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IAF SPACE EXPLORATION SYMPOSIUM (A3)

Space Exploration Overview (1)

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THE MOON VILLAGE CONCEPT: CAPTURING NEW GLOBAL CONTEXTS AND SHAPING INTERNATIONAL ENGAGEMENT

Abstract

In the last couple of years perspectives for future space exploration have evolved and this evolution seems gaining momentum. When the Moon Village concept was put forward, a couple of years ago, it stood out almost as a unique attempt to put the moon and global open cooperation at the core of future space exploration endeavours, including robotic and human elements. The paper will highlight the number of national, international and global initiatives, both private and public, that are shaping an environment more conducive to the spirit of the Moon Village concept. These may be regarded as actually being about to lay the foundation of an open ended permanent presence on the surface of the Moon. Whether by space agencies or by private entrepreneurs, missions, new concepts and developments as well as preparatory activities aiming at the moon are multiplying creating a web of converging missions, opportunities and mission that will bring about the vision of a permanent presence on the surface of the Moon. Existing or potential connections among all these different initiatives and the Moon Village concept will be analysed in order to depict a prospective coherent canvas of complementary initiatives and activities converging and contributing to a common goal, that is a global cooperative endeavour leading to a permanent presence on the surface of the Moon. As a core element the paper will present the status and outlook of ESA's driven activities in support of the development of a Moon Village concept and these activities' international dimension and ties. The sustainability of a permanent presence on the moon surface will depend on alliances between space and non-space businesses, between public and private entities as well as the ability to lay the foundation of a marketplace beyond LEO balancing short-, midand long-term rationales. The paper will thus also dwell on this important aspect and will present the latest developments. In conclusion the paper will present the future activities and will propose possible scenarios for the way forward for furthering the idea of an open ended, global endeavour for a permanent presence on the surface of the moon.