Governance Session: Introduction

13 February 2025

Cochairs: Masaya Murata/IOAG and Ruihong Yang/CNSA

International Organizations Currently Involved in Lunar PNT

LunaNet Interoperability Specification (LNIS) development

LNIS WG

Space agency lunar PNT (LunaNet) governance coordination

Lunar PNT/GNSS interoperability, compatibility, availability

Space frequency coordination (lunar spectrum management)

Lunar reference system and time system recommendations

Exploration mission high-level roadmaps and performance needs

ISECG
International Space Exploration Coordination Group

What is governance? Why do we need it?

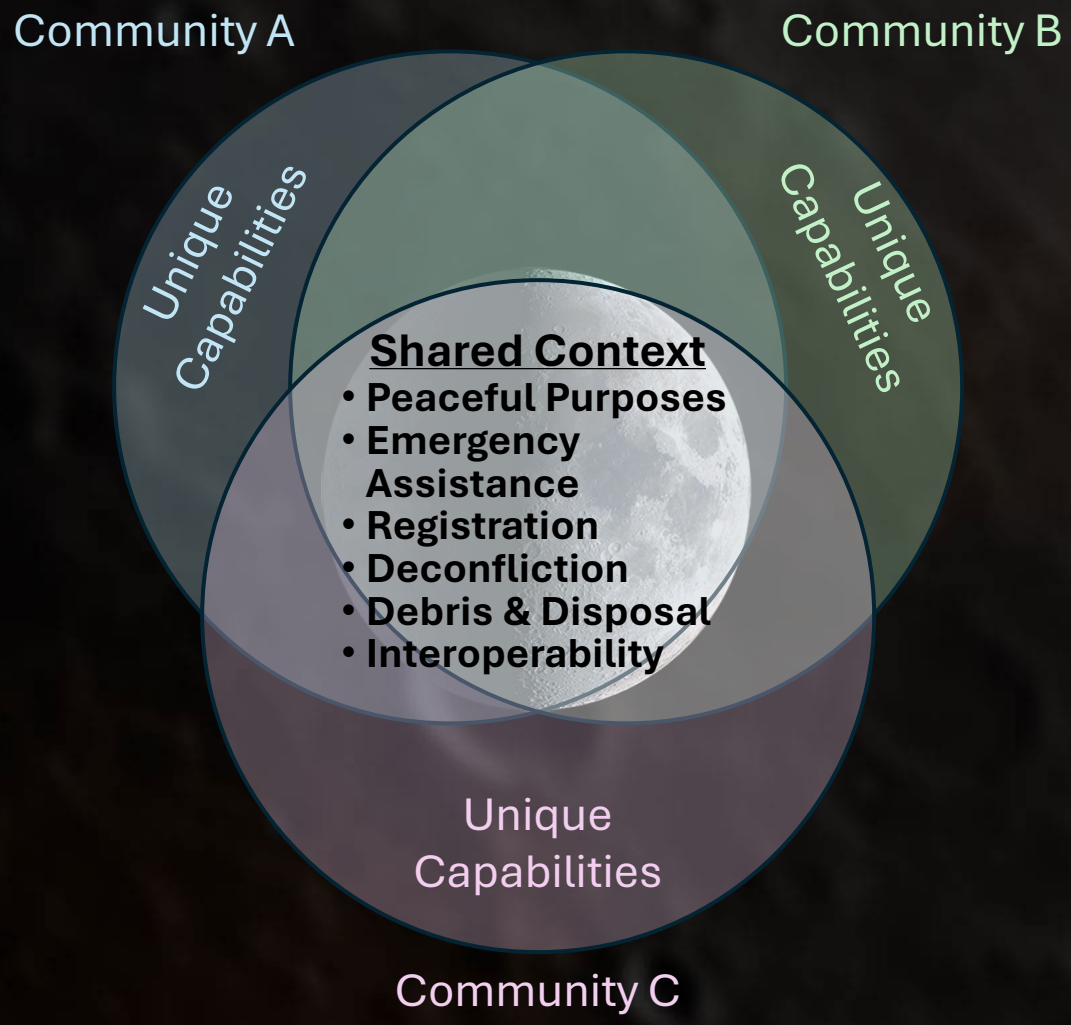
- Definition: “the development and application by governments, the private sector and civil society, in their respective roles, of shared principles, norms, rules, decision-making procedures, and organizations that shape the evolution” – Terms of Reference for IOAG CSLG
  - Derived from **Internet governance** definition, UN-initiated World Summit on the Information Society (WSIS), 2005
  - Distinguish between **Governance** (legal & regulatory) and technical **Coordination**
- Governance & coordination are driven by:
  - Establishment of and compliance with international treaties: OST, etc.
  - Development and operation of one or more international systems for cislunar Communications & PNT that comply with governance and are technically compatible

Organization of Governance Session

- Two talks on Governance (legal & regulatory)
  - *Treaties & international space law implications for PNT*, Chris Johnson/Secure World Foundation
  - *The Road Ahead: From Cislunar PNT to the Solar System Internet*, Scott Pace/George Washington University
- Two talks on Technical Collaboration
  - *Considerations on Lunar PNT governance*, Yang Ruihong/CNSA LESEC
  - *IOAG LunaNet Coordination Study Preliminary Results*, James Schier/IOAG and Masaya Murata/JAXA
- Questions and (hopefully) Answers

Governance ←→ Collaboration for Overlapping Communities

- Each community is presumed to have its own architecture and operations with some unique capabilities and some potentially shared with other communities
- Shared context includes, e.g.:
  - Spectrum
  - Standards development
  - Space traffic management
  - Rescue & return
  - International collaboration via government & industry interaction, conferences, joint testing, etc.



Session 5: Lunar PNT Governance (Co-Chairs: Masaya MURATA (IOAG), Ruihong YANG (CNSA))

11:00 - 11:10	Introduction - Necessity of Governance, Masaya MURATA (IOAG) and Ruihong YANG (CNSA)
11:10 - 11:25	Treaties & International Space Law Implications for PNT, Chris JOHNSON (Secure World Foundation)
11:25 - 11:40	The Road Ahead: From Cislunar PNT to the Solar System Internet, Scott PACE (George Washington University) (online)
11:40 - 11:55	Considerations on Lunar PNT Governance, Ruihong YANG (CNSA LESEC)
11:55 - 12:10	IOAG LunaNet Governance Study Preliminary Results, James SCHIER (IOAG) and Masaya MURATA (JAXA)
12:10 - 12:30	Q&A