Legal Implications for Delimitation of Airspace and Outer Space

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“Implications” not “Consequences”

- Original suggested title
  - “Legal consequences”
- Actual title
  - “Legal implications”
- “Consequences” infers prediction of results
  - Impossible because process is inherently political
- “Implications” suggests possible results
  - Reasonably achievable
International Implications

• Could set upper limits to national sovereignty
  — Favored by some non-spacefarers as clarity
  — Disfavored by some spacefarers as arbitrary, inappropriate and requiring change over time

• Challenge: definition of “spacefarer”
  — Indigenous launch capability?
  — Ground station operations?
  — Consortium Member?
International Implications

- Could favor one approach over another
  - Spatial: where activity or object is
  - Functional: how activity or object functions

- Clear distinction between aviation law and space law
  - As practical matter not important to aviation law because no historical need to establish a border

- Currently, no internationally accepted definition
National Implications

- If change is as formal treaty or amendment to treaty regime
  - States are required to comply with international obligations
  - May require a national legal framework
  - Bound to include international law in their national law
  - Nations determine how this is done
National Implications

• States choose legal techniques for implementing treaty obligations in internal law

• If a “line” is articulated for delimitation, depending on basis of delimitation, for example, science, technology, State practice, etc. there may be room for national decisions to implement the “line”
Some Examples of Existing Relevant National Laws

• Australia
  — Space Activities Act
    – National law applies activities above 100 km above mean sea level
    – No definition of “outer space”; not an attempt to delimit
    – Law was amended to replace “outer space” with “an area beyond the distance of 100 km”
    – Does not limit other Commonwealth laws
Some Examples of Existing Relevant National Laws

- Colombia
  - Constitution
    - includes geostationary orbit segment
    - electromagnetic spectrum and space in which it operates
    - in accordance with international law or laws of Colombia in absence of international regulations
Some Examples of Existing Relevant National Laws

- European Union Council Regulation Annex
  - EU export controls
    - Definition of "space-qualified" as "...products...operating at altitudes of 100 km or higher."
    - Possibly applicable to the Member States under European law?
Some Examples of Existing Relevant National Laws

- **United States**
  - 2004 Commercial Space Launch Amendment Acts
    - Commercial human spaceflight ("tourism")
    - based on distinctions in physics between "lift" and "thrust"
    - law classifies commercial space tourism vehicles as rockets, not aircraft
Some Examples of Existing Relevant National Laws

- **United States**
  - Code of Federal Regulations (Internal Revenue Service)
    - Identify income source; assert primary tax jurisdiction
      - “Space means any area not within the jurisdiction (as recognized by US) of a foreign country, possession of US, or US, and not in international water.”
      - Space activity defined “as any activity conducted in space”
        - Examples:
          - leasing satellite on-orbit
          - Internet service provider using leased satellite capacity
    - Value of service attributable to functions performed, resources employed, and risks assumed in space
Some Implications of Existing Relevant Laws

- Contain elements of both spatial and functional approaches
- Some have been changed or clarified over time regarding application
- Some have multilateral ramifications
- Authority ranges from the level of a constitution to national acts to implementing regulations
International and National Implications: Delimitation and Demarcation

- **Delimitation**
  - process of determining land or maritime boundaries of a State, including continental shelf and EEZ
  - generally done by geographical coordinates of latitude and longitude

- **Demarcation**
  - *further* and separate procedure for marking a line of delimitation, usually on land, with physical objects
  - often *involves some degree of delimitation* because a line on a map may look different on the ground requiring reasonable adjustments
International and National Implications: Delimitation and Demarcation

- Terms are often confused even in treaties
- Based on geographical features and processes related to land and maritime territory and activities
- Would have to be adapted to features of space and space activities
- If a “line is drawn” it could be a beginning rather than an end.....
Questions?
Comments?

Res Communis Blog:
A blog on the legal aspects of human activities using aerospace activities
http://rescommunis.wordpress.com/