

Legal Issues Related to Space Exploration (13)
Present and future regulation of space exploration and exploitation: general issues (1)

Author: Prof. Bin Li
Harbin Institute of Technology, China, binli.chinese@gmail.com

THE LEGAL LIABILITY FOR DAMAGES CAUSED BY SPACE DEBRIS: AN ENVIRONMENTAL
PERSPECTIVE

Abstract

Current discussion on international dispute settlement of space debris mainly aims at the potentiality of collision and the compensation for damages caused by the accident in outer space environment. Concerns over outer space environment protection continuously intensify as space debris proliferates, as well as both the risk of collision and operations for avoiding such accidents increase. Yet, debates on legal issues relating to the claims for pollution of or damages to outer space environment have not brought up significant changes. A legally binding instrument on outer space environment damages could enhance the effectiveness of existing practices of space debris mitigation which are largely characterized as soft law. In fact, so long as to pollution or contamination of outer space environment by space debris is not considered as a violation of international law, space debris mitigation efforts keep their voluntary nature and their effectiveness and consistence could hardly be warranted.

However, some legal issues such as who has the stand to claim compensation for outer space environmental damage, how to evaluate the harm, etc, make it necessary to adapt the current international dispute settlement mechanism to fit pollution or contamination to outer space environment defined as common heritage of mankind. At present stage, the feasibility of building an international mechanism on outer space environment pollution is questionable. In spite of conceptual and practical drawbacks, outer space environment issues could be usefully introduced into the international dispute settlement of space debris and thus strengthen the legal regime of space debris through recognizing that environmental damage is reparable and imputing strict liability on responsible state. Pragmatic and piecemeal approach is useful to raise states' concerns and encourage the adoption of space debris mitigation measures. It could be relied upon to forge consensus on integrating environment issues into international dispute settlement of space debris. Practically, mobilizing incentives in place of intimidation would be a more effective inducement for major space faring states to accept such an initiative.

The paper focuses on the legal liability issues relating to damages caused by space debris. Through introducing the environmental dimension into the analysis, the author try to find the possible solutions for building a more equitable, effective and widely accepted legal mechanism on the compensation of damages and on the prevention of further potential risks raised by space debris.