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THE EVOLVING ROLE OF THE ENVIRONMENTAL IMPACT ASSESSMENT AS VALUABLE LEGAL TOOL FOR THE PROTECTION OF OUTER SPACE AND THE SUSTAINABILITY OF SPACE ACTIVITIES

Abstract

States and private companies have multiplied their efforts in programs directed to the exploration and use of outer space, especially of the Moon and Mars. With an increase in space missions, the risk of negatively affecting the Earth and space environment on a short and long-term basis has risen. This brings to the need of identifying effective tools to evaluate and minimize such risk. Environmental Impact Assessment (EIA) is an important tool for assessing the potential impact of hazardous projects on Earth and its application in outer space has already been put forward. Indeed, it can be seen as an instrument for the implementation of art. IX of the Outer Space Treaty (OST) and a mean to minimize the risk of "harmful contamination" of outer space and celestial bodies, but its application is not *sic et simpliciter* the same as for terrestrial activities. Furthermore, EIA is relevant in the context of Article VI of the OST which obliges states to authorization and continuing supervision of all its activities in outer space. From *Apollo Program* to the recent *Mars 2020* mission, the international space community shows a certain propensity for conducting environmental assessment procedures, especially in the field of space debris mitigation. Although legal requirements to undertake EIA for activities in outer space are limited, the legal frameworks of Belgium, France, Austria and Finland require consideration of extraterrestrial impacts in order to provide information and assessments on the possible environmental consequences of their space activities. NASA has recently announced two directives to modernize guidelines to review the planetary protection policies for Moon and Mars missions. Furthermore, synergies between EIA and other environmental assessment methods such as Life Cycle Assessment by ESA, strategic environmental assessment and sustainability impact assessment should be promoted. The aim of this paper is to consider that the development of outer space activities should consider on the one hand, the legal framework applicable to the protection of the outer space environment following the developments in international environmental law; on the other hand, the non-legally binding instruments such as the TCBMs for Outer Space Activities, the LTS Guidelines and the COSPAR policy. Although EIA is associated with technical standards, it is to be considered an important tool of risk reduction for the implementation of best practices to improve the TCBMs and responsible behavior in order to ensure the protection of the environment and the sustainability of space activities.