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SUSTAINABLE GOVERNANCE OF HUMAN SPACE SETTLEMENTS: LEGAL AND POLITICAL PERSPECTIVES ON THE MOON VILLAGE AND MARS CITY

Abstract

The objective of setting up human space settlements has recently entered the limelight of the international space sector. The two most prominent proposals are the establishment of a 'Moon Village', envisioned by ESA Director General Jan Wörner, and a 'Mars City', promoted by SpaceX CEO Elon Musk. Besides finding solutions to a smorgasbord of scientific, technological, health and economic issues, the implementation of these two or any other human space settlement proposal needs to also deal with a number of political and legal issues. One of these latter issues is the creation of a political and legal framework facilitating and guaranteeing the sustainable governance of the respective human space settlement. Up till now, related professional and academic debates appear to have been rather limited.

The paper aims at contributing to the discussion of resolving the issue of sustainable human space settlement governance by providing a general legal and political perspective on the sustainable governance of the Moon Village and Mars City visions on the basis of present international space-related agreements. The authors argue that a reasonable option for a sustainable governance framework for the Moon Village, presumably a multilateral undertaking for various purposes like scientific and technological development, is a strong yet flexible international regime among the participating states. In the case of the 'Mars City', apparently pursued by a US-American commercial enterprise but geared towards setting up a self-sustaining human civilisation on Mars, a strict domestic regulatory framework enacted by the US government and compliant to international space law seems to be a highly reasonable solution for sustainable governance. However, both projects might need further clarification regarding the right of the use of celestial resources.

Overall, the results are reached by presenting the publicly known details of the Moon Village and Mars City visions, identifying provisions relevant for human space settlements in the current international space-related agreements and highlighting some legal gaps, as well as examining the multilateral legal and political governance of the ISS, at the point of writing the only manned space habitat established through international collaboration. Eventually, the authors connect all these findings to propose initial schemes for the governance of human space settlements like the Moon Village and Mars City.