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THE INTERNATIONAL LUNAR DECADE: A FRAMEWORK FOR MULTINATIONAL COLLABORATION IN LUNAR EXPLORATION AND DEVELOPMENT

Abstract

This paper will update recent efforts to launch an International Lunar Decade (ILD) from 2020-2030 – based upon the proposal initially presented to the Technical Subcommittee of UN COPUOS in February 2016 and to UN COSPAR in July 2018. The ILD concept was originally inspired by the International Geophysical Year (July 1957 through December 1958) that engaged 67 nations and led to institutional developments (including UN COPUOS) that created a forum to negotiate the Outer Space Treaty (1967) and other multinational space agreements. Envisioned as a framework for enhancing international cooperation to enable a sustainable human presence on and around the Moon, the ILD was first proposed to COSPAR by the Planetary Society in 2006 (when former President George W. Bush's Vision for Space Exploration promoted a return to the Moon before 2020) – envisioned to commence on the 50th anniversary of the IGY (in 2007). However, the global financial crisis which emerged that year directly impacted space priorities – particularly for the United States, which cancelled programs targeting the Moon. Now the U.S., along with many space-faring nations, are again planning lunar missions; and unlike 2006, there is now significant engagement by the private sector, with plans to utilize lunar resources as well as fuel depots and other facilities in cislunar space. Over the past two years, an ILD working group (including representatives from ESA, NASA, the National Space Society, the International Space Exploration Coordination Group, and other space-related organizations) has been working to expand international participation in this initiative. An International MoonBase Alliance (IMA) is also being formed to develop and deploy the technologies needed to build a permanent sustainable human settlement on the Moon by the end of the decade. Like the IGY, the ILD will provide a flexible temporal framework for coordinating initiatives independently organized by countries, commercial firms, universities, and international organizations that could advance both lunar research and commercial activities (on the Moon's surface and in cislunar space). The central goal of the ILD (as discussed in this paper) is to enable the use of lunar resources and launch of related (and sustainably profitable) markets, which in turn will require formulation of space policies and appropriate infrastructure, standards and enabling technologies that can help reduced the costs, enhance the benefits, and accelerate timetables for future lunar exploration and development.