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**Committee on the Peaceful
Uses of Outer Space
Scientific and Technical Subcommittee
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Draft report

Addendum

VII. Near-Earth objects

1. In accordance with General Assembly resolution [79/87](#), the Scientific and Technical Subcommittee considered agenda item 9, entitled “Near-Earth objects”.
2. The representatives of Canada, China, France, Germany, Italy, Japan, Mexico, the Republic of Korea, the Russian Federation, the United Kingdom and the United States made statements under agenda item 9. A statement was made by the observer for ESA. Statements were also made by the observers for IAWN and SMPAG. During the general exchange of views, statements relating to the item were also made by representatives of other member States.
3. The Subcommittee had before it a conference room paper entitled “Status report by the International Asteroid Warning Network (IAWN) and the Space Mission Planning Advisory Group (SMPAG)” (A/AC.105/C.1/2025/CRP.6).
4. The Subcommittee heard the following scientific and technical presentations:
 - (a) “Research on monitoring and early warning system for near-Earth asteroids based on space-Earth coordination”, by the representative of China;
 - (b) “ASI activities on near-Earth objects”, by the representative of Italy;
 - (c) “Peaceful applications of space rocks: JAXA contributions to science and humanity”, by the representative of Japan.
5. The Subcommittee noted with appreciation that the General Assembly, in its resolution [79/86](#), declared 2029 to be the International Year of Asteroid Awareness and Planetary Defence, in order to take advantage of the unique occasion of the close approach of 99942 Apophis, which in 2029 would pass safely but in very close proximity to the Earth, making the asteroid visible to billions of people with the naked eye in the clear night sky.
6. The Subcommittee heard status reports by IAWN and SMPAG and noted in that regard that the asteroid designated 2024 YR4 had first been reported on 27 December 2024. The Subcommittee also noted that the three orbit computation centres of IAWN had been independently computing the impact probability for asteroid 2024 YR4, and



on 27 January 2025 the centres jointly arrived at the conclusion that the impact probability for that asteroid would exceed the 1 per cent threshold for potential impact on 22 December 2032. As at 6 February 2025, the impact probability for 22 December 2032 was calculated to be 1.9 per cent and was being updated daily as telescopic observations continued.

7. The Subcommittee noted that IAWN provided information on asteroid 2024 YR4 to SMPAG and the Office for Outer Space Affairs in a notification dated 29 January 2025, which was disseminated by the Office to States Members of the United Nations on 30 January 2025.

8. The Subcommittee further noted that the worldwide network of IAWN would continue to observe asteroid 2024 YR4 through early April 2025, when it would become too faint to be observable from Earth until June 2028, and that three orbit computation centres of IAWN would continue to update the impact probability on their public websites.

9. The Subcommittee noted efforts and activities at the national, regional and international levels aimed at developing capabilities for the discovery, observation, early warning and mitigation of potentially hazardous near-Earth objects, and the importance of further development of ground-based and space-based telescopic assets.

10. The Subcommittee noted the launch of the Hera mission of ESA in October 2024, which was planned to encounter the Didymos asteroid system in 2026 with a view to providing a valuable assessment of the deflection technique used in the NASA Double Asteroid Redirection Test (DART) mission, which had been the first planetary defence technology demonstration mission to alter the motion of a natural celestial body.

11. The Subcommittee noted that there were currently 61 signatories to the IAWN Statement of Intent, representing independent astronomers, observatories and space institutions from over 28 countries, and that the signatories to the Statement of Intent recognized the importance of collaborative data analysis and of being adequately prepared for communications with a variety of audiences about near-Earth objects, their close approaches to the Earth and Earth impact risks.

12. The Subcommittee noted that SMPAG currently had 19 members and 7 permanent observers, and that the Indian Space Research Organisation and the Spanish Space Agency had indicated their interest in joining. In that regard, the Subcommittee noted that States and their space agencies and offices that were not yet members of SMPAG and were interested in contributing to its work were invited to express such interest in a letter to the Chair of SMPAG, with a copy to the Office for Outer Space Affairs as the permanent secretariat of SMPAG.

13. The Subcommittee noted that in preparation for the ninth IAA Planetary Defense Conference, to be held in Stellenbosch, South Africa, from 5 to 9 May 2025, IAWN and SMPAG had been working on a hypothetical asteroid impact scenario to test their capabilities and that more information on the work of IAWN and SMPAG was available on their websites (<http://iawn.net> and <http://smpag.net>).