

Legal issues of space debris remediation

Abstract

Space activities are growing, and outer space is becoming congested to a point where space debris remediation is needed to ensure a sustainable outer space environment. However, space treaties do not take space debris remediation into account. This thesis analyses legal issues of space debris remediation as one of the most pressing matters of space law. The author aims to answer whether current space law provides a sufficient framework for space debris remediation by analysing the issues of perpetual ownership, liability, registration, and transfer of ownership. Ownership of space objects is permanent under the Outer Space Treaty, this also applies to space debris, which complicates its remediation in certain cases. Obtaining permission is not a viable solution when the owner is unknown. Abandonment is discussed as a solution to the ownership problem. Transfer of ownership is also complicated as liability for damage cannot be transferred, neither can jurisdiction and control when the transferee is a non-launching State. Furthermore, liability presents an issue itself, as the space treaties were not drafted to fit the delicate legal relationships that may arise during space debris remediation operations. The possibility of a different liability regime for remediation is discussed. Additionally, this thesis suggests that if duly followed, the Registration Convention would be a great tool for space debris remediation purposes. This thesis argues that current space law does not provide the necessary framework to conduct active debris removal and on-orbit servicing without legal challenges. Creating customary law is one possibility of compensating for missing binding rules. The codification of space traffic management rules is another way to help space debris remediation and the efforts for a sustainable space environment. This thesis proposes a greater use of the international standards issued by the International Organisation for Standardisation.

Key words: space debris, space debris remediation, legal issues