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Committee on the Peaceful

Uses of Outer Space

Scientific and Technical Subcommittee

Thirty-seventh session

Vienna, 7-18 February 2000

Draft report of the Scientific and Technical Subcommittee on the work of its thirty-seventh session

I. Introduction

1. The Scientific and Technical Subcommittee of the Committee on the Peaceful Uses of Outer Space held its thirty-seventh session at the United Nations Office at Vienna from 7 to 18 February 2000 under the chairmanship of Dietrich Rex (Germany).
2. Representatives of the following Member States attended the session: Argentina, Australia, Austria, Brazil, Bulgaria, Canada, Chile, China, Colombia, Cuba, Czech Republic, Ecuador, Egypt, France, Germany, Greece, Hungary, India, Indonesia, Iran (Islamic Republic of), Iraq, Italy, Japan, Kazakhstan, Kenya, Lebanon, Mexico, Morocco, Netherlands, Nigeria, Pakistan, Philippines, Poland, Portugal, Republic of Korea, Romania, Russian Federation, South Africa, Spain, Sweden, Syrian Arab Republic, Turkey, Ukraine, United Kingdom of Great Britain and Northern Ireland, United States of America, Uruguay and Venezuela [...].
3. Representatives of the following specialized agencies and other organizations in the United Nations system attended the session: United Nations Educational, Scientific and Cultural Organization (UNESCO), International Telecommunication Union (ITU), World Meteorological Organization (WMO) and International Atomic Energy Agency (IAEA) [...].
4. The session was also attended by representatives of the European Space Agency (ESA), the International Mobile Satellite Organization (IMSO), the Committee on Space Research (COSPAR), the International Astronautical Federation (IAF), the International Astronomical Union (IAU), the International Society for Photogrammetry and Remote Sensing (ISPRS) and the International Space University (ISU) [...].

5. A list of the representatives of Member States, specialized agencies and other international organizations attending the session is contained in document A/AC.105/C.1/INF/29.
6. On 7 February 2000, the Subcommittee adopted the following agenda:
 1. Adoption of the agenda.
 2. Statement by the Chairman.
 3. General exchange of views and introduction to reports submitted on national activities.
 4. The United Nations Programme on Space Applications and the coordination of space activities within the United Nations system following the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III).
 5. Matters relating to remote sensing of the Earth by satellites, including applications for developing countries and monitoring of the Earth's environment.
 6. Use of nuclear power sources in outer space.
 7. International cooperation in human spaceflight.
 8. Presentations on new launch systems and ventures.
 9. Space debris.
 10. Examination of the physical nature and technical attributes of the geostationary orbit and of its utilization and applications, including, *inter alia*, 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.
 11. Draft provisional agenda for the thirty-eighth session of the Scientific and Technical Subcommittee.
 12. Report to the Committee on the Peaceful Uses of Outer Space.

A. Meetings and documentation

7. The Subcommittee held [...] meetings.
8. A list of the documents that were before the Subcommittee is provided in annex I to the present report.
9. At the 525th and 526th [...] meetings, the Chairman informed the Subcommittee that requests had been received from the permanent representatives of Bolivia, Costa Rica, Finland, Georgia, Guatemala, Malaysia, Peru, Saudi Arabia, Slovakia, Sri Lanka, Switzerland and Tunisia [...] to attend the session. Following past practice, they were invited to send delegations to attend the current session of the Subcommittee and to address it as appropriate, without prejudice to further requests of that nature; that action did not involve any decision of the Subcommittee concerning status but was a courtesy that the Subcommittee extended to those delegations.
10. General statements were made by the following delegations: Argentina, Austria, Brazil, Canada, China, Colombia, Czech Republic, Egypt, France, Germany, Greece,

Hungary, India, Indonesia, Iran (Islamic Republic of), Italy, Japan, Morocco, Pakistan, Republic of Korea, Romania, Russian Federation, Saudi Arabia, Spain, Sudan, United Kingdom and United States. General statements were also made by the representatives of IAF, IAU, ISPRS and ISU.

11. During the general exchange of views, some delegations expressed the view that it would be desirable to expand the membership of the Committee on the Peaceful Uses of Outer Space. The Subcommittee noted that that matter should be considered by the Committee itself.

12. At the 526th meeting, the Director of the Office for Outer Space Affairs of the Secretariat made a statement reviewing the work programme of the Office. At the 527th meeting, the Expert on Space Applications made a statement outlining the activities carried out and planned under the United Nations Programme on Space Applications.

B. Technical presentations

13. In accordance with General Assembly resolution 54/67 of 6 December 1999, a symposium on the theme “Space commercialization: an era of new opportunities and challenges” was organized by COSPAR and IAF. The first part of the symposium, entitled “Overview of space commercialization”, was held on 7 February 2000 and was chaired by K. Doetsch, representing IAF. The second part of the symposium, entitled “Commercialization of space exploration”, was held on 8 February 2000 and was chaired by J. Andersen, representing COSPAR.

14. The presentations to the symposium included the following: “Overview of space commercialization”, by L. Rains of Space News; “Towards a European global navigation system”, by A. Steciw of ESA; “Commercial aspects of remote sensing”, by D. El Hadani of the Royal Centre for Remote Sensing of Morocco; “Personal mobile satellite communication systems”, by A. Fuller of IMSO; “The Integrated Global Observing Strategy: commercial opportunities”, by R. Landis of WMO; “Commercialization of space exploration”, by K. Doetsch of ISU; “Clear radio skies”, by J. Cohen of the Jodrell Bank Observatory; “Commercialization of the International Space Station: SPACEHAB”, by B. Harris of SPACEHAB; and “Benefits to space applications of low-cost access to space”, by Wei Sun of the Surrey Space Centre.

15. In accordance with General Assembly resolution 54/68 of 6 December 1999, a symposium entitled “Interactive Multimedia Satellite Services: Implications for the Twenty-first Century” was held on 9 February 2000 to strengthen the partnership of the Subcommittee with industry. The symposium was moderated by B. Mahone of the Aerospace Industries Association.

16. The presentations to the symposium included the following: “New skies, new opportunities: satellite communication opportunities for Member States arising from the creation of New Skies Satellites”, by A. Faiola of New Skies Satellites Ltd.; “Trends in multimedia applications of space technology”, by B. Mahone of the Aerospace Industries Association; “Satellite multimedia services in the Asia-Pacific region”, by Ki-Jin Boo of Korea Telecom; “Space-based multimedia communications systems”, by Y. Zubarev of the State Science and Research Institute of Radio of the Russian Federation; “SkyBridge: multimedia satellites”, by P. Spencer of SkyBridge; and “Multimedia satellite services”, by L. Shope-Mafole (South Africa).

17. Pursuant to General Assembly resolution 54/67, technical presentations were made by the following representatives on the issue of space debris and the solutions currently being adopted in that area at the national and international levels: F. Alby (France); V. Agapov (Russian Federation); M. Yakovlev (Russian Federation); N. Johnson (United States); W. Flury, in his capacity as representative of ESA; and W. Flury, in his capacity as representative of the Inter-Agency Space Debris Coordination Committee (IADC) [...].

18. During the thirty-seventh session of the Subcommittee, scientific and technical presentations were made by M. Nair (India) on the Geosynchronous Satellite Launch Vehicle (GSLV), the new launch vehicle of the Indian Space Research Organization (ISRO); by I. Glazkova (Russian Federation) on the creation of a European environmental monitoring service; by E. Motornyi (Russian Federation) on the Angara launcher family, a status report; by V. Oraevsky (Russian Federation) on the application of small satellites for monitoring of natural and technogenic disasters; by S. Pulinets (Russian Federation) on remote sensing techniques for registration of short-term precursors of disastrous earthquakes from on-board space platforms and the possible Earth-space system for their global monitoring; by S. Harbison (United Kingdom) on the United Kingdom position on technical processes and technical standards relevant to nuclear power sources in space; by K. Clark (United States) on the International Space Station; by J. Wheeler (United States) on safety processes and standards for United States space and terrestrial nuclear power systems; by B. Mahone (United States) on new United States launch ventures; by A. Gonzalez of IAEA on the use of nuclear power sources; by J. Andersen of IAU on international coordination of research on near-Earth objects; by M. Oehm (Germany) on new launch systems and ventures; by M. Doubovik (France) on STARSEM, a Euro-Russian venture on space transportation; and by K. Snook of the Youth Advisory Council on the Youth Advisory Council [...].

C. Recommendations of the Scientific and Technical Subcommittee

19. After considering the various items before it, the Subcommittee, at its [...]th meeting, on 18 February 2000, adopted its report to the Committee on the Peaceful Uses of Outer Space, containing its views and recommendations as set out in the paragraphs below.
