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Legal aspects of Active Debris Removal (ADR): regulation of ADR under international space law and the way forward for legal development

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The growth of space debris is becoming increasingly problematic for current and future space operations. Active debris removal (ADR) is needed to tackle this problem and stabilise the orbital environment. This research addresses the question as to whether the current international legal framework for space activities adequately regulates ADR and, if not, what the gaps are and how they can be filled.

To answer this question, this research identifies four issues relating to the governance of ADR that need legal answers, including whether an international obligation to mitigate and remove debris exists, what the implications of the international liability regime are for ADR activities, whether it is allowed to remove space debris of other States, and how to address the inherent dual-use nature of ADR technologies.

An examination of the hard and soft law pillars of international space law reveals that while the existing legal framework lays down fundamental rules and principles that apply to ADR activities, it falls short of adequately governing the identified issues associated with ADR. To address the legal gaps, this research analyses initiatives undertaken at national and international levels and provides recommendations for the further development of international space law to better accommodate ADR activities.

This is a volume in the series of the Meijers Research Institute and Graduate School of the Leiden Law School of Leiden University. This study is part of the Law School's research programme 'Exploring the Frontiers of International Law'.



Legal Aspects of Active Debris Removal (ADR)

*Regulation of ADR under International
Space Law and the Way Forward for
Legal Development*

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