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REVISITING 'RES COMMUNIS' AND ENVIRONMENTAL LAW APPROACH TO SPACE DEBRIS
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Abstract

With growing interests among emerging space economies for Earth observation applications, and with multiple commercial spaceflight providers entering the small-satellite launch segment, the cumulative market size for small-satellite low Earth orbit (LEO) launches for the 2014-2023 timeline will be several billion dollars, adding tons of potentially hazardous debris to the already crowded space. With reference to the principle of 'common but differentiated responsibilities' (CBDR principle), the primary responsibility of long-standing space faring states for creating the debris population should be taken into account when seeking balanced solutions for the problem which shall not hamper developing states' efforts to utilize outer space. On the other hand, the key points of environmental law are the obligations and responsibilities to prevent, protect and mitigate issues that could cause harm to the environment and in turn to mankind. In this study, efforts have been made to understand the extent to which the existing environmental regime could be applied to the issue of space debris, in addition to the lessons learned from the implementation of existing mechanisms. The extension of environmental law to terrestrial space debris and its applicability for long-term sustenance is analysed, to hold an equitable and rightfully balanced responsibility between established space powers and emerging space economies, through a new set of guidelines or principles without a sense of discrimination with unlawful pressures even before the emerging powers enter into exploiting space for good. The principles of equity and CBDR must remain the bedrock of our collective enterprise across all areas – tracking, mitigation, and implementation. The study also looks into the aspects of the framework for existing international space law treaties to be properly interpreted, applied, adjusted or improved to clarify and/or impose international liability on the actors leaving their non-functional satellites in orbit, together with the role of non-space faring nations' involvement in a meaningful and constructive way.