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Committee on the Peaceful Uses of Outer Space

The "Space2030" agenda and the global governance of outer space activities

Note by the Secretariat

Contents

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Summary

The goals and major targets of the global frameworks adopted by the international community in 2015, namely, the 2030 Agenda for Sustainable Development, the Sendai Framework for Disaster Risk Reduction 2015–2030 and the Paris Agreement, require stronger space governance and supporting structures at all levels, including improved space-based data and space infrastructure.

The "Space2030" agenda outlines a comprehensive and inclusive long-term vision for space as one of the key drivers for development and reaffirms the unique position of the Committee on the Peaceful Uses of Outer Space as the United Nations body responsible for international cooperation in the peaceful uses of outer space, supported by the Office for Outer Space Affairs, which serves as a gateway to space in the United Nations system.

In order to bridge the space divide, defined as the gap between those nations that have developed space-related capabilities and technologies and those that have limited or no access to such capabilities, the "Space2030" agenda calls for actions under the four cross-cutting pillars and their strategic objectives:

- Space economy: development of space-derived economic benefits;
- Space society: advancement of the societal benefits of space-related activities;
- Space accessibility: access to space for all;
- Space diplomacy: building partnerships and strengthening international cooperation and the governance of space activities.

As part of the first United Nations space summit of the twenty-first century, UNISPACE+50, to be held on 20 and 21 June 2018, and as a topic to be considered by the General Assembly at its seventy-third session under the plenary agenda item "Space as a driver of sustainable development", the "Space2030" agenda and its implementation plan will set the course for strengthening the contribution of space activities and space tools to achieving internationally agreed development goals, strengthening the global governance of outer space activities and promoting the peaceful exploration and use of outer space.

The actions established under the "Space2030" agenda are aimed at achieving measurable targets through the global engagement of Member States in order to steadily increase membership of the Committee on the Peaceful Uses of Outer Space to 120 States by 2030; to ensure that States are invited to and have participated in at least one training course/capacity-building activity of the Office for Outer Space Affairs; and to achieve the balanced participation of women and men in those activities to ensure gender parity by 2025, in comparison with the current figure of 38 per cent women to 62 per cent men.

It is recommended that the Committee on the Peaceful Uses of Outer Space evaluate the implementation of the "Space2030" agenda in 2025 and report back to the General Assembly. The year 2025 should also be declared by the General Assembly as the "International Year of Space", to ensure that the broad societal benefits of space as an area of innovation, inspiration, interconnectedness, integration and investment continue to be experienced beyond the landmark year 2030.

I. UNISPACE+50: the first United Nations global space summit of the twenty-first century

1. The present report should be read in the context of preparations for the fiftieth anniversary of the first United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE+50), in 2018, which the Committee on the Peaceful Uses of Outer Space began in 2015.[1]

2. Fifty years after the first United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE I), and building on UNISPACE II (1982) and UNISPACE III (1999),[2] UNISPACE+50 represents a milestone opportunity, as the first United Nations space summit of the twenty-first century, for the international community to consider the future course of global space cooperation and the governance of outer space activities for the benefit of humankind.

3. In its resolution 72/79, the General Assembly expressed its conviction that UNISPACE+50 offers a unique opportunity for Member States to reflect on more than 50 years of achievement in space exploration and to look towards the future by strengthening the mandates of the Committee on the Peaceful Uses of Outer Space, its subsidiary bodies and the Office for Outer Space Affairs as unique platforms for international cooperation in the peaceful uses of outer space.

4. In the same resolution, the General Assembly emphasized the significance of the high-level segment of UNISPACE+50, to be held on 20 and 21 June 2018 during the sixty-first session of the Committee on the Peaceful Uses of Outer Space, which will be open to all States Members of the United Nations and at which concrete deliverables and outcomes are to be concluded for presentation to the General Assembly in the form of a resolution to be considered at its seventy-third session, including on the "Space2030" agenda and its implementation plan for strengthening the contribution of space activities and space tools to the achievement of the global agendas addressing long-term development concerns of humankind based on the peaceful exploration and use of outer space.

5. The General Assembly also decided to consider in plenary meeting at its seventy-third session a separate agenda item entitled "Space as a driver of sustainable development" in the context of the fiftieth anniversary of the United Nations Conference on the Exploration and Peaceful Uses of Outer Space, in order to consider the outcomes of the UNISPACE+50 high-level segment.

6. The "Space2030" agenda is submitted in accordance with General Assembly resolution 72/79 and paragraphs 322 and 328 of the report of the sixtieth session of the Committee on the Peaceful Uses of Outer Space (A/72/20), which note that the Secretariat will prepare a report on the "Space2030" agenda and its implementation plan, to be issued in the six official languages of the United Nations for submission to the Committee and its subcommittees at their sessions in 2018.

7. The "Space2030" agenda contains strategic objectives and recommendations relating to a long-term vision for space, and has been prepared on the basis of the work carried out in respect of the thematic priorities of UNISPACE+50, as agreed by the Committee in 2016 (A/71/20, para. 296), the reports from the flagship conferences and workshops held in relation to the thematic priorities of UNISPACE+50, the input of the high-level forums on space as a driver for socioeconomic sustainable development and other input provided during the preparatory work in the lead-up to UNISPACE+50.

8. Section II contains an overview of the "Space2030" agenda and the elements that shaped it, sections III to V contain the main elements and strategic objectives of the agenda and its implementation actions, and section VI outlines the way forward.

[1] The UNISPACE+50 workplan is contained in document A/AC.105/L.297.

[2] For a historical overview of the three global conferences, see A/AC.105/1137.

II. The “Space2030” agenda: strategic overview

9. There is growing recognition that the goals and major targets established in the global frameworks adopted in 2015, namely, the 2030 Agenda for Sustainable Development, the Sendai Framework for Disaster Risk Reduction 2015–2030 and the Paris Agreement, require stronger space governance and supporting structures at all levels, including improved space-based data, space infrastructure, services and applications, underlining the need to consider space as one of the key drivers for the attainment of the internationally agreed development goals.

10. In line with the global agendas referred to above, the “Space2030” agenda outlines a comprehensive and inclusive long-term vision for space: the contribution of space activities to achieving the Sustainable Development Goals and to addressing overarching long-term development concerns, on the basis of the peaceful exploration and use of outer space.

11. In that regard, the “Space2030” agenda is aimed at reducing the space divide, defined as the gap between those nations that have developed space-related capabilities and technologies, and those that do not have access to such capabilities. As with the digital divide, which refers to the difference in opportunities with regard to access to information and communication technologies such as the Internet, there is a gap between nations mastering space capabilities and others with limited or no access to those capabilities. To reduce that divide, it is vital to create new opportunities and enhance existing opportunities for accessing space.

12. In order to achieve that goal, the “Space2030” agenda, as a forward-looking agenda, includes initiatives and programmes designed to bridge the space divide, make space accessible to everyone, everywhere, and foster synergies and collaboration between the space and non-space sectors; facilitates international cooperation in space exploration and innovation between space nations and emerging space nations and within the broader space community; addresses challenges relating to the safety, security and sustainability of outer space activities; and is aimed at strengthening international efforts to effectively use space-based data, science, technology and applications, including for the monitoring of climate variables, in order to address sustainable development- and climate-related challenges.

13. The “Space2030” agenda and its implementation plan align the work of the Committee, its subsidiary bodies and the Office for Outer Space Affairs with the current challenges and opportunities in the space arena, which has an ever-growing number of increasingly diverse actors and is witnessing the diversification of space activities.

14. The “Space2030” agenda further aligns the work of the Committee and the Office for Outer Space Affairs with the global development agendas, thus strengthening the mandates of the Committee, its subsidiary bodies and the Office for Outer Space Affairs as unique platforms for international cooperation in the peaceful uses of outer space.

15. As a comprehensive blueprint, the “Space2030” agenda is established around the following four pillars: space economy, which relates to the development of space-derived economic benefits; space society, which relates to the evolution of society and societal benefits resulting from space-related activities; space accessibility, which relates to the use by all communities of space technology; and space diplomacy, which relates to the building of partnerships and strengthened international cooperation in and governance of space activities.

16. Those pillars represent broad, cross-cutting and strategic areas, in which space is regarded as the main driver of and contributor to overarching development goals and strengthened international cooperation in outer space activities.

17. The aim of the “Space2030” agenda and the global governance of outer space activities is to provide a long-term vision for the contribution of space activities and

space tools to the achievement of internationally agreed development goals and a framework for the improved governance of outer space activities, as exercised by the Committee, its subsidiary bodies and the Office for Outer Space Affairs, which are unique platforms, both at the global level and within the United Nations, for the promotion of international cooperation in the peaceful uses of outer space for the benefit of humankind.

A. The "Space2030" agenda and the global development agenda

18. The "Space2030" agenda comes at a strategic time, coinciding as it does with developments in both the space arena and the global community at large — the context of the decision by the global community in 2015 to pursue the goals and targets of the three interlinked milestone United Nations frameworks: the 2030 Agenda for Sustainable Development, the Sendai Framework for Disaster Risk Reduction 2015–2030 and the Paris Agreement.

19. At the same time, the "Space2030" agenda aligns with system-wide efforts made by the Secretary-General to reposition the United Nations development system to deliver on the 2030 Agenda within the context of his overall reform agenda, as set out in his report (A/72/124-E/2018/3), in which he calls for greater collaboration across the pillars of peace, security, development and human rights and for reduced silos and fragmentation in order to generate improved policies and products and to further engage with Member States with a view to strengthening the work of the United Nations in that regard.

20. The "Space2030" agenda is in line with those efforts because it brings together the areas of global governance of outer space activities, space science, technology, policy and law, thus following a unique cross-sectoral approach, which is essential in order to strengthen the contribution of space to the achievement of the goals and targets of the internationally agreed development goals.

21. The agenda also aims to strengthen the coordination of three inter-governmental platforms, namely, the Scientific and Technical Subcommittee, the Legal Subcommittee and the Committee on the Peaceful Uses of Outer Space, in line with the system-wide efforts to overcome fragmentation across the United Nations system in order to deliver better and more efficiently.

22. The cornerstone of the "Space2030" agenda and its implementation plan is to build stronger partnerships and strengthen international cooperation and coordination in the peaceful uses of outer space at all levels, in order to demonstrate the utility of space for the well-being of all peoples and its decisive role as a facilitator of the attainment of the internationally agreed Sustainable Development Goals.

23. Inclusive multi-stakeholder partnerships for delivering on the "Space2030" agenda, built upon a shared vision and shared goals, provide unique and creative opportunities for the international community to ensure a better future for all.

24. The "Space2030" agenda is also oriented towards achieving Sustainable Development Goal 17 on strengthening the means of implementation and revitalizing the global partnership for sustainable development, and recognizing the benefits of partnerships between governments, the private sector and civil society.

25. The "Space2030" agenda thus highlights the importance to the Office for Outer Space Affairs of strengthening its cooperation with industry and the private sector in order to deliver its mandates as the unique United Nations entity working in space affairs and implement activities to promote space-based applications and technologies for innovative and timely actions to support Member States in meeting the objectives of the global development agendas.

B. Towards the “Space2030” agenda: drivers and facilitators of the UNISPACE+50 process

26. In developing a road map towards the “Space2030” agenda, the Committee and its subcommittees defined seven thematic priorities of UNISPACE+50 in 2016.[3] In doing so, they considered the following cross-cutting areas, which have been at the core of the work of the Committee, its subsidiary bodies and the Office for Outer Space Affairs for the past 60 years:

(a) Governance, including the United Nations treaties and principles on outer space, guidelines adopted by the Committee and General Assembly resolutions on outer space;

(b) Capacity-building, including the activities of States members of the Committee and permanent observers to the Committee, work undertaken by the Office for Outer Space Affairs in its central role of fostering capacity-building in the use of space science and technology and their applications for the benefit of all countries, in particular developing countries, and through the regional centres on space science and technology education, affiliated to the United Nations;

(c) Resiliency, including matters related to the ability to depend on space systems and to respond to the impact of events such as adverse space weather, natural disasters and the threat posed by near-Earth objects;

(d) Interoperability, including work done by the International Committee on Global Navigation Satellite Systems (ICG) and other new and existing coordination mechanisms;

(e) Space for sustainable development, including efforts by the Committee and its member States as well as the Office for Outer Space Affairs to meet the 2030 Agenda for Sustainable Development.

27. Building upon those unique areas of work, which have enabled the Committee and its subcommittees to provide vital institutional leadership in the development of the main cooperation processes in space activities over the past 60 years, in 2016 the Committee endorsed the following UNISPACE+50 thematic priorities (A/71/20, para. 296) that have served as drivers for the UNISPACE+50 process towards the “Space2030” agenda and its strategic outcomes in 2018:

(a) Global partnership in space exploration and innovation (thematic priority 1);

(b) Legal regime of outer space and global space governance: current and future perspectives (thematic priority 2);

(c) Enhanced information exchange on space objects and events (thematic priority 3);

(d) International framework for space weather services (thematic priority 4);

(e) Strengthened space cooperation for global health (thematic priority 5);

(f) International cooperation towards low-emission and resilient societies (thematic priority 6);

(g) Capacity-building for the twenty-first century (thematic priority 7).

28. Mechanisms have been identified to support the objectives of each of those thematic priorities. Recommendations and observations in that regard are contained in final reports under the seven thematic priorities, which, together with reports on flagship events and conferences held in relation to the thematic priorities of UNISPACE+50 and the results of the series of high-level forums, feed into the “Space2030” agenda for strengthened cooperation and governance of outer space

[3] A/71/20, para. 296.

activities and their contribution to addressing overarching long-term development concerns.

29. The whole process is underpinned by the 2030 Agenda for Sustainable Development, with its pledge to ensure a better future for all. The 17 Sustainable Development Goals and their 169 targets demonstrate the scale and ambition of that new universal agenda, which will promote action in five critical areas — people, planet, prosperity, peace and partnerships.

30. Space activities are highly relevant to the attainment of all 17 Sustainable Development Goals and their respective targets, either directly, as enablers and drivers for sustainable development, or indirectly, as an integral part of the indicators for monitoring progress towards the implementation of the 2030 Agenda for Sustainable Development.

31. One of the core elements of the "Space2030" agenda that supports countries, in particular developing countries, in attaining the Sustainable Development Goals is the establishment by the Office for Outer Space Affairs of the global space partnership for the Sustainable Development Goals, which is an essential and comprehensive coordination mechanism to facilitate the optimal delivery of existing space assets and cooperation to address user needs for future space infrastructures and to foster partnerships for developing innovative systems and solutions that will assist countries in monitoring and achieving the Sustainable Development Goals.

32. The global space partnership will integrate space-based data and infrastructure on a global scale, including global navigation satellite systems and satellite telecommunications, and ground-based data, thus offering a unique opportunity to humankind to address more efficiently the 2030 Agenda and its 17 Sustainable Development Goals.

33. In order to address the funding required to deliver on the "Space2030" agenda, including the partnership, the global compact for space is to be established as the main mechanism for collaboration between the Office for Outer Space Affairs and the private sector. Furthermore, a global space fund for development is proposed, following examples of existing United Nations funding mechanisms, to support the coordination and implementation of activities of the global space partnership for the Sustainable Development Goals (see paras. 60 to 67 below).

C. High-level forums 2015–2017: space as a driver for socioeconomic sustainable development

34. Another important element in the lead-up to UNISPACE+50 and beyond is represented by the series of high-level forums on space as a driver for socioeconomic sustainable development, launched by the Office for Outer Space Affairs to promote dialogue between Governments, international organizations, industry, the private sector, academia and civil society, to connect UNISPACE+50 with the "Space2030" agenda and its four pillars of space economy, space society, space accessibility and space diplomacy, and to facilitate partnerships with the Office for Outer Space Affairs.

35. As highlighted in the recommendations arising from the high-level forums (see A/AC.105/1129 and A/AC.105/1165),[4] the forums have demonstrated the broad societal benefits of space as an area of innovation, inspiration, interconnectedness, integration and investment, and the importance of strengthening unified efforts at all levels and among all relevant stakeholders in the space sector in order to address the overarching long-term development concerns of society, with concrete deliverables pertaining to space for development.

[4] See also www.unoosa.org/documents/pdf/hlf/Prep.HLF/summary-hlf2015.pdf.

36. As such, the forums have developed into important annual gatherings for the collective space community to address those cross-sectoral areas, by integrating the economic, environmental, social, policy and regulatory dimensions of space in pursuit of global sustainable development and by forging partnerships to deliver on the "Space2030" agenda and beyond.

III. The "Space2030" agenda and the global governance of outer space activities

37. The "Space2030" agenda, established around the pillars of space economy, space society, space accessibility and space diplomacy, consists of the following aspects: a framework for improved cooperation and governance of outer space activities, as exercised at the international level by the Committee on the Peaceful Uses of Outer Space and its subsidiary bodies, and supported by the Office for Outer Space Affairs (see sect. III); and strategic objectives under the four pillars and their implementation plan for mainstreaming the use of space as a driver for development (see sects. IV and V); and the way forward (see sect. VI).

A. Role of the Committee on the Peaceful Uses of Outer Space and its Scientific and Technical Subcommittee and Legal Subcommittee

38. The global governance of outer space activities,[5] responding to the challenges of the space arena in the twenty-first century, will determine the "future of space". Ultimately, it is possible that only new regulations collectively negotiated by the United Nations — a truly global international organization — can guarantee that the benefits of space are preserved for future generations.

39. In line with the dynamic developments in space activities, the ongoing task of the international community is to prove its response capacity and react to current developments in order to preserve outer space as a global commons and a limited resource for the benefit of humankind.

40. Common issues and concerns relating to outer space activities have been considered in a cross-sectoral approach in order to determine the optimum strategy for the "Space2030" agenda and the strengthened global governance of outer space activities.

41. The Committee on the Peaceful Uses of Outer Space and its two subcommittees have, throughout the space age, retained their inimitable position as global platforms for international cooperation in the peaceful uses of outer space and dialogue among major spacefaring nations and emerging space nations.

42. Their role has also been reaffirmed through the increasing number of States that have become members of the Committee, from 24 States at the time the Committee was established as a permanent body in 1959 to the 87 States that are currently members of the Committee and the 37 international intergovernmental and non-governmental organizations with space-related mandates that are permanent observers, reflecting the growing community of States and organizations committed to international cooperation in space activities.

43. That is also reflected in the growing number of States that have ratified the United Nations treaties on outer space that form the basis of the international legal regime on outer space. The Committee continues to appeal to its member States that have not ratified the United Nations treaties on outer space, in particular the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (Outer Space Treaty), to do so. In addition, the Committee aspires to increase its membership by engaging with those

[5] For further information regarding the governance of outer space activities, see document A/AC.105/1137, paras. 6 and 7.

States that have already ratified the Outer Space Treaty but are not yet members of the Committee, so that all States that have ratified the Outer Space Treaty are also members of the Committee, and vice versa.[6]

44. In view of the complexities of the space arena resulting from the growing number of both governmental and non-governmental space actors and the diversification of space activities, there is a need to address the broad perspective of international space law and policy, as well as issues of concern to the safety, security and sustainability of outer space activities in a structured manner.

45. **In strengthening the global governance of outer space activities in the twenty-first century, the Committee on the Peaceful Uses of Outer Space, its subsidiary bodies and the Office for Outer Space Affairs should:**

(a) Strengthen the Committee's unique position as the primary intergovernmental platform for international space cooperation and the negotiation of instruments pertaining to space activities, and work towards further increasing its membership;

(b) Promote the Committee's role as the main centre for space-related international coordination and cooperation mechanisms, to ensure better information flow with member States;

(c) Promote the universality of the United Nations treaties on outer space by developing, by 2020, a guidance document that will assess the existing legal regime on outer space and identify possible gaps with a view to fostering an international regime of responsibility and liability and ensuring that space law is a strong pillar of global space governance;[7] and by strengthening capacity-building and technical assistance provided by the Office for Outer Space Affairs in the field of international space law, policy and space-related institutional capacity-building as fundamental tools in those efforts, including for policymakers and decision makers;[8]

(d) Promote the United Nations Register of Objects Launched into Outer Space of the Office for Outer Space Affairs by improving existing registration practices and information exchanges on the basis of existing mandates, including measures that seek to increase transparency and improving the efficiency of the registration mechanism;

(e) Restructure the Committee's agenda in order to address, in a comprehensive manner, the use and utility of space as a driver of sustainable development and the issues of safety, security and sustainability of outer space activities, including the exchange of information on space objects and events, in-orbit collisions and interferences, space operations and space traffic management;

(f) Strengthen coordination between the three intergovernmental platforms, namely, the Scientific and Technical Subcommittee, the Legal Subcommittee and the Committee on the Peaceful Uses of Outer Space, to enable agenda items to be addressed in a comprehensive, cross-cutting manner combining scientific, technical, legal, policy and decision-making dimensions;

(g) Strengthen cooperation with the United Nations entities dealing with space, in line with the United Nations system-wide efforts to increase coherency and deliver as one: (i) by expanding the bilateral partnerships of the Office for Outer Space Affairs with those United Nations entities that routinely make use of space technologies and their applications in a wide range of activities under

[6] For the status of ratifications of the United Nations treaties on outer space, see document A/AC.105/1122, para. 75.

[7] For an overview of the United Nations treaties and instruments on outer space, see *International Space Law: United Nations Instruments* (ST/SPACE/61/Rev.2).

[8] See also the report on UNISPACE+50 thematic priority 2 (legal regime of outer space and global governance: current and future perspectives) (A/AC.105/1169).

their respective mandates; (ii) within the Inter-Agency Meeting on Outer Space Activities (UN-Space) as another important aspect of the governance of outer space activities, which is led by the Office for Outer Space Affairs; and (iii) by the increased engagement of United Nations entities in the work of the Committee and its subsidiary bodies.

B. Role of the Office for Outer Space Affairs

46. In exercising its role as a global platform for strengthening the global governance of outer space activities and international cooperation in the peaceful uses of outer space, the Committee on the Peaceful Uses of Outer Space has, since its establishment, been supported by the Office for Outer Space Affairs, which is a gateway to space matters in the United Nations system and leads global efforts in the promotion of international cooperation in the peaceful exploration and use of outer space and in the utilization of space science and technology for sustainable development.

47. With its specific and broad mandate to deal with the full spectrum of space activities, including science, technology, policy and law, the Office for Outer Space Affairs has a strategic position in the United Nations as a gateway to space.[9] The Office discharges mandates on behalf of the Secretary-General pertaining to United Nations treaties and principles on outer space and works as part of the United Nations Secretariat towards delivering on the 2030 Agenda for Sustainable Development.

48. The Office, in its role as a capacity-builder, a facilitator and a bridge-builder, works globally with Member States to promote international cooperation in the use and exploration of outer space for the achievement of the development goals and, as a facilitator of negotiations pertaining to space activities in the Committee, acts as an important player in the global governance of outer space activities.

49. At present, the work of the Office includes:

(a) Providing support to intergovernmental processes;

(b) Discharging the responsibilities of the Secretary-General under the United Nations treaties and principles on outer space;

(c) Implementing the United Nations programme on space applications;

(d) Implementing the United Nations Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER);

(e) Leading UN-Space;

(f) As part of the Secretariat of the United Nations, building partnerships with United Nations entities dealing with space, working towards delivering on the 2030 Agenda for Sustainable Development and better serving Member States;

(g) Serving as the executive secretariat of ICG;

(h) Serving as the secretariat to the Space Mission Planning Advisory Group (SMPAG).

50. In accordance with General Assembly resolution 70/82, the Office also conducts activities associated with space security and transparency and confidence-building measures in outer space activities, as appropriate, and within the context of the long-term sustainability of outer space activities.

51. Recognizing the need to deliver as “one United Nations” and with the goal of streamlining the internal efforts of the United Nations, the Office has been seeking to

[9] For the history of the Office for Outer Space Affairs and the evolution of its mandates, see document A/AC.105/1137, para. 19.

develop new partnerships and strengthen existing ones in order to fulfil its core mandate and collaboratively achieve its established targets.[10]

52. In 2015, the Office also launched a series of high-level forums on space as a driver for socioeconomic sustainable development, to engage in a broad dialogue with Governments, the private sector and civil society regarding a wide range of issues that form the core of the "Space2030" agenda and its implementation plan.

53. Through UNISPACE+50 and with a view to building a comprehensive "Space2030" agenda, the Office for Outer Space Affairs has identified several challenges and opportunities to fully exploit the benefits of space by all nations, by systematically integrating space-based solutions into the implementation mechanisms of the 2030 Agenda for Sustainable Development.

54. In that regard, and as mandated by the Committee,[11] the Office for Outer Space Affairs works to strengthen its cooperation with industry and the private sector in order to deliver its mandates as the unique United Nations entity working in space affairs and implement activities to promote space-based applications and technologies for innovative and timely actions to support Member States in meeting the objectives of the three global development agendas.

55. That process also requires the modernization and reinforcement of the overall mandate and structure of the Office for Outer Space Affairs, to better position the Office to assist States in using space for sustainable development, strengthen the Office's role in disaster management and emergency response and its capacity-building, outreach and awareness-raising efforts, including integrated legal and technical assistance, and reinforce the Office's spaceflight portfolio to enable broad access to space for the achievement of the Sustainable Development Goals, in particular for the benefit of developing countries.

IV. Space as a driver of sustainable development

A. Space economy

Strategic objective 1
Develop space-derived economic benefits

56. The space economy can be defined as the full range of activities and use of resources that create and provide value and benefits to the world population in the course of exploring, understanding and utilizing space. The space economy pillar aims to address the economic benefits of the space sector and strengthen its role as a major driver for a dynamic economy.

57. Space is increasingly seen as a contributing lever for economic growth, social well-being and sustainable development. In 2017, the value of the space economy amounted to more than $320 billion, generated mostly by commercial and government entities operating at the national, regional and global levels. This increased strategic value of space has also resulted in a growing focus on the governance of outer space activities and their safety and sustainability.

58. Following the adoption of the 2030 Agenda for Sustainable Development, there is a growing need to strengthen the capacity of space science and technology in meeting development goals and to integrate the space economy pillar within the environmental, social, policy and regulatory aspects of space to help achieve global sustainable development.

59. The following recommendations are therefore proposed to strengthen the potential of space-derived economic benefits.

[10] See the report of the Secretary-General on the work of the Organization (A/71/1).
[11] See A/72/20, para. 326.

Objective 1.1
Establish a global space partnership for the Sustainable Development Goals

Overview of the objective

60. In view of the need to support countries, in particular developing countries, in attaining the Sustainable Development Goals, a global space partnership for the Sustainable Development Goals should be established by the Office for Outer Space Affairs as an essential and comprehensive coordination mechanism to facilitate the optimal service delivery of existing space assets and to foster partnerships for developing innovative systems and space solutions that will assist countries in monitoring and achieving the Goals.

61. The objective of the partnership would be to establish a direct link between space and the Sustainable Development Goals through one authoritative office (the Office for Outer Space Affairs), which also serves as the gateway to space in the United Nations. Through the partnership, the Office for Outer Space Affairs would act as a "one-stop-shop", coordinating multiple providers of space-derived data, information, services and products.

62. The partnership would be a response to Sustainable Development Goal 17, since it is envisioned as a voluntary partnership undertaken by Governments, intergovernmental organizations and other relevant stakeholders, whose efforts are contributing to the implementation of the 2030 Agenda for Sustainable Development.

Implementation of the objective

63. Countries are the beneficiaries of the objectives of the proposed partnership, and the progressive increase in their access to space and use of space assets is the key indicator of the success of the partnership.

64. The Office for Outer Space Affairs is working to develop several tools: the space for development profile, to assess and monitor space capabilities in a country; the space solutions compendium, to provide timely and adapted space solutions; and the capacity-building network, to provide research opportunities, hands-on training programmes and other educational opportunities.[12]

65. Within the partnership, the Office should, among other things, continue to promote the development of integrated applications of Earth observation, global navigation satellite system and telecommunication constellations for disaster risk reduction and climate change monitoring, mitigation and adaptation.

66. The Space Climate Observatory (see para. 106 (b)), as agreed upon by a number of space agencies in the Paris Declaration, represents an invaluable part of the global space partnership, providing opportunities to humankind to address even more effectively the 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals.[13]

67. To implement the partnership, the Office for Outer Space Affairs should build upon existing partnerships and forge new, including with industry and the private sector, to provide broader opportunities of access to space for science, innovation, research and development, education and capacity-building.

[12] These tools also form part of the Access to Space initiative, which is further elaborated under the space society pillar but has clear cross-cutting links and impacts for the space economy pillar, since broadening access to space and development of space-based infrastructure as a gateway to new markets.

[13] See the Paris Declaration "Towards a space climate observatory", adopted on 11 December 2017.

Objective 1.2
Global compact for space

Overview of the objective

68. The achievement of the goals and targets of the 2030 Agenda for Sustainable Development will depend on partnerships. The space sector is also moving towards building partnerships, in particular private-public partnerships, with a view to developing innovative space solutions and activities. The space industry and the private sector are therefore regarded as essential partners, opening the door to a new way of working.

69. Partnerships with the space industry and the private sector are not new in the United Nations system: the United Nations Global Compact, launched in 2000, is a voluntary initiative based on the commitments made by Chief Executive Officers to implement universal sustainability principles and to take steps to support the work of the United Nations. The United Nations Global Compact offers guidance, training, resources, tools, local network support and networking opportunities with Global Compact participants.

70. Pursuant to General Assembly resolution 72/79 and as endorsed by the Committee on the Peaceful Uses of Outer Space at its sixtieth session in 2017, the Office should pursue greater engagement with industry and private sector entities to further their support for and contributions to the overall work of the Office.[14]

71. In line with the United Nations Global Compact, which is focused on sustainability, the Office for Outer Space Affairs is working to establish a global compact for space, which will focus on the space sector, opening a forum where the space sector could partner with the Office on projects and activities in support of the internationally agreed development goals as well as in support of recommended activities in that regard by the Committee on the Peaceful Uses of Outer Space.

Implementation of the objective

72. A global compact for space should be established as the main mechanism for collaboration between the Office for Outer Space Affairs and industry and private sector entities.

73. The global compact for space could also be used as the entry point for industry and the private sector for the space solutions compendium, as they could include their space solutions in the compendium.

74. The global compact for space should be developed starting with a call for interest, which could be launched at UNISPACE+50, as a starting point for dialogue between the Office and interested potential partners. Once established, the global compact for space should become the main mechanism for collaboration between the Office for Outer Space Affairs and space industry and the private sector.

Objective 1.3
Global space fund for development

Overview of the objective

75. The aim of the global space fund for development is to establish an additional operational funding facility to deliver on the commitments of the “Space2030” agenda towards the Sustainable Development Goals, following examples of existing United Nations funding mechanisms, such as the Global Environment Facility (GEF), administered by the United Nations Environment Programme, which is the largest public funder of projects to improve the global environment.

76. The global space fund for development would support the coordination and implementation of the activities of the global space partnership for the Sustainable

[14] A/72/20, para. 326.

Development Goals and would serve as an additional financial mechanism for implementing strategic objectives of the “Space2030” agenda.

Implementation of the objective

77. The global space fund for development should be established as a voluntary trust fund, which would generate funds, either for general purposes or earmarked, to be offered to developing countries by inviting proposals to develop projects contributing to the implementation of the strategic objectives under the four pillars of the “Space2030” agenda.

78. The funding approach is proposed in two phases: an initial fund of approximately $10 million contributed by the fund’s founding members, who would play a role in formulating the framework for projects and services offered through the fund (such as science, technology, engineering and mathematics education, advisory services, capacity-building, projects, assisting in the establishment of space and ground infrastructure, a data centre and other practical areas to assist Member States, space and global health initiatives, among others), to be followed by a second phase that would include a worldwide fundraising campaign.

79. The financial contributions would be allocated following a global call for interest by the Office for Outer Space Affairs to invite proposals from developing countries based on their needs towards meeting the 2030 Agenda for Sustainable Development and the strategic objectives of the “Space2030” agenda.

Objective 1.4
Build an inclusive global partnership in space exploration and innovation

Overview of the objective

80. Space exploration is a long-term driver of innovation, strengthening international cooperation on an all-inclusive basis among nations and creating new opportunities for addressing global challenges. Innovation derived from space exploration endeavours is also a key driver of socioeconomic development and technical progress on Earth for the benefit of all humankind, providing growth, jobs and long-term returns.

81. Space exploration can trigger new partnerships, foster dialogue with the space industry and the private sector and promote cooperation among all countries. It is a multifaceted endeavour, and the political agendas of a growing number of countries include space exploration as a goal and frame it as an international cooperative adventure. Collaboration is essential for space exploration, and equally so for addressing scientific challenges that are inherently global and interrelated.

82. The exploration of new space frontiers and innovative applications of new scientific and technical knowledge will require substantial and sustained investment efforts. Significant investment in innovation will also be indispensable in translating knowledge provided by space-based science into applications of socioeconomic relevance and for sustainable development goals in areas such as education, health, agriculture and environment, benefiting the broad population and generating new opportunities for societal growth.

83. Innovation in the space applications area lends itself to a broad range of cooperation among Governments, international intergovernmental organizations, national space agencies, non-governmental organizations, industry and the private sector, academia and civil society. In particular, cooperation in innovation and knowledge dissemination between developed and developing countries would serve as the ideal conduit to promote the overall goals of sustainable development and the peaceful exploration and uses of outer space.

Implementation of the objective[15]

84. The Committee should review ways and means of working with non-governmental entities, including industry and private sector entities, in order to better consider all aspects of space exploration and innovation.

85. Bilateral and multilateral cooperation involving States and international intergovernmental organizations in space exploration and innovation should be encouraged. New mechanisms and/or forums for cooperating in space exploration activities should be identified, including by considering the participation of industry and States with emerging capabilities in space exploration.

86. All States should conduct their space exploration activities taking into account the long-term sustainable and peaceful use of outer space.

87. The Office for Outer Space Affairs should be requested to include capacity-building activities (including workshops and/or exchange or international fellowship programmes) on space exploration and innovation, with particular emphasis on science, technology, engineering and mathematics education.

88. The Office for Outer Space Affairs should develop, within existing resources, a section on its website to assist in the dissemination of information on space exploration and innovation, taking into account in particular the needs of developing countries.

B. Space society

Strategic objective 2
Advance societal benefits of space-related activities

89. The term “space society” implies a society carrying out its core functions while making the best use of space technologies and space-based services and applications for improving the quality of life.

90. The space sector plays an increasingly pivotal role in the efficient functioning of modern societies and their socioeconomic development. The value of space technology and applications and space-derived data and information in contributing to sustainable development has been demonstrated by the fact that they improve the formulation and subsequent implementation of policies and programmes of action in connection with, for example, land and water management, marine and coastal ecosystems, health care, climate change, disaster risk reduction and emergency response, energy, navigation, seismic monitoring, natural resource management, biodiversity, agriculture and food security.

91. Another important societal dimension of space is the fact that it unites humankind for a shared and higher purpose and serves as an area of inspiration, innovation, interconnectedness, integration and investment.

92. With the growing increase in the world’s population, which is estimated to reach 8.5 billion by 2030 and 9.7 billion by 2050 and is projected to exceed 11 billion by 2100, with almost all of the population growth from the current population of 7 billion taking place in less developed countries,[16] there is a growing pressure on our planet and its population.

93. Space applications have the global reach to address that challenge, since they support environmental security, food security, global health, disaster preparedness

[15] See also the report on UNISPACE+50 thematic priority 1 (global partnership in space exploration and innovation) (A/AC.105/C.1/114).

[16] See *World Population Prospects: The 2015 Revision—Key Findings and Advance Tables* (ESA/P/WP.241).

and overall human security, as well as forming one of the cornerstones of the information society.

Objective 2.1
Space for global health

Overview of the objective

94. With a view to ensuring improved use of space science, technology and applications in the global health domain, there should be enhanced cooperation and sharing of information in emergencies, epidemics and early warning events, as well as on environmental parameters, and enhanced capability in terms of integrating health data in disaster management plans. Capacity-building in advancing space technologies in global health efforts should be strengthened and viable governance and cooperation mechanisms identified to support this objective.

Implementation of the objective[17]

95. A new agenda item dedicated to space and global health should be put on the agenda of the Scientific and Technical Subcommittee under a multi-year workplan, and a working group established tasked with considering and proposing actions, with the scope of its work to be further determined, relating to the future uses of space (technology, applications, practices and initiatives) in support of global health needs in the wider context of sustainable development on Earth, including the contribution of space science and technology and their applications to the achievement of the Sustainable Development Goals, and taking into account the concerns and interests of all countries, in particular those of developing countries.

96. A dedicated platform should be established for effective coordination among United Nations entities, other international organizations and relevant actors, on space and global health issues.

97. United Nations entities, intergovernmental organizations and national Governments should be encouraged to pursue effective coordination in all key space activities relevant to global health (telecommunications, GNSS, remote sensing and GIS, and space life science and technology development).

98. Institutional arrangements between the Office for Outer Space Affairs and the World Health Organization (WHO) should be strengthened to ensure effective collaboration.

99. WHO should establish a dedicated high-level focal point for space-related affairs to advance the use of space science and technology in the area of global health.

100. The key role of the Office for Outer Space Affairs in providing technical support to United Nations entities and intergovernmental organizations on interdisciplinary and cross-sectoral space-related matters should be reinforced. Further attention should be given to promoting a “one health, one planet” perspective.

101. WHO should be actively engaged in some of the activities of the Office for Outer Space Affairs that are relevant to global health, including, but not limited to, UN-SPIDER technical advisory missions. The Office should also be more closely involved in the activities of WHO on a reciprocal basis, as appropriate.

102. The United Nations system should support the wider application of space solutions for global health. This could be achieved by encouraging the implementation of a broader range of space solutions for sustainable development, and could include public-private partnerships.

[17] See also the report on UNISPACE+50 thematic priority 5 (strengthened space cooperation for global health) (A/AC.105/1172).

Objective 2.2
Space for low-emission and resilient societies

Overview of the objective

103. Building resilient societies through better coordination and the forging of global partnerships is one of the key challenges in the twenty-first century. The common challenges of disaster risk reduction, climate change and sustainable development, linked through the 2030 Agenda, the Sendai Framework and the Paris Agreement imply strong interconnectedness between actions to enhance the safety, security and sustainability of outer space activities, including the protection of space assets, space systems and critical infrastructures.

104. The resilience of space infrastructure is thus a prerequisite for the delivery of services that are in turn essential to the measurement and monitoring of progress in the implementation of the global agendas.

105. There is a need to strengthen the use of integrated space applications, in combination with ground, in situ systems, to contribute to systematic observations of the climate and natural hazards, to assess changes in exposure of vulnerable elements to natural hazards and other manifestations of climate change (sea-level rise, glacier melting, temperature increases, etc.), to improve the assessment of natural hazards, to improve early warning systems and to monitor indicators used to track progress in the implementation of the 2030 Agenda, the Sendai Framework and the Paris Agreement.

Implementation of the objective[18]

106. The implementation of this objective includes several elements, since it is aimed at achieving impact across the four interdependent areas of disaster risk reduction; mitigation and adaptation to climate change; sustainable development; and resiliency of space-based systems (critical space infrastructure):

(a) The Office for Outer Space Affairs, through UN-SPIDER, should work towards the improved and full implementation of existing mandates, as endorsed by the General Assembly in its resolution 61/110, with a view to better addressing the common challenges of disaster risk reduction, climate change and sustainable development;

(b) As an important component of low-emission and resilient societies, the Space Climate Observatory,[19] agreed upon by a number of space agencies and based on systematic observations of essential climate variables, data validation and intercalibration, constitutes strategic architecture for the integration of space and in situ data and models and a free and open data policy. The Space Climate Observatory is seen as an invaluable contribution to “Space2030” and could benefit from the coordination offered by the Office’s global space partnership for the Sustainable Development Goals, which will integrate space-based data and infrastructure on a global scale;

(c) Owing to the critical importance of space-based infrastructure and its direct relevance for resilient societies, the protection of space assets, space systems and ground infrastructure, including related critical infrastructure, should be a matter of international discussions. The consideration of critical space infrastructure at the international level, including with a view of studying cyber-security issues related to space activities, should be initiated at the level of the Committee on the Peaceful Uses of Outer Space. This is also crucial towards meeting the objective set out in subparagraph (b) above, since the timely recovery of data streams provided by space

[18] See also the report on UNISPACE+50 thematic priority 6 (international cooperation towards low-emission and resilient societies) (A/AC.105/1173).

[19] See the Paris Declaration “Towards a space climate observatory”, adopted on 11 December 2017.

assets is particularly important for climate change studies, where the availability of long time series is needed to understand the evolution of climate.

Objective 2.3
Space for human security

Overview of the objective

107. The strengthening of the use of space for resiliency relates to the ability to depend on space systems to respond to the impact of events, such as natural disasters, space weather and the near-Earth object impact threats. Space capabilities play a crucial role in ensuring human security through enhanced coordination efforts at the global level to respond to near-Earth object impact threats.

108. The Office for Outer Space Affairs serves as the secretariat to SMPAG, which works on laying out the framework, timeline and options for initiating and executing space mission response activities, as well as promoting opportunities for international collaboration on research and techniques for near-Earth object deflection.

109. The Office also works with the International Asteroid Warning Network (IAWN), which maintains an internationally recognized clearing house for the receipt, acknowledgment and processing of all near-Earth object observations, based on information dissemination to Member States related to near-Earth objects.

Implementation of the objective

110. In order to strengthen preparedness in case of a potential near-Earth object impact, there should be increased planetary defence efforts and raised awareness among Member States, in particular those without capabilities in that area. The Office should work together with IAWN and SMPAG through UN-SPIDER, as part of technical advisory missions on disaster preparedness and emergency response and as part of the Office's capacity-building activities. This is also related to one of the activities of IAWN concerning informing relevant parties, such as emergency response agencies.

111. Furthermore, there is a need to proceed to defining an approach for interaction with the Office for Outer Space Affairs and the Committee on the Peaceful Uses of Outer Space in the event that a possible impactor is detected.

Objective 2.4
International framework for space weather services

Overview of the objective

112. Space weather is a global challenge, and potentially catastrophic impacts arising from the natural hazard of severe-extreme space weather demand a response from the international community. There is a need to address the vulnerability of terrestrial and space-based infrastructure to space weather as well as the vulnerability of society as a whole to the impact of adverse space weather.

113. Information about the most advanced scientific research and detailed socioeconomic and technical impact assessment studies and preparatory activities within civil protection administrations are needed to ensure that States know what to do to protect their infrastructure. By focusing on accurate and actionable space weather warnings, States will know when to act.

114. Improved outreach, communication, capacity-building and global coordination are needed to ensure that States have the ability to act and the knowledge to allow them to do so.

Implementation of the objective[20]

115. A new international coordination mechanism for space weather should be established with a mandate to promote increased high-level coordination on space weather and to promote increased global resilience against space weather effects.

116. This new international coordination group for space weather could consist of representatives from States members of the Committee on the Peaceful Uses of Outer Space, with participation from appropriate international space weather entities (see A/AC.105/1146). The coordination group could report to the Scientific and Technical Subcommittee under its agenda item on space weather and would be expected to have a substantial involvement from COSPAR, for example, through ex officio membership.

117. The mandate of the coordination group could be expanded beyond that of the existing Expert Group on Space Weather of the Scientific and Technical Subcommittee to enable the coordination group to make recommendations to be approved by the Scientific and Technical Subcommittee for consideration and adoption by the Committee on the Peaceful Uses of Outer Space at the annual sessions of those two bodies. If the establishment of the coordination group is approved by the Committee, the activities of the Expert Group on Space Weather could be transitioned to the coordination group during the period 2020–2021, and the coordination group would then act and operate in line with its mandate and terms of reference during the period 2021–2030.

118. Specific tasks to be completed through the new international coordination mechanism should be those listed in the space weather road map.[21]

119. COSPAR should take responsibility for assessing scientific research and developing scientific road maps and share the results with the Committee on the Peaceful Uses of Outer Space. Road-mapping for space weather services should be coordinated in the context of the new international coordination mechanism.

Objective 2.5
“Space for women” initiative

Overview of the objective

120. As part of the capacity-building for the twenty-first century, the Office for Outer Space Affairs has been mandated to define innovative and effective approaches to overall capacity-building and development needs, with a special focus on the empowerment of women in developing countries, in particular by strengthening the possibility of their participation in science, technology, engineering and mathematics education.[22]

121. The main initiative under this objective is the “Space for women” project, aimed at widening possibilities for women to pursue space-related education and careers. Gender equality is embedded in the work of the Office; however the disproportionate participation of women in science, technology, engineering and mathematics education and in careers in the space field compared with that of men needs to be addressed in a more systematic and long-term manner.

Implementation of the objective[23]

122. To achieve equal opportunities and gender equality in the space field and to promote participation of women in science, technology, engineering and mathematics

[20] See also the report on UNISPACE+50 thematic priority 4 (international framework for space weather services) (A/AC.105/1171).
[21] Ibid., ch. III.
[22] See also the report on UNISPACE+50 thematic priority 7 (capacity-building for the twenty-first century) (A/AC.105/1174).
[23] See also A/AC.105/1163.

education and careers, the Office for Outer Space Affairs should develop the "Space for women" project.

123. The "Space for women" project is centred on the following activities: (a) awareness-raising and advocacy; (b) capacity-building and training; and (c) networking and mentoring. Focusing in particular on developing countries, the project aims to take advantage of the inspiring field of space for the empowerment of women and promotion of their equal access in the aerospace industry and in science, technology, engineering and mathematics education.

124. The initiative is also in line with the International Gender Champions Initiative (http://genderchampions.com), a network that brings together female and male decision makers with a view to breaking down gender barriers, and with the efforts of the Secretary-General as part of his new system-wide strategy on gender parity.

125. The "Space for women" initiative is closely related to and reinforced through the function of the Director of the Office for Outer Space Affairs as one of the International Gender Champions, and a number of commitments made by the Director in that regard, available on the web page of the initiative, to defend and promote gender-balanced representation and gender mainstreaming in the work of the Office for Outer Space Affairs and report regularly to the Committee on implementation of those commitments.

Objective 2.6
Open Universe initiative

Overview of the objective

126. Initially proposed at the fifty-ninth session of the Committee on the Peaceful Uses of Outer Space in 2016,[24] the aim of the Open Universe initiative is to promote and facilitate open and transparent access to astronomy and space science data, with a view to ensuring that all people can utilize and learn from such invaluable sources of information for the benefit of humankind.

Implementation of the objective[25]

127. To implement the objectives of the Open Universe initiative, the Office for Outer Space Affairs, together with its partners, should work towards:

(a) Enhancing and completing the online availability and visibility of astronomical and space science data, following existing standards;

(b) Developing tools and educational and outreach environments for astronomy and space science, with the objective of facilitating the cultural and knowledge progress of society, in particular among youth and women, irrespective of the level of development of a country;

(c) Engaging with a wider user base, including the various target groups identified, ranging from the research community, higher and secondary education, citizen and amateur scientists and other potential end-users;

(d) Promoting among data providers the adoption of the FAIR (findable, accessible, interoperable, reusable) guiding principles for scientific data management, and of transparency on data production mechanisms and data access rules;

(e) Fostering partnerships among the research community in the development, extension and provision of visibility for the above-mentioned data, services, applications and standards for a wider user base and work with partners to promote education in astronomy, space science and other science, technology, engineering and mathematics subjects, in particular in developing countries and for the empowerment of women.

[24] See A/71/20, para. 292 (a), and A/AC.105/2016/CRP.6.
[25] See also A/AC.105/1175.

C. Space accessibility

Strategic objective 3
Access to space for all

128. Ensuring access to space means that all countries can benefit socioeconomically from and make equal use of space science and technology applications and space-based data, information and products. Space spin-offs and technologies have been adapted to improve the overall quality of life on Earth.

129. Although data and technology are becoming more accessible at lower costs, the gap between those nations that have developed space-related capabilities and technologies and those that do not have access to such capabilities, known as the space divide, is increasing.

130. Space accessibility refers not only to physical access to outer space but also to access to space-related infrastructure, data, information and services.

Objective 3.1.
"Access to space" initiative

Overview of the objective

131. The "Access to space" initiative of the Office for Outer Space Affairs is aimed at broadening access to space to bridge the space divide, which, if no action is taken, threatens to widen the gap between countries that have access to space and those that do not.

132. The scope of the "Access to space" initiative is twofold: physical access to space, and access to space-based data and infrastructure.

133. The initiative also builds upon the Office's current spaceflight portfolio as part of its Human Space Technology Initiative, and includes a wide range of opportunities made available to developing countries for launch, ground and in-orbit space experiments on, inter alia, drop towers, space stations and low-orbit free-flying vehicles, and through the design, manufacture and operation of small satellites.

Implementation of the objective[26]

134. Development of a results-based management approach to capacity-building, based on country-specific needs, assessed through two key instruments that have been developed by the Office for Outer Space Affairs: the space for development profile and the space solutions compendium, which will enable the provision of capacity-building strategies for Member States on a long-term basis:

(a) The space for development profile consists of a list of indicators that enables an initial assessment to be made of strengths and weaknesses in terms of space development. The initial set of indicators can mostly be measured using open data, however, that set can be expanded to include indicators related to a country's space-related strategic objectives, which that country is interested in monitoring closely;

(b) The space solutions compendium is a list of space-related solutions that each country can apply in accordance with its space strategy, and as such, complements the space for development profile. The compendium is a key tool for supporting the 2030 Agenda for Sustainable Development, linking space solutions with sustainable development goals and targets. Through the compendium, the Office would act as a focal point, pairing solutions provided by developed countries and developing countries, monitoring the effectiveness of those solutions and identifying any needs in order to deliver more targeted capacity-building.

[26] See also A/AC.105/1174.

135. The use of the aforementioned two tools should be accompanied by triangular cooperation, in which the Office channels the assistance of an interested party to create and/or develop capabilities in a developing country, thus reducing the space divide, enabling capacity-building on a long-term basis and considerably increasing the benefits of cooperation for all parties, in particular developing countries.

136. In order to support the "Access to space" initiative, the activities of the regional centres for space science and technology education, affiliated to the United Nations, and the UN-SPIDER regional support offices should be strengthened.

137. To that end, and in order to improve the overall capacity of the regional centres, an alliance of regional centres should be established, as proposed during the meeting of directors of the regional centres for space science and technology education held in conjunction with the sixtieth session of the Committee.[27]

138. Member States are encouraged to support the establishment of new regional centres, to extend the reach of those centres to all regions.

139. The Russian Federation has proposed the establishment at the Roscosmos Academy in Moscow of a regional centre for space science and technology education, affiliated to the United Nations, in order to provide a network for universities and research institutions.

140. New regional centres for space science and technology education, affiliated to the United Nations, could be based on existing centres of excellence.

141. A capacity-building network should be established for all entities, in particular universities, museums, other institutions and non-governmental organizations and governmental bodies, to provide research opportunities and hands-on training programmes, including student exchange programmes and programmes delivered in working environments. The regional centres for space science and technology education, affiliated to the United Nations, should be part of that capacity-building network.

142. Furthermore, in the context of the capacity-building network, the creation has been recommended of a programme on universal space heritage sites as a possible tool to promote space education, contribute to capacity-building and increase public awareness.[28] The "Universal Space Heritage Sites Programme" would be specifically focused on sites in outer space, including sites of special relevance on the Moon and other celestial bodies.

143. The use of new tools and technologies, such as massive open online courses, should be introduced to increase the global reach of the activities conducted by the Office. In addition, a space information and training centre should be established as a facility of the Office for Outer Space Affairs, with a view to creating opportunities for trainers and educators, in particular from countries in which space-related education infrastructure is poor or non-existent, to be exposed to an effective learning environment with the necessary tools and materials for use at the regional and country level.

D. Space diplomacy

Strategic objective 4
Strengthening existing mechanisms and forging new mechanisms in the area of international cooperation in outer space activities

144. Space diplomacy, built on existing norms and negotiated treaties, refers to cooperation among nations on the basis of equal engagement and mutual respect, with

[27] See A/72/20, para. 84.
[28] See A/AC.105/1164.

the overall goal being to address the common challenges facing humanity and to build constructive, knowledge-based partnerships.

145. The continuous growth and diversification of space activities can be attributed to combined and sustained efforts undertaken at the national, regional and global levels to foster international cooperation in the peaceful uses of outer space, in particular within the Committee on the Peaceful Uses of Outer Space, as the main international platform for facilitating that cooperation, supported by the Office for Outer Space Affairs.

146. The data contained in the Register of Objects Launched into Outer Space, which is maintained by the Office for Outer Space Affairs, is testament to that unprecedented growth. In six decades of outer space activities, approximately 8,000 functional space objects (satellites, planetary probes, landers and rovers, crewed spacecraft and space station flight elements) have been launched by over 70 States and intergovernmental organizations. Approximately 41 per cent of those objects have re-entered the Earth's atmosphere, leaving approximately 4,600 functional or formally functional objects in outer space. Of those, nearly 92 per cent have been registered. Presently, approximately 1,700 space objects are still operational, while the remainder orbit the Earth in their operational orbits or in graveyard/disposal orbits.

147. The broad-based membership of the Committee on the Peaceful Uses of Outer Space, which comprises 87 member States, among them space powers, emerging space nations, countries that are still in the early stages of building their space infrastructures, and an impressive number of space-related international intergovernmental and non-governmental organizations (currently 37), continues to position the Committee at the centre of the global governance of outer space activities.

Objective 4.1
Strengthen the space diplomacy pillar by building upon existing partnerships and creating new partnerships in space activities

Overview of the objective

148. The increase in commercial and private activities in the space sector generates a demand for regulatory certainty at the national level to meet the needs of new actors and beneficiaries of spacefaring nations, space middle powers and emerging space nations. In that regard, there is a need for greater coordination with non-governmental organizations and the private sector in order to facilitate dialogue with a larger number of user communities and other entities, and increased synergies in their interaction with the Office for Outer Space Affairs and the Committee on the Peaceful Uses of Outer Space.

Implementation of the objective

149. The Office for Outer Space Affairs should strengthen its cooperation with industry and the private sector and build upon public-private partnerships in order to deliver its mandates as the unique United Nations entity working in space affairs, and support States in attaining the Sustainable Development Goals by establishing a global space partnership.

150. The High-level Forum on space as a driver for socioeconomic sustainable development should become a regular annual meeting to promote strengthened partnerships between all relevant stakeholders, serving as it does as a driver of dialogue among Governments, international organizations, industry, the private sector, academia and civil society, and as a driver that facilitates partnerships with the Office for Outer Space Affairs, to deliver on the "Space2030" agenda and beyond.

Objective 4.2
Strengthen the diplomacy pillar by addressing "space exploration and innovation" as an agenda item of the Committee on the Peaceful Uses of Outer Space

Overview of the objective[29]

151. As already highlighted under the space economy pillar above, engaging developing countries and emerging space nations in an international space exploration programme will pave the way for open and inclusive space exploration activities on a global scale and create a critical bottom-up support structure to ensure continuity in the development and execution of future global space exploration frameworks.

152. In order to maximize the efforts of various initiatives being conducted by different participants, there is an expectation to synergize their activities through the existing means of exchanging views, such as the agendas of the Committee on the Peaceful Uses of Outer Space and its subcommittees and other international forums. Those cooperation platforms could facilitate discussion and coordination of the initiatives and programmes being planned and conducted around the world.

Implementation of the objective[30]

153. The Committee on the Peaceful Uses of Outer Space should consider including in its agenda an item entitled "Space exploration and innovation".

154. States members and observers of the Committee should be encouraged to provide their views on space exploration and innovation and on how to organize work under that agenda item, including on the possibility of establishing a working group.

155. The Committee should review ways and means of working with non-governmental entities, including industry and private sector entities, in order to comprehensively consider all aspects of space exploration and innovation.

Objective 4.3
Enhance the safety, security and sustainability of outer space activities, including the protection of space assets, space systems and critical infrastructures

Overview of the objective

156. The goal and main objective is for the Office for Outer Space Affairs, in line with ongoing efforts to ensure the long-term sustainability of outer space activities, to develop an implementation mechanism for assisting Member States in their implementation of the agreed guidelines on the long-term sustainability of outer space activities and other associated guidelines and instruments, including transparency and confidence-building measures in outer space activities.

Implementation of the objective[31]

157. In order to strengthen the implementation of the United Nations treaties on outer space, the Office for Outer Space Affairs should enhance its capacity-building and technical assistance in the field of international space law, policy and space-related institutional capacity-building.

158. The role of the Register of Objects Launched into Outer Space, which is maintained by the Office for Outer Space Affairs, should be strengthened through the enhancement of existing registration practices and information exchanges on the basis of existing mandates, including measures that seek to increase transparency and improve the efficiency of the registration mechanism.

[29] See related recommendations under objective 1.2.
[30] See also A/AC.105/C.1/114.
[31] See also the report on UNISPACE+50 thematic priority 3 (enhanced information exchange on space objects and events) (A/AC.105/1170).

159. The Office for Outer Space Affairs should actively promote the implementation of General Assembly resolution 62/101 on registration practices and encourage the "harmonization" of orbital information provided by States of registry. States of registry could also be encouraged to provide notifications regarding significant changes to a space object's orbital status.

160. There should be enhanced cooperation and coordination between the Office for Outer Space Affairs and other United Nations entities and programmes, including the Office for Disarmament Affairs, in respect of capacity-building efforts aimed at ensuring the safety, security and sustainability of outer space activities.

161. The Office should conduct regular technical advisory missions to facilitate and promote transparency and confidence-building measures in outer space activities, as part of its holistic capacity-building programme.

Objective 4.4
Build upon the existing network of the Office for Outer Space Affairs and strengthen its global and regional presence

Overview of the objective

162. To strengthen the global capacity-building and outreach efforts undertaken by the Office for Outer Space Affairs, the Office should explore possibilities for expanding and strengthening its global and regional presence. That would enable the Office to better engage with the diplomatic community in the areas of space diplomacy, the global governance of outer space activities and the universality of the outer space treaties; to engage with developing countries and involve them in the work of the Office and the Committee; and to more closely coordinate its services with local and regional partners.

Implementation of the objective

163. The Office should build upon its existing global network. In particular, it should strengthen the activities of the regional centres for space science and technology education by creating an alliance of regional centres, expanding the UN-SPIDER regional support offices and leading regional hubs for infrastructure and space-data distribution. New regional centres for space science and technology education and centres of excellence could be considered, on the basis of proposals by Member States.

164. In order to work more closely and provide coordinated services with local and regional partners in the region most vulnerable to disasters and challenges owing to its fast pace of development, a liaison office in Bangkok should be opened, possibly hosted by the Economic and Social Commission for Asia and the Pacific.

165. The Office could explore similar opportunities with other countries that express an interest.

V. The "Space2030" agenda: implementation

166. The present section summarizes the main steps proposed in the implementation of the "Space2030" agenda with a view to mainstreaming space as a driver of sustainable development and strengthening the governance of outer space activities.

A. Recommendations relating to the space economy pillar

Objective 1.1
Establishment of the global space partnership for the Sustainable Development Goals

It is recommended that the global space partnership for the Sustainable Development Goals be established as a comprehensive coordination mechanism to facilitate optimal service delivery through existing space assets and to foster partnerships for developing innovative systems and space solutions to support countries in achieving the Sustainable Development Goals and monitoring their progress in that regard (see paras. 63–67).

Road map

(a) Definition and approval of the partnership (July 2017–June 2018): completion of the feasibility assessment and preparation of all documents defining the partnership, in consultation with the key partners;

(b) Partnership build-up phase (July 2018–July 2021): preparing the ground for launching the partnership's core processes, such as analysing the relevance of space assets in relation to the Sustainable Development Goals and identifying gaps and priorities for action. Progressive implementation of activities, giving priority to management and coordination and to the core processes. At the end of this phase, the partnership is assumed to be fully in place. An evaluation will be conducted in 2021 to reassess the schedule and the resources needed;

(c) Regular operations (from July 2021 onwards): governance of the partnership and its main processes are functioning. The partnership has acquired the authoritative role expected of it in coordinating the availability of space assets in support of the Sustainable Development Goals and in facilitating their use.

Objective 1.2
Establishment of the global compact for space

It is recommended that the global compact for space be established as the main mechanism for collaboration between the Office, industry and the private sector. The compact should support the implementation of the "Space2030" agenda and serve as the entry point for industry and the private sector to the space solutions compendium, in which solutions relating to the global agenda proposed by the private sector could be included (see paras. 72–74).

Road map

Launch of a call for expressions of interest, preferably in 2018, during UNISPACE+50, as the starting point for the dialogue between the Office and potential partners, leading to the global compact for space in 2019.

Objective 1.3
Establishment of a global space fund for development

It is recommended that a global space fund for development be established as a voluntary trust fund to support the coordination and implementation of activities of the global space partnership for the Sustainable Development Goals, based on existing United Nations funding mechanisms (see paras. 77–79).

Road map

(a) Allocation of an initial amount of approximately $10 million by UNISPACE+50 in 2018, with contributions from the fund's founding members, who will participate in formulating the framework for projects and services offered through the fund, followed by a worldwide fund raising campaign;

(b) Establishment of core funding for initial project activities. New partnerships should sustain core funding beyond 2030 and ensure the fund's further growth;

(c) Allocation of funds following a global call for expressions of interest by the Office to invite proposals based on countries' needs in meeting the Sustainable Development Goals and the strategic objectives of the "Space2030" agenda.

Objective 1.4
Implementation of recommendations for building an inclusive global partnership in space exploration and innovation

The recommendations for building an inclusive global partnership in space exploration and innovation are described in paragraphs 84 to 88 above. It is recommended that the Office be requested to include capacity-building activities on space exploration and innovation (including workshops, exchanges and international fellowship programmes), with a particular emphasis on science, technology, engineering and mathematics, and to develop a section on its website that helps to disseminate information on space exploration and innovation, with particular emphasis on the needs of developing countries.

Road map

Inclusion in the agenda of the sixty-second session of the Committee, to be held in 2019, of a new item on an inclusive global partnership in space exploration and innovation, and inclusion of space exploration and innovation in the Office's new integrated capacity-building programme.

B. Recommendations relating to the space society pillar

Objective 2.1
Implementation of the recommendations relating to the strategic objective "space for global health"

The recommendations relating to the strategic objective "space for global health", set out in paragraphs 95 to 102 above, include supporting the wider application of space solutions for global health, for which the United Nations system is encouraged to establish a global financing mechanism in line with the recommendation of the United Nations/World Health Organization/Switzerland Conference on Strengthening Space Cooperation for Global Health, held in Geneva from 23 to 25 August 2017 as a flagship conference on thematic priority 5 of UNISPACE+50.

Road map

Setting up the proposed financing mechanism under the umbrella of the global space fund for development.

Objective 2.2
Implementation of the recommendations relating to the strategic objective "space for low-emission and resilient societies"

The recommendations relating to the strategic objective "space for low-emission and resilient societies", set out in paragraph 106 (a) to (c) above, comprise the following interrelated objectives: (a) strengthening the implementation of the Office's UN-SPIDER programme; (b) supporting the establishment by space agencies of the Space Climate Observatory as a critical mechanism furthering the establishment of low-emission and resilient societies and creating links between such an observatory and the Office's global space partnership for the Sustainable Development Goals; and (c) giving consideration to critical space infrastructure within the Committee.

Road map

(a) Development, following UNISPACE+50, of a strategy to enable UN-SPIDER to fulfil its mandate and widen its reach beyond the disaster risk reduction community so as to engage with the key stakeholders involved in climate change adaptation and mitigation, and sustainable development, thus better contributing to the commitments under the Sendai Framework and the Paris Agreement;

(b) Once established, the Space Climate Observatory agreed by a number of space agencies as an invaluable contribution to the "Space 2030" agenda could benefit from initiatives taken under the global space partnership for the Sustainable Development Goals.

Objective 2.3
Implementation of the recommendations relating to the strategic objective "space for human security"

The recommendations under the strategic objective "space for human security", set out in paragraphs 110 and 111 above, include a strengthening of efforts to raise awareness of ongoing work by IAWN and SMPAG in the field of planetary defence supported by the Office.

Road map

(a) The further exploration by the Office of synergies between UN-SPIDER technical advisory missions on disaster preparedness and emergency response operations, and the Office's capacity-building activities to strengthen preparedness and increase the reach of awareness-raising campaigns, in particular among Member States without capabilities in that area;

(b) Further definition of an approach to interaction between IAWN and SMPAG on one hand and the Office and the Committee on the other in the event a possible impactor is detected.

Objective 2.4
Implementation of the recommendations relating to the strategic objective "international framework for space weather services"

The recommendations relating to the strategic objective "international framework for space weather services", set out in paragraphs 115 to 119 above, include the establishment of a new international coordination mechanism for space weather.

Road map

(a) Ongoing work on an international framework for space weather services done by the Expert Group on Space Weather of the Scientific and Technical Subcommittee (2018–2021) and consideration by the Subcommittee of the establishment of an international coordination mechanism on space weather;

(b) Organization of an international workshop on space weather, to be held in 2019, with the participation of States, national authorities, international organizations active in space weather research and services, users of space weather services and governmental and non-governmental organizations working in the field of critical infrastructure protection.

Objective 2.5
Implementation of the "Space for women" project

The "Space for women" project is described in paragraphs 122 to 125 above. In implementing it, it is recommended that special focus be placed on developing countries, advantage be taken of the inspiring field of space for the empowerment of

women and equal access for women be promoted to the aerospace industry and to education in science, technology, engineering and mathematics.

Road map

Initializing by the Office of the "Space for women" project following UNISPACE+50, in 2018, building on the recommendations made by the United Nations Expert Meeting on Space for Women, held in New York from 4 to 6 October 2017 (see A/AC.105/1163) in collaboration with the United Nations Entity for Gender Equality and the Empowerment of Women, and on the commitments made by the Director of the Office as one of the champions under the International Gender Champions Initiative.

Objective 2.6
Implementation of the Open Universe initiative

The Open Universe initiative is described in paragraph 127 (a) to (e) above. It is recommended that it be implemented under the leadership of the Office in close cooperation with the Government of Italy through the Italian Space Agency and with other potential partners.

Road map

Building on the recommendations made by the United Nations/Italy Workshop on the Open Universe initiative (see A/AC.105/1175), continuation by the Office of work on the Open Universe initiative with its partners in 2018. A pilot project with COSPAR on a hands-on data utilization workshop is envisaged to be held in 2018.

C. Recommendations relating to the space accessibility pillar

Objective 3.1
Implementation of the Access to Space initiative
Development of the space for development profile and the space solutions compendium

The development is recommended of the space for development profile and the space solutions compendium as key tools for assessing country-level strengths and weaknesses in the development of space capabilities and for providing space solutions to enhance those capabilities, coupled with triangular cooperation on long-term capacity-building and strengthened South-South cooperation, as part of which the Office channels the assistance of interested parties to create and/or develop capabilities in developing countries (see paras. 134–135 above).

Road map

A pilot project has been carried out and a partnership with the European Space Agency established in this connection. A call for expressions of interest in triangular partnerships for long-term capacity-building is to be issued at UNISPACE+50, in 2018.

Establishment of an alliance of regional centres for space science and technology education, affiliated to the United Nations

The establishment is recommended of an alliance of regional centres for space science and technology education, affiliated to the United Nations, to strengthen the delivery of services and the coordination among existing centres and possible new centres (see paras. 136–140 above). The alliance was proposed in 2017 during the annual meeting of directors of the regional centres for space science and technology education, affiliated to the United Nations, in conjunction with the sixtieth session of the Committee.

Road map

New centres could be established following past practices. They should not require contributions from the Office.

Establishment of a capacity-building network

The establishment is recommended of a capacity-building network that would be open, upon selection, to any entity, in particular to universities, museums and similar institutions, to non-governmental organizations and to governmental entities (see paras. 141–142).

Road map

(a) Publication, prior to UNISPACE+50, of a call for expressions of interest;

(b) Inclusion of the regional centres in the capacity-building network;

(c) Establishment, as part of the initiative, of a universal space heritage sites programme with a focus on sites in outer space, including sites of special relevance on the Moon and other celestial bodies.

Online content and massive open online courses

It is recommended that online content and massive open online courses be offered to widen access to the online resources generated by the Office, promote the benefits of space and create new content adapted to the needs identified by the Office, thus contributing to Sustainable Development Goal 4, on quality education (see para. 143).

Road map

(a) A two-phased approach is proposed. In the first phase, online resources already available in the space solutions compendium could be offered to students and practitioners to help them in finding the latest and most relevant courses and good practices. In the second phase, online content could be made available through massive open online courses to increase their reach, in particular by partnering with satellite telecommunications providers to reach remote locations or areas with no access to broadband internet connections;

(b) For the development of the courses, the expertise of the Office's staff and networks of experts could be used. The first courses could be rolled out one year after the necessary resources have been made available.

Establishment of a space information and training centre

The establishment is recommended of a space information and training centre under the Office to assist trainers and educators, in particular those from countries where space-related education infrastructure is poor or non-existent (see para. 143).

Road map

A two-phased approach is proposed. In the first phase (2018–2020), a temporary space information and training centre could be established that serves a limited number of countries. In 2020, there could be an evaluation to decide whether it is possible to establish a permanent space information and training centre.

D. Recommendations relating to the space diplomacy pillar

New item on space exploration and innovation to be added to the agenda of the Committee on the Peaceful Uses of Outer Space

It is recommended that a new item on space exploration and innovation be added to the agenda of the Committee to enable spacefaring and non-spacefaring nations alike to continue to discuss important issues regarding humanity's horizons in space and to

facilitate the attainment of exploration and innovation objectives (see paras. 153–155).

New item on space and global health to be added to the agenda of the Scientific and Technical Subcommittee

It is recommended that a new item on space and global health be added to the agenda of the Scientific and Technical Subcommittee under a multi-year workplan and the establishment is recommended of a new working group dedicated to the topic (see para. 95).

Road map

If the Committee decides to follow this recommendation, it could consider the new agenda items from 2019 onwards.

Establishment of an international coordination group for space weather

The establishment is recommended of an international coordination group for space weather as the basis for the international coordination mechanism required in this area (see paras. 115–119).

Road map

As of 2019, under its agenda item on space weather, the Scientific and Technical Subcommittee could consider the establishment of an international coordination mechanism on space weather under a multi-year workplan.

Enhancing the safety, security and sustainability of outer space activities

It is recommended that the safety, security and sustainability of outer space activities be enhanced, including by enhancing the protection of space assets, space systems and critical space infrastructure (see paras. 157–161).

Road map

(a) Active implementation, following UNISPACE+50, of enhancements to existing registration practices and information exchanges by the Office on the basis of existing mandates, and conduct of capacity-building activities to promote transparency and confidence-building measures;

(b) From 2019 onwards, consideration by the Committee of critical space infrastructure at the international level with a view to, among other things, studying cybersecurity issues related to space activities.

Annual convening of the High-level Forum: Space as a Driver for Socioeconomic Sustainable Development

The annual convening is recommended of the High-level Forum: Space as a Driver for Socioeconomic Sustainable Development (see paras. 149–150).

Road map

Following a series of high-level forums held in preparation for UNISPACE+50, it is recommended that the High-level Forum: Space as a Driver for Socioeconomic Sustainable Development continue to be convened annually from 2018 onwards.

Strengthening the space diplomacy pillar by building upon existing partnerships in space activities and creating new ones

It is recommended to strengthen existing partnerships of the Office for Outer Space Affairs and create new ones (see para. 149).

Road map

Continuation of efforts by the Office as endorsed by the Committee at its sixtieth session (see A/72/20, para. 326), and undertaking of further efforts following UNISPACE+50.

Strengthening the global and regional presence of the Office for Outer Space Affairs

The strengthening is recommended of the global and regional presence of the Office as the gateway to space in the United Nations system (see paras. 163–165). The Office could build on the existing network of regional centres for space science and technology education, and explore how the highest diplomatic levels in New York and Geneva can be engaged in its work in space diplomacy, global governance of outer space activities and the universality of the outer space treaties with a view to creating further synergies in the space-related work of the United Nations system and enhancing the delivery of United Nations space-related services to meet the needs of Member States.

Road map

Ongoing discussions with Member States and partners, including other United Nations entities, that have put forward proposals in this context.

E. Further recommendations pertaining to the work of the Committee on the Peaceful Uses of Outer Space and the Office for Outer Space Affairs

167. To strengthen the global governance of outer space activities and to streamline and advance the mandates of the Committee, its Scientific and Technical Subcommittee, its Legal Subcommittee, and the Office, the recommendations contained in paragraph 45 (a) to (g) should be implemented.

168. The Office, as the gateway to space in the United Nations system and as a key player in efforts to strengthen the use of space for internationally agreed development goals, should further explore ways to report directly to the United Nations System Chief Executives Board for Coordination on space-related matters.

169. The Office, through the "Space2030" agenda, should be appropriately positioned so that it may serve as an important conduit for promoting and facilitating the use of space-based solutions in the implementation of the 2030 Agenda.

170. The overall implementation plan of the "Space2030" agenda requires the expansion of the mandate of the Office to enhance its programmatic and global reach. To implement the recommendations set out in a series of notes on the UNISPACE+50 thematic priorities[32] and summarized in the present note, the Office's human and financial resources will have to be increased both from the regular budget and through voluntary cash contributions, and the Office's structural and administrative set-up will have to be addressed.

171. Such measures will better enable the Office to assist States in using space for sustainable development, to strengthen its role in disaster management and emergency response operations, to reinforce its capacity-building, outreach and awareness-raising efforts, including integrated legal and technical assistance, and to boost its efforts to increase engagement in activities that support developing countries in gaining broad access to space.

[32] See A/AC.105/C.1/114, 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.

VI. The way forward

172. The “Space2030” agenda establishes a vision for sustainable long-term development. It highlights the pivotal role the space sector plays in the efficient functioning and socioeconomic development of modern societies and underscores the valuable contribution made by space science and technology and their applications, and space-derived data and information, to sustainable development.

173. As such, the “Space2030” agenda is a stepping stone towards a vision for space beyond the landmark year 2030, when the global community will be assessing the progress made under the 2030 Agenda, the Sendai Framework for Disaster Risk Reduction and the Paris Agreement.

174. At present, the long-term development of our planet, its people and their prosperity is linked to the fourth industrial revolution, which is characterized by the fusion of new technologies and new business models and which will continue to both impact outer space activities and benefit from them.

175. It is therefore important to sustain efforts undertaken at the national, regional, and international levels to foster international cooperation in the peaceful uses of outer space and thus to ensure the continuous growth and diversification of space activities, and to do so within the framework of the Committee, supported by the Office, as the main international platform for facilitating that cooperation.

176. The “Space2030” agenda and its strategic objectives are aimed at sustaining and advancing those efforts and thus to ensure a better future for all by supporting and stimulating action across the five areas of critical importance identified in the 2030 Agenda: people, planet, prosperity, peace and partnerships.

177. In building a long-term vision for space beyond 2030, the Committee should evaluate the implementation of the “Space2030” agenda in 2025 and report to the General Assembly.

178. It is proposed that the General Assembly declare 2025 the international year of space to ensure that the broad societal benefits of space as an area of innovation, inspiration, interconnectedness, integration and investment are carried on beyond the landmark year 2030 towards a future embodying an inclusive global vision for space exploration, innovation and inspiration based on strengthened international cooperation and governance of outer space activities.