

W E B I N A R

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LAW

# Space Tourism, Space Commercialisation and the Development of Space Law

20 January 2021  
13:00 – 14:00  
(GMT+8)

**Moderator:** Dr Anthony NEOH QC SC JP **Speaker:** Professor ZHAO Yun





# Space Tourism, Space Commercialization and the Development of Space Law

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# First Man in Space (12 April 1961): Yuri Gagarin



‘That’s one small step for man, one giant leap for mankind.’ (Neil Armstrong, 1969)





# China's manned flight in 2003 and moon sample in 2020



# The Space Race

- Space: The Final Frontier
- USSR:
  - Sputnik 1, 1957
    - First man-made object launched into space
  - Yuri Gagarin, 1961
    - First man in space
- USA The manned moon landing, 1969
- Need for setting up specific rules to regulate space activities







1

**Basic System of Space Law**

2

**Latest Development and Legal Challenges**

3

**Space Commercialisation**





# 1. Basic System of Space Law

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- Origin of Space Law
- Five Space Treaties
- Fundamental Principles

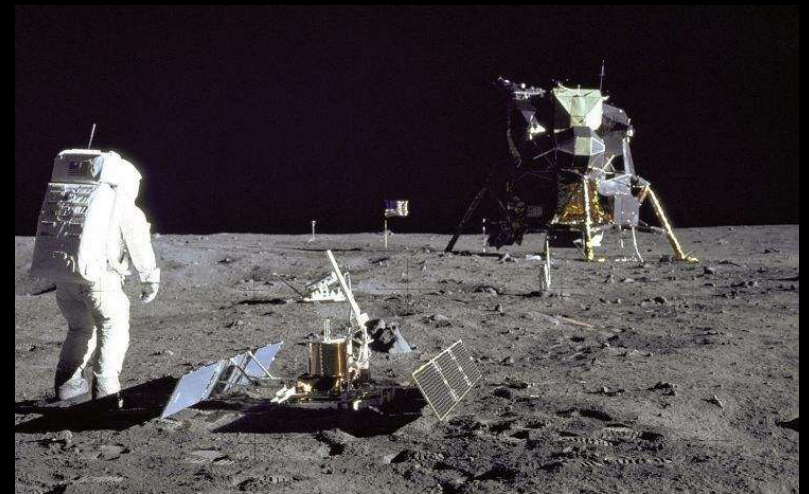
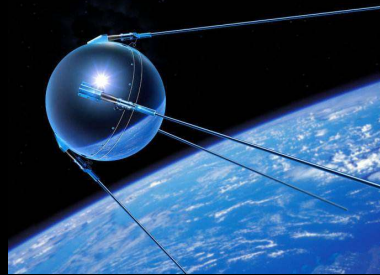


# Space Law: Pre-Sputnik Years

- First monograph on space law published in Germany in 1932 By Vladimir Mandl (Father of Space Law)
- First doctoral thesis on space law by Welf Heinrich in Germany in 1953 (*Air Law and Space*)
- Topic of space law first debated in International Civil Aviation Organization (ICAO) in 1956

# Origin of Space Law

- **1958 UNGA: need for international cooperation**
- **1958-1959 creation of the United Nations Committee on the Peaceful Uses of Outer Space (UNCOPUOS): forum for the negotiation of space law treaties**
- **1961 UNGA Resolution: international cooperation**
- **1963 UNGA Resolution: Legal Principles: non-binding**

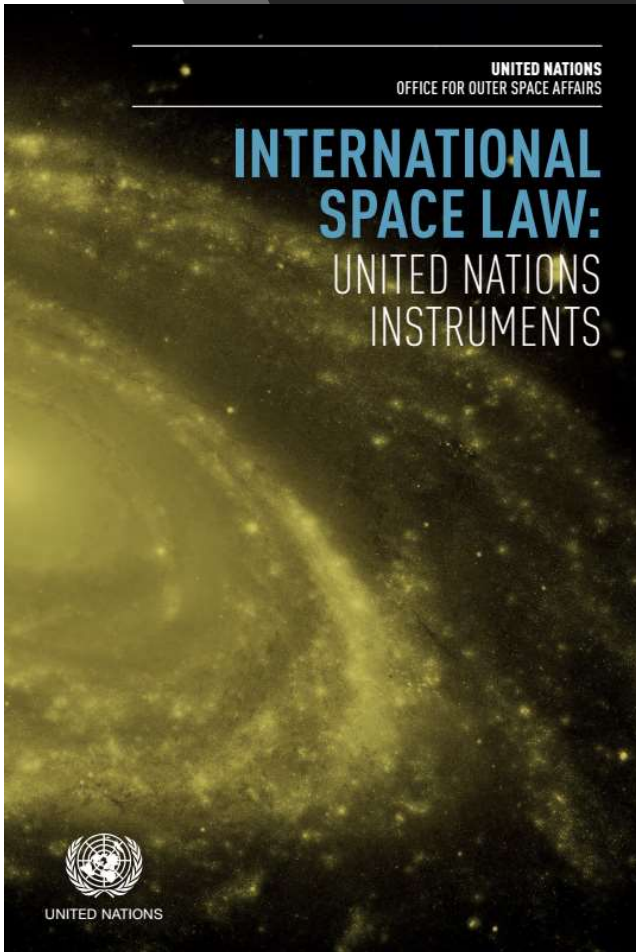




# Five Space Treaties

- **Outer Space Treaty 1967: 107 States**
- **Rescue Agreement 1968: 96 States**
- **Liability Convention 1972: 95 States**
- **Registration Convention 1975: 67 States**
- **Moon Agreement 1979: 18 States**

See: [UN Doc. A/AC.105/C.2/2018/CRP.3](#)



# Fundamental Principles of Space

- **Free Exploration and Exploitation**
- **Province of Mankind**
- **Non-appropriation**
- **International Cooperation**
- **Peaceful Uses of Outer Space**







## **2. Latest Development and Legal Challenges**

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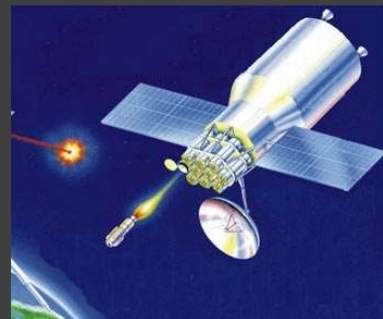
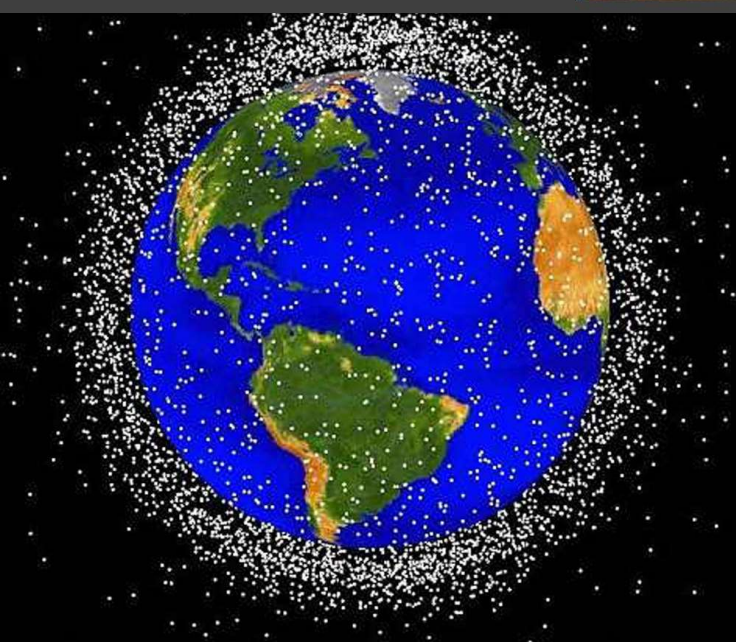
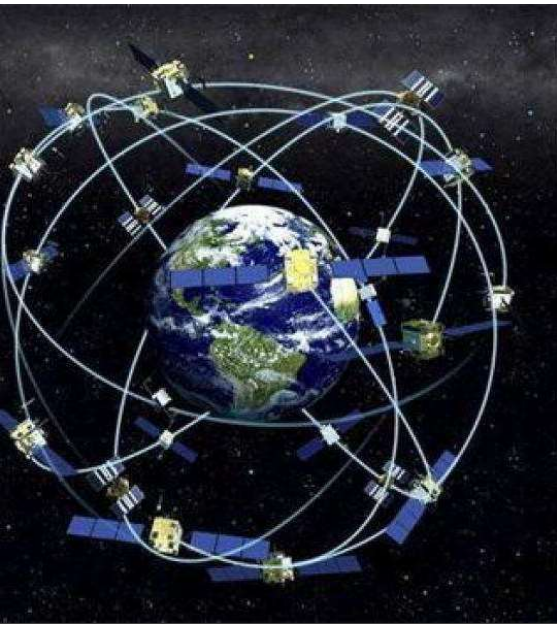
- **Space Commercialisation**
- **Space Environment**
- **Space Security**
- **Space Sustainability**



# Space Commercialisation

- **Increasing Number of Participants**
- **Increasing Private Capital Investment**
- **Exploitation of Space Resources**
- **Challenges Faced by Space Law**





# Space Environment and Space Security

- **Increasing Space Debris and Harmful Interference**
- **Legal Dilemma of Active Removal of Debris**
- **Space Orbit Congestion**
- **Threat of Space Weaponisation**

# Long-Term Sustainability of Outer Space Activities

- 2010-2018 UNCOPUOS LTS Project
- UNISPACE+50 (1968-2018)
- LTS and Space Law







## **3. Space Commercialisation**

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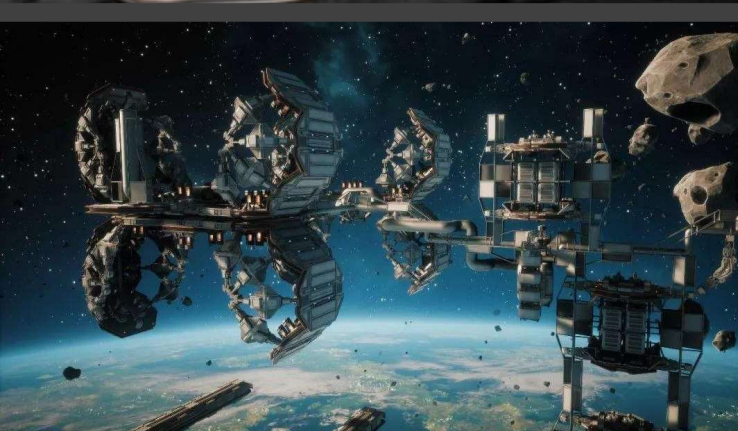
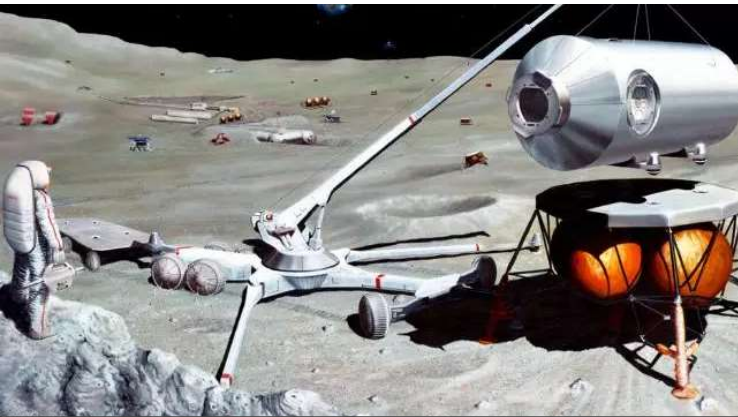
- **Space Travel**
- **Space Mining**

# Space Travel



- **Space Tourists —  
Envoys of Mankind?**
- **Space Hotel —  
property right**
- **Space Traffic  
Management**





# Space Mining

- Possibility
- Latest Space Legislation of U.S. & Luxembourg
- Future Possible Mechanism

# The U.S. Commercial Space Launch Competitiveness Act (H.R. 2262) in November 2015

- Title Four: Space Resource Exploration and Utilization (3 sections)
  - Definition: asteroid resource; space resource; United States citizens
  - promotion of the right of private entities to engage in commercial exploration and utilization of space resources
  - Private entities shall be entitled to any asteroid resource or space resource obtained, including to possess, own, transport, use and sell the resource
  - The US does not assert sovereignty or sovereign or exclusive rights or jurisdiction over, or the ownership of, any celestial body.



# Response from the International Society

- International Institute of Space Law (IISL) Position Paper in December 2015:
  - No clear prohibition on the taking of space resources
  - The Act pays respect to international legal obligations of the US
  - It is an open question whether this legal situation is satisfactory.
- Luxembourg followed suit by enacting Law on the Exploration and Use of Space Resources in July 2017

# The Legal Nature of Space Resources

- ‘Space resources’ first appeared in the Moon Agreement
- Common Heritage of Mankind (res communis in Roman Law)
  - No sovereignty or claim sovereignty
  - All countries share in the management of the area
  - The benefits derived from the exploration must be shared with all
  - The area must be dedicated to peaceful purposes
  - The area must be preserved for future generation
- UNCLOS: deep seabed resources
- CHM is only a system in the law of sea field, not yet customary international law
  - The Moon Agreement: 18 member states
  - UNGA Resolution No. 2749: (118 affirmative vote, 0 negative, 18 abstention): only indicating the acceptance of the term, but does not mean anything accepting the term as a law



# Concluding Remarks

- Space commercialisation and privatisation as the ongoing trend
- International cooperation as a cornerstone: multilateralism v. unilateralism
- Diversification of space law legislation
  - UN: no more the only forum for space legislation
  - National space legislation: becoming more important





**Thank You**

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