UNISPACE+50 Thematic priority 1: Outcome documents of the Second International Space Exploration Forum (ISEF2)

Conference room paper by Japan

At its fifty-ninth session, in 2016, the Committee on the Peaceful Uses of Outer Space endorsed the seven thematic priorities of the fiftieth anniversary of the United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE+50), as well as their objectives and mechanisms (A/71/20, para. 296). The Action Team on Exploration and Innovation was established as the mechanism under thematic priority 1: Global partnership in space exploration and innovation, and the Action Team’s terms of reference were made available to the Committee at its sixtieth session, in 2017, in conference room paper A/AC.105/2017/CRP.21.

As per the Action Team’s terms of reference and the note taken by the Scientific and Technical Subcommittee at its fifty-fifth session, the report on thematic priority 1 was to be updated with the outcomes of the Second International Space Exploration Forum (ISEF2). This conference room paper should therefore be read in connection with document A/AC.105/1168.

This conference room paper contains the three outcome documents confirmed by the participants of ISEF2, which was held in Tokyo on 3 March 2018. Annex I contains the ISEF2 Joint Statement, Annex II contains the Tokyo Principles for International Space Exploration as the common principles for international space exploration. These two documents were welcomed by the participants as the basis for Governments to engage in dialogue to promote international cooperation and long-term space exploration endeavours that deliver benefits to humanity. Also Annex III contains the International Space Exploration Forum Terms of Reference as the basic parameters related to the function of ISEF in order to make the forum a continuous international effort.
Annex I

ISEF2 Joint Statement

The 2nd International Space Exploration Forum
Tokyo, Japan
3 March, 2018

Joint Statement

Representatives from more than 40 nations and intergovernmental organizations gathered in Tokyo, Japan, for the 2nd International Space Exploration Forum (ISEF) to advance international collaboration and coordination efforts in the exploration of space.

The meeting was preceded by an industrial event to share possibility and issues of private sector involvement in the space exploration and a youth event to stimulate great ideas and interests in the next generation. In the meeting, the representatives participated in a whole day intensive discussion and concluded with important recognitions as follows:

(Significance of space exploration and benefits for humankind)

1. The ISEF participants affirmed that space exploration is an important challenge to explore new frontiers and to expand areas of human activity in outer space. They also noted that space exploration is about accumulating new knowledge and experience for the benefit of humankind and curiosity to search for answers to fundamental questions. They also noted that exploring the solar system is a common endeavour.

(Reasons for national investments in space exploration and values obtained)

2. The ISEF participants affirmed the importance of investments in space exploration, which contribute to economic growth and societal well-being for all citizens on Earth. They noted that investments in space exploration fuel future scientific discoveries; address global challenges in space and on Earth through the development and application of advanced technologies; create global partnerships by sharing challenging and peaceful goals; inspire society and especially the younger generations through collective and individual efforts; stimulate economic expansion and enable new business opportunities.

(Significance of international cooperation and forms of cooperation)

3. The ISEF participants recognized that future space exploration through sustainable human and robotic flight programmes will consist of numerous activities that, large or small, and regardless of destinations, can be strengthened through international collaboration and can be synergized based on shared visions and goals to enhance effective and efficient space exploration activities.
(Increasing number of new players in international space exploration and the opportunities for innovative partnerships)

4. The ISEF participants heralded the new landscape of modern exploration characterized by significant contributors on every continent, in both the public (governmental) and private (commercial and non-governmental) sectors, and among accomplished spacefaring nations as well as those countries just beginning to explore and utilize outer space. Based on this perception, they encouraged wider opportunities for innovative partnerships of these contributors. They expected that the outcomes of this meeting should be complementary to the work of the UNISPACE+50 Action Team on Exploration and Innovation.

(Possible internationally shared vision and goals)

5. The ISEF participants affirmed that extending exploration deeper into the solar system, from low-Earth orbit (LEO) through the Moon to Mars and beyond, is a goal widely shared by the international community. They recognized the importance of building sustainable human exploration as well as robotic by making the most of each step. They acknowledged the International Space Station (ISS) as a platform for scientific research, technical demonstration, and experimentation for exploration of outer space and act as a project of peaceful international cooperation. They also took note of the January 2018 release of the Global Exploration Roadmap by International Space Exploration Coordination Group (ISECG) space agencies. They further recognized the importance of international cooperation on space exploration in LEO and beyond LEO.

In pursuing their individual and collective exploration objectives, the ISEF participants agreed to work to preserve and protect the outer space environment for widest benefit and use by future generations.

(Endorsement of the Principles for International Space Exploration and ISEF ToR)

6. The ISEF participants welcomed the continuation of ISEF as a ministerial-level forum for advancing support for sustainable international space exploration efforts. The participating countries and intergovernmental organizations recognized the ISEF Terms of Reference and welcomed the Principles for International Space Exploration as a basis for governments to engage in dialogue to promote international cooperation and long-term space exploration endeavours that deliver benefits to humanity.
Annex II

Tokyo Principles for International Space Exploration
3 March 2018

Space exploration represents the ultimate challenge in our quest to explore new frontiers and extend our collective sense of humanity’s place in the universe.

In addition to advancing the state-of-the-art in science, technology and engineering, there are innovative opportunities to deliver benefits to humanity on Earth while paving the way for future space exploration activities.

These benefits include fuelling future scientific discoveries; addressing global challenges in space and on Earth through the development and application of advanced technologies; creating global partnerships by sharing challenging and peaceful goals; inspiring society and especially the younger generations through collective and individual efforts; stimulating economic expansion and enabling new business opportunities.

Many of the achievements of space exploration over the past half a century would not have been possible without international cooperation. Space exploration consists of multiple missions, programmes and projects, large and small, to several destinations, which all have their own merits, and can be explored using a variety of technologies. Collaboration can strengthen both individual projects and the collective effort.

Common principles for international space exploration will advance sustainable, effective, and efficient international collaboration and generate benefits for all humankind. Participating nations affirm the following:

- Peaceful Purposes and Benefits For Humankind
  - Common interest of all
  - Scientific, technological, inspirational and economic opportunities
  - Benefits of space exploration research and technology developments for humankind on Earth
  - Adherence to the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies.

- Science
  - Exploration enables science; and science enables exploration
  - Leverage scientific expertise for exploration of the solar system

- Implementable, evolvable, and affordable
  - Implementable in the near-term based on current resources and in the long-term using resources commensurate with economic conditions.
  - Synergies between robotic and human space exploration missions
  - Based on fiscal reality of each country/organization

- Aspirational and Inspirational
  - Challenges that push the boundaries of science and technology
  - Quest of humanity to explore new frontiers, to make new discoveries and to extend our collective sense of place in the universe

- Respect for Space Policies and Projects of each Country/Organization
  - Space policies and projects of each country/organization
- Promotion of International Cooperation and Collaboration
  o Through coordination and partnerships
  o Promotion of policies for free and open science data exchange

- Public Engagement
  o Human exploration of the solar system for all to become involved
  o Cooperation with academic and private sector organizations

- Economic Expansion
  o Opportunities for commercial business to further enhance their experience and business base
  o Opportunities for the creation of new markets, commercial services, and spinoffs

- Sustaining Outer Space Environment
  o Protecting outer space including celestial bodies

- Continuity
  o Continuity of international space exploration with a regular cadence of robotic missions and human missions as appropriate according to scientific objective
  o Incremental build up of capabilities for more complex and compelling integrated human and robotic missions
Annex III

International Space Exploration Forum
Terms of Reference
3 March 2018

(Background)

The first meeting of a High-level International Space Exploration Platform was held in Lucca, Italy, on 10 November 2011 following the two ministerial-level conferences on space exploration which were respectively hosted by European countries.

Representatives from around the world met in Lucca and committed to begin an open structured high-level policy dialogue on space exploration at the government level. The United States of America hosted the next dialogue, the International Space Exploration Forum (ISEF), in Washington, D.C., on 9 January 2014.

Participants of the Forum at the above meetings confirmed the importance of international cooperation and collaboration to further advance space exploration and the utilization of space for the benefit of humankind. Participants also confirmed the importance of policy-level commitment for realization and sustainable implementation of international endeavours in space exploration.

This spirit was taken over in the 2nd ISEF (ISEF2) in Tokyo on 3 March 2018, and the participants recognized the Terms of Reference (ToR) for the ISEF to establish the basic parameters related to its function in order to make the forum a continuous international effort.

(Scope and Purpose)

The purpose of ISEF will be to enrich understanding of importance of space exploration for the benefit of humankind and to further advance the international cooperation and collaboration on space exploration through non-binding, high-level policy dialogue.

(Operation)

- Host country will be responsible for the general ISEF arrangement and associated expenses
- Host country and participating countries do not exchange any funds

(Participation)

- Participation in ISEF is open to governments and international/intergovernmental organizations interested in space exploration and ascribing to the document entitled Principles for International Space Exploration
- The host country may arrange for a meeting or conference to be held in concert with ISEF to include representatives of universities, research institutes, companies and others

(Opportunity for Intersessional Work)

- ISEF host countries will determine how best to plan and organize future ISEF meetings, including the potential for intersessional consultations
(Revisions)

- These Terms of Reference may be revised by the ISEF participating countries and international/intergovernmental organizations, by consensus

(Effectivity)

- These Terms of Reference became effective in being consented by those participating countries and international/intergovernmental organizations on 3 March, 2018, at the time of the 2nd ISEF in Tokyo, Japan