IAF HUMAN SPACEFLIGHT SYMPOSIUM (B3)
Governmental Human Spaceflight Programmes (Overview) (1)

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THE 2024 GLOBAL EXPLORATION ROADMAP: A COORDINATED VISION FOR SPACE EXPLORATION

Abstract

Worldwide space exploration programmes are evolving rapidly, with more and more countries flying missions. This exciting growth also brings challenges for international cooperation. Space agencies around the world must coordinate and cooperate to explore responsibly together.

The International Space Exploration Coordination Group (ISECG) is a voluntary, non-binding coordination forum of 27 space agencies and government organisations with the common aim of advancing space exploration through exchanging information, objectives, and plans, according to the shared vision in the Global Exploration Strategy. Since 2007, ISECG members have met to share information about their space exploration plans, objectives, and interests to strengthen their individual exploration programmes and collective exploration efforts. ISECG participating agencies coordinate to develop consensus-based, non-binding products.

ISECG's flagship product is the Global Exploration Roadmap (GER), which reflects a coordinated vision for long-term human and robotic exploration of the solar system. The Global Exploration Roadmap reflects common objectives and shared principles for space exploration. The 2024 edition of the Global Exploration Roadmap conveys international support for the expansion of humanity's presence in the solar system. The roadmap articulates a common vision for space exploration through 2050, focusing on the priorities of participating ISECG agencies, with an emphasis on sustained exploration: missions that progressively develop more capabilities and enable more scientific investigations. Among the key exploration principles affirmed in the GER is responsible exploration: the importance of exploring peacefully together and preserving the space environment for future generations.

It begins with foundational activities in low Earth orbit, covers intensifying exploration activities—both human and robotic—on and around the Moon, and discusses preparation for initial human exploration of Mars. This edition of the roadmap presents an update to the overall exploration mission scenario and participating agencies' national exploration architectures and summarises upcoming and planned missions. It also discusses other destinations in the solar system, the synergy between robotic and human exploration activities, exciting work by emerging space agencies (both independently and through cost-sharing and collaboration with more established agencies), the scientific questions that space exploration aims to

answer, the growing role of commercialisation in spaceflight, and efforts to develop the technologies that enable increasingly ambitious missions.

ISECG and products like the GER enable the international communication and cooperation that lead to inspiring accomplishments in space for the benefit of all humanity.