

## **General Assembly**

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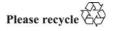
Committee on the Peaceful Uses of Outer Space Scientific and Technical Subcommittee Fifty-second session Vienna, 2-13 February 2015

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

- 1. At its 815th meeting, on 2 February 2015, the Scientific and Technical Subcommittee reconvened its Working Group on the Use of Nuclear Power Sources in Outer Space, under the chairmanship of Sam A. Harbison (United Kingdom of Great Britain and Northern Ireland).
- 2. The Working Group recalled the objectives of its multi-year workplan for the period 2010-2015, adopted by the Subcommittee at its forty-seventh session, in 2010 (A/AC.105/958, annex II, para. 7) and extended to 2017 by the Subcommittee at its fifty-first session, in 2014 (A/AC.105/1065, annex II, para. 9):
- (a) To promote and facilitate the implementation of the Safety Framework for Nuclear Power Source Applications in Outer Space by providing information pertinent to challenges faced by member States and international intergovernmental organizations, in particular those considering or initiating involvement in applications of nuclear power sources (NPS) in outer space;
- (b) To identify any technical topics for, and establish the objectives, scope and attributes of, any potential additional work by the Working Group to further enhance safety in the development and use of space NPS applications. Any such additional work would require the approval of the Subcommittee and would be developed with due consideration for relevant principles and treaties.
- 3. The Working Group noted and discussed the following papers and presentations, which were before the Subcommittee:
- (a) Paper submitted by the United Kingdom entitled "A trial set of safety recommendations to implement the guidance for governments section of the Safety Framework" (A/AC.105/C.1/L.342 and A/AC.105/C.1/2015/CRP.3);

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- (b) Presentation by the United Kingdom entitled "Space nuclear power systems: update on activities and programmes in the United Kingdom" (A/AC.105/C.1/2015/CRP.5);
- (c) Presentation by China entitled "The progress of the Chinese Lunar Exploration Program".
- 4. The Working Group, at its informal meetings, had further discussion of the presentations referred to in paragraph 3 above, including a discussion of the safety management of Chang'e-3 of China, which was successfully launched on 2 December 2013, and which used radioisotope heater units for maintaining the temperature during the lunar night.
- 5. The Working Group discussed the following potential activities to further enhance safety in the development and use of space NPS applications:
- (a) Conduct a survey among member States concerning the implementation of the Safety Framework;
- (b) Prepare a technical document, by one or more member States with experience in space NPS applications, and potentially in cooperation with the International Atomic Energy Agency, focused on the practical achievement of safety in space NPS applications;
- (c) Receive presentations from member States with experience in space NPS applications on their mission-specific experiences in implementing the guidance contained in the Safety Framework and in satisfying the intent of the Principles Relevant to the Use of Nuclear Power Sources in Outer Space.
- 6. The Working Group agreed to hold an intersessional teleconference in June 2015, in order to gather additional information to further the development of the potential activities referred to in paragraph 5 above and to facilitate the preparation of its draft report during the fifty-third session of the Subcommittee.
- 7. Some delegations were of the view that it was important for the Working Group to conduct its work on furthering the safety of space NPS bearing in mind the importance of States' supervision and registration of their national space activities, the importance of the long-term sustainability of outer space activities and the need to protect human life and environment. The delegations expressing that view were also of the view that legal aspects of the use of NPS in outer space should be considered in close cooperation between the Scientific and Technical and Legal Subcommittees.
- 8. Some delegations were of the view that it continued to be important for the Working Group to complete its work on facilitating the implementation of the Safety Framework, in accordance with the objectives of its workplan referred to in paragraph 2 above, before considering any potential expansion of work into areas covered under other agenda items of the Committee and its Subcommittees.
- 9. Some delegations were of the view that the objectives of the Working Group's multi-year workplan should be in conformity with international law, the Charter of the United Nations and the United Nations treaties and principles 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.

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- 10. The view was expressed that all member States should be involved in the decision-making and in identifying the issues and challenges associated with the application of NPS and the Safety Framework and that that would ensure the success of the implementation of the workplan. The delegation expressing that view was also of the view that all decisions of the Working Group should be subject to a strict agreement of the Subcommittee.
- 11. The Chairman of the Working Group expressed the view that care had been taken to follow the multi-year workplan and ensure transparency in all the deliberations of the Working Group, recalling that invitations had been extended to all member States and permanent observers to attend the informal deliberations of the Working Group.
- 12. The Working Group took note of the web page maintained by the Secretariat containing the technical papers and presentations, in all official languages of the United Nations, that had been provided to the Working Group since the Safety Framework was adopted by the Committee (see www.unoosa.org/oosa/en/COPUOS/stsc/wgnps/index.html).
- 13. At its [...] meeting, on [...] February 2015, the Working Group adopted the present report.

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