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THIRD UNITED NATIONS CONFERENCE ON THE EXPLORATION AND PEACEFUL USES OF OUTER SPACE

Vienna
19-30 July 1999
Agenda item 13
Activities of the Technical Forum

Report of the Technical Forum

I. Introduction

1. The General Assembly, in its resolution 52/56 of 10 December 1997, agreed to convene the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III) at the United Nations Office at Vienna from 19 to 30 July 1999. Many countries came to realize that UNISPACE III would serve as an ideal forum to construct a practical, well-defined framework within which global society could maximize the benefits of space science and technology through international cooperation in space activities in the years ahead. UNISPACE III attracted the participation of high-level government officials and policy makers from Member States, including heads of space agencies, as well as representatives of intergovernmental and non-governmental organizations. The Conference was also attended by senior executives of space-related industry.

II. Programme

2. The Technical Forum was an integral part of UNISPACE III. It consisted of 38 seminars, workshops, symposia, scientific and technical forums, round tables and panel discussions. Its purpose was to examine in detail various issues of space science, technology and law related to the six substantive items on the agenda of the Conference. Each of the items was covered by several activities at the Technical Forum. Immediately following the completion of each activity, all conclusions and proposals that emanated from it were summarized and submitted to the relevant committee of UNISPACE III for consideration by Member States. Those conclusions and proposals made a significant contribution to the final report of the Conference.

3. The individual activities of the Technical Forum were prepared not only by Member States and national and international space agencies, but also by renowned scientific and technical organizations, such as the Committee on Space Research (COSPAR), the International Academy of Astronautics (IAA), the International Astronautical Federation (IAF), the International Astronomical Union (IAU), the International Institute of Space Law (IISL) and many others.

4. In addition to the Technical Forum, from 18 to 23 July 1999 UNISPACE III hosted an exhibition highlighting global achievements in space technology and future developments. One hundred exhibitors from all over the world took part in the event.

5. A national technical presentation session and an industry presentation session were also organized during the Conference. The technical presentation session consisted of 15 presentations made by representatives of Argentina, Bolivia, China (2 presentations), Germany, Hungary, Italy, the Republic of Korea, the Russian Federation, Spain (2 presentations), the Syrian Arab Republic, the United Nations Food and Agriculture Organization, the International Telecommunication Union and the International Telecommunications Satellite Organization.

6. The industry presentation session included presentations, reports and demonstrations of products and services made by representatives of the General Organization of Remote Sensing (Syrian Arab Republic), Boeing (United States of America), the Mitsubishi Electric Corporation and the Toshiba Corporation (Japan), the Khrunichev Space Centre and KBTM (Russian Federation), Brazsat (Brazil), GeoVille GmbH and GeoSpace GmbH (Austria), Iridium Telecommunications (Germany) and DAIS (Argentina).

7. Former students of the International Space University (ISU) organized the Space Generation Forum (see A/CONF.184/L.14), aimed at giving university students and young professionals a platform to express their creative vision for the future of space in the context of the themes being discussed at UNISPACE III.

III. Proceedings of the Technical Forum

8. The Technical Forum was headed by its Chairman, Peter Jankowitsch (Austria).

9. The activities of the Technical Forum were structured according to the substantive agenda items of the Conference.

10. The first group of activities dealt with the status of the scientific knowledge of Earth and its environment (agenda item 7). Its main components were the Scientific Forum on Climate Variability and Global Change, prepared by the National Aeronautics and Space Administration of the United States of America; the International Forum on the Integrated Global Observing Strategy, prepared by the IGOS Partnership; the Workshop “Blue Planet, Green Planet”, prepared by the Centre national d’études spatiales (CNES) of France; and the Workshop on Meteorological Satellite Systems, prepared by the European Organization for the Exploitation of Meteorological Satellites on behalf of the Coordination Group for Meteorological Satellites. Each meeting examined the current status of knowledge in those areas and identified ways and means of enhancing cooperation.

11. The second group of Technical Forum activities explored the status and applications of space science and technology (agenda item 8). To date, the most promising field of applications derived from advanced methods of remote sensing of the Earth. It was covered, for example, by the Workshop on Resource Mapping from Space, coordinated by the International Society for Photogrammetry and Remote Sensing (ISPRS), and by the Workshop on Disaster Management and the Workshop on Remote Sensing for the Detection, Monitoring and Mitigation of Natural Disasters, both organized by the European Space Agency (ESA) and ISPRS. Applications of space remote sensing technology in agriculture, infrastructure, environment and decision-making had become a prerequisite in support of the sustainable development of global society. Ways of using space technology, in particular satellite communications, for global health, tele-medicine and education were also examined in this segment of the Technical Forum.

12. The benefits of basic space science and capacity-building (agenda item 9) was another subject examined by the Technical Forum. Recent progress and future plans for further exploration of the solar system, in particular of Mars, as well as the study of near-Earth asteroids and comets, which might pose a risk to Earth in the future, were discussed. In that connection, the issues of how to avoid the contamination of near-Earth space resulting from human activity and

how to preserve a clear sky for astronomical research were also addressed. Meetings to consider those issues were organized by COSPAR, IAA, IAU and the Planetary Society.

13. Another important group of issues was related to information needs and the global approach (agenda item 10) and economic and societal benefits of space technology applications (agenda item 11). In the workshop organized by the Canada Centre for Remote Sensing, the emerging convergence of wireless communications, Earth remote sensing observation and geographic information systems were explored. The Canadian Space Agency prepared a two-session Workshop on Developing Indigenous Earth Observation Industrial Capabilities in Developing Countries. The emphasis was on capacity-building and on developing the necessary strategic partnership between government and industry. The Workshop produced a report on the options available to those countries and suggested courses of action to assist them in developing indigenous, self-sustaining Earth observation capabilities.

14. The Workshop on Small Satellites at the Service of Developing Countries produced important guidelines for near-term involvement of the United Nations in that promising area. Perspectives in the use of clean and inexhaustible solar power in space, discussed under the guidance of IAF experts, might exercise substantial influence on global society in the next millennium.

15. The promotion of international cooperation (agenda item 12) was considered as a central topic throughout the Technical Forum. The Office for Outer Space Affairs, in cooperation with the American Institute of Aeronautics and Astronautics, CNES, ESA, the Indian Space Research Organization, IAF, ISU and many others prepared a series of high-level discussion panels and forums involving the heads of space agencies, senior executives of the space industry, and academics to discuss the theme of the Conference, “Space Benefits for Humanity in the Twenty-first Century”. In addition, the presentation of the results of the deliberations of several preparatory meetings and a four-day Workshop on Space Law in the Twenty-first Century, prepared by IISL, also fell into that important category.

IV. Conclusions

16. The recommendations made by the seminars, workshops, symposia, scientific and technical forums, round tables and panel discussions of the Technical Forum at UNISPACE III appear in documents before Committee I (A/CONF.184/C.1/L.1-L.20) and Committee II (A/CONF.184/C.2/L.1-L.12).

17. The Chairman of the Technical Forum presented its report to the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space.