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Legal framework for collaborative space activities - New ways of launching (micro-launching) and large constellation microsats (Joint IAF/IISL session) (7-B3.8)

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OUTER SPACE SARPS: A STEP TOWARDS HARMONIZATION OF NATIONAL REGULATIONS  
FOR THE ENHANCEMENT OF SUSTAINABILITY OF THE SPACE ENVIRONMENT

**Abstract**

The past decade has seen the rapid growth of novel commercial ventures that have highlighted the deficiencies in both international and national governance of outer space. Commercially driven applications such as orbital servicing, resource extraction and mega-constellations of thousands of communications satellites in LEO were not envisioned when the basic space law treaties were developed. Of particular concern is the unmanaged growth of space objects (spacecraft and debris) that threatens the sustainability of the outer space environment.

Article I of the Outer Space Treaty provides for freedom of use of outer space for all States and Article VI imposes the responsibility of national supervision of their space activities. This results in outer space being an internationally shared environment where the actors are governed by different individual national regulations; a patchwork of regulatory measures imposing varying obligations and restrictions on space actors through national licensing regimes. This disparate approach leaves fundamental problems unresolved. Of particular urgency are those threatening the sustainability of the space environment (space debris and space traffic management). Some useful “soft law” measures have been adopted, such as the Space Debris Mitigation Guidelines, however their implementation has been inconsistent and these measures appear to be insufficient to address the increasing risk to sustainability.

This paper proposes that Standards and Recommended Practices (SARPs) should be developed in order to provide a consistent governance framework for space activities. The model of SARPs, where compliance is required for cooperation among states, has proved to be extremely effective in creating a level competitive playing field and ensuring safety for international civil aviation. Aviation SARPs were established as Technical Annexes to the 1944 Convention on International Civil Aviation (Chicago Convention) and are continually modified to keep pace with new technology and applications. A similar approach could be used for space where compliance with SARPs would be a condition of cooperation among States. This would encourage harmonization of national regulatory regimes, create a level playing field for commercial actors and contribute to the long-term sustainability of the outer space environment.