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Revised Zero draft of the "Space2030" Agenda and implementation plan

Working paper submitted by the Bureau of the Working Group on the "Space2030" Agenda

- (i) The present working paper contains a revised text of the Zero-draft of the "Space2030" Agenda and implementation plan (as contained in document A/AC.105/L.317) and was prepared by the Bureau of the Working Group on the "Space2030" Agenda, with the assistance of the Secretariat, based on the discussions at the meetings and informal consultations of the Working Group during the 62nd session of the Committee on the Peaceful Uses of Outer Space as well as taking into account several written contributions by States members of the Committee received during this session of the Committee.
- (ii) The working paper is intended to advance the work of the Working Group, to be able to consider, during the sessions of the Scientific and Technical Subcommittee (3–14 February) and the Legal Subcommittee (23 March–3 April) in 2020, a draft "Space2030Agenda and implementation plan and submit the final "Space2030" Agenda and implementation plan for endorsement by the Committee during its 63 rd session (17-26 June) in 2020.







The "Space2030" Agenda: space as a driver of sustainable development

I. Introduction

- 1. The United Nations has been at the centre of international cooperation in space activities since the beginning of the space age. The Committee on the Peaceful Uses of Outer Space came into being as a result of the recognition by the General Assembly, in its resolution 1348 (XIII) of 13 December 1958, of the importance of using outer space for peaceful purposes and of the need to promote international cooperation in the conduct of space activities; in its resolution 1472 A (XIV) of 1959, the Assembly permanently established the Committee.
- 2. Owing to its unique mandate and position at the centre of international cooperation in the peaceful uses of outer space and global governance of outer space activities¹, the Committee played a key role in the organization of the first three United Nations conferences on the exploration and peaceful uses of outer space, held in 1968, 1982 and 1999.
- 3. Fifty years after the first United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE), United Nations Member States and representatives of the international space community gathered in Vienna on 20 and 21 June 2018 for the high-level segment of the fiftieth anniversary of the first United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE+50), to reflect on more than 50 years of achievement in space exploration and use, and to chart the future contribution of the Committee to the global governance of outer space activities.
- 4. The General Assembly, in its resolution 73/6 of 26 October 2018, noted with appreciation that the preparatory process and the high-level segment of UNISPACE+50 had resulted in documents aimed at articulating a comprehensive, inclusive and strategically oriented vision on strengthening international cooperation in the exploration and peaceful uses of outer space, in which space was seen as a major driver of and contributor to the achievement of the Sustainable Development Goals for the benefit of all countries.
- 5. In that regard, the General Assembly invited the Committee to continue to develop, on the basis of the results of the UNISPACE+50 process, a "Space2030" agenda and implementation plan and to provide the General Assembly with the outcome of its work for consideration by the Assembly at its seventy-fifth session, in 2020.
- 6. The "Space2030" Agenda and implementation plan is submitted by the Committee to the General Assembly as a comprehensive and forward-looking strategy for reaffirming and strengthening the contribution of space activities and space tools to the achievement of global agendas, addressing long-term sustainable development concerns of humankind. It also contributes to charting the future contribution of the Committee to the global governance of outer space activities.

II. Strategic vision

7. We, the States Members of the United Nations, acknowledge that the exploration and peaceful uses of outer space have enriched our collective knowledge and revolutionized life on Earth. Space science and technology are now intrinsic to our daily lives and bring an abundance of unique and fundamental benefits to Earth. As the space community moves forward with its space exploration endeavours, space will

¹ See A/AC.105/1137.

² The 2030 Agenda for Sustainable Development, the Sendai Framework for Disaster Risk Reduction 2015–2030 and the Paris Agreement.

continue to serve as a source of inspiration and innovation and to provide suitable applications for the benefit of humankind.

- 8. We emphasize that space tools are highly relevant for the attainment of the global development agendas, in particular the 2030 Agenda for Sustainable Development and its goals and targets, either directly, as enablers and drivers of sustainable development, or indirectly, by providing essential data for the indicators used to monitor the progress towards achieving the 2030 Agenda and the Sendai Framework for Disaster Risk Reduction 2015–2030 and the commitments by States parties to the Paris Agreement. The fulfilment of these global agendas requires improved access to space-based data and applications and space infrastructure, taking into account the particular needs of developing countries.
- 9. We acknowledge the distinguished historical record of the Committee on the Peaceful Uses of Outer Space and its Legal Subcommittee and Scientific and Technical Subcommittee in the establishment and further development of the international legal regime governing outer space activities. Under that regime, outer space activities of States, international intergovernmental organizations and non-governmental entities are flourishing, and as a result, space science and technology and their applications are contributing immeasurably to economic growth and improvements in the quality of life worldwide.
- 10. We reaffirm the unique role of the Committee, and its subcommittees, supported by the Office for Outer Space Affairs, as unique platforms for international cooperation in the exploration and use of outer space for peaceful purposes, for the global governance of outer space activities, for developing international space law, for fostering dialogue among spacefaring and emerging space nations, and for promoting the increased involvement of all countries in space activities, including through capacity-building initiatives.
- 11. We underscore the importance of global governance of outer space activities, based on international law, including the United Nations treaties on outer space, as well as the United Nations principles on outer space and related General Assembly resolutions, and the contributions of the Committee to that end. Of particular importance, the Outer Space Treaty is the cornerstone of the international legal regime governing outer space activities. It contains the fundamental principles of international space law and will continue to provide an indispensable framework for the conduct of outer space activities. The universalization and effective implementation of the Outer Space Treaty should be promoted.
- 12. We encourage the Committee to continue to coordinate efforts to strengthen the implementation of the United Nations treaties and principles on outer space and to complement existing international space law, when appropriate, to respond to emerging issues. The Committee and its subcommittees should continue to demonstrate their relevance and address new challenges and opportunities, such as the long-term sustainability of outer space activities, space resources and space debris mitigation and remediation, as well as emerging topics such as space traffic management, planetary defence and space safety.
- 13. We commit to addressing changes in the undertaking of outer space activities at a time when new technologies have emerged and when an increasing number of participants, representing both governmental agencies and non-governmental entities, including industry and the private sector, are becoming involved in ventures to explore and use space and carry out space activities. In that regard, we commit to ensuring that the Committee, and its subcommittees, supported by the Office for Outer Space Affairs, continue, as appropriate, to respond to such changes, in their role as unique platforms for international cooperation in the peaceful uses of outer space.
- 14. We acknowledge the importance of ensuring that outer space remains an operationally stable and safe environment, suitable for use by current and future generations, consistent with long-standing principles contained in the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer

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Space, including the Moon and other Celestial Bodies. We also underscore the need to ensure the long-term sustainability of outer space activities and the need to address the significant challenge posed by space debris.

- 15. We aim to contribute to strengthening international cooperation in the exploration and peaceful uses of outer space and the global governance of outer space activities, taking into account the particular needs of developing countries. We also aim to contribute to realizing a shared vision for the future in the exploration and use of outer space for peaceful purposes and for the benefit of and in the interest of all humankind.
- 16. We aim to inspire young people and to promote [diversity and] the engagement of women in the space sector and in science, technology, engineering and mathematics.
- 17. We also aim to leverage to a greater extent new, innovative technologies, such as space technologies and their applications, to contribute to improved delivery of the mandates of the United Nations as a whole.
- 18. We emphasize that the seven thematic priorities developed by the Committee in the context of UNISPACE+50 represent a comprehensive approach to addressing key areas and collectively serve to determine the core objectives of the future work of the Committee and its subcommittees and the Office for Outer Space Affairs in the areas of global partnership in space exploration and innovation (thematic priority 1), current and future perspectives of the legal regime of outer space and global governance (thematic priority 2), enhanced information exchange on space objects and events (thematic priority 3), an international framework for space weather services (thematic priority 4), strengthened space cooperation for global health (thematic priority 5), international cooperation towards low-emission and resilient societies (thematic priority 6) and capacity-building for the twenty-first century (thematic priority 7).³
- 19. We also emphasize that, in fulfilling the "Space2030" Agenda and implementation plan, importance is attached to global partnerships and strengthened cooperation among Member States, United Nations entities, intergovernmental and non-governmental organizations, industry and private sector entities, to ensure that, through joint efforts and by taking advantage of the practical experiences and contributions of different stakeholders, the benefits of space will be brought to everyone, everywhere.

III. Objectives and actions

20. We, the States Members of the United Nations, commit to pursuing the following objectives and actions, based on the above strategic vision. They are grouped under overarching objectives, which are structured around the four pillars of space economy, space society, space accessibility and space diplomacy. These four pillars are complementary and mutually reinforcing.

Overarching objective 1: Enhance space-derived economic benefits and strengthen the role of the space sector as a major driver of sustainable development

- 1.1. Raise awareness of the importance of space science and technology for the achievement of the Sustainable Development Goals;
- 1.2. Facilitate and promote the integration of the space sector with other sectors including energy, public health, environment, climate change, management of resources, information and communication technology as well as the development of multi-stakeholder partnerships leading to innovative space-based solutions for social

³ General Assembly resolution 73/6, twenty-fourth preambular paragraph.

and economic development, that can be integrated into mechanisms for implementing the Sustainable Development Goals;

- 1.3. Address issues arising from commercial activities in outer space, including with a view to enabling space activities to better support the achievement of global development agendas and to ensuring the long-term sustainability of outer space activities;
- 1.4. Promote the development of the space industry, with a particular focus on small and medium-sized enterprises, including with a view to increasing investment in the space sector and creating high-quality jobs, and promote the spin-off benefits of space technologies to the non-space sector;
- 1.5. Enable space activities for all, consistent with international law, by promoting a governance framework that encourages safety and innovation;
- 1.6. Promote the use of space-based solutions in global efforts to ensure a sustainable ocean economy;
- 1.7. Strengthen the contribution of space technologies and their applications to sustainable agriculture, food safety and security, and nutrition.

Overarching objective 2: Harness the potential of space to solve everyday challenges and leverage space-related innovation to improve the quality of life

- 2.1. Support space science and research, as outer space provides a unique perspective for scientists to observe and study the Earth and the universe;
- 2.2. Promote the use of space technologies and their applications to enhance scientific knowledge of the natural environment, including oceans and seas, water cycles and resources, forestry, biodiversity, desertification and land degradation, with a view to contributing to the preservation of the natural environment, sustainable resource management and the protection of ecosystems;
- 2.3. Strengthen the use of integrated space applications to facilitate the observation of the climate and the assessment of disaster risks, improve early warning systems and provide data for the indicators used to track progress in the implementation of the 2030 Agenda for Sustainable Development, the Sendai Framework and the Paris Agreement;
- 2.4. Advance the role of space technologies in highlighting, analysing and addressing climate change and facilitating the transition to low-emission societies, and promote international collaboration in that regard, in line with existing and recognized international mechanisms and organizations;
- 2.5. Promote the use of space-based technologies in all phases of the disaster management cycle, including prevention, mitigation, preparedness, response, recovery and reconstruction; monitor elements such as exposure, hazards, disaster risk and damage in different regions of the world; and promote the sharing of disaster monitoring data;
- 2.6. Strengthen space-related cooperation in support of global health, improve the use of space science and technology and their applications in the global health domain and enhance cooperation and the sharing of information for improved early warning and in emergencies and epidemics;
- 2.7. Strengthen international cooperation and preparedness to respond to the threat posed by near-Earth objects;
- 2.8. Strengthen the use of space technologies and their applications to support the development of socially and environmentally sustainable human settlements, both urban and rural, to study urbanization and migration patterns, and to monitor cultural heritage sites and contribute to their preservation.

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Overarching objective 3: Improve access to space for all and ensure that all countries can benefit socioeconomically from space science and technology applications and space-based data, information and products, thereby supporting the achievement of the Sustainable Development Goals

- 3.1. Leverage the potential of space to inspire youth, increase the involvement of young people in the space sector, support national and international initiatives that inspire the interest of young people in space activities, from elementary school onwards, and strengthen their engagement in science, technology, engineering and mathematics subjects;
- 3.2. Enhance inclusive partnerships for space exploration as a long-term driver of innovation and strengthen international cooperation in that regard;
- 3.3. Enhance capacity-building, education and training in space science and applications, in particular for developing countries;
- 3.4. Increase knowledge of outer space, including through enhanced access to astronomical and space science data, for the benefit of humankind;
- 3.5. Promote and support the use of space technologies to enhance worldwide access to data and broadband technologies, giving special attention to developing countries and areas with less-developed infrastructure;
- 3.6. Promote [diversity and] the participation of women in space activities, including by strengthening the possibility for women to participate in science, technology, engineering and mathematics education;
- 3.7. Increase awareness of the risks of adverse space weather and mitigate those risks, in order to ensure increased global resilience against space weather effects, and improve the international coordination of space weather-related activities, including outreach, communication and capacity-building.

Overarching objective 4: Build partnerships and strengthen international cooperation in the peaceful uses of outer space and in the global governance of outer space activities

- 4.1. Strengthen the role and activities of the Committee on the Peaceful Uses of Outer Space and its subcommittees, supported by the Office for Outer Space Affairs, as a unique platform for international cooperation in the exploration and use of outer space for peaceful purposes;
- 4.2. Promote the implementation by States parties of the United Nations treaties on outer space, as well as the implementation of related principles and General Assembly resolutions, and encourage the Committee and its subsidiary bodies, supported by the Office for Outer Space Affairs, to continue to coordinate efforts in that regard and to complement and develop international space law, as appropriate, to respond to emerging issues;
- 4.3. Strengthen capacity-building and technical assistance, including that provided by the Office for Outer Space Affairs, for Member States in the field of international space law, policy and space-related institutional capacity-building;
- 4.4. Enhance the role of maintaining the United Nations Register of Objects Launched into Outer Space, entrusted to the Office for Outer Space Affairs, by implementing improvements to existing registration practices and information exchange on the basis of existing mandates, including measures taken by the Office to increase transparency and improve the efficiency of the registration mechanism, and ensure the timely and consistent registration of objects;

- 4.5. Ensure the long-term sustainability of outer space activities and the preservation of the outer space environment for peaceful uses, including through the implementation on a voluntary basis of the guidelines on the long-term sustainability of outer space activities and the sharing of experiences in implementing the guidelines, and address new challenges, risks and threats posed to the long-term sustainability of outer space activities;
- 4.6. Enhance the safety of outer space operations, in line with ongoing efforts to ensure the long-term sustainability of outer space activities;
- 4.7. Promote international cooperation and exchanges on regulating commercial and private outer space activities, based on international law, with a view to enhancing the safety and long-term sustainability of outer space activities while facilitating the development of the space industry;
- 4.8. Enhance, within the framework of the Committee, the exchange of information on space objects and events, as well as the discussion on rules and procedures relating to the prediction and prevention of potential collisions;
- 4.9. Strengthen the coordination and interrelationship between the Committee on the Peaceful Uses of Outer Space and its subcommittees, with the assistance of the Office for Outer Space Affairs, including by addressing agenda items in a comprehensive, cross-cutting manner, combining scientific, technical, legal, policy and decision-making dimensions.
- 4.10. Encourage strengthened cooperation between the United Nations entities dealing with space, in line with the United Nations system-wide efforts to increase coherency and deliver as one, on interdisciplinary and cross-sectoral space-related matters, and in order to promote international cooperation in the peaceful exploration and use of outer space, and in the utilization of space science and technology for sustainable development.

IV. Implementation plan

A. Partnerships

- 20. The responsibility for the fulfilment of the "Space2030" Agenda and its implementation plan lies primarily with Member States and with the Committee, supported by the Office for Outer Space Affairs, including through the provision of its technical, policy and legal expertise.
- 21. In fulfilling the "Space2030" Agenda and its implementation plan, importance is attached to global partnerships and strengthened cooperation among Member States, United Nations entities, intergovernmental and non-governmental organizations, industry and private sector entities, with the Committee, supported by the Office, as the main international platform for facilitating that cooperation.
- 22. The Office for Outer Space Affairs should be appropriately positioned so that it may serve as a conduit for promoting and facilitating the use of space-based solutions in the implementation of the "Space2030" Agenda. It should continue, within its mandate, to forge partnerships, including with research institutions, academia, industry and the private sector, to provide broader opportunities to access space for purposes of science, innovation, research and development, education and capacity-building, and should implement activities to promote the use of space-based applications and technologies to support Member States in meeting the objectives of the global development agendas
- 23. In view of implementing the "Space2030" Agenda, the Committee on the Peaceful Uses of Outer Space and the Office for Outer Space Affairs should continue to fulfil their respective mandates and to cooperate and coordinate with other relevant entities within the United Nations system, including through the Inter-Agency Meeting on Outer Space Activities (UN-Space).

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B. Tools

- 24. In implementing the "Space2030" Agenda, Member States are encouraged to contribute to and take advantage of a number of international mechanisms, programmes, projects and platforms that are already in place or are being developed, such as the following:
- The seven thematic priorities in the context of UNISPACE+50, undertaken in the agendas and work of the Committee and its subcommittees, and the Office for Outer Space Affairs in the areas of global partnership in space exploration and innovation, current and future perspectives of the legal regime of outer space and global governance, enhanced information exchange on space objects and events, an international framework for space weather services, strengthened space cooperation for global health, international cooperation towards low-emission and resilient societies and capacity-building for the twenty-first century;⁴
- United Nations Platform for Space-based Information for Disaster Management and Emergency Response (A/RES/61/110), a programme of the Office for Outer Space Affairs that provides access to space-based data and services for disaster risk reduction and emergency response, and through its Knowledge Portal, enables access to space-based resources in all phases of disaster management cycle. It is recommended to strengthen the support provided to Member States by UN-SPIDER by enhancing the programme and supporting the activities carried out under the programme;
- Regional centres for space science and technology education, affiliated to the United Nations. It is recommended to enhance capacity-building, education and training in space science and applications provided by them, in particular for developing countries, including by supporting the alliance of the regional centres;
- Charter on Cooperation to Achieve the Coordinated Use of Space Facilities in the Event of Natural or Technological Disasters (also called the International Charter on Space and Major Disasters), as a worldwide collaboration among space agencies and space system operators, through which satellite-derived information and products are made available to support disaster response efforts;
- Recovery Observatory of the Committee on Earth Observation Satellites as a means to increase the contribution of satellite data to recovery from natural disasters;
- International Space Climate Observatory, with a focus on the integration of space and in situ data and models, with a view to referencing and assessing climate change impact cases and scenarios;
- International Committee on Global Navigation Satellite Systems (ICG) (A/RES/60/99) that promotes voluntary cooperation on matters of mutual interest related to civil satellite-based positioning, navigation, timing, and value-added services, and encourages and facilitates compatibility, interoperability and transparency between all the satellite navigation systems;
- International Asteroid Warning Network and Space Mission Planning Advisory Group (A/RES/70/82), to strengthen preparedness for the threat of potential impacts of near-Earth objects.
- 25. In addition, several tools and initiatives have been and are being developed by the Office for Outer Space Affairs, as part of the capacity-building for the twenty-first century, and in cooperation with its partners, including:
- Access to Space for All initiative aimed at broadening access to space in support of the achievement of the Sustainable Development Goals through triangular

⁴ Related documents include A/AC.105/1168, A/AC.105/1169, A/AC.105/1170, A/AC.105/1171, A/AC.105/1172, A/AC.105/1173 and A/AC.105/1174. See also para.18 above.

- cooperation between space-faring nations, the United Nations and non- or emerging space-faring nations (A/AC.105/1162);
- *Open Universe* initiative, in order to enhance access to astronomical and space science data (A/AC.105/1175);
- Space Solutions Compendium, as a tool for supporting Member States in the implementation of the 2030 Agenda for Sustainable Development, linking space solutions with Sustainable Development Goals and targets (A/AC.105/1174);
- Space for Women initiative, aimed at widening possibilities for women to pursue space-related education and careers (A/AC.105/1163);
- Space law for new space actors project, as part of capacity-building and advisory services in response to the needs and requirements of policy-makers and legislators in governmental and regulatory authorities from countries who are either entering the space sector for the first time or who are embarking upon new phases of space activities (A/AC.105/1131);
- Space4Water portal, as a platform for interdisciplinary knowledge exchange on space technologies and water-related topics;
- *Space for Youth*, to advance the UN-wide "Youth 2030" strategy in the area of space-related activities and projects;
- Space Solutions for the Pacific, aimed at offering a range of programmatic services to Pacific Island States to enhance their ability to meet Sustainable Development Goals, including climate change, illegal fishing, telecommunications, global health and disaster risk reduction;
- High-level forums on space as a driver for socioeconomic sustainable development. It is recommended to consolidate them as regular annual events, aimed at ensuring strengthened partnerships and continuous dialogue among the global community on a broad range of space matters and at raising awareness and supporting the implementation of the "Space2030" Agenda through the broad involvement of all relevant space actors.
- 26. The above lists are not exhaustive and new initiatives could be developed, including with a view to assisting Member States in implementing the "Space2030" Agenda.

C. Resources

- 27. Member States are invited to actively undertake bilateral, multilateral, regional and broader international space cooperation in various forms, including capacity-building, the sharing of information and infrastructure and the development of joint projects, and, as appropriate, to integrate space cooperation with economic and development cooperation, in order to promote the fulfilment of the "Space2030" Agenda and its implementation plan.
- 28. Member States and other donors are invited to provide voluntary extrabudgetary resources to the Office for Outer Space Affairs to advance the implementation of the "Space2030" Agenda, in accordance with the rules and procedures of the United Nations.
- 29. The Secretary-General is urged to consider the sufficiency of resources provided to the Office for Outer Space Affairs in its role as secretariat to the Committee on the Peaceful Uses of Outer Space and its subcommittees, and to ensure that the Office can fully and effectively implement its mandate, including capacity-building activities for Member States in the field of space science and technology and their applications, as well as in space law and policy, taking into account the "Space2030" Agenda and implementation plan.

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D. Review of progress

30. The Committee on the Peaceful Uses of Outer Space should include an item on its agenda for each session allowing for an exchange among States member of the Committee and its permanent observers on their experiences in implementing the "Space2030" Agenda. In 2025, the Committee should carry out a midterm review of progress made in implementing the "Space2030" Agenda. In 2030, the Committee should carry out a final review of the implementation of the "Space2030" Agenda and report to the General Assembly on the results.