

# Article IX of the Outer Space Treaty

## Data Sharing and Space Situational Awareness

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# Principle of Cooperation and “Due Regard”

- Article IX establishes that States Parties “*shall* be guided by the principle of cooperation and mutual assistance, and *shall* conduct all their activities in outer space, including the Moon and celestial bodies, with due regard to the corresponding interests of all other States Parties to the Treaty.”

# Consultation Clause

- Article IX's "consultation clause" has two 'parts':
  - 1. "If a State Party to the Treaty has reason to believe that an activity or experiment planned by it or its nationals in outer space, including the Moon and other celestial bodies, would cause potentially harmful interference with activities of other States Parties in the peaceful exploration and use of outer space, including the Moon and other celestial bodies, it shall undertake appropriate international consultations before proceeding with any such activity or experiment."

# Consultation Clause, cont'd

- 2. “A State Party to the Treaty which has reason to believe that such activity or experiment planned by another State Party in outer space, including the Moon and other celestial bodies, would cause potentially harmful interference with activities in the peaceful exploration and use of outer space, including the Moon and other celestial bodies, may request consultation concerning the activity or experiment.”

# What Obligations?

- The Question: Does Article IX therefore oblige States Parties to:
  - Maintain develop and maintain the capabilities to determine if their actions might create “potentially harmful interference?”
    - Which would in turn require space situational awareness (SSA) capability?
      - While SSA is a military term of art, SSA here refers to the generic capability of “seeing” and understanding the space environment where one’s spacecraft is operating
  - Share SSA data with other Parties if they have “reason to believe” there is potential harm?

# Complications Abound

- Article IX language does not define:
  - “mutual assistance”
  - “reason to believe”
  - “potentially harmful interference”
  - “appropriate international consultations”
  - States themselves, whether the actor or the potentially affected party, hold the discretion to determine whether there is “reason”
    - How States are to do so is not addressed.
- States are not the only space operators: commercial firms, universities also own and operate satellites.
  - But, Article VI of the OST establishes that States are responsible for “national activities in outer space, including the Moon and celestial bodies, whether such activities are carried out by governmental or by non-governmental entities...”

# Complications Cont'd

- Article IX has not been adequately legally tested; nor has customary international law regarding it been established:
  - Japan only nation to charge China with violation of the Article IX with its 2007 debris-creating ASAT test; although the test obviously had “potential to cause harmful interference.”
  - There was no invocation of Article IX during the Cold War era when both the Soviet Union and the United States undertook ASAT tests
  - The United States took pains to note its adherence to the consultation clause prior to the “shoot down” of ailing USA 193 in 2008 – BUT, the fact is that the satellite hit was highly unlikely to cause harm either in space or on the ground.

# Complications, cont'd

Most space operators do not have the capability to generate, or access to, refined orbital data that would allow them to calculate chances of collision with other objects (either other satellites or debris)

- The United States is the only State to have a persistent, global space surveillance network and SSA capabilities (not perfect)
- Russia, France, China and the European Union have some limited surveillance and SSA capabilities
- Does this suggest that States practice is actually antithetical to the establishment of an Article IX obligation for SSA under customary international law?
- Does this suggest that those States with capabilities have an indirect obligation to inform/assist others so that those lacking capacity can determine when their activities might cause harm?



# Complications, Cont'd

- There is no established international system (nor other legal requirement) for sharing SSA data
  - The Registration Convention requires States to register launches including orbital insertion data, but does not require final orbit parameters to be registered
  - The US voluntarily shares, via Space-track, some rudimentary data with most space operators; and higher quality data with some select operators
  - Russia has exchanged data with the United States, but does not openly share

# No Real Precedents

- The International Telecommunications Regulations (administered by the ITU) also create an obligation to avoid harmful interference (as applied to RF).
  - If operators are in compliance with the regulations, they have fulfilled their obligation.
  - The ITU has an established mediation process for when interference occurs.
  - The ITU has no enforcement power should an operator refuse to act to correct accidental interference or if an operator or Member State chooses to undertake deliberate interference.
  - Unclear relevance to Article IX

# Conclusion

- It would seem obvious that If a State has an obligation to consult if it believes its activities may cause harm, then the State must also be obligated to be able to make such a determination. This would infer a requirement to maintain SSA capabilities.
  - However, such an obligation is not explicit in Article IX.
  - Further, States practice regarding SSA does not seem to establish a customary international law basis to assume such an obligation.
- What, if any, obligations for States having data and capability to determine harm to share such data and a finding of potential harms seem much less clear.
  - BUT, Article IX does state that Parties “shall be guided by the principle of cooperation and mutual assistance” raising the question of an indirect obligation.

# Bottom Line?

There is a need for all you space lawyers to get busy to answer the questions!

