

EGU21-492

<https://doi.org/10.5194/egusphere-egu21-492>

EGU General Assembly 2021

© Author(s) 2022. This work is distributed under the Creative Commons Attribution 4.0 License.



From space debris to planetary defense: a provisional ground for resilient international cooperation in outer space activities

Diego De Blasi

Italy (d.deblasi84@gmail.com)

International cooperation has definitely been shaping the development of the **Corpus Juris Spatialis** and relative principles *under the aegis of the United Nations* (see A/Res/1962/XVIII). To this extent, the concept of *space as global commons* represents the core debate of Space Agencies (ESA), whilst manned and unmanned exploration of the universe are flying to next generation. On the other hand, all space activities will be reasonably linked to both anthropic and natural risks: other effective provisional advancements in international space law are so much needed to addressing *space debris* and *planetary defense* as *common global challenges*

First of all, the **space debris issue** is susceptible to fostering the aforementioned level of innovation in space law by these multilateral efforts. All “composite material components” accumulating in considerable amount in *Low-Earth Orbit (LEO/collinear Lagrangian points)* may possibly lead the way to a comprehensive review of the terms laid down in the Outer Space Treaty (*ex plurimis*, **article IX**). Moreover, the further existence of international customary law, which is notably ascertained “*as evidence of a general practice accepted as law*” (**art. 38, let. b, ICJ Statute**), might also create hermeneutical tools to tackling such critical task. In addition, a long-term solution may hopefully give birth to the establishment of an *international agreement* on *space debris clearing*, providing for adequate international binding norms and structural organization of international guidelines (IADC/UNOOSA)

Secondly, **planetary defense** measures *vis-à-vis* the so called “*Cosmic Hazard*” shall be carried out by emphasizing the application of international space law and regulations *thereto*. In particular, the legal use of explosive devices (NED) may be found as slightly critical in light of the applicable international norms and regulations. Moreover, cosmic hazard issues also engage with a very complex level of decision making, to be carried out by a specific vote of the United Nation Security Council (UNSC) in application of the procedure laid down in *article 27* of the *UN Charter*. On the other side, this particular dilemma may call upon States to undertake responses against natural space threats by preventing potential liability of the States (see **article VII OST** and **International Liability Convention for Damages caused by Space Objects**)

Eiusmodo, the *liability conventional framework* shall either have some *comprehensive interpretation* of the principle of “*vis major (quae humana infirmitas resistere non potest)*”. In compliance with *article II*, it must be noticed that failing attempts by Parties- whenever space threats may be encountered in different circumstances - connects directly with the regime of

absolute responsibility for eventual damages occurred to third Parties.

To be concluded, both *space debris* and *planetary defense* stand together as resilient pillars of international cooperation in space affairs: the accountable exploration of outer space shall previously take also into account of such perspectives for the exclusive benefit of Mankind