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

Addendum

X. International Heliophysical Year 2007

1. In accordance with General Assembly resolution 62/217, the Scientific and Technical Subcommittee considered agenda item 13, "International Heliophysical Year 2007", under the three-year workplan adopted at its forty-second session (A/AC.105/848, annex I).
2. The representatives of Brazil, Indonesia, Japan, Malaysia, the Russian Federation, the United States and Ukraine made statements on the item.
3. The Subcommittee heard the following scientific and technical presentation on the item: "IHY 2007 update", by the representative of the United States on behalf of the secretariat of the International Heliophysical Year.
4. The Subcommittee had before it the following:
 - (a) Note by the Secretariat on reports on national and regional activities related to the International Heliophysical Year 2007 (A/AC.105/C.1/L.294);
 - (b) Information on the continued deployment of worldwide instrument arrays and reports on national and regional activities for the International Heliophysical Year 2007 (A/AC.105/C.1/2008/CRP.6).
5. The Subcommittee noted with satisfaction that the International Heliophysical Year, which had been celebrated worldwide in 2007 and had marked the fiftieth anniversary of the International Geophysical Year of 1957, was an international programme of scientific collaboration to understand the Sun and its influence on the space environment and planets, and was, as such, of great interest to Member States.



6. The Subcommittee also noted with satisfaction that, building on results obtained during International Geophysical Year 1957, the International Heliophysical Year 2007 had expanded to include the study of universal processes in the solar system that affected interplanetary and space environmental conditions and their evolution, which would pave the way for safe human space travel to the Moon and planets in the future and would serve to inspire the next generation of space physicists.

7. The Subcommittee noted that the objectives of the International Heliophysical Year 2007 were:

(a) To provide benchmark measurements of the response of the magnetosphere, the ionosphere, the lower atmosphere and the Earth's surface in order to identify global processes and drivers that affected the terrestrial environment and climate;

(b) To further the global study of the Sun-heliosphere system outwards to the heliopause in order to understand the external and historical drivers of geophysical change;

(c) To foster international scientific cooperation in the study of current and future heliophysical phenomena;

(d) To communicate the unique scientific results of the International Heliophysical Year to interested members of the scientific community and to the general public.

8. The Subcommittee noted with appreciation the progress made by Member States in the conduct of outreach, educational and research campaigns, and in the deployment of instrument arrays.

9. The Subcommittee also noted with appreciation that the United Nations Basic Space Science Initiative of the Office for Outer Space Affairs, in cooperation with the secretariat of the International Heliophysical Year, continued to support the deployment in countries throughout the world, in particular in developing countries, of arrays of small instruments such as magnetometers, radio antennas, Global Positioning System (GPS) receivers and all-sky cameras, to provide global measurements of heliospheric phenomena.

10. The Subcommittee noted some of the highlights of the International Heliophysical Year 2007: two summer schools, in India and the United States, to disseminate information on space science among students from around the world, with three more such schools planned for 2008; the International Heliophysical Year Latin American summer school, to be held in Brazil in February 2008; the International Heliophysical Year European heliophysics school, hosted by the International Centre for Theoretical Physics, to be held in Italy in October 2008; and the International Heliophysical Year Asia-Pacific summer school, to be held in China in November 2008; the release of a documentary film on the eclipse trip to India, entitled "The path to totality", by the secretariat of the International Heliophysical Year; a symposium in the Russian Federation to commemorate the fiftieth anniversary of space flight; National Science Week, held in Thailand with the participation of more than 300,000 students; and the International Heliophysical Year-Africa Space Weather Science and Education Workshop, held in Addis Ababa

in November 2007, with participants from 28 African and European countries and the United States.

11. The Subcommittee noted that the third United Nations/National Aeronautics and Space Administration Workshop on Basic Space Science and the International Heliophysical Year 2007 had been held in Tokyo in June 2007, and that two more such workshops were planned for 2008 and 2009, to be hosted by Bulgaria and the Republic of Korea respectively.

12. The Subcommittee further noted that the International School of Young Astronomers had been held in Malaysia in May 2007, with an emphasis on solar physics, in collaboration with the International Astronomical Union, and that as a continuation of the International School of Young Astronomers programme, Malaysia would host a workshop on space-based ultraviolet-optical astronomy in June 2008, in cooperation with COSPAR.

13. The Subcommittee noted that the National Institute of Aeronautics and Space of Indonesia was conducting research on solar physics and the Sun-Earth relationship, and that Indonesia had established cooperation with other countries, including Japan, on geomagnetic observation (the Magnetic Data Acquisition System project) and solar physics.

14. The Subcommittee also noted that most Member States had made progress in space weather programmes as part of a global partnership, with the aim of predicting space weather and its impact on the Earth system.

15. The Subcommittee agreed that the International Heliophysical Year 2007 would be discussed as a single agenda item at its forty-sixth session, in 2009, and that Member States should continue to report to the Subcommittee on their activities related to the International Heliophysical Year.

XI. Examination of the physical nature and technical attributes of the geostationary orbit and its utilization and applications, including in the field of space communications, as well as other questions relating to developments in space communications, taking particular account of the needs and interests of developing countries

16. In accordance with General Assembly resolution 62/217, the Scientific and Technical Subcommittee considered agenda item 14, "Examination of the physical nature and technical attributes of the geostationary orbit and its utilization and applications, including in the field of space communications, as well as other questions relating to developments in space communications, taking particular account of the needs and interests of developing countries", as a single issue/item for discussion.

17. The representatives of Colombia, Ecuador, Greece, Indonesia, Iran (Islamic Republic of) and Venezuela (Bolivarian Republic of) made statements on the item.

18. The Subcommittee heard the scientific and technical presentation entitled “World Radiocommunication Conference 2007: outcome related to space services”, given by the observer for ITU.

19. Some delegations reiterated the view that the geostationary orbit was a limited natural resource, which ran the risk of becoming saturated. Those delegations were of the view that the exploitation of the geostationary orbit should be rationalized and made available to all countries, irrespective of their current technical capabilities, thus giving them the opportunity to have access to the geostationary orbit under equitable conditions, taking into account in particular the needs of developing countries and the geographical position of certain countries, with the participation and cooperation of ITU. Those delegations therefore considered that the item on the geostationary orbit should remain on the agenda of the Subcommittee for further discussion, with the purpose of continuing to analyse its technical and scientific characteristics.

20. The view was expressed that the Subcommittee should refrain from the examination of the physical nature and technical attributes of the geostationary orbit and its utilization and applications in the field of space communications since ITU was the only organization with the mandate to assign radio frequencies and associated orbit positions.

21. The view was expressed that a study of the history of occupancy of the geostationary orbit using GEO Occupancy Analyser Tool (GOAT) illustrated the need to review the current mechanisms for the use of that scarce resource. That delegation called for the pursuit of a more equitable and rational utilization of the geostationary orbit.

22. The view was expressed that the Committee on the Peaceful Uses of Outer Space, which had the required competency, should pay greater attention to the technical, political and legal aspects of access to and use of the geostationary orbit with a view to establishing an international regime applicable to the geostationary orbit, with due regard to the interests and needs of developing countries. That delegation expressed concern that overall utilization of the geostationary orbit fell within industrialized countries and noted that the Subcommittee should make regular assessments of developments in that area.

23. The view was expressed that equitable access by all nations to spectrum resources within the geostationary orbit was severely threatened by commercial operators that, under the protection of a number of Governments, over-exploited a limited strategic resource.

XII. Draft provisional agenda for the forty-sixth session of the Scientific and Technical Subcommittee

24. In accordance with General Assembly resolution 62/217, the Scientific and Technical Subcommittee considered proposals for a draft provisional agenda for its forty-sixth session, to be submitted to the Committee on the Peaceful Uses of Outer Space. Pursuant to paragraph 11 of that resolution, the Subcommittee requested the Working Group of the Whole, reconvened at its [...]th meeting, on [...] February, to

consider the draft provisional agenda for the forty-sixth session of the Subcommittee.

25. At its 695th meeting, on 21 February, the Subcommittee endorsed the recommendations of the Working Group of the Whole concerning the draft provisional agenda for the forty-sixth session of the Subcommittee, contained in the report of the Working Group of the Whole (see annex I to the present report).

26. The Subcommittee noted that the Secretariat had scheduled the forty-sixth session of the Subcommittee to be held from 9 to 20 February 2009.
