

SYMPOSIUM ON STEPPING STONES TO THE FUTURE: STRATEGIES, ARCHITECTURES,
CONCEPTS AND TECHNOLOGIES (D3)

Strategies and Architectures to Establish a “Stepping Stone” Approach to our Future in Space (1)

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STEPPING STONES TO THE MOON AND BEYOND: ILEWG ROADMAP

Abstract

We review the roadmap for robotic and human exploration of the Moon, starting with recent missions results and key issues. We review how to perform new science, to acquire knowledge to make the Moon habitable (using advanced and sustained technological support), and expand life beyond Earth planet of origin. Those science and technology missions, implemented on different landers and rovers, forming a Global Robotic Village, will serve as precursor missions for future human exploration of the solar system. We shall discuss: Science; Technology activities Future Missions to the Moon; Preparation using analogue and simulation activities; Moon testbed for robotic outposts telepresence; Lunar Robotic Village; Infrastructures deployment and in-situ resources utilisation; Synergies with Mars and solar system exploration; New approaches to the International Lunar Base and long term perspectives.

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