

14TH IAA SYMPOSIUM ON BUILDING BLOCKS FOR FUTURE SPACE EXPLORATION AND
DEVELOPMENT (D3)Strategies & Architectures as the Framework for Future Building Blocks in Space Exploration and
Development (1)

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PIONEERING SPACE WITH THE INTERNATIONAL COMMUNITY: RESULTS FROM THE 2015
SPACE GENERATION CONGRESS EXPLORATION WORKING GROUP**Abstract**

At the 2015 Space Generation Congress, NASA convened an Exploration Working Group comprising 31 early-career congress delegates representing 17 nations. The goal of the working group was to investigate the reception of NASA's terminology when communicating its long-range human spaceflight objectives. In recent years, the U.S. space agency has communicated its human space exploration planning in terms of a "Journey to Mars" and describing the implementation of this strategy as "Pioneering Space" – the idea of permanently expanding human presence into the solar system in a sustainable, self-sufficient way. The goal of this strategy is to transition human spaceflight programs out of the current "Earth Reliant" phase to advancing exploration capabilities into the "Proving Ground" of cislunar space and ultimately becoming "Earth Independent" for human missions far beyond the Earth-moon system, including those to Mars. The Exploration Working Group was tasked to define the essence of "Pioneering Space" in an international context and how it can be defined to encompass global human expansion into the solar system. The Working Group further developed this idea to define the concept of a "Proving Ground" and associated activities and operations within the same context. Under the guidance of NASA and a JAXA research fellow representative, the working group examined the significance and possible connotations of the terms Pioneering Space and Proving Ground from an international context. The group provided recommendations to broaden the definition of these terms to encompass global human expansion into the solar system, emphasizing commonalities aimed at generating economic and social benefits for humanity as a whole. Throughout the three-day congress, the working group explored linguistic and cultural implications for the terms described above and also investigated potential benefits to the global society stemming from collaborative efforts in space exploration. This paper will provide an overview of the working group outcomes and reveal key components of the Pioneering Space framework on which the diverse participants were able to agree and share with their respective institutions.