

# Fundamental Regulatory Principles relating to Emerging Space Activities: Relevance for (potential) Aerospace Activities

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# Space Related Technology – Rapid Development

- Space Technology – relevant for many aspects of life
  - commercial / civil / scientific / military
- Outer Space services – burgeoning commercial industries
- => Evolving new technology
  - small satellites
  - human transportation / tourism and leisure
    - orbital
    - sub-orbital
    - ‘aerospace’ – aspects of air space and outer space
- (Overly) optimistic future projections?
  - but eventually an ‘industry’ will emerge

# Legal 'Basis' of Outer Space

- Sputnik (1957) – need for regulation
- => fundamental principles (CIL and subsequently Treaty)
  - legal 'status' of outer space
  - different legal basis from air law
  - freedom principle
  - non-appropriation principle
  - not based on territoriality / sovereignty
    - => national law does not apply

# International Legal Framework

- UNGA Resolutions 1960s
  - => a series of United Nations Treaties
- 1980s =>
  - UNGA Principles
  - 'hard' and 'soft' law guidelines
  - (national law)
- Treaties
  - Outer Space Treaty (1967)
  - Rescue Agreement (1968)
  - Liability Convention (1972)
  - Registration Convention (1975)
  - (Moon Agreement) (1979)
  - => before aerospace technology emerged

# (some) Relevant Treaty Principles

- Treaties refer to ‘Space Objects’
  - ‘includes component parts of a space object as well as its launch vehicle and parts thereof’
  - cf. an ‘aerospace’ object – not defined under space law
- Astronauts
  - ‘envoys of mankind in outer space’
  - State obligations to rescue astronauts
  - cf. a ‘human spaceflight participant’
  - rights / obligations?
- Responsibility
  - States – international responsibility for ‘national activities in outer space’
    - authorization
    - continuing supervision
- Liability
  - ‘Launching State(s)’ bears international liability for damage caused by a space object
  - determined at time of launch – wide application
  - no time limitation / cap on amount (*restitution* principle)
  - two liability regimes
    - absolute liability – on Earth or aircraft in flight
    - fault liability – everywhere else
- Registration
  - national register
  - United Nations register

# Applicable Law for 'Aerospace' Activities?

- (Policy) Choices
- 'Unitary' approach – based on intended destination / purpose / function?
  - one regime only
  - air law?
  - space law?
- 'Binary' approach – based on location
  - air law AND space law?
- A new special (unified) regime?
  - 'aerospace law'?
- Other legal frameworks?