

General Assembly

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Committee on the Peaceful Uses of Outer Space Scientific and Technical Subcommittee Forty-first session Vienna, 16-27 February 2004

Draft report of the Scientific and Technical Subcommittee on its forty-first session, held in Vienna from 16 to 24 February 2004

Addendum

III. Implementation of the recommendations of the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III)

- 1. In accordance with General Assembly resolution 58/89, the Scientific and Technical Subcommittee continued its consideration of item 6, on implementation of the recommendations of UNISPACE III. Pursuant to paragraph 19 of Assembly resolution 58/89, the Subcommittee requested the Working Group of the Whole, established at the 603rd meeting of the Subcommittee, on 18 February, to consider the issue.
- 2. At its [...] meeting, on [...] February, the Subcommittee endorsed the recommendations of the Working Group of the Whole concerning implementation of the recommendations of UNISPACE III, as contained in the report of the Working Group (see annex [...]).
- 3. The representatives of Austria, Canada, China, France, Greece, India, Iran (Islamic Republic of), Italy, Japan, Malaysia, Mexico, Portugal, the United Kingdom and [...] made statements under the item.
- 4. The Subcommittee heard a presentation by the observer for the European Space Agency (ESA) on "TIGER initiative: water resources management in Africa".
- 5. The Subcommittee had the following documents before it for consideration:

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- (a) International cooperation in the peaceful uses of outer space: activities of Member States (A/AC.105/816 and Add.1 and A/AC.105/C.1/2004/CRP.4 and Add.1);
- (b) International cooperation in the peaceful uses of outer space: activities of international organizations that have contributed to implementing the recommendations of the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (A/AC.105/819 and A/AC.105/C.1/2004/CRP.5);
- (c) Draft report of the Committee on the Peaceful Uses of Outer Space on the implementation of the recommendations of UNISPACE III: chapters I-IV and annexes I-IV (A/AC.105/C.1/L.272 and Adds.1-4 and A/AC.105/C.1/2004/CRP.17);
- (d) Summary of the findings, recommendations and actions taken by the Action Team on Public Health (A/AC.105/C.1/2004/CRP.6);
- (e) Draft report on the implementation of the recommendations of the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III): comments received from member States of the Committee on the Peaceful Uses of Outer Space and United Nations entities (A/AC.105/C.1/2004/CRP.9 and Add1);
- (f) Correlation between the recommendations of the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III) and actions called for in the United Nations Millennium Declaration, the Plan of Implementation of the World Summit on Sustainable development and the Plan of Action of the World Summit on the Information Society (first phase) (A/AC.105/C.1/2004/CRP.10);
- (g) Results of the survey on the level of priority to be given to the recommendations of the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III) that are still to be addressed (A/AC.105/C.1/2004/CRP.11);
- (h) Summary of findings, recommendations and actions taken by the Action Team on Increasing Awareness (A/AC.105/C.1/2004/CRP.15).
- 6. The Subcommittee noted with appreciation the efforts made by the chairpersons and members of the 12 action teams established by the Committee on the Peaceful Uses of Outer Space at its forty-fourth session and by the Scientific and Technical Subcommittee at its fortieth session, in making progress in the implementation of the recommendations of UNISPACE III for which they were responsible.
- 7. The Subcommittee noted with appreciation that the following action teams had submitted their final reports:

	Recommendation ^a	Chair(s)	Orally presented to the Subcommittee	Final reports submitted
1.	Develop a comprehensive, worldwide environmental monitoring strategy	Islamic Republic of Iran, Syrian Arab Republic and Russian Federation	Islamic Republic of Iran	A/AC.105/C.1/L.275
2.	Improve the management of the Earth's natural resources	India	India	A/AC.105/C.1/2004/ CRP.12
4.	Enhance weather and climate forecasting	Portugal	Portugal	A/AC.105/C.1/L.269
7.	Implement an integrated, global system to manage natural disaster mitigation, relief and prevention efforts	Canada, China and France	Canada	A/AC.105/C.1/L.273
10.	Improve universal access to and compatibility of space-based navigation and positioning systems	Italy and United States of America	Italy	A/AC.105/C.1/L.274
11.	Promote sustainable development by applying the results of space research ^b	Nigeria		A/AC.105/C.1/L.264
17.	Enhance capacity-building by developing human and budgetary resources	Japan	Japan	A/AC.105/C.1/2004/ CRP.13
18.	Increase awareness among decision makers and the general public of the importance of space activities	Austria and United States of America	Austria	A/AC.105/C.1/2004/ CRP.14
32.	Identify new and innovative sources of financing to support the implementation of the recommendations of UNISPACE III ^b	France		A/AC.105/L.246

^a The recommendations are numbered in the order of their appearance in the resolution entitled "The Space Millennium: Vienna Declaration on Space and Human Development," which contains the full text of each recommendation (see *Report of the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space, Vienna, 19-30 July 1999* (United Nations publication, Sales No. E.00.I.3), chap. I, resolution 1).

^b The Action Team on Sustainable Development and the Action Team on Innovative Sources of Financing presented their final reports to the fortieth session of the Subcommittee and forty-sixth session of the Committee on the Peaceful Uses of Outer Space, in 2003.

A. The Subcommittee noted with satisfaction that the Action Team on Knowledge-sharing (recommendation 9) and the Action Team on Near-Earth Objects (recommendation 14) had reported to the Subcommittee on their progress and the work they had conducted thus far. The interim report of the Action Team on Near-Earth Objects was made available to the Subcommittee in document A/AC.105/C.1/2004/CRP.30.

- 9. The Subcommittee noted with appreciation the contributions that entities of the United Nations system as well as intergovernmental and non-governmental organizations that had permanent observer status with the Committee, had made to the work of the action teams.
- 10. The Subcommittee agreed that the assessment of the status of the implementation of the recommendations of UNISPACE III should be both objective and pragmatic and that the ways to carry forward the recommendations of UNISPACE III should be based on clear and realistic criteria, as well as capacity to implement the recommendations.
- 11. The Subcommittee agreed that the work of the action teams should be followed up by defining and implementing action plans with specific goals, means and tasks.
- 12. The Subcommittee noted that the recommendations of UNISPACE III continued to be implemented by Member States through both national programmes and bilateral cooperation, as well as international cooperation and integration facilitated by the Committee on the Peaceful Uses of Outer Space and its Subcommittees at the regional and international levels.
- 13. The Subcommittee noted with appreciation the reports by Member States on the promotion and organization of public outreach activities in celebration of World Space Week.
- 14. The Subcommittee agreed that Member States should strengthen their efforts to promote capacity-building, including through cooperation and coordination with the Committee and other organizations, such as the United Nations Educational, Scientific and Cultural Organization (UNESCO), the Committee on Earth Observation Satellites and the International Astronautical Federation.
- 15. The Subcommittee noted that the use of space technology to provide economic and social benefits, as well as meeting the concrete needs of developing countries, should shift from the experimental phase to the operational phase.
- 16. The Subcommittee noted that, in accordance with General Assembly resolution 58/89, the Working Group established by the Committee to prepare a report for submission to the General Assembly at its fifty-ninth session for the review of the progress made in the implementation of the recommendations of UNISPACE III had held informal consultations during the forty-first session of the Subcommittee under the chairmanship of Niklas Hedman (Sweden). Eight meetings of the informal consultations were held between 19 and 26 February 2004.
- 17. During the informal consultations, a review of the draft text for chapters I-IV and annexes I-IV was conducted for general comments. As for chapters V and VI of the draft report, it was agreed that the draft list of elements to be included in those chapters, as contained in document A/AC.105/C.1/2004/CRP.31, would provide guidelines for developing a draft text.
- 18. It was noted that, in accordance with General Assembly resolution 58/89, the next round of the informal consultations of the Working Group would be held during the forty-third session of the Legal Subcommittee. It was agreed that the informal consultations would begin on 31 March 2004, to begin a paragraph-by-paragraph review of the entire text of the draft report. It was noted that any further

comments received from States members of the Committee on the Peaceful Uses of Outer Space by 8 March 2004 would be taken into account in the draft report to be made available for the next round of the informal consultations.

X. Solar-terrestrial physics

- 19. In accordance with General Assembly resolution 58/89, the Scientific and Technical Subcommittee considered a single issue/item for discussion on solar-terrestrial physics.
- 20. The representatives of Canada, China, Cuba, France, India, Japan and the United States of America made statements under the item.
- 21. The Subcommittee heard the following scientific and technical presentations on the subject of solar-terrestrial physics:
 - (a) "The Sun-Earth plasma environment", by the representative of Austria;
- (b) "CORONAS-F: contribution to solar-terrestrial physics", by the representative of the Russian Federation;
- (c) "The scientific importance and socio-economic efficiency in the implementation of programmes on solar-terrestrial physics", by the representative of the Russian Federation;
- (d) "International Living with a Star (ILWS)", by the representative of the United States;
- (e) "European view on International Living with a Star", by the observer of ESA;
- (f) "Report of the Task Force on Radio Astronomy and the Radio Spectrum", by the observer of the Organisation for Economic Cooperation and Development.
- 22. The Subcommittee agreed that solar-terrestrial physics was important in exploring the solar corona and understanding the functioning of the Sun; understanding the effects that the variability in the Sun can have on the Earth's magnetosphere, environment and climate; exploring the ionized environments of planets; and reaching the limits of the heliosphere and understanding its interaction with interstellar space. The Subcommittee also agreed that as society became increasingly dependent on space-based systems, it was vital to understand how space weather, caused by solar variability, could affect, among other things, space systems and human space flight, electric power transmission, high-frequency radiocommunications, Global Navigation Satellite System signals and long-range radar, as well as the well-being of passengers in high altitude aircraft.
- 23. The Subcommittee noted that severe magnetic storms, resulting from coronal mass ejections, had caused failures of many geostationary orbit communication satellites, radio blackouts and power outages on Earth. The Subcommittee agreed that the ability to predict space weather accurately could assist in preventing or minimizing impacts of severe magnetic storms on space-based services and systems and on ground power systems.

- 24. The Subcommittee noted that several scientific missions had been undertaken by space agencies to study the interactions between the Sun and the Earth. These included the Cluster mission, the Double Star mission, the Enhanced Polar Outflow Probe (ePOP), the Solar and Heliospheric Observatory (SOHO) and the Yohkoh mission.
- 25. The Subcommittee agreed that international cooperation in research and development activities in the field of solar-terrestrial physics was important to all countries, particularly developing countries, owing to the high cost of such activities.
- 26. The Subcommittee noted that the International Living with a Star (ILWS) initiative was a collaborative programme in solar-terrestrial physics that had been undertaken to stimulate, strengthen and coordinate space research to understand the governing processes of the connected Sun-Earth system as an integrated entity. ILWS was comprised of an international fleet of more than a dozen international space missions acquiring data on the behaviour of that system by observing the Sun and its variability and measuring conditions in interplanetary space. The Subcommittee also noted that new space missions were under development to contribute to ILWS in the coming decade. These included the CORONAS-PHOTON project, the Picard micro-satellite mission, the Solar-B satellite and the Solar Probe, among others.

XI. Draft provisional agenda for the forty-second session of the Scientific and Technical Subcommittee

- 27. In accordance with General Assembly resolution 58/89, the Scientific and Technical Subcommittee considered proposals for a draft provisional agenda for its forty-second session to be submitted to the Committee on the Peaceful Uses of Outer Space. Pursuant to paragraph 19 of that resolution, the Subcommittee requested the Working Group of the Whole, established at its [...] meeting, on [...] February, to consider the draft provisional agenda for the forty-second session of the Subcommittee.
- 28. At its [...] meeting, on [...] February, the Subcommittee endorsed the recommendations of the Working Group of the Whole concerning the draft provisional agenda for the forty-second session of the Subcommittee, as contained in the report of the Working Group of the Whole (see annex [...] to the present report).
- 29. The Subcommittee noted that the Secretariat had scheduled the forty-second session of the Subcommittee to be held from 21 February to 4 March 2005.

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