Legal Issues Critical to SSA

Space Situational Awareness 2013

Accelerating Space Situational Awareness Capabilities

Sa'id Mosteshar

Professor of Space Policy and Law
FRAeS, MCIArb, Barrister, Attorney-at-Law
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LONDON INSTITUTE OF SPACE POLICY AND LAW

SPACE SITUATIONAL AWARENESS

• SSA defined:

• Identification of the location of each object orbiting Earth, why it is there, what it is doing, and to predict what it will be doing in the future.

• Objective:

- To track and understand what exactly is in orbit from either space or from the ground.
- Information not an end in itself.
- Sustainability of space environment.

LEGAL FRAMEWORK

- International Law
 - Outer Space Treaty 1967
 - Liability Convention 1972
 - Registration Convention 1975
- Guidelines and Recommendations
- National Implementation
 - Legislation
 - Licence and Authorisation

• Co-operation:

- *States* must carry on space activities in accordance with international law, maintain international peace and *security* and promote international *co-operation* and understanding. OST Art III
- If a space object that has caused damage, or may do so, cannot be identified from the register, other States, in *particular States possessing space monitoring and tracking facilities*, shall assist in its identification to the greatest extent feasible. Reg. Con. Art VI

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- Avoidance of Harmful Interference:
 - In their space activities *States* must *co-operate with and assist* and have *due regard* to the *corresponding interests of all other States*. In exploring space they must *avoid its harmful contamination* and *adopt appropriate measures* for this purpose.
 - If a State believes a space activity of another State would cause *harmful interference* with space activities. it may request consultation concerning the activity. OST Art IX

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• Responsibility:

- States are responsible for national space activities, and for assuring they are carried out in *conformity with* the provisions of the OST.
- The space activities of non-governmental require *authorization* and *continuing supervision* by the appropriate State. OST Art VI

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- Jurisdiction, Control and Ownership:
 - States of registration retain jurisdiction and control over the space object and its personnel, while in outer space.
 - *Ownership* of space objects, including those landed or constructed on a celestial body, is *not affected* by their presence in outer space or by their return to the Earth. OST Art VIII
- Salvage Rights: Concept of the Law of the Sea

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• Liability:

- Each State .. that *launches or procures the launching* of an object into outer space.. and each State .. from whose *territory* or *facility* an object is launched, is liable for damage to another State or to its national by the object or its component parts. OST Art VII
- A launching State is *absolutely liable* for damage caused by its space object on the surface of the Earth or to aircraft in flight. Liability Conv. Art II

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Liability:..... continued

- For damage caused *elsewhere than on the surface of the Earth* the launching State is liable only if the damage is due to its *fault* or that of persons for whom it is responsible. Liability Conv. Art III
- *Fault* is "any act or inaction that violates an obligation or duty." In the context of remediation, the question arises whether there is an obligation to remove debris. Consider OST Articles IX and II
- SSA may affect fault liability.

Guidelines and Recommendations

- IADC Guidelines
- UN COPUOS
 - Guidelines to be considered in planning, design, manufacture and operation of space objects:
 - Mitigate debris creation and long-term presence in LEO
 - Avoid long-term presence in GEO
- ITU
 - Environmental protection of the geostationary-satellite orbit Recommendation ITU-R S.103-2

Proposed Solutions

- EU Code of Conduct
- European SST
- Space Fence
- Spacecast 2020

NATIONAL LAWS

- Not all space active States have legislation
 - US early legislation. Europe Sweden then UK
 - Significant differences even in EU
 - France insurance and liability €60m to 1 year after loss of control; UK insurance €60m, liability unlimited
 - UK Outer Space Act 1986
 - UK Licence Conditions
 - be conducted in a *proper manner*
 - accord with best *industry practice*
 - comply with *international* obligations of UK
 - not give rise to *liability* under international law

LEGAL IMPACT

- Combination of SSA, Guidelines and National Law
- General international law
 - Customary practice
 - Acceptance as law

REMEDIATION

- Consent
 - State with jurisdiction & control Registration State
 - Legal owner of the object
 - Launching State(s)
- ITAR
 - Applicability
 - Clearance

Thank You

Sa'id.Mosteshar@space-institute.org
SM@SpaceLaw.co

www.space-institute.org
www.spacelaw.co

Dir +44 (0)20 7691 0055

SB +44 (0)20 7402 2010 / 7242 2523