

National Space Legislation as an Enhancer of Space Policies and Activities

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Outline

- Relationship between Law and Policy
- Role of Space Treaties; what they accomplish
- National Legislation; the key to space principles and activities
- Changing conditions in space require both bottom up and top down implementation

Culture, Custom, Policy, Law, Regulations

Which comes first? Does it matter?

- Depends on what is being questioned
- Broad principles and ideals that develop slowly
 - = Culture → Policy → Law
- National objectives (Missions, Security, Economic)
 - = Opportunity → Policy → Law
- Business, competition (Space Applications)
 - = Innovation → Law → Regulation
- And never underestimate the power of a budget and funding

The Space Treaties

- Establish Basic Principles (the OST)
 - Peaceful uses, freedom of exploration, freedom of access, no sovereignty, etc.
- Refine and define some details
 - ARRA, Liability Convention, Registration, and Moon
- Not self-enforcing
 - Requires actions by States Party
- Leave many issues unresolved

Changing Conditions

1960

- Space technology—expensive and large structures
- 2 nations controlled all access to space
- Few nations with satellites
- Launches were not for sale
- No commercial space; heavily regulated telecom companies
- All applications were in early R&D phase
- Human-created space debris was not an issue

2010

- Growth of small satellites; cheaper
- Over 10 nations can access space directly
- Over 40 nations operate satellites
- Anyone can purchase a launch and operate in space
- Commercial space > \$150 B/year
- Space applications are “critical infrastructure”
- Dramatic increase in space debris and in risk

Approaches to Initiatives in Space Law

1. Negotiate and draft new treaties

- = Slow process; can take many years for implementation
- = Uncertain outcomes increases today's investment risk

2. Amend existing treaties

- = Also can be a slow process
- = May be useful for clarifying definitions, and specific refinements to meet changing conditions

3. Develop new national legislative initiatives and encourage adoption of best practices

- = Faster, can be customized to reflect national culture and priorities
- = Over time can become customary international law

National Space Legislation

- Essential for reinforcing basic principles
- Essential to encourage new space activity
- New space laws to meet new conditions
 - In past few years:
 - France, Germany (specific to remote sensing), Japan, Korea, South Africa, among others, have adopted new space legislation
 - U.S. constantly revising legislation & regulations
 - Reflects changes in priorities, and technology.
 - Addresses new initiatives—e.g. suborbital human spaceflight
 - States within U.S. also now encouraging private initiatives

National Legislation: Major Issues

- Peaceful Purposes
- Definition and Delimitation of Outer Space
- Common and Best Practices, Norms, Procedures
 - Debris mitigation
- Safety and Security, including environmental security
- Commercial and Public/private partnerships
 - Encouraging new space commerce
 - U.S.: CSLA; Remote Sensing; Europe: Arianespace, SpotImage, Galileo
- Liability
 - Financial Responsibility and Safety Regulations

Limitations of National Legislation

- National legislation can address but not solve problems of:
 - Coordination among nations (harmonization) of laws
 - Economic competition and its consequences
 - e.g. unfair tax and trade incentives, “flags of convenience,” other regulations
 - Art. VI responsibility when more than one State is involved in a space project
 - International space traffic coordination

Focus on Space Debris

Three ways to approach international controls

1. Political/Diplomatic

- Codes of Conduct, Rules of the Road

2. Technical

- Mitigation Guidelines (IADC)

3. Legal

- Change Liability Convention

Current Law: No Likely Recovery

- Article IV of the Liability Convention requires a finding of fault for an injured 3rd party to recover
- Almost an impossibility
 - Negligence undefined
 - Loss from debris may occur many years after original collision

Role of National Legislation

- A possible approach with more immediate advantages
 - Use national legislation to extend the financial responsibility attached to launch operations to space objects in-orbit with no time limits.
 - Legislation and regulations will be necessary as more activities occur in-orbit, especially human activity (e.g. the ISS)
- But, national legislation now follows fault liability as written in Liability Convention

International Incentives for State Action

- Proposal: Study the feasibility of amending the Liability Convention to change:
- Article IV(b)(2) from fault liability to absolute liability.
 - Would require States Party to remain responsible for all their space objects
 - Would encourage more States to develop situational awareness capabilities and to share information to avoid accidents

Consistent with OST

- This proposal is completely consistent with Article VII of the OST and Article II of the Liability Convention.
 - It only removes an exception to the general rule that was drafted when debris was not a serious problem.
- It is consistent with the U.N. General Assembly adoption of the IADC Guidelines.
- And, States would be encouraged to create a legal solution--regulate and require financial responsibility for in-orbit activities as they now do for launches.

Conclusion

- For actions that involve broad global issues and norms, national legislation is essential for implementation
- Treaties are still needed for overall guidance and coordination