HUMAN SPACE ENDEAVOURS SYMPOSIUM (B3) Overview Session (Present and Near-Term Human Space Flight Programs) (1)

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AN INTERNATIONAL STRATEGY FOR EXPLORATION: DEVELOPMENT STATUS OF THE ISECG GLOBAL EXPLORATION ROADMAP

Abstract

The International Space Exploration Coordination Group (ISECG) was established in response to "The Global Exploration Strategy: The Framework for Coordination" developed by fourteen space agencies and released in May 2007. This GES Framework Document recognises that preparing for human space exploration is a stepwise process, starting with basic knowledge and culminating in sustained human presence in space. Robotic exploration is considered an important early step in expanding human presence in space in order to increase knowledge of future destinations or to take risk reduction objectives into consideration.

Sharing this common understanding of space exploration, ISECG participating agencies have started a dialogue on purpose and goals of different destinations and associated mission scenarios in the overall exploration sequence recognising that, (a) different destinations and related mission scenarios require different challenges to be mastered and different risks to be addressed and (b) opportunities exist to exploit synergetic capabilities for the exploration of different destinations.

The dialog beginning within ISECG will ultimately lead to development of the ISECG Global Exploration Roadmap recognizing that such a roadmap will be evolving and responding to new programmatic priorities, scientific discoveries and technological breakthroughs. The Global Exploration Roadmap can serve as an international reference framework for

- Facilitating the alignment of international human space exploration mission plans, programmes and policies and thereby enhance opportunities for collaborative missions;
- Making optimum use of each planned mission in enabling follow-on mission scenarios, this includes also the use of space infrastructures such as the ISS for preparing future human exploration missions;
- Encouraging timely investments in enabling technologies development.

ISECG members contributing to the development of the Global Exploration Roadmap will consider all exploration missions and activities planned or studied by ISECG participating agencies, which target the destinations where human can hope to live and work. This will include all missions addressing the themes of the Global Exploration Strategy (new knowledge in science and technology, a sustained presence –

extending human frontiers, economic expansion, a global partnership, inspiration and education) executed by robots or humans. It will provide a compilation, characterization and comparative assessment of international exploration mission scenarios leading to better understanding of the key differences between destinations/mission scenarios. Based on this assessment it will identify logical relationships between different destinations and mission scenarios related to exploration goals, technological capabilities and risks.

For more information on ISECG please consult ISECG website at www.globalspaceexploration.org or the ISECG Secretariat at: isecg@esa.int.