

Legal Issues Related to Space Exploration (13)
Specific legal issues of space exploration and exploitation (2)

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THE THREAT OF SPACE DEBRIS TO THE FURTHER EXPLORATION OF OUTER SPACE: AN
ITU SOLUTION?

Abstract

The uncontrolled accumulation of space debris poses one of the biggest threats to the further development of the exploration of outer space. It stands to reason that most debris will accumulate in orbits that are most valuable for space exploration, as most activity will be deployed in these regions. From a legal point of view, however, the only rules that have been developed for combating the exponential rise of space debris, are non-binding guidelines, such as those adopted by the Inter-Agency Space Debris Coordination Committee (IADC) and the UN General Assembly. To be sure, some of these guidelines have been translated into binding regulations at the national level. Moreover, some provisions of the Outer Space Treaty and other UN space treaties are commonly seen as applying to the problem of space debris. As such, the issue is often linked with binding international provisions on the preservation of the space environment. Most of these rules are vague, ill-defined and difficult to enforce, however, and their applicability to the space debris problem has not been tested in practice.

It is argued here that the regime of the International Telecommunication Union (ITU), while notoriously under-researched, could be far more effective in tackling the space debris issue on an international legal basis. Pursuant to the 2002 IADC debris mitigation guidelines, space debris can be defined as ‘all man made objects including fragments and elements thereof, in Earth orbit or re-entering the atmosphere, that are non functional.’ The entire ITU regime, however, is based on the requirement that registered frequencies and orbital positions are immediately, actually and continually put to use by the registering state; if a satellite is no longer used for a specified period of time, all rights associated with the registered orbital position will be lost. The paper will analyze to what extent retaining space objects that are defined by their non-functionality can be deemed to be in conformity with such a legal regime. It will be concluded that the ITU regime puts states under a strong international legal obligation to actively remove their space debris from orbit, thereby offering a more effective legal stick to free outer space from exploration-hindering debris.