The Office for Outer Space Affairs

Global Partnership in Space Exploration and Innovation: COPUOS Action Team and First Workshop



UNITED NATIONS Office for Outer Space Affairs

21 November 2022

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Committee, Policy and Legal Affairs Section



UNISPACE,

Thematic Priority 1 -Global partnership in space exploration and Innovation





China, Jordan and the United States of America

> Members

Austria, Canada, China, France, Germany, India, Italy, Japan, Jordan, Luxembourg, Pakistan, Poland, Qatar, Romania, the Russian Federation, Saudi Arabia, South Africa, Switzerland, Tunisia, the United Arab Emirates, the United Kingdom of Great Britain and Northern Ireland, and the United States of America

Committee on Space Research, the European Southern Observatory, the European Science Foundation, the European Space Agency, the Inter-Islamic Network on Space Sciences and Technology, the International Law Association, the National Space Society and the United Nations Environment Programme

Substantive support by UNOOSA







- Scientific exploration (the Moon, near-Earth asteroids, Mars and beyond - the origin and co-evolution of life and understanding the future of humankind in the universe)
- Innovation (new business models, investments, commercial space ventures – job creation and social welfare)



- Partnerships (open and inclusive on a global scale, fostering dialogue with space industry and the private sector, governance)
- Capacity-building (economic driver, new opportunities for addressing global challenges, Sustainable Development Goals)
- > Openness (openness and resilience of architecture, open access to data and simulations, citizen science)





- Produced the first-ever United Nations report emphasizing the importance of human space exploration beyond low Earth orbit (A/AC.105/1168)
- Recommendations for the the Committee on the Peaceful Uses of Outer Space

Committee on the Peaceful

Uses of Outer Space Sixty-first session Vienna, 20–29 June 2018

United Nations

General Assembly

Thematic priority 1. Global partnership in space exploration and innovation

Note by the Secretariat

I. Introduction

 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, pars. 296).

2. The Action Team on Exploration and Innovation was established as the mechanism under thematic priority 1: Global partnership in space exploration and innovation. 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. The present document resulted from the work of the Action Team, as well as through electronic channels, with substantive and secretariat support provided by the Office for Outer Space Affairs of the Secretariat. (Conference room paper A/AC.105/C.1/2018/CRP.3 provides further procedural details on the Action Team's work.)

 The present document is an updated version of document A/AC.105/C.1/114, which delegations had before them at the fifty-fifth session of the Scientific and Technical Subcommittee, and includes information on the second International Space Exploration Forum, held in Tokyo on 3 March 2018.

II. Background

A. The human quest to explore

4. Human desire to know what is beyond Earth dates back to antiquity. The myths and legends from the various regions of the world show that exploring the vast cosmos has been a common dream of humanity since ancient times.

5. Humanity's interest in the heavens has been universal and enduring. Humans are driven to explore the unknown, discover new worlds, push the boundaries of science and technology and then push even further. The desire to explore and

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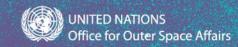
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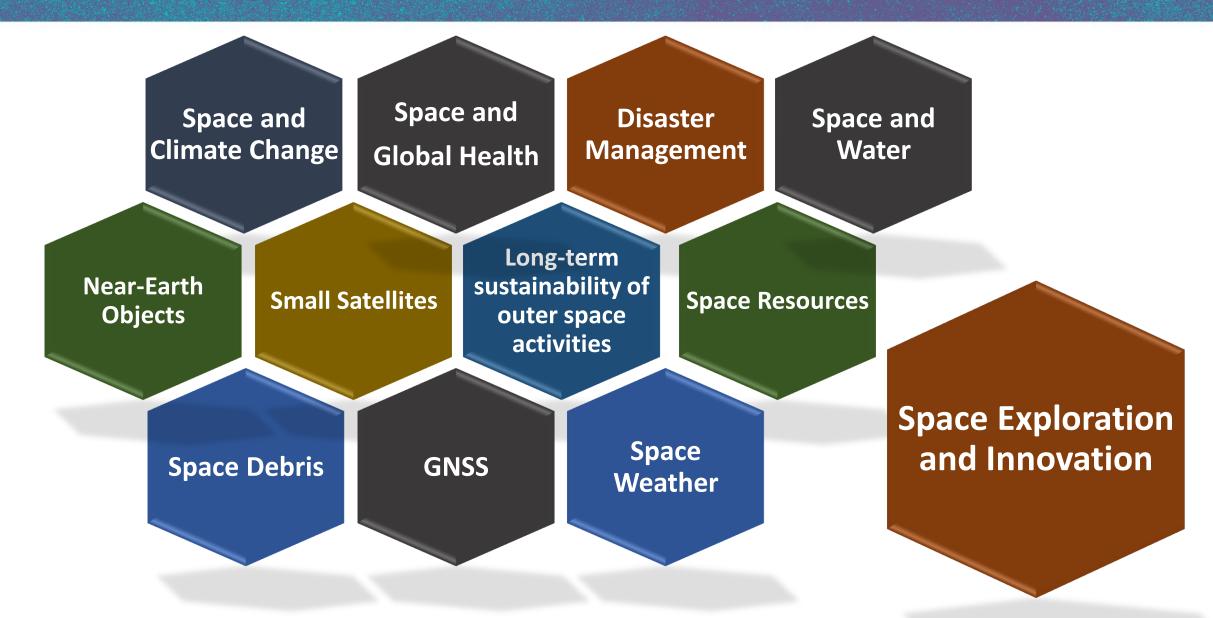
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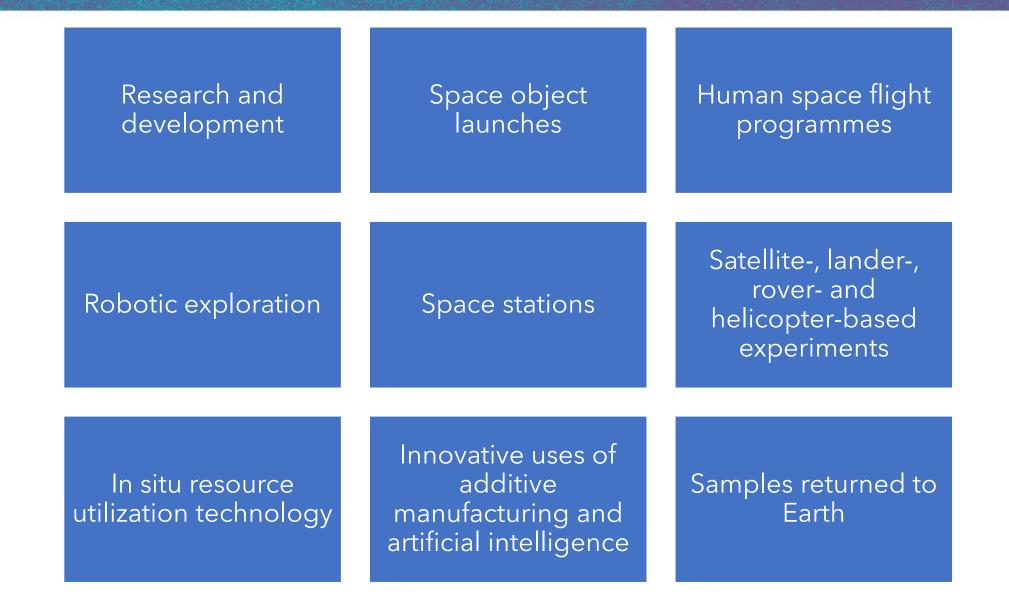
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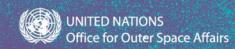




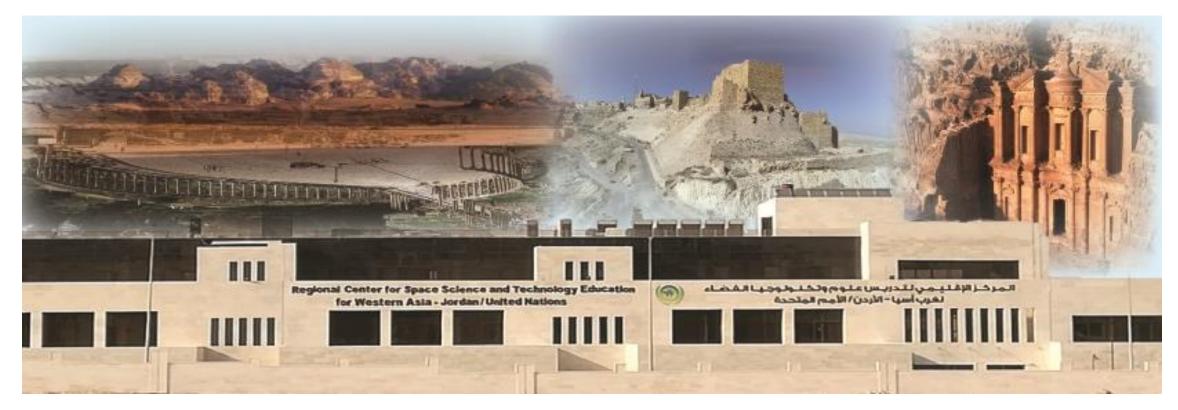
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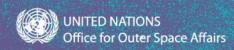




United Nations/Jordan Workshop: Global Partnership in Space Exploration and Innovation Amman, Jordan 25-28 March 2019



Cross-sectoral - Capacity-building - Strategic



Thematic sessions

- Current space exploration and innovation programmes
- Current and potential future cooperation mechanisms
- Open and inclusive partnerships
- Planetary protection
- Space and astrophysics
- Terrestrial analogues to space environments





Field trip to Wadi Rum - Terrestrial analogue to Mars





Recommendations

- SHARE information on space programmes to build transparency and confidence and build capacity of new and emerging space actors.
- COOPERATE Continue North-South, South-South and triangular cooperation in fields related to space exploration and innovation
- ENGAGE young people in science, technology, engineering and mathematics (STEM) within the context of space exploration and innovation.
- SUPPORT female role models in space science with which people from diverse backgrounds identify



SPACE FOR YOUTH



A.1 Adopt, revise and amend, as necessary, national regulatory frameworks for outer space activities A.2 Consider a number of elements when developing, revising or amending, as necessary, national regulatory frameworks for outer space activities

POLICY AND REGULATORY FRAMEWORK FOR SPACE ACTIVITIES

Guidelines for the Long-term Sustainability of Outer Space Activities: Section A

A.3 Supervise national space activities A.4 Ensure the equitable, rational and efficient use of the radio frequency spectrum and the various orbital regions used by satellites A.5 Enhance the practice of registering space objects

UNITED NATIONS Office for Outer Space Affairs #LTSGUIDELINES #SPACESUSTAINABILITY B.1 Provide updated contact information and share information on space objects and orbital events
 B.2 Improve accuracy of orbital data on space objects and enhance the practice and utility of sharing orbital information on space objects
 B.3 Promote the collection, sharing and dissemination of space debris monitoring information
 B.4 Perform conjunction assessments during all orbital phases of controlled flight
 B.5 Develop practical approaches for pre-launch conjunction assessments
 B.6 Share operational space weather data and forecasts

SAFETY OF SPACE OPERATIONS

Guidelines for the Long-term Sustainability of Outer Space Activities: Section B

B.7 Develop space weather models and tools, and collect established practices on the mitigation of space weather effects
B.8 Design and operation of space objects regardless of their physical and operational characteristics
B.9 Take measures to address risks associated with the uncontrolled re-entry of space objects
B.10 Observe measures of precaution when using sources of laser beams passing through outer space

UNITED NATIONS Office for Outer Space A #LTSGUIDELINES #SPACESUSTAINABILITY

C.1 Promote and facilitate international cooperation in support of the long-term sustainability of outer space activities

C.2 Share experience related to the long-term sustainability of outer space activities and develop new procedures, as appropriate, for information exchange

INTERNATIONAL COOPERATION, CAPACITY-BUILDING AND AWARENESS

Guidelines for the Long-term Sustainability of Outer Space Activities: Section C

C.3 Promote and support capacity-building C.4 Raise awareness of space activities D.1 Promote and support research into and the development of ways to support sustainable exploration and use of outer space

SCIENTIFIC AND TECHNICAL RESEARCH AND DEVELOPMENT

Guidelines for the Long-term Sustainability of Outer Space Activities: Section D

D.2 Investigate and consider new measures to manage the space debris population in the long term



Thank you for your attention.



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