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DEVELOPMENT (D3)Strategies & Architectures as the Framework for Future Building Blocks in Space Exploration and
Development (1)

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THE MOON VILLAGE: STRATEGIES AND ARCHITECTURES FOR GROWTH.

Abstract

The concept of a Moon Village was first presented by ESA Director General, Johann-Dietrich Wörner, during the 2016 International Astronautical Congress. The word “Village” does not refer to the classical sense of a community built around habitation and economy but rather to a general sense of cooperation. The objective of this broad understanding between actors working for the Moon is to jointly develop international cooperation and the commercialization of space.

This vision reflects a clear change in the way space missions are being designed in more recent years. This change of paradigm has been fostered by the arrival of new actors in the space community. The private sector and the New Space economy convey an innovative approach to space programs. To many start-up companies, developing a vision for the Moon is of high importance to future exploration. Additionally, as of today, no comprehensive legal framework has been established on the international level to meet the vision of a Moon Village.

Conveniently, Wörner’s open and free architecture vision of the Village suggests its development without substantial legal implication. Action before law seems to be the direction in which the Moon Village concept is developing. The Moon Village Association is of particular interest in this regard. One of the objectives of this non-governmental organization is to influence the way in which space missions are thought of, in order for them to be developed and implemented in a shorter period of time, with a lower budget, and with a focus on the use of more collaborative and innovative approaches.

This paper starts by focusing on the analysis of the scope and purpose of the Moon Village as a concept in order to propose further steps for sustainable growth. It then assesses the aspects that New Space actors and traditional agencies will each take in the development of the Moon Village. Finally, the paper presents strategies and architectures combining commercial opportunities with new geopolitical interests.