

Pursuant to the Information Circular (OSSA/2024/66) dated December 23, 2024, requesting Member States' submissions for the mid-term review of the Space2030 Agenda, please find enclosed Canada's response covering activities from approximately 2020 to the present, in alignment with the UNGA Resolution 76/3.

Canada reiterates its ongoing commitment to the objectives and priorities of the Space2030 Agenda and this submission reflects activities with a particular focus on strengthening environmental monitoring, Earth observation, and the advancement of space technologies to promote resilient and sustainable development. Canada's commitment toward the use of Satellite Earth Observation for a sustainable future is a core component of *Canada's Strategy for Satellite Earth Observation* published in February 2022.

Looking ahead, Canada is implementing satellite projects that will further advance sustainable development objectives aligned with Agenda2030. For example, planned to be launched in 2029, the WildFireSat mission will provide near real-time wildfire data to be used in smoke and air quality forecasts to provide daily monitoring of all active wildfires in Canada from space for wildfire management (SDGs 11, 13, and 15). Additionally, Canada is advancing plans for potential future missions, including the Arctic Observing Mission (AOM), which would provide unprecedented environmental monitoring capacity across Arctic latitudes (SDGs 3, 9, 13, 15, and 17), as well as the proposed Terrestrial Snow Mass Mission (TSMM), which is a Canadian-led satellite concept that would provide the first continuous global monitoring of snow-stored water, in the early 2030s (SDGs 2, 6, 7, and 13).

Additionally, Canada remains committed to its continued engagement in international forums such as the Committee on the Peaceful Uses of Outer Space, and active participation in the International Charter: Space and Major Disasters. Canada looks forward to ongoing collaboration with United Nations Office for Outer Space Affairs and international partners to collectively advance the objectives of the Space2030 Agenda towards its final review in 2030.

In regard to Pillar 4, *space diplomacy*, Canada wishes to highlight the following:

4.1. Strengthen the role and activities of the Committee on the Peaceful Uses of Outer Space and its subcommittees, supported by the Office for Outer Space Affairs, as a unique platform for international cooperation in the exploration and use of outer space for peaceful purposes.

Canada supports the work of the Committee on the Peaceful Uses of Outer Space (COPUOS) and its Subcommittees, recognizing the role of the United Nations Office for Outer Space Affairs (UNOOSA) as a unique platform for international collaboration in space activities. Canada reiterates its support through statements, conference room papers, outreach, participation inside events and other knowledge-sharing activities and advocacy for the core role of COPUOS across multilateral forums.

To strengthen the role and activities of COPUOS and its Subcommittees, Canada advocates for increasing member State participation in the Committee, growth in ratification of the space treaties, and growing participation from international organizations. This approach reinforces UN COPUOS role and ensures that diverse perspectives are represented in space governance discussions.

Moreover, Canada actively participates in and encourages broad participation in the Committee's and Subcommittees' deliberations, working groups, events, meetings, and initiatives. This engagement is crucial for reinforcing the technical, legal, and scientific work of the Committee, especially as activities in outer space continue to evolve.

Canada also actively engages with OOSA on specific projects, including its extensive support for the of Space4Women programme and the creation of the first ever Gender Mainstreaming Toolkit for the Space Sector. Canada actively works to elevate awareness of the important work being spearheaded by OOSA through the Space4Women program and its role in advancing Goals 4 and 5 of the 2030 Agenda for Sustainable Development. This is aligned with the broader United Nations Sustainable Development Agenda that seeks to promote women's leadership and empower women economically.

4.2. Promote the implementation by States parties of the United Nations treaties on outer space, as well as the implementation of related principles and General Assembly resolutions, and encourage the Committee and its subsidiary bodies, supported by the Office for Outer Space Affairs, to continue to coordinate efforts in that regard and to complement and develop international law related to outer space, as appropriate, to respond to emerging issues.

Canada recognizes the role of the COPUOS, its Subcommittees, with support from OOSA, as having responsibility for developing governance methods related to the peaceful uses of outer space. Canada believes that the peaceful exploration of outer space begins with adherence to and the implementation of the core space treaties and relevant UNGA resolutions, and further supports the work being undertaken by the Committee and its Subcommittees to develop additional governance methods in response to emerging space issues, including implementation of the long-term sustainability guidelines. Canada actively advocates for its position in all its engagements across multilateral fora and participates in relevant working groups as appropriate.

4.3. Strengthen capacity-building and technical assistance, including that provided by the Office for Outer Space Affairs, for Member States, in particular in the field of international space law and policy.

Canada is currently engaged with OOSA in exploring opportunities to enhance collaboration in the areas of remote sensing, with a particular focus on regulatory activities. Canada was proud to participate in the first Meeting of National Focal Points on Registration and sees significant value in building international expertise and sharing of best practices as it relates to space object registration.

4.4. Enhance existing registration practices and information exchange and acknowledge the role of the Office for Outer Space Affairs in maintaining the United Nations Register of Objects Launched into Outer Space to increase transparency and improve the efficiency of the registration mechanism and the timeliness and consistency of the registration of objects, including by providing technical assistance to Member States in this regard.

Canada recognizes the responsibility of the Office in maintaining the registry of space objects launched and follows an established practice of registering its space objects with OOSA. Canada supports and participates in the discussions related to the enhancement of registration practices of space objects. Moreover, Canada supports the current work related to the Article XI initiative, the aim of which is to provide a notification mechanism to enhance transparency, improve cooperation, and enable consultations related to outer space activities.

4.5. Ensure the long-term sustainability of outer space activities and the preservation of the outer space environment for peaceful uses, including through the implementation on a voluntary basis of the adopted preamble and the guidelines for the long-term sustainability of outer space activities and the

sharing of experiences in implementing the guidelines, and address new challenges, risks and threats posed to the long-term sustainability of outer space activities.

Canada is a strong advocate for the peaceful uses of outer space, the importance of conserving the outer space environment, and the sustainability of outer space activities. Canada believes that one way to achieve this is through the implementation of the long-term sustainability guidelines and is moving to incorporate those to the greatest extent practicable into its domestic regulatory frameworks on outer space activities. Canada is actively involved in supporting the work being undertaken in the working group on long-term sustainability and believes strongly that a substantive final report from this Working Group that encompasses recommendations across the four areas within the group's mandate. This is not only to have a clear outcome from the expertise, time, and resources dedicated to this Working Group, but also to form the basis for future discussions. These recommendations should focus on addressing implementation challenges, exploring methods to improve capacity building, and identifying new challenges or emerging areas for future activities and work that may impact the long-term sustainability of outer-space activities, aligned with the mandate of this group.

4.6. Enhance the safety of outer space operations as a contribution to the long-term sustainability of outer space activities.

Canada's Conjunction Risk Assessment and Mitigation System (CRAMS) has been operational since 2011 to provide actionable insights to private and public satellite operators based on the conjunction data messages produced by the US Space Surveillance Network. Recent updates allow improved data quality and maneuver assessment, designed to stay ahead of emerging concerns including increased launch cadence and modern on-orbit propulsion technologies. Through CRAMS, Canada supports international efforts to share critical data with satellite operators worldwide to enhance safety and sustainability.

4.7. Promote international cooperation and exchange information and best practices, within the framework of the Committee, on the supervision of space activities of non-governmental entities, consistent with international law, with a view to enhancing the safety and long-term sustainability of outer space activities while facilitating the development of the space industry.

Canada participates in exchanges of information related to its domestic space policies and regulatory programs, which are developed to meet the international legal framework and strive to ensure the sustainable use of outer space resources through a careful balance that promotes the growth of the space industry. In Canada's view, it is essential to share these practices, experiences and knowledge among the space players to foster international collaboration and ensure the responsible and sustainable exploration and utilization of outer space.

4.8. Enhance, within the framework of the Committee, the exchange of information on space objects and events, as well as the discussion on the prediction and prevention of potential collisions.

Canada recognizes the pivotal role of international collaboration in addressing the challenges to the safety and sustainability of the outer space environment. As our reliance on space-based applications grows, Canada reaffirms its commitment to

work collaboratively with other States to advance space science, technology, and other solutions to address the complex issue of space debris. Space Situational Awareness remains central to Canada's approach to space sustainability, and Canada continues to operate its own space telescope in low-Earth orbit, the Near-Earth Object Surveillance Satellite or NEOSSat. In keeping with open data-sharing practices, NEOSSat's precision ephemeris, both definitive and predicted, are published on the Canadian Space Agency's Open Data Portal. This data is useful for researchers aiming to develop better models of the orbital environment around the Earth. Canada welcomes the Pact for the Future and views it as a timely initiative to strengthen international cooperation and address pressing issues related to space safety and sustainability, with COPUOS driving this work. The Pact asks member States to discuss the establishment of new frameworks for space traffic, space debris and space resources through COPUOS. We see this as an important recognition of discussions already underway within the Committee and underlines the importance of the dialogue already underway within the Long-Term Sustainability Working Group, Space Resources Activities Working Group and the broader STSC and Legal Sub-Committee (LSC) agendas.

4.9. Strengthen the coordination and interrelationship between the Committee on the Peaceful Uses of Outer Space and its subcommittees, with the assistance of the Office for Outer Space Affairs as the secretariat.

As activities in outer space and the space environment rapidly evolve, Canada believes that discussions on their legal and technical aspects must be coordinated by the Committee. Through its statements, interventions and coordination across its national delegations and implicated Departments, Canada advocates for enhanced coordination amongst the subcommittees' discussions and continues to work closely with Committee members to achieve this goal.

4.10. Encourage strengthened cooperation between the United Nations entities dealing with space, in line with the United Nations system-wide efforts to increase coherency and deliver as one, on interdisciplinary and cross-sectoral space-related matters, in order to promote international cooperation in the peaceful exploration and use of outer space and in the utilization of space science and technology for sustainable development.

Canada supports and advocates for increased synergies between the United Nations entities involved in space-related matters.

