved in space activities
 - Originally, almost uniquely Soviet Union & United States



\rightarrow International space law

- State-oriented: rights & duties of States
 - IGOs only included at secondary level
 - Private entities only referenced once as "nongovernmental entities"
- ◆ Applies to Outer Space treaties & follow-up
- & Applies to ITU-regime on orbits & frequencies



The paradigm change

\leftarrow > More States involved, incl. developing ones

& Increasing 'practicalization' space activities









 \rightarrow Private sector becomes interested



So the main question now is...

- How would / should / could private commercial operators fit into this regime?
 - How to make sure also they would comply with the rules as well?
 - How to make sure also their legitimate interests would be taken into account?



...and the main answer:

- The Outer Space Treaty provides legal structure guiding the handling of the paradigm change
 - Outer space = 'global commons', free for States to explore & use as long as compliant with obligations under the treaties
 - & Private operators only allowed within that context



Four main concepts (1)

♦ Article II:

Outer space is a *global commons*, where no single State can determine the law



Four main concepts (2)

♦ Article VI:

 States are *internationally responsibility* for the conformity with international space law of *national activities in outer space*, also if carried on by *private entities*





Four main concepts (3)

◆ Article VII :

States internationally *liable* for damage caused by space object operations, also if carried on by *private entities*





Four main concepts (4)

◆ Article VIII :

 States can *register their spacecraft*, also if operated by *private entities*, and ensure *application of national laws* to such spacecraft & their personnel



\rightarrow Need to implement the treaties!

- Authorization requirement (license, permit, approval, ...)
 - Ensuring compliance with international law by licensee – since State is responsible
 - Including obligation to compensate State for international liability claims it has to pay
 - Ensuring registration



National space law: the status quo





US national space law

- Number of disparate Acts (1)
 - 1958 General Act (a.o.) creating NASA
 - Includes *de facto* competence to 'regulate' private sector activities on the International Space Station & the Moon (the 'Artemis Accords')
 - Telecommunications \rightarrow satellite communications
 - 1970: 1934 Communications Act declared to apply
 - Satellite remote sensing / earth observation
 - 1984: first Land-Remote Sensing Act



US national space law

- ◆ Number of disparate Acts (2)
 - Launching & private space transportation
 - 1984: Commercial Space Launch Act
 - 2004: made to apply to re-entry / human spaceflight as well
 - General commercialization → Recent efforts to streamline ... & add space mining
 - 2015: broader Act provisionally addresses space mining



