Liability in Outer Space
A Cross-cutting Problem

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The views expressed in this presentation reflect the views of the author alone, and do not necessarily reflect the views of the Government of the United States.
Introduction

• All transport modes on Earth are relatively safe today because of the lessons learned and the responses to previous accidents
  • Many lives lost and damage incurred over many years

• On Earth we clean up, make repairs and technical adjustments

• Space is different
  • There is no effective clean-up available or on the technology horizon
  • Future sustainability of space will be compromised
  • Costs to remedy damages could be prohibitive
National and international liability regimes to deal with accidents or damage in-orbit or on celestial bodies should be strengthened. and

There is a need for clear legal measures to discourage bad behavior in space from either governments or non-governmental entities.
Liability is Focused on Launches

• Primary concern of provisions of the 1972 Liability Convention are focused on the innocent victim (3rd party liability)

• The Liability Convention is focused on terrestrial damage from launches
  • Nations have responded with laws and rules for
    • Safety reviews of the vehicle and payloads onboard
    • Financial responsibility

• Damages are limited to those caused by space objects or to space objects
  • This can result in limited coverage due to a lack of clarity on the definition of a space object and other definitions such as that of space debris.

• Damage in outer space is based on fault which is also undefined
  • Reflecting the small number of space assets 50 years ago and the low probability of a conjunction

• These issues can be addressed without a new treaty
LSC Agenda Items

• Liability issues straddle all items in the LSC agenda
  • Debris, STM, Resources, Small satellites

• States should consider future approaches to liability that are consistent across all space activities and domains
  • Recognizing that different types of operational rules and issues will clearly be encountered from different space activities (debris, servicing, mining, etc.)

• Nations have the keys to meet liability obligations.
• For new activities in space coordination among nations is essential.
Specifically

• Are all activities in outer space ultrahazardous in the same way as launches are;
  • Is there a *res ipsa loquitur* legal approach?

• It is relatively easy to argue for a nation to meet an Art. VI test of authorization and continuing supervision (both are not well defined in a legal context).
  • Does that absolve a nation of negligence, or bad conduct if an accident occurs in space?
  • Similar arguments can be made for undefined terms in Articles VII, VIII, and IX of the OST such as control, due regard, due diligence.

• The relationship between registration and liability needs to be clarified

• We do not need new treaties or amendments to the Liability Convention to manage the risk of accidents occurring in outer space
  • Recognizing that mechanisms will vary among different types of space activities
Starting Points

- Article XXIII (2) of the Liability Convention allows agreements among nations to supplement or expand on any provision in the Convention.
  - Nations to develop multilateral agreements among like-minded nations on potential liability issues. One precedent is the ISS Partnership Agreement.

- Seriously negotiate specific rules and/or mutually agreed mechanisms and paths of implementation for:
  - Space Traffic Management in orbit
  - In orbit incidents resulting from manufacturing, servicing, other RPO-type operations
  - Space missions deployed to remove debris
  - Exploration and resource recovery on the lunar surface and any other celestial body
• Nations should consider the benefits of adapting comprehensive financial responsibility laws
  • Consider developing uniform international standards
  • Consider liability limits similar to those in other domains such as maritime or aviation.

• Establish dispute resolution system(s) that are binding and go beyond existing treaty-based diplomatic negotiations

• In parallel with national attention to liability, establish a coordination group within COPUOS to work with the nations to develop further suggestions.
Summary

• There is no effective legal regime focused on liability for outer space activities.

• The overall approach to liability in outer space should be uniform and consistent among the wide range of types of activities that will occur in outer space.

• Similarly, national implementation of future liability measures should also be coordinated across nations and focused on discouraging “bad behavior”
  • States are ultimately liable but need to recognize multi-stakeholder inputs

• There is no need for a new treaty or for amendments to the current treaties to accomplish this.