Draft report of the Working Group on the Use of Nuclear Power Sources in Outer Space

1. In accordance with paragraph 11 of General Assembly resolution 76/76, the Scientific and Technical Subcommittee, at its 955th meeting, on 7 February 2022, reconvened its Working Group on the Use of Nuclear Power Sources in Outer Space, with Sam A. Harbison (United Kingdom of Great Britain and Northern Ireland) as Chair.

2. The Working Group continued its work under the extended multi-year workplan (A/AC.105/1240, para. 246 and annex II, para. 5) and recalled the following objectives of its multi-year workplan (A/AC.105/1138, annex II, paras. 8 and 9):

   Objective 1. Promote and facilitate the implementation of the Safety Framework for Nuclear Power Source Applications in Outer Space by:

   (a) Providing an opportunity for member States and international intergovernmental organizations considering or initiating involvement in space nuclear power source (NPS) applications to summarize and discuss their plans, progress to date and any challenges faced or foreseen in implementing the Safety Framework;

   (b) Providing an opportunity for member States and international intergovernmental organizations with experience in space NPS applications to make presentations on challenges identified under subparagraph (a) above, and on their mission-specific experiences in implementing the guidance contained in the Safety Framework.

   Objective 2. Discuss within the Working Group advances in knowledge and practices and their potential for enhancing the technical content and scope of the Principles Relevant to the Use of Nuclear Power Sources in Outer Space through presentations from member States and international intergovernmental organizations based on one or more of the following:

   (a) Their practical experience in implementing the Principles;

   (b) Their knowledge of advances in science and technology relating to space NPS;

   (c) Their knowledge of internationally accepted norms, standards and practices regarding radiation protection and nuclear safety.
3. The Working Group had before it the following documents:

(a) Draft report on the implementation of the Safety Framework for Nuclear Power Source Applications in Outer Space and recommendations for potential enhancements of the technical content and scope of the Principles Relevant to the Use of Nuclear Power Sources in Outer Space, prepared by the Working Group on the Use of Nuclear Power Sources in Outer Space (A/AC.105/C.1/L.391);

(b) Working paper entitled “Reflections on further steps to enhance the safety of nuclear power source applications in outer space”, prepared by the United Kingdom of Great Britain and Northern Ireland and the European Space Agency (A/AC.105/C.1/L.395).

4. The Working Group met both in informal and formal meetings during the fifty-ninth session of the Scientific and Technical Subcommittee to discuss the documents before it, as referred in paragraph 3 above, and recalled that during 2021 it had held three intersessional meetings online to meet the objectives of the workplan for that year and had been able to make some progress in developing a draft report to the Subcommittee on the outcome of its work under the current workplan, while also considering the possibility that the workplan might need to be extended.

5. On the basis of its deliberations during 2021, as well as at the formal and informal meetings during the current session, the Working Group agreed that more discussions and work were needed in order to complete its final report to the Subcommittee and to explore options for gathering information about advances in knowledge, practices and plans for future space nuclear power source applications. Therefore, the Working Group recommended that the current multi-year workplan be extended to 2023 as follows:

2023 Finalize the report to the Subcommittee on the outcome of the multi-year workplan and explore options for gathering information about advances in knowledge, practices and plans for future space nuclear power source applications.

6. The Working Group agreed that, should the workplan be extended, a series of intersessional meetings would be necessary. In that connection, the Working Group requested the Secretariat to facilitate the scheduling, preparation and holding of those meetings. Furthermore, the Working Group felt that it would be highly desirable to hold a meeting on the margins of the sixty-fifth session of the Committee on the Peaceful Uses of Outer Space, which was planned to be held from 1 to 10 June 2022.

7. The Working Group also agreed that the Secretariat should, under the guidance of the Chair of the Working Group, update the contents of the website of the Office for Outer Space Affairs dedicated to the work of the Working Group (www.unoosa.org/oosa/en/COPUOS/stsc/wgnps/index.html).

8. At its 4th meeting, on 16 February, the Working Group adopted the present report.