

Legal Perspectives on Orbital Debris Management

Agenda Item 11

National Space Society



Pillars of Orbital Debris Management

- Space Situational Awareness (SSA)
- Space Traffic Management (STM) (i.e. norms of responsible behavior)
- Mitigation
- **Remediation**
- On-Orbit Recycling



Active Debris Removal - Legal Challenges

- Article VIII of the Outer Space Treaty
 - A State Party to the Treaty on whose registry an object launched into outer space is carried shall retain **jurisdiction and control** over such object, and over any personnel thereof, while in outer space or on a celestial body.
Ownership of objects launched into outer space, including objects landed or constructed on a celestial body, and of their component parts, is not affected by their presence in outer space or on a celestial body or by their return to the Earth...
 - [and Article I & II of the Registration Convention]



Legal Framework Outline - Step One

- State Sovereignty Issues
 - Identified State of Registry → express consent
 - Unidentified State of Registry → implied consent?
- **Debris Capture Entity**



Legal Framework Outline - Step Two

- Ownership Issues
 - Law of Finds Doctrine applies here
 - Abandonment and thus capture
 - Law of Salvage Doctrine incompatible



Policy Considerations as Supplemental Solutions

- Debris Risk Index
 - Catalogue & rank all options for active debris removal
- International Active Debris Removal Guidelines
 - ITU- and IADC- published remediation guidelines
- Space Sustainability Ratings
 - STM norm cascading through a defined sustainability rating
- Protection and Indemnity Insurance Clubs (P&I Clubs)
 - Risk pooling for cheaper & wider liability coverage

