

# **Is Customary Law a Source of Space Law ?**

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# Delimitation of OS at the UN

- **Scientific and Technical Subcommittee of COPUOS:**
  - Start of discussions: 1959
  - End of discussions: 1967
    - “It is not possible to identify scientific and technical criteria which would permit a precise and lasting delimitation of Outer Space”
- **Legal Subcommittee:**
  - Discussions: for about 40 years up to 2011
  - No consensus reached
  - 2010 decision: Questionnaire to Governments of Member States

# Recent Technological Changes 1

- **Space Debris at the UN:**

- First explicit information on Space Debris in 1979, study by OSAD on Mutual Relations of Space Missions,
- Space Debris on the agenda of the S&T Subcommittee in 1994,
- In 1996 -1998 Technical Report of the S&T Subcommittee,
- In 2007 Space Debris Mitigation Guidelines.
- Space Debris constitute 95% of objects in space
- Re-entry of space debris is independent of the adoption of OS delimitation and vice versa.

## Recent Technological Changes 2

- **Space Traffic Rules**

- First paper on Traffic Rules in Outer Space appeared in 1983,
- Cosmic Study on Space Traffic Management (p. 39):  
“Missing delimitation can become a problem when the re-entry of reusable vehicles is concerned” ... “A space traffic system has to answer the question of where innocent passage of reusable vehicles starts”.

## Recent Technological Changes 3

- **Wide use of navigation systems:**
  - Three independent navigation systems: GPS, GLONASS, GALILEO, implies coverage of all objects
  - Improvement in precision of position determination
- **Basic attributes of space flight have not been changed by recent technological changes**

## Role of science and technology

- Precise limits or boundaries are rather exceptions than rules in science,
- Properties of the atmosphere change gradually with altitude, some vary with a daily or yearly period or with the period of solar activity (11 years),
- Science may indicate a region where a delimitation is compatible with physical facts,
- A **precise** boundary is needed for application of law.

## Altitudes above 100 km

- Population:
  - about 1000 active satellites,
  - some 20.000 larger space debris,
  - very large number of small debris.
- Launchings into **Outer Space** announced to the GS of the UN
  - GA Res. 1721 of 1961 or Registration Convention of 1974.
- Announcements submitted for more than 50 years, for a large majority of space objects.
- **No protests** or opposition to innumerable orbital flights over territories of sovereign states.

## Customary Law

- Manfred Lachs in 1972: The conclusion seems to be warranted that an unwritten **rule of law** has gradually come into being.
- At present, 40 years later, no protests against overflights, functioning practice of announcements of launchings into Outer Space.
- Conclusion: Outer Space is at least the region populated by space objects.
- **Space Law applies in Outer Space**, i.e. above 100 km.
- 100 km is a rounded off value, + or – 10 or 20 km.
- An **explicit statement** by COPUOS welcome, not essential



## Altitudes below 100 km

- **Population:**
  - natural objects – meteorites,
  - Space Objects launched into, or returning from, Outer Space,
  - Re-entering space debris.
- **Status** not defined, traffic density low.
- Coordination with **air traffic** necessary at altitudes of **air traffic**
- Coordination case by case or an **international system** (ICAO ?)

# Conclusion

- The practice of considering launches of orbiting space objects as successful and the absence of protests against flights over territories of sovereign States has become, in fact, a customary law in the sense that satellite orbits are in outer space.
- Space Law has to be applied in events occurring in orbits, i.e. above 100km altitude.
- Below 100 km space law may be applied if respective delimitation is internationally agreed upon.
- Proclamation of sovereignty higher than 100 km is not consistent with customary law.