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EXTENDING THE OUTER SPACE TREATY TO PROTECT PLANETARY ENVIRONMENTS

**Abstract**

Due to the policies and investments made by spacefaring nations and international space agencies over the last five decades, one of the most pervasive trends in space flight and exploration is that non-State Parties are now developing significant capabilities in space exploration and use. This is both desirable, and if there is to be the development of a true space economy, essential. Nonetheless, the rise of other actors in outer space can only be successful if the legal and regulatory regimes associated with other planetary environments anticipate that rise. While it is true that non-State Parties launching from a State signatory to the 1967 Outer Space Treaty are subject to the Treaty's articles, there is the possibility that different launching venues might differ greatly in their implementation and enforcement of the Treaty provisions, inviting abuses of those provisions if a State's enforcement is ineffective. This could lead to "venue-shopping" for launches by commercial firms if there are economic advantages to a "soft" interpretation of those provisions—especially where the concept of "harmful contamination" of other planetary environments is not well-defined.

It appears that it is timely to consider steps by which it will be possible to clarify and complement the legal regime affecting the exploration of the Moon and other celestial bodies. In recent workshops (COSPAR) as well as recent reports (IAA's "Protecting the Environment of Celestial Bodies") there has been a call for specific measures to be taken to protect outer space environments needing protection (and by extension opening up environments that might be suitable for other uses), and the development of management guidelines and regulations for environmental protection in addition to the accepted regulations for preventing harmful planetary contamination of the biological and organic chemical sort.

This paper will discuss appropriate approaches for the development of an international framework to protect extraterrestrial environments in a future era of exploration, commercialization, and human habitation, extending the provisions of Article IX of the 1967 UN Space Treaty. Initial models to be explored may include the establishment of an intergovernmental technical panel or panels (like the Intergovernmental Panel on Climate Change [IPCC] or the Intergovernmental Panel on Biodiversity and Ecosystem Services [IPBES]), in concert with an elaboration of the principles and mechanisms of the 1967 Space Treaty in a subsidiary agreement that can provide a specific regulatory regime in this area (e.g., a 'Convention on Space Environmental Protection,' or similar).