

# TRANSMISSIONS TO EXTRA- TERRESTRIALS AND THE LAW

**Where do we stand,  
where should we stand?**

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# ROAD MAP PRESENTATION

- The law – and its role in the context of SETI
- Core principles of space law
- Core principles of telecommunications law
- Core principles of general international law
- The way forward

# THE ROLE OF THE LAW

- Man-made & dealing with human activities & human interaction
  - To establish some semblance of justice
  - To establish some efficiency & predictability
- Law follows man – even if by proxy
- Subjects of the law (versus objects)
  - National law: private persons (legal & natural)
  - International law: states, exceptionally IGOs
- *So not applicable to any ETI...*

# SO WHERE DO WE STAND?

- Current efforts almost exclusively private
  - At best government-condoned & -subsidized
  - Mainly within a few major space-faring nations
- No international law dedicated to SETI, passive or active (yet)
- Relatively-speaking most-relevant regimes:
  - Space law
  - Telecommunication law
  - General international law

# SPACE LAW (1)

- 1967 Outer Space Treaty
  - Outer space = global commons
  - Baseline = freedom of space activity
    - Limits to freedom can only be internationally agreed
    - Or nationally – but then for national operators only
  - Use = for all mankind; incl. science, incl. SETI
  - State responsibility for compliance
  - General international law also applies (...!)
  - *Applies as soon as some object is to be launched into outer space, or other effect in space is intended*

# SPACE LAW (2)

- 1972 Liability Convention
  - Absolute state liability for unlimited 3<sup>rd</sup> party damage on earth / fault liability for damage to other space object
  - State-to-state regime!
  - ➔ National license, incl. insurance (e.g. US, Russia)
- 1975 Registration Convention
  - Space objects to be launched should be registered nationally & internationally (with UN)

# TELECOMMUNICATION LAW



- International Telecommunication Union regime
  - Coordination international use of radio frequencies
  - Focuses on active use
  - Special frequencies ‘reserved’ for radio-astronomy
- Nationally: e.g. FCC for United States
  - Ensure conformity international use US operators
  - Ensure implementation (‘additional’) US law
    - Radio-quiet zones
    - 1924 US National Radio Silence Day

# GENERAL INTERNATIONAL LAW

- Role United Nations as per the UN Charter
  - Closest to ‘representative body of mankind’
    - Intergovernmental organization – only states = members
  - So far rather terrestrially-oriented
  - Originally focused on peace & security
    - But increasingly broader: general economic, social & medical well-being of humanity ... → ???
- Right of self-defense (for states)
  - When attacked... ???



# MATRIX OF APPLICATION OF LAW

	From Earth	From Space
Passive SETI	<ul style="list-style-type: none"> <li>• International telecom law – only regarding bands reserved for radio-astronomy</li> <li>• National telecom law e.g. on radio-quiet zones</li> <li>• Other national law</li> </ul>	<ul style="list-style-type: none"> <li>• International space law</li> <li>• National space law (license)</li> <li>• International telecom law – only regarding bands reserved for radio-astronomy</li> </ul>
Active SETI	<ul style="list-style-type: none"> <li>• International &amp; national telecom law</li> <li>• Other national law</li> <li>• <b><i>Role general international law / UN (Charter)?</i></b></li> </ul>	<ul style="list-style-type: none"> <li>• International space law</li> <li>• National space law (license)</li> <li>• International &amp; national telecom law</li> <li>• <b><i>Role general international law / UN (Charter)?</i></b></li> </ul>

# WHERE SHOULD WE STAND?

- Main current issues: Active SETI ↔  
Role of international law & UN (Charter)
- The way forward:
  - Ensure no major opposition arises against Active SETI activities amongst UN member states
  - In particular: avoid any Active SETI which may threaten global peace and security...
    - Would be good to involve five permanent members Security Council – all of the Security Council? General Assembly?
    - Use at least five official UN languages...