

Report of the Committee on the Peaceful Uses of Outer Space

General Assembly Official Records Fifty-fifth Session Supplement No. 20 (A/55/20)

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Note

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Contents

Chapter			Paragraphs	Page
I.	Intro	oduction	1-18	1
	A.	Meetings of subsidiary bodies	2-3	1
	B.	Adoption of the agenda	4	1
	C.	Membership	5	1
	D.	Attendance	6-10	1
	E.	Bureaux of the Committee and its subcommittees	11-12	2
	F.	General statements	13-17	2
	G.	Adoption of the report of the Committee	18	3
II.	Recommendations and decisions		19-199	3
	A.	Ways and means of maintaining outer space for peaceful purposes	19-28	3
	B.	Report of the Scientific and Technical Subcommittee on its thirty-seventh session	29-119	4
		 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) 	32-66	4
		Implementation of the recommendations of the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III)	67-87	9
		3. Matters relating to remote sensing of the Earth by satellites, including applications for developing countries and monitoring of the Earth's environment	88-94	11
		4. Use of nuclear power sources in outer space	95-99	12
		5. International cooperation in human spaceflight	100-101	12
		6. Presentations on new launch systems and ventures	102-103	13
		7. Space debris	104-110	13
		8. Examination of the physical nature and technical attributes of the geostationary orbit and of its utilization and applications, including, <i>inter alia</i> , 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	111	13
		9. Draft provisional agenda for the thirty-eighth session of the Scientific and Technical Subcommittee	112-119	14

	C.	Report of the Legal Subcommittee on its thirty-ninth session				
		1. Status of the international treaties governing the uses of outer space	121-123	15		
		2. Information on the activities of international organizations relating to space law	124-126	16		
		3. Matters relating to the definition and delimitation of outer space and to the character and utilization of the geostationary orbit, including consideration of ways and means to ensure the rational and equitable use of the geostationary orbit without prejudice to the role of the International Telecommunication Union	127-135	16		
		4. Review and possible revision of the Principles Relevant to the Use of Nuclear Power Sources in Outer Space	136-139	17		
		5. Review of the status of the five international legal instruments governing	140-146	17		
		outer space	140-140	18		
			147-133	10		
		7. Draft provisional agenda for the fortieth session of the Legal Subcommittee	154-167	18		
	D.	Spin-off benefits of space technology: review of current status	168-178	20		
	E.	Other matters	179-197	21		
		1. Membership of the Committee	179-191	21		
		2. Organization of a colloquium on the theme "The human dimension in space science and technology applications"	192	22		
		3. New agenda item of the Committee	193-195	22		
		4. Medium-term plan	196	22		
		5. Fifty-first International Astronautical Congress	197	22		
	F.	Schedule of work of the Committee and its subsidiary bodies	198-199	22		
Annex						
	Programme budget implications of the decision adopted by the Committee at its forty-third session to endorse and recommend implementation of the plan of action proposed by the					
		ice for Outer Space Affairs to implement the recommendations of UNISPACE III		24		

Chapter I Introduction

1. The Committee on the Peaceful Uses of Outer Space held its forty-third session at the United Nations Office at Vienna from 7 to 16 June 2000. The officers of the Committee were as follows:

Chairman:

Raimundo González (Chile)

First Vice-Chairman:

Driss El Hadani (Morocco)

Second Vice-Chairman/Rapporteur: Harijono Djojodihardjo (Indonesia)

The unedited verbatim transcripts of the meetings of the Committee are contained in documents COPUOS/T.462-475.

A. Meetings of subsidiary bodies

- 2. The Scientific and Technical Subcommittee of the Committee on the Peaceful Uses of Outer Space had 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). The report of the Subcommittee was before the Committee (A/AC.105/736).
- 3. The Legal Subcommittee of the Committee on the Peaceful Uses of Outer Space had held its thirty-ninth session at the United Nations Office at Vienna from 27 March to 6 April 2000 under the chairmanship of Vladimír Kopal (Czech Republic). The report of the Subcommittee was before the Committee (A/AC.105/738). The unedited verbatim transcripts of the meetings of the Subcommittee are contained in documents COPUOS/Legal/T.622-638.

B. Adoption of the agenda

- 4. At its opening meeting, the Committee adopted the following agenda:
 - 1. Adoption of the agenda.
 - 2. Election of officers.
 - 3. Statement by the Chairman.

- 4. General exchange of views.
- 5. Ways and means of maintaining outer space for peaceful purposes.
- 6. Report of the Scientific and Technical Subcommittee on its thirty-seventh session.
- 7. Report of the Legal Subcommittee on its thirtyninth session.
- Spin-off benefits of space technology: review of current status.
- 9. Other matters.
- 10. Report of the Committee to the General Assembly.

C. Membership

In accordance with General Assembly resolu-5. tions 1472 A (XIV) of 12 December 1959, 1721 E (XVI) of 20 December 1961, 3182 (XXVIII) of 18 December 1973, 32/196 B of 20 December 1977, 35/16 of 3 November 1980 and 49/33 of 9 December 1994 and decision 45/315 of 11 December 1990, the Committee on the Peaceful Uses of Outer Space was composed of the following Member States: Albania, Argentina, Australia, Austria, Belgium, Benin, Brazil, Bulgaria, Burkina Faso, Cameroon, Canada, Chad, Chile, China, Colombia, Cuba, ¹ Czech Republic, Ecuador, Egypt, France, Germany, Greece, Hungary, India, Indonesia, Iran (Islamic Republic of), Iraq, Italy, Japan, Kazakhstan, Kenya, Lebanon, Mexico, Mongolia, Morocco, Netherlands, Nicaragua, Niger, Nigeria, Pakistan, Philippines, Poland, Portugal, Republic of Korea,1 Romania, Russian Federation, Senegal, Sierra Leone, South Africa, Spain, Sudan, Sweden, Syrian Arab Republic, Turkey, Ukraine, United Kingdom of Great Britain and Northern Ireland, United States of America, Uruguay, Venezuela, Viet Nam and Yugoslavia.

D. Attendance

6. Representatives of the following States members of the Committee attended the session: Argentina, Australia, Austria, Belgium, Brazil, Bulgaria, Burkina Faso, 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, Turkey, Ukraine, United Kingdom, United States, Uruguay, Venezuela and Viet Nam.

- 7. At its 462nd, 463rd and 467th meetings, the Committee decided to invite, at their request, the representatives of Algeria, Belarus, Bolivia, Costa Rica, Guatemala, the Holy See, Malaysia, Peru, Saudi Arabia, Slovakia, Switzerland and Yemen to attend its forty-third session and to address it, as appropriate, on the understanding that it would be without prejudice to further requests of that nature and that it would not involve any decision of the Committee concerning status.
- 8. Representatives of the International Atomic Energy Agency (IAEA) attended the session.
- 9. The session was also attended by representatives of the European Space Agency (ESA), the International Mobile Satellite Organization (IMSO), the International Organization of Space Communications (INTERSPUTNIK), the International Academy of Astronautics (IAA), the International Astronautical Federation (IAF), the International Law Association (ILA), the International Society for Photogrammetry and Remote Sensing (ISPRS) and the International Space University (ISU).
- 10. A list of representatives of States members of the Committee, States not members of the Committee, specialized agencies and other organizations attending the session is contained in document A/AC.105/XLIII/INF/1.

E. Bureaux of the Committee and its subcommittees

11. The Committee recalled that, at its fortieth session, held from 2 to 10 June 1997, it had reached an agreement on the composition of the bureaux of the Committee and its subsidiary bodies, agenda structures and duration of sessions. In accordance with that agreement, the Committee, at its forty-third session, elected Raimundo González (Chile) as its Chairman for the second three-year term, from 2000 to 2002. The Committee also elected Driss El Hadani (Morocco) as First Vice-Chairman of the Committee and Harijono Djojodihardjo (Indonesia) as Second Vice-Chairman/Rapporteur of the Committee.

12. The Committee agreed that Vladimír Kopal (Czech Republic) should be elected Chairman of the Legal Subcommittee and Karl Doetsch (Canada) should be elected Chairman of the Scientific and Technical Subcommittee for the second three-year term of those offices, from 2001 to 2003.

F. General statements

- 13. Statements were made by representatives of the following delegations during the general exchange of views: Argentina, Austria, Brazil, Canada, Chile, China Colombia, Ecuador, France, Germany, Greece, India, Indonesia, Iran (Islamic Republic of), Iraq, Italy, Japan, Morocco, Nigeria, Pakistan, Republic of Korea, Romania, Russian Federation, Spain, Sweden, Turkey and United States. The representatives of Guatemala (on behalf of the Group of Latin American and Caribbean States), Peru and Slovakia also made statements. Statements were also made by representatives of ESA, IAF, ILA and ISPRS.
- 14. At the 462nd meeting, a statement was read on behalf of the outgoing Chairman of the Committee, U. R. Rao (India).
- 15. At the 462nd meeting, the Director of the Office for Outer Space Affairs made a statement reviewing the work of the Office during the previous year and the documentation before the Committee.
- 16. At the 464th meeting, a special presentation was made by the representative of IAA on the IAA position paper entitled "A decision process for examining the possibility of sending communications to extraterrestrial civilizations". The Committee, on the basis of the presentation, agreed that the Office for Outer Space Affairs should retain a copy of the position paper on file for review.
- 17. The Committee acknowledged the important contributions made to its work by U. R. Rao, the outgoing Chairman of the Committee, Dietrich Rex, the outgoing Chairman of the Scientific and Technical Subcommittee, N. Jasentuliyana, former Director of the Office for Outer Space Affairs, and A. Abiodun, former Expert on Space Applications.

G. Adoption of the report of the Committee

18. After considering the various items before it, the Committee, at its 475th meeting, on 16 June 2000, adopted its report to the General Assembly containing the recommendations and decisions set out below.

Chapter II

Recommendations and decisions

A. Ways and means of maintaining outer space for peaceful purposes

- 19. In accordance with paragraph 29 of General Assembly resolution 54/67 of 6 December 1999, the Committee on the Peaceful Uses of Outer Space continued its consideration, as a matter of priority, of ways and means of maintaining outer space for peaceful purposes.
- The Committee was of the view that the General Assembly, by requesting in resolution 54/67 that the Committee continue its consideration, as a matter of priority, of ways and means of maintaining outer space for peaceful purposes and report thereon to the Assembly at its fifty-fifth session, had expressed the concern of the international community about the need to promote international cooperation in the peaceful uses of outer space, taking into particular account the needs of developing countries. The Committee, through its work in the scientific, technical and legal fields, had an important role to play in ensuring that outer space was maintained for peaceful purposes. It was the firm belief of the members of the Committee that current efforts to strengthen the role of the Committee in maintaining outer space for peaceful purposes should be continued. The Committee had responsibilities relating to strengthening the international basis for the peaceful exploration and uses of outer space, which could cover, among other things, the further development of international space law, including, as appropriate, the preparation of international agreements governing various practical peaceful applications of space science and technology. Strengthening international cooperation in the peaceful exploration and use of outer space also implied the need for the Committee itself to improve, wherever necessary, the methods and forms of its work.

- 21. Some delegations expressed the view that activities involving international cooperation, such as collaborative space missions, joint scientific activities, sharing of satellite data, training activities and piggyback launch opportunities, should be further encouraged to enable outer space to be explored and used for peaceful purposes.
- 22. The view was expressed that easy and unhindered access to space and access to technology without restraints were essential to pursuing the peaceful uses of outer space. That delegation also expressed the view that the Committee could contribute to maintaining outer space for peaceful purposes by strengthening national legislation of Member States, encouraging dialogue to harmonize conflicting interests, promoting international cooperative projects in space technology and applications and encouraging confidence-building measures to ensure the use of space exclusively for peaceful purposes.
- 23. Some delegations expressed the view that the development and testing of weapon systems in outer space and the recent use of space systems for military purposes could lead to the intensification of militarization in outer space and trigger an arms race in outer space, which were against the tide of the time and the established principles guiding the peaceful use of outer space, as contained in the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (General Assembly resolution 2222 (XXI), annex), and the maintenance of world peace and security.
- Some delegations expressed the view that an international legal regime should be developed for the prevention of an arms race in outer space and to prohibit any militarization of outer space, and that negotiations on an international agreement to prevent an arms race in outer space should be conducted as soon as possible. Those delegations also expressed the view that the existing legal regime was insufficient, especially under present-day conditions, and that additional principles were needed to ensure that outer space was kept free of weaponry. Some delegations also expressed the view that the Committee should consider the possibility of establishing a mechanism to coordinate its work with other related bodies, in particular with the Conference on Disarmament, since the two bodies shared common interests in promoting the peaceful uses of outer space and preventing an arms race in outer space.

- 25. Some delegations expressed the view that the Committee had been created exclusively to address international cooperation in the peaceful uses of outer space and that it would be more appropriate to deal with disarmament aspects of outer space in the Conference on Disarmament and the First Committee of the General Assembly.
- The view was expressed that the agenda item entitled "Ways and means of maintaining outer space for peaceful purposes" had produced measurable results in the Committee and its subsidiary bodies, namely, the establishment in the Scientific and Technical Subcommittee of the Working Group of the Whole to Evaluate the Implementation of the Recommendations of the Second United Nations Conference on the Exploration and Peaceful Uses of Outer Space; the addition of new items to the agenda of that Subcommittee; the impetus for completing negotiations on the Principles Relating to Remote Sensing of the Earth from Outer Space (General Assembly resolution 41/65, annex) and on the Declaration on International Cooperation in the Exploration and Use of Outer Space for the Benefit and in the Interest of All States, Taking into Particular Account the Needs of Developing Countries (General Assembly resolution 51/122, annex); and the addition of an agenda item of the Committee on spin-off benefits of space exploration.
- 27. The view was expressed that the idea put forward earlier of establishing a world space organization responsible for space activities, including satellite communications and the space environment, should be further considered.
- 28. The Committee recommended that, at its forty-fourth session, in 2001, it should continue its consideration, on a priority basis, of the item on ways and means of maintaining outer space for peaceful purposes.

B. Report of the Scientific and Technical Subcommittee on its thirty-seventh session

- 29. The Committee took note with appreciation of the report of the Scientific and Technical Subcommittee on its thirty-seventh session (A/AC.105/736), covering the results of its deliberations on the items assigned to it by the General Assembly in resolution 54/67.
- 30. At the 466th meeting, a special presentation was made on disaster management activities of the Committee on Earth Observation Satellites (CEOS).

- 31. At the 470th meeting, a special presentation was made, entitled "Report of the Integrated Global Observing Strategy (IGOS) partnership".
 - 1. 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)

(a) United Nations Programme on Space Applications

- 32. At the outset of the deliberations of the Committee on the item, the Expert on Space Applications briefed the Committee on the overall strategy for the implementation of the United Nations Programme on Space Applications, which would concentrate on a few themes of major importance for developing countries and establish objectives that could be reached in the short and medium term. The objectives would be reached through activities of the Programme that would build on the results of other activities. The Committee noted that, within each priority theme, the two main objectives would be (a) capacity-building and (b) building awareness among decision makers in order to strengthen local support for the operational use of space technologies.
- 33. The Committee noted that the priority themes of the Programme were: (a) disaster management; (b) satellite communications for tele-education and telemedicine applications; (c) monitoring and protection of the environment, including the prevention of infectious diseases; (d) management of natural resources; and (e) education and research areas in basic space sciences. Other areas that the Programme would promote included developing capability in enabling technologies, such as the use of global navigation and positioning satellite systems, spin-offs of space technology, including commercialization aspects, applications of small satellites and micro-satellites and promoting the participation of private industry in activities of the Programme.
- 34. The Committee took note of the activities of the Programme carried out in 1999 as set out in the report of the Scientific and Technical Subcommittee (A/AC.105/736, paras. 42-47). The Committee expressed its appreciation to the Expert on Space Applications for the manner in which he had implemented the activities of the Programme within the limited funds at his disposal and expressed its appreciation to the Governments and

intergovernmental and non-governmental organizations that had sponsored the activities. The Committee was pleased to note that further progress was being made in the implementation of the activities of the Programme for 2000, as set out in the report of the Subcommittee (A/AC.105/736, paras. 48-50).

- (i) United Nations conferences, training courses and workshops
- 35. With regard to the United Nations conferences, training courses and workshops organized in the first half of 2000, the Committee expressed its appreciation to the Government of Sweden, represented by the Swedish International Development Cooperation Agency, Stockholm University and the Swedish Space Corporation Group for co-sponsoring the Tenth United Nations/Sweden International Training Course on Remote Sensing Education for Educators, held in Stockholm and Kiruna, Sweden, from 2 May to 9 June 2000.
- 36. The Committee endorsed the following workshops, training courses, symposia and conferences planned for the remaining part of 2000, based on the programme of activities described in the report of the Expert on Space Applications (A/AC.105/730, annex II):
- (a) Ninth United Nations/European Space Agency Workshop on Basic Space Science: Satellites and Network of Telescopes—Tools for Global Participation in the Study of the Universe, to be held in Toulouse, France, from 27 to 30 June 2000:
- (b) United Nations/Austria Symposium on Enhancing the Participation of Youth in Space Activities, to be held in Graz, Austria, from 11 to 14 September 2000;
- (c) United Nations/International Astronautical Federation Workshop on Operational Strategy for Sustainable Development Using Space, to be co-sponsored by ESA and the Centre national d'études spatiales (CNES) of France and to be held in São José dos Campos, Brazil, from 28 to 30 September 2000;
- (d) United Nations/International Academy of Astronautics Workshop on Small Satellites in Latin America, to be held during the fifty-first Congress of the International Astronautical Federation in Rio de Janeiro, Brazil, in October 2000;
- (e) United Nations/European Space Agency/ Committee on Space Research Workshop on Data Analysis Techniques, to be held in Bangalore, India, from 9 to 13 October 2000;

- (f) United Nations/European Space Agency Workshop on the Use of Space Technology in Disaster Management, to be held in La Serena, Chile, from 13 to 16 November 2000;
- (g) United Nations Workshop on Global Navigation Satellite System Applications, to be held in Kuala Lumpur from 13 to 17 November 2000;
- (h) The following courses and workshops to be organized in the year 2000 at the regional centres for space science and technology education, affiliated to the United Nations:
 - (i) In India, the following postgraduate training courses:
 - a. Training Course on Satellite Meteorology and Global Climate, to be held from 1 July 2000 to 31 March 2001;
 - b. Training Course on Space and Atmospheric Science, to be held from 1 August 2000 to 30 April 2001;
 - c. Training Course on Remote Sensing and Geographic Information Systems (GIS), to be held from 1 October 2000 to 30 June 2001:
 - d. International Training Course on Remote Sensing and GIS Technology and Applications in Natural Resources and Environmental Management, to be held from 28 August to 22 September 2000;
 - e. Short Course on Application of Satellite Communications for Development, to be held from 17 to 21 July 2000;
 - (ii) In Morocco the following postgraduate training courses and workshops:
 - a. Training Course on Remote Sensing and GIS, a nine-month course beginning on 17 April 2000;
 - b. Workshop on Space Telecommunications, to be held in October 2000;
 - c. Training Course on Space Telecommunications, a nine-month course beginning in October 2000:
 - (iii) In Nigeria, the Training Course on Remote Sensing and GIS, a nine-month course beginning on 15 June 2000.

- 37. The Committee endorsed the following programme of workshops, training courses, symposia and conferences planned for 2001:
- (a) Eleventh United Nations/Sweden International Training Course on Remote Sensing Education for Educators, to be held in Stockholm and Kiruna, Sweden;
- (b) United Nations/European Space Agency Workshop on Remote Sensing for Environmental Monitoring and Natural Resource Management, to be held in Prague in July 2001;
- (c) United Nations/International Astronautical Federation Workshop on the Use of Space Technology for the Benefit of Developing Countries, to be held in Toulouse, France;
- (d) Tenth United Nations/European Space Agency Workshop on Basic Space Science, for developing countries in Africa, to be held in Mauritius;
- (e) The Second United Nations/Austria Symposium on Enhancing the Participation of Youth in Space Activities, to be held in Graz, Austria;
- (f) United Nations/European Space Agency/ Committee on Space Research Workshop on Data Analysis Techniques, to be held in Damascus;
- (g) Several workshops to be organized at the regional centres for space science and technology education, affiliated to the United Nations.
- 38. The Committee noted with appreciation financial contributions of \$22,000 from the Government of Austria and \$110,000 from ESA to implement the activities of the Programme.
- 39. The Committee noted with appreciation the provision, by host countries and entities, of experts to serve as instructors and speakers in activities of the United Nations Programme on Space Applications. It also noted the financial and other assistance that had been provided for the Programme by the Ministry of Science and Technology and the Ministry of Agriculture of China, ESA, CNES, Station 12 of the Netherlands, the International Institute for Aerospace Survey and Earth Sciences (ITC), the National Aerospace Laboratory (NLR) of the Netherlands, the Centro Espacial de Canarias of the National Institute for Aerospace Technology (INTA) of Spain; the Ministry of Foreign Affairs of Spain; and the Department of Physical Geography of Stockholm University and the Swedish Space Cooperation Group.

- (ii) Long-term fellowships for in-depth training
- 40. The Committee expressed its appreciation to ESA for having offered three fellowships for research in remote sensing technology at the European Space Research Institute facilities in Frascati, Italy.
- 41. The Committee expressed its appreciation to the Government of China for its decision to continue to provide two one-year fellowships to developing countries, through the Office for Outer Space Affairs, in the field of remote sensing.
- 42. The Committee noted that it was important to increase the opportunities for in-depth education in all areas of space science, technology and applications projects through long-term fellowships and urged Member States to make such opportunities available at their relevant institutions.

(iii) Short-term fellowships

43. The Committee noted with appreciation that the Government of China, through the China National Space Administration, had offered eight fellowships for the Training Course on Asia-Pacific Multilateral Cooperation in Space Technology and Applications and that the fellowships were being administered jointly through the United Nations Programme on Space Applications and the Environment and Natural Resources Management Division of the Economic and Social Commission for Asia and the Pacific (ESCAP). The Course, to be held from 22 July to 20 August 2000 in Harbin, Xian and Beijing, would deal with small satellite technology.

(iv) Technical advisory services

- 44. The Committee noted that the Programme had provided technical advisory services in support of projects involving regional space applications, as indicated in the report of the Expert on Space Applications (A/AC.105/730, paras. 19-26), including the following:
- (a) Collaboration with ESA on follow-up activities in Africa, Asia and the Pacific, Latin America and the Caribbean and western Asia relating to the series of workshops on basic space science;
- (b) Providing assistance to support the growth and operation of the Asia-Pacific Satellite Communications Council (APSCC), as well as technical assistance in the preparations for the APSCC 2000 Conference and

Exhibition, entitled "New Vision for Satellite Communications in the 21st Century";

- (c) Presenting the results of UNISPACE III at the second Ministerial Conference on Space Applications for Sustainable Development in Asia and the Pacific, organized by ESCAP, hosted by the Government of India and held in New Delhi from 15 to 20 November 1999;
- (d) Presenting the results of UNISPACE III to the thirteenth plenary meeting of CEOS, held in Stockholm from 10 to 12 November 1999, and offering to support CEOS activities in the year 2000;
- (e) Assisting ESA in providing the Water Research Institute in Accra with computers and software to strengthen the indigenous capability in using remote sensing and GIS data in various environmental and water resource applications in Ghana;
- (f) Collaborating with ESA and the Department of Economic and Social Affairs of the Secretariat in providing the necessary technical assistance and expertise required for initiating a project on the use of Earth observation data for monitoring glaciers and snow cover in Latin America in 1999, a project for watershed management in Asia and the Pacific in 2000 and a project in Africa on the use of satellite data to locate and plan the management of humid areas in 2000;
- (g) Providing assistance to the United Nations International Drug Control Programme (UNDCP) as it develops, in partnership with ESA, a methodology for the use of satellite images to monitor illicit crop cultivation.
 - (v) Promotion of greater cooperation in space science and technology
- 45. The Committee noted that the United Nations Programme on Space Applications had co-sponsored the participation of scientists from developing countries in the United Nations/IAF Workshop on Space, held in Enschede, the Netherlands, from 30 September to 3 October 1999, and the participation of those scientists in the fiftieth Congress of IAF, held from 4 to 8 October 1999.
- 46. The Committee noted that the United Nations Programme on Space Applications had collaborated with the Bulgarian Academy of Sciences on the national coordinators' meeting on the operation and functioning of the Network of Space Science and Technology Education and Research Institutions for Central Eastern and South-Eastern Europe, held in Sofia from 21 to 22 October 1999.

- 47. The Committee noted with appreciation that ESA would cover the cost of providing the United Nations Programme on Space Applications with a yearly quota of data sets from the European Remote Sensing Satellite (ERS), to be distributed to research institutions in developing countries on the basis of well-defined research proposals.
- 48. The Committee noted with appreciation that ESA would assist the Office for Outer Space Affairs in the definition of a regional disaster management training module.
- 49. The Committee noted that the United Nations Programme on Space Applications would co-sponsor the participation of scientists from developing countries in the thirty-third Scientific Assembly of the Committee on Space Research, to be held in Warsaw from 16 to 23 July 2000.

(b) International space information service

- 50. The Committee noted with satisfaction that the eleventh in the series of documents containing selected papers from the activities of the Programme, entitled Seminars of the United Nations Programme on Space Applications, had been issued.³ A booklet entitled Space for Development, which contained detailed descriptions of past and ongoing activities of the United Nations Programme on Space Applications and an indication of its future activities, had been issued for UNISPACE III.
- 51. The Committee noted with satisfaction that information for Member States and the general public on the latest developments in activities carried out by the Programme, including presentations made at events organized by the Office for Outer Space Affairs, had been made available on the web site of the Office for Outer Space Affairs (http://www.oosa.unvienna.org). The schedules and objectives of the planned activities had also been made available on that web site.
- 52. The view was expressed that the Office for Outer Space Affairs should distribute a monthly or quarterly newsletter describing current or ongoing activities of the Office.

(c) Coordination of space activities within the United Nations system and inter-agency cooperation

53. The Committee continued to stress the necessity of ensuring continuous and effective consultations and coordination in the field of outer space activities among

organizations within the United Nations system and the avoidance of duplicative activities. The Committee also noted with satisfaction that the United Nations Programme on Space Applications had begun to enhance coordination efforts with regional space events such as the ESCAP Regional Space Applications Programme for Sustainable Development in Asia and the Pacific.

- 54. The Committee noted with satisfaction that the Inter-Agency Meeting on Outer Space Activities had held its twentieth session at the United Nations Office at Vienna from 2 to 4 February 2000 and that the report on its deliberations (A/AC.105/727) and the report of the Secretary-General entitled "Coordination of outer space activities within the United Nations system: programme of work for 2000 and 2001 and future years" (A/AC.105/726) were before the Committee.
- 55. The Committee noted with satisfaction that the Inter-Agency Meeting had agreed to consider at its twenty-first session, in 2001, an item entitled "Methods to strengthen further the inter-agency coordination and cooperation in space-related activities" (A/AC.105/736, annex II, para. 32).
- 56. The Committee noted that the next session of the Inter-Agency Meeting was to be held at the United Nations Office at Vienna from 22 to 24 January 2001 and that it would be hosted by the Office for Outer Space Affairs.

(d) Regional and interregional cooperation

- 57. The Committee noted with appreciation the continuing efforts undertaken through the United Nations Programme on Space Applications, pursuant to General Assembly resolution 45/72 of 11 December 1990, in leading an international effort to establish and operate regional centres for space science and technology education in existing national or regional educational institutions in developing countries. The Committee also noted that, once established, each centre could expand and become part of a network that could cover specific programme elements in established institutions related to space science and technology in each region.
- 58. The Committee recalled that the General Assembly, in its resolution 50/27 of 6 December 1995, had endorsed the recommendation of the Committee that the centres be established on the basis of affiliation to the United Nations as early as possible and that such affiliation would provide the centres with the necessary recognition and would strengthen the possibilities of attracting donors and of

- establishing academic relationships with national and international space-related institutions.
- 59. The Committee noted with satisfaction that the African Regional Centre for Space Science and Technology Education—in English Language had held its first regional workshop on remote sensing applications in Ile-Ife, Nigeria, from 10 to 14 April 2000.
- 60. The Committee noted with satisfaction that the second meeting of the Governing Board of the African Regional Centre for Space Science and Technology—in French Language had been held in Rabat on 4 April 2000. In November 1999, the Regional Centre had held a workshop on the focus of its scientific activities, which had been attended by its member countries and international organizations such as CNES and the Canadian Space Agency; it had also held its first workshop on remote sensing and GIS in Rabat from 17 to 19 2000.
- The Committee noted with satisfaction that the Centre for Space Science and Technology Education in Asia and the Pacific had held its fourth Governing Board Meeting and its first Advisory Committee Meeting in New Delhi on 6 and 7 July 1999. The number of member States of the Centre had reached 14. The Committee also noted with satisfaction that the Centre had held the following postgraduate courses and workshops: (a) the second nine-month postgraduate Course in Satellite Communications, from 1 July 1999 to 31 March 2000; (b) the postgraduate Course on Digital Image Processing, from 30 August to 24 September 1999; (c) the fourth postgraduate Course in Remote Sensing and GIS, from 1 October to 31 March 2000; (d) the Workshop on Land-Use and Land-Cover Changes in Coastal Areas, from 17 to 20 April 2000. A total of 226 persons from 33 countries in the region have attended the postgraduate courses.
- 62. The Committee noted with satisfaction that, with the assistance of the Office for Outer Space Affairs, the member States concerned in Asia and the Pacific were undertaking consultations with a view to making the Centre for Space Science and Technology Education in Asia and the Pacific grow into a network of nodes.
- 63. The Committee noted with satisfaction that the first meeting of the Governing Board of the Regional Centre for Space Science and Technology Education in Latin America and the Caribbean had been held in Brasilia on 15 October 1999, and that the headquarters agreement between the Centre and the Government of Brazil was ready to be

signed, which would allow the activities of the Centre to start.

- 64. The Committee noted with satisfaction that, following the review of a report on an evaluation mission and of offers and commitments made by interested countries, Jordan had been identified as the country that would host the Regional Centre for Space Science and Technology Education in Western Asia. The Office for Outer Space Affairs had announced the establishment and location of the Centre.
- 65. The Committee noted with satisfaction the report presented to the Scientific and Technical Subcommittee at its thirty-seventh session by the Chairman of the Steering Committee of the Network of Space Science and Technology Education and Research Institutions for Central Eastern and South-Eastern Europe on the activities of the Network in 1999. The Steering Committee had also held a special session in Vienna on 7 June 2000, during which it had discussed a proposed text of a memorandum of understanding for the Network.
- 66. The Committee emphasized the importance of regional and international cooperation in making the benefits of space technology available to all countries by such cooperative activities as sharing payloads, disseminating information on spin-off benefits, ensuring compatibility of space systems and providing access to launch capabilities at reasonable cost.

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

67. The Committee noted with satisfaction that the General Assembly, in its resolution 54/68 of 6 December 1999, had taken note with satisfaction of the report of the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III)⁴ and had endorsed the resolution entitled "The Space Millennium: Vienna Declaration on Space and Human Development".⁵ The Committee also noted that the Assembly had urged Governments, organs, organizations and programmes within the United Nations system as well as intergovernmental and non-governmental organizations and industries conducting space-related activities to take the necessary action for the effective implementation of the Vienna Declaration. The Committee further noted that the Assembly had called upon all concerned to implement the

recommendations made by UNISPACE III as reflected in its report.

- 68. The Committee noted that, in accordance with General Assembly resolution 54/67, the Scientific and Technical Subcommittee at its thirty-seventh session convened the Working Group of the Whole, under the chairmanship of Muhammad Nasim Shah (Pakistan), to consider the future work of the Subcommittee in the light of the recommendations of UNISPACE III.
- 69. The Committee noted that the Working Group of the Whole had made recommendations on the following (A/AC.105/736, annex II):
- (a) Mechanism to implement the strategy to address global challenges referred to in the Vienna Declaration:
- (b) Organization, during the session of the Scientific and Technical Subcommittee, of a symposium to strengthen the partnership of the Subcommittee with industry;
- (c) Promotion of the participation of youth in space activities and the establishment of a consultative mechanism within the Committee to facilitate the continued participation of young people in cooperative space-related activities;
- (d) Celebration of World Space Week from 4 to 10 October;
- (e) Trust Fund for the United Nations Programme on Space Applications and new and innovative funding sources to implement the recommendations of UNISPACE III;
- (f) Identification and promotion of the use of appropriate space technologies to meet the needs of programmes and organizations of the United Nations system;
- (g) Strengthening of the activities of the United Nations Programme on Space Applications.

Action taken by the Committee

70. The Committee endorsed the recommendations of the Working Group of the Whole concerning the implementation of the recommendations of UNISPACE III, as contained in its report (A/AC.105/736, annex II, paras. 3-37).

(a) Plan of action proposed by the Office for Outer Space Affairs to implement the recommendations of UNISPACE III

- 71. The Committee noted that the General Assembly, in its resolution 54/68, had requested the Secretary-General to recommend measures to ensure that the Office for Outer Space Affairs was provided with adequate resources to implement specific actions based on the recommendations of UNISPACE III. The Committee also noted that, in connection with that request, the Office for Outer Space Affairs had prepared and submitted to the Committee, for its consideration, a plan of action to implement the recommendations of UNISPACE III (A/AC.105/L.224).
- 72. The Committee endorsed the plan of action proposed by the Office for Outer Space Affairs and recommended its implementation.

(b) Working methods of the Committee for the implementation of the recommendations resulting from UNISPACE III

- 73. The Committee had before it a proposal submitted by Canada and the United States of America regarding the creation of an informal working group on the implementation of the recommendations of UNISPACE III (A/AC.105/L.226). The Committee also had before it a conference room paper (A/AC.105/2000/CRP.5) concerning an initiative undertaken under the auspices of IAF to engage non-governmental entities in the implementation of selected recommendations resulting from UNISPACE III under the theme "Priorities for space activities in the twenty-first century". The representative of IAF gave a presentation on that initiative.
- 74. The Committee held informal consultations on the working methods of the Committee for the implementation of the recommendations resulting from UNISPACE III and considered the proposal by Canada and the United States of America and the initiative undertaken under the auspices of IAF, mentioned in paragraph 73 above. The Committee had before it a conference room paper reflecting the results of the informal consultations (A/AC.105/2000/CRP.10).
- 75. The Committee agreed that its Scientific and Technical Subcommittee should be assigned the task of discussing and reaching a consensus on the implementation of the recommendations of UNISPACE III and their associated work plans and of reporting to the Committee each year the findings and recommendations of the Subcommittee to the Committee for final approval and/or

- modifications. The Committee also agreed that the Subcommittee should be charged, in the first instance, with conducting its deliberations on the matter in its Working Group of the Whole.
- The Committee agreed that an item on the implementation of the recommendations of UNISPACE III should be included in the agenda of the forty-fourth to forty-seventh sessions of the Committee, in 2001, 2002, 2003 and 2004, to consider matters concerning the implementation of the recommendations of UNISPACE III and related matters, such as the recommendations and reports of the Scientific and Technical Subcommittee, the plan of action of the Office for Outer Space Affairs for the implementation of the recommendations of UNISPACE III (A/AC.105/L.224) and the engagement of non-governmental entities. The Committee also agreed that the Committee would prepare a report under that agenda item for adoption at its fortyseventh session, in 2004, for review and evaluation by the General Assembly, on the progress made in implementing the recommendations of UNISPACE III, in accordance with Assembly resolution 54/68. The Committee further agreed that it should decide at its forty-seventh session, in 2004, whether to keep that item on its agenda. The Committee noted that it might wish to establish a working group of the whole (i.e. the full Committee temporarily operating in working group mode) during each session of the Committee for the discussion of some matters under that agenda item.
- The Committee took note of the IAF initiative and other initiatives to engage non-governmental entities in the implementation of selected recommendations of UNISPACE III. The Committee agreed that those initiatives should be reviewed by the Scientific and Technical Subcommittee at its thirty-eighth session, in 2001. The Subcommittee should report its findings and views on the modalities for the engagement of nongovernmental entities during the forty-fourth session of the Committee. International and multinational nongovernmental entities, including international scientific societies, would primarily interface with the Committee through the Office for Outer Space Affairs, which would ensure that the Committee and its Subcommittees were fully informed of the ongoing work arising from the initiatives of non-governmental entities. National organizations would continue to interface with the Committee through the delegations of their respective States.

(c) World Space Week

- 78. The Committee noted that the General Assembly, in its resolution 54/68, had declared 4-10 October World Space Week to celebrate each year at the international level the contributions of space science and technology to the betterment of the human condition.
- 79. The Committee noted with satisfaction that some Member States had already planned activities to contribute to the celebration of World Space Week. Information on the planned activities by some of those Member States has been made available to the Committee in a conference room paper (A/AC.105/2000/CRP.4).
- 80. The Committee had before it a plan to celebrate World Space Week (A/AC.105/2000/CRP.3 and Add.1) that the Office for Outer Space Affairs had developed with the assistance of the Spaceweek International Association in accordance with a recommendation made by the Working Group of the Whole of the Scientific and Technical Subcommittee. The Committee heard a presentation by a representative of the Spaceweek International Association on its activities to celebrate World Space Week.
- 81. The Committee agreed upon the implementation of the plan of the Office for Outer Space Affairs to celebrate World Space Week (A/AC.105/2000/CRP.3 and Add.1).
- 82. Some delegations expressed the view that the celebration of World Space Week should remain an event of the United Nations and that the United Nations should assume responsibility for celebrating the Week. The assistance of associations would be considered favourably as long as they respected the responsibilities that belonged to the United Nations. It was necessary to ensure that World Space Week would continue to be celebrated in a manner that took into account the needs of developing countries.
- 83. The view was expressed that the Office for Outer Space Affairs and the Spaceweek International Association should identify available resources to support activities in developing countries.
- 84. The view was expressed that the participation of the private sector in celebrating World Space Week should not undermine the role of the United Nations.

(d) List of priority project proposals

85. The Committee noted that the General Assembly, in its resolution 54/68, had requested the Secretary-General to invite all States to contribute voluntarily to the Trust

- Fund for the United Nations Programme on Space Applications and, in his letter of invitation, to identify priority project proposals, on the basis of the recommendations of the Committee, and had requested the Office for Outer Space Affairs to provide the Committee with a report listing those States which had responded to his invitation.
- 86. The Committee noted that the plan of action proposed by the Office for Outer Space Affairs to implement the recommendations of UNISPACE III (A/AC.105/L.224) contained a number of projects and activities that would be funded through both regular and extrabudgetary resources. The Committee had before it, for its consideration, a list of possible priority projects taken from the plan of action of the Office (A/AC.105/2000/CRP.8).
- 87. The Committee recommended that the following list of projects and activities should be included in the letter of the Secretary-General referred to in paragraph 85 above:
- (a) Support of operational activities of the regional centres for space science and technology education, affiliated to the United Nations (five at present), and the Network of Space Science and Technology Education and Research Institutions for Central Eastern and South-Eastern Europe;
- (b) Development of disaster-specific modules and implementation of pilot projects in developing countries to introduce the use of space technologies in disaster management;
- (c) Provision of satellite data and hardware and software to user institutions in developing countries to initiate or strengthen pilot projects that use Earth observation data for protecting the environment and management of natural resources;
- (d) Development and implementation of a training module on the use of satellite communications for distance education, telemedicine and telehealth applications;
- (e) Organization of outreach activities for young people and for the general public.
 - 3. Matters relating to remote sensing of the Earth by satellites, including applications for developing countries and monitoring of the Earth's environment
- 88. The Committee noted that, in accordance with General Assembly resolution 54/67, the Scientific and

Technical Subcommittee had continued its consideration of matters relating to remote sensing of the Earth by satellites.

- 89. The Committee emphasized the importance of remote sensing technology for sustainable development. In that connection, it also emphasized the importance of providing non-discriminatory access to state-of-the-art remote sensing data and to derived information at reasonable cost and in a timely manner.
- 90. The Committee noted the importance of building capacity in the adoption and use of remote sensing technology, in particular to meet the needs of developing countries.
- 91. The Committee noted the importance, in particular for developing countries, of sharing experiences and technologies, of cooperating through international and regional remote sensing centres and of working on collaborative projects.
- 92. The view was expressed that the Committee should consider practical steps towards increasing access to remote sensing data, such as obtaining free access to remote sensing imagery in order to handle natural disasters.
- 93. The view was expressed that the full benefits of remote sensing technology could reach only those countries with access to real-time data and the capability to interpret them and that most developing countries were at a disadvantage in that regard because of the high cost of real-time data. That delegation also expressed the view that regional ground receiving stations should be established in developing countries, through international cooperation.
- 94. The view was expressed that the Committee should develop a strategy for embodying in an international instrument the Principles Relating to Remote Sensing of the Earth from Outer Space (General Assembly resolution 41/65, annex).

4. Use of nuclear power sources in outer space

95. The Committee noted that, in accordance with General Assembly resolution 54/67, the Scientific and Technical Subcommittee had continued its consideration of the item relating to the use of nuclear power sources in outer space. The Committee noted that, in accordance with the four-year work plan adopted by the Subcommittee at its thirty-fifth session (A/AC.105/697 and Corr.1, annex III, appendix), the Subcommittee had identified terrestrial

processes and technical standards that might be relevant to nuclear power sources, including factors distinguishing nuclear power sources in outer space from terrestrial nuclear applications. The Committee also noted that the Subcommittee had reconvened the Working Group on the Use of Nuclear Power Sources in Outer Space. The Committee noted the discussions of the Subcommittee and its Working Group on the Use of Nuclear Power Sources in Outer Space, as reflected in the report of the Subcommittee and in the report of the Working Group (A/AC.105/736, paras. 75-83 and annex III).

- 96. The Committee recalled that the General Assembly had adopted the Principles Relevant to the Use of Nuclear Power Sources in Outer Space, contained in Assembly resolution 47/68 of 14 December 1992. While noting that the Principles provided that they should be reopened for review and revision by the Committee no later than two years after their adoption, the Committee recalled that, at its fortieth session, it had agreed that the Principles should remain in their current form until amended and that, before amendment, proper consideration should be given to the aims and objectives of the proposed revision.
- 97. The Committee agreed with the Scientific and Technical Subcommittee that, while a revision of the Principles was not necessary at the current stage, it was important that States making use of nuclear power sources should conduct their activities in full accordance with the Principles (A/AC.105/736, para. 78).
- 98. The Committee also agreed that the Subcommittee and the Working Group should continue to receive the widest input on matters affecting the use of nuclear power sources in outer space and any contribution related to improving the scope and application of the Principles.
- 99. The Committee agreed that Member States should continue to be invited to report to the Secretary-General on a regular basis with regard to national and international research concerning the safety of space objects with nuclear power sources, that further studies should be conducted on the issue of the collision of orbiting space objects with nuclear power sources on board with space debris and that the Subcommittee should be kept informed of the results of such studies.

5. International cooperation in human spaceflight

100. The Committee noted that, in accordance with General Assembly resolution 54/67, the Subcommittee had

considered international cooperation in human spaceflight as a single issue/item for discussion.

101. The Committee noted with satisfaction the wide variety of space activities and the extensive international cooperation being carried out in this area, as reflected in the report of the Subcommittee (A/AC.105/736, paras. 8488).

6. Presentations on new launch systems and ventures

102. The Committee noted that, in accordance with General Assembly resolution 54/67, the Subcommittee had heard presentations on new launch systems and ventures as a single issue/item for discussion.

103. The Committee noted with satisfaction the wide variety of space activities and the extensive international cooperation being carried out in this area, as reflected in the report of the Subcommittee (A/AC.105/736, paras. 89-93). The Committee also noted that, with the increasing involvement of the private sector in space activities, it was a timely subject for discussion.

7. Space debris

104. The Committee noted that, in accordance with General Assembly resolution 54/67, the Scientific and Technical Subcommittee had continued its consideration of the agenda item on space debris as a single issue/item for discussion, on a priority basis. The Committee also noted that, under that agenda item, the Subcommittee had reviewed international application of standards of the International Telecommunication Union (ITU) and recommendations of the Inter-Agency Space Debris Coordination Committee (IADC) concerning the disposal of satellites in geosynchronous orbit at the end of their useful life. The Committee took note of the discussion of the Subcommittee on space debris, as reflected in the report of the Subcommittee (A/AC.105/736, paras. 94-113).

105. The Committee agreed with the Scientific and Technical Subcommittee that consideration of space debris was important, that international cooperation was needed to expand appropriate and affordable strategies to minimize the potential impact of space debris on future space missions and that Member States should pay more attention to the problem of collisions of space objects, including those with nuclear power sources, with space debris and to other aspects of space debris (A/AC.105/736,

paras. 95 and 96), in accordance with General Assembly resolution 54/67.

106. The Committee noted with satisfaction that, at the invitation of the Scientific and Technical Subcommittee, a representative of IADC had made a technical presentation on the subject of space debris mitigation practices. The Committee agreed with the Scientific and Technical Subcommittee that IADC should be invited to make a technical presentation on its work on an annual basis (A/AC.105/736, para. 100).

107. The Committee expressed its encouragement of theoretical studies of the problem of removal of inactive space debris, including options for different size categories, in academic and technical forums such as IAA and IADC.

108. The Committee agreed that the Secretariat should prepare a sample index to the United Nations Register of Objects Launched into Outer Space for the thirty-eighth session of the Scientific and Technical Subcommittee.

109. The Committee agreed that the full title of document A/AC.105/720 should be *Technical Report on Space Debris (The Rex Report)*.

110. Some delegations expressed the view that the Committee should ask the Legal Subcommittee to give its views on the *Technical Report on Space Debris* and on the applicability of the current space treaties to the issues of space debris and should endorse the proposals contained in a working paper (A/AC.105/C.1/L.239) submitted by France⁶ to the Scientific and Technical Subcommittee at its thirty-seventh session. Other delegations expressed the view that it would be premature for the Legal Subcommittee to discuss legal issues relevant to space debris.

- 8. 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
- 111. The Committee noted that, in accordance with General Assembly resolution 54/67, the Subcommittee had continued its consideration of the geostationary orbit and space communications as a single issue/item for discus-

sion. The Committee took note of the discussion of the Subcommittee under this agenda item, as reflected in the report of the Subcommittee (A/AC.105/736, paras. 114-121).

9. Draft provisional agenda for the thirty-eighth session of the Scientific and Technical Subcommittee

- 112. The Committee noted that, in accordance with General Assembly resolution 54/67, the Scientific and Technical Subcommittee had endorsed the recommendations of its Working Group of the Whole, established to consider the future work of the Subcommittee in the light of the recommendations of UNISPACE III, concerning the draft provisional agenda for the thirty-eighth session of the Subcommittee (A/AC.105/736, paras. 122 and 123).
- 113. The Committee noted that the Scientific and Technical Subcommittee, in connection with the work plan entitled "Means and mechanisms for strengthening interagency cooperation and increasing the use of space applications and services within the United Nations system and among United Nations specialized agencies and bodies", had requested the Office for Outer Space Affairs to prepare a list of questions to be circulated to organizations of the United Nations system (A/AC.105/736, annex II, para. 40). The Committee noted with satisfaction that the Office for Outer Space Affairs had submitted a draft list of questions to the Committee (A/AC.105/L.223) and approved the list of questions.
- 114. The Committee endorsed the recommendation of the Scientific and Technical Subcommittee that the Committee on Space Research and IAF, in liaison with Member States, should be invited to arrange a symposium on the theme "Terrestrial hazards from outer space objects and phenomena" with as wide a participation as possible, to be held during the first week of the thirty-eighth session of the Subcommittee (A/AC.105/736, annex II, para. 44).
- 115. The Committee noted with satisfaction the recommendation of the Scientific and Technical Subcommittee that an industry symposium on emerging applications of global navigation satellite systems in improving the productivity of national and regional infrastructure, such as transportation, oil and gas networks, agriculture and telecommunications, be organized at the thirty-eighth session of the Scientific and Technical Subcommittee (A/AC.105/736, annex II, para. 12).

- 116. The Committee agreed that CEOS should be invited to make a presentation at the thirty-eighth session of the Scientific and Technical Subcommittee in connection with the work plan entitled "Implementation of an integrated, space-based global natural disaster management system". The Committee also agreed that domestic satellite operators of Member States and intergovernmental organizations involved in satellite communications should be invited to participate in the work plan.
- 117. The Committee requested the Office for Outer Space Affairs to prepare a comprehensive preparatory document for the work plan entitled "Implementation of an integrated, space-based global natural disaster management system", which could be based on data from various sources, including international seminars.
- 118. The Committee agreed that the Organisation for Economic Cooperation and Development, ITU and IAU should be invited to present the status of their work on frequency interference with radioastronomy at the thirty-eighth session of the Scientific and Technical Subcommittee.
- 119. The Committee agreed upon the following draft provisional agenda for the thirty-eighth session of the Scientific and Technical Subcommittee:
 - 1. General exchange of views and introduction to reports submitted on national activities.
 - 2. United Nations Programme on Space Applications following the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III).
 - 3. Matters relating to remote sensing of the Earth by satellite, including applications for developing countries and monitoring of the Earth's environment.
 - 4. Items to be considered under work plans:
 - (a) Use of nuclear power sources in outer space
 - (Second year of the work plan: review of national and international processes, proposals and standards and national working papers relevant to the launch and peaceful use of nuclear power sources in outer space⁷);
 - (b) Means of and mechanisms for strengthening inter-agency cooperation and increasing the use of space applications

and services within and among entities of the United Nations system

(First year of the work plan: an analysis of the current levels of usage of space applications and services within the United Nations system, including one day for presentations by appropriate United Nations entities and Member States that undertake cooperative activities with those entities; and an examination of the utility of space applications and services for increasing, with regard to space activities, the effectiveness, efficiency and coordination of the operations of United Nations entities);

(c) Implementation of an integrated, spacebased global natural disaster management system

> (First year of the work plan: review of the types of natural disasters being faced and the extent of the application of space-based services being utilized for their mitigation (Different countries are to be invited to make presentations on the subject.)).

- 5. Single issues/items for discussion:
 - (a) Space debris:
 - (i) Consistent with paragraph 370 of the report of UNISPACE III,⁸ stating that the Committee on the Peaceful Uses of Outer Space should give attention to various aspects of space debris, the Scientific and Technical Subcommittee should continue its work on the topic of space debris in 2001;
 - (ii) It is proposed that, without prejudice to the work on this topic in other forums, the Scientific and Technical Subcommittee should, in particular, examine the question of the costs and benefits of debris mitigation measures. As part of this examination, Member States could report on:
 - a. The costs of various debris mitigation measures;

- b. The consequences, including the economic aspects, of taking no debris mitigation measures;
- c. An analysis of the costs and benefits in various debris mitigation scenarios;
- (iii) For the thirty-eighth session of the Scientific and Technical Subcommittee, in 2001, the passivation and limitation of mission-related space debris for launch vehicles, including the above-named cost-benefit aspects, would be a suitable subject;
- (b) 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;
- (c) Government and private activities to promote education in space science and engineering.
- 6. Draft provisional agenda of the Scientific and Technical Subcommittee at its thirty-ninth session, in 2002, including identification of subjects to be dealt with as single issues/items for discussion or under multi-year work plans.
- 7. Report to the Committee on the Peaceful Uses of Outer Space.

C. Report of the Legal Subcommittee on its thirty-ninth session

120. The Committee took note with appreciation of the report of the Legal Subcommittee on its thirty-ninth session (A/AC.105/738), which contained the results of its deliberations on the items assigned to it by the General Assembly in resolution 54/67.

1. Status of the international treaties governing the uses of outer space

121. The Committee noted that, in accordance with General Assembly resolution 54/67, the Legal

Subcommittee had considered the status of the international treaties governing the uses of outer space as a new regular item in order to provide an opportunity for reports on any additional signature or ratification as well as the application of the outer space treaties.

- 122. The Committee noted that the Legal Subcommittee had been provided by its Chairman with a report on the current status of signatures and ratifications of the international treaties governing the use of outer space, in accordance with information provided to the Secretariat by the depositaries of those treaties.
- 123. The Committee noted that some delegations had informed the Legal Subcommittee of the current status of and further intended action concerning their accession to the five international legal instruments governing outer space. Similar information was also submitted to the Committee.

2. Information on the activities of international organizations relating to space law

- 124. The Committee noted that, in accordance with General Assembly resolution 54/67, the Legal Subcommittee had considered the item on information on the activities of international organizations relating to space law as a new regular item.
- 125. The Committee noted with satisfaction that the Legal Subcommittee had been provided with reports from various international organizations on their activities relating to space law.
- 126. The Committee endorsed the agreement by the Legal Subcommittee that the Secretariat should continue to extend invitations to relevant international organizations to report on their activities relating to space law at the fortieth session of the Subcommittee, in 2001.
 - 3. Matters relating to the definition and delimitation of outer space and to the character and utilization of the geostationary orbit, including consideration of ways and means to ensure the rational and equitable use of the geostationary orbit without prejudice to the role of the International Telecommunication Union
- 127. The Committee noted that, in accordance with General Assembly resolution 54/67, the Legal Subcommittee, through its Working Group, under the chairmanship of Héctor Raúl Pelaez (Argentina), had continued to consider as a regular item matters relating to

- the definition and delimitation of outer space and to the character and utilization of the geostationary orbit, including consideration of ways and means to ensure the rational and equitable use of the geostationary orbit without prejudice to the role of the International Telecommunication Union.
- 128. The Committee noted the work carried out by the Legal Subcommittee and the Working Group on this item, as reflected in their reports (A/AC.105/738, paras. 36-49 and annex I).
- 129. The Committee welcomed and endorsed the agreement adopted by the Legal Subcommittee on the question of the character and utilization of the geostationary orbit, as reflected in the report of the Subcommittee (A/AC.105/738, annex III).
- 130. The Committee agreed that reaching consensus within the Legal Subcommittee on the question of the character and utilization of the geostationary orbit represented a major accomplishment in the work of the Subcommittee.
- 131. The view was expressed that the recommendations relating to the question of the character and utilization of the geostationary orbit contained in the report of the Subcommittee were an important expression of the views of Member States concerning that limited natural resource, which must be used rationally. However, that delegation remained of the view that the Radio Regulations of ITU were sufficient to preserve the prerogatives of all administrations to ensure equitable access to the radio frequency spectrum and orbital position resources.
- 132. The view was expressed that in view of the special characteristics of the geostationary orbit, its utilization should be based on the principle of rational and equitable utilization for all countries, taking into account the special needs of developing countries and the geographical situation of particular countries, as also recognized by ITU. That delegation regarded the Committee on the Peaceful Uses of Outer Space as the most competent body to examine the legal aspects of the geostationary orbit, while recognizing ITU as the appropriate body to deal with the technical aspects.
- 133. The view was expressed that the agreement reached on the question of the character and utilization of the geostationary orbit reflected the fact that there was mutual recognition of the respective roles of ITU and the Committee on the Peaceful Uses of Outer Space. That delegation was of the view that coordination between the two bodies should be further enhanced to ensure that their

respective members remained informed of relevant developments in their work. In that regard, that delegation expressed the view that ITU should be invited to report to the Legal Subcommittee on the results of its recent meeting in Istanbul relating to space telecommunications.

- 134. Some delegations expressed the view that, with the agreement reached on the question of the character and utilization of the geostationary orbit, the Legal Subcommittee could concentrate its consideration of the item, in particular within its working group, on the outstanding issues relating to the definition and delimitation of outer space. The view was expressed that that might be done by attempting to draft a set of conclusions similar to those drafted with regard to the geostationary orbit.
- 135. The view was expressed that the definition and delimitation of outer space were needed to provide Member States with a legal basis for regulating their national territories, as well as for resolving issues arising from collisions that could occur between aerospace objects and aircraft.

4. Review and possible revision of the Principles Relevant to the Use of Nuclear Power Sources in Outer Space

- 136. The Committee noted that, in accordance with General Assembly resolution 54/67, the Legal Subcommittee had continued its consideration of the review and possible revision of the Principles Relevant to the Use of Nuclear Power Sources in Outer Space, adopted by the General Assembly in its resolution 47/68, as a single issue/item for discussion.
- 137. The Committee noted that an exchange of views had taken place in the Legal Subcommittee on the review and possible revision of the Principles Relevant to the Use of Nuclear Power Sources in Outer Space, as reflected in the report of the Legal Subcommittee (A/AC.105/738, paras. 50-57). It was noted that, during the thirty-ninth session of the Legal Subcommittee, some delegations had welcomed the work undertaken by the Scientific and Technical Subcommittee on an item entitled "Use of nuclear power sources in outer space" (A/AC.105/738, para. 55).
- 138. The view was expressed that, on the basis of the progress of deliberations in the Scientific and Technical Subcommittee, it would be appropriate for delegations of the Legal Subcommittee to begin informal consultations in order to develop essential points for a meaningful

discussion on the Principles Relevant to the Use of Nuclear Power Sources in Outer Space.

139. The Committee agreed that the item entitled "Review and possible revision of the Principles Relevant to the Use of Nuclear Power Sources in Outer Space" should be retained as a single issue/item for discussion at the fortieth session of the Legal Subcommittee, in 2001.

5. Review of the status of the five international legal instruments governing outer space

- 140. The Committee noted that, in accordance with General Assembly resolution 54/67, the Legal Subcommittee had continued its review of the status of the five international legal instruments governing outer space in accordance with the three-year work plan approved by the Subcommittee at its thirty-sixth session.
- 141. The Committee agreed that the review by the Legal Subcommittee of the status of the five international legal instruments governing outer space had represented a significant development in the revitalization of the work of the Subcommittee.
- 142. The view was expressed that the positive conclusions of the review had already encouraged a number of States that had not previously become parties to the United Nations treaties governing outer space to reconsider their earlier positions and to increase the number of States that had become legally bound by at least some of those instruments. That delegation was of the view that a similar appeal should be addressed to space-related international organizations that had not yet declared their acceptance of the rights and obligations as provided for in the individual treaties to consider making such declarations.
- 143. The view was reiterated that the recommendations appearing in subparagraphs 75 (a) and (c) of the report of the Legal Subcommittee (A/AC.105/738) were the most important. That delegation was also of the view that States should be called upon to seriously consider adhering to what it termed "the four core instruments".
- 144. The view was reiterated that, while States should consider making a declaration accepting the binding nature of the decisions of the Claims Commission in the event of a dispute under the provisions of the Convention on International Liability for Damage Caused by Space Objects (General Assembly resolution 2777 (XXVI), annex), that was not necessarily the best approach in view of the wide variety of legal and other mechanisms that

might be available for settling disputes related to outer space.

145. The view was expressed that some States might consider the relevance of the outer space treaties too far removed from their immediate concerns to warrant accession and that, to address the problem, symposia could be organized using the Office for Outer Space Affairs as a focal point to raise awareness and, more importantly, to provide technical advice concerning the benefits to States parties to the five international legal instruments governing outer space.

146. The Committee agreed to endorse the recommendations, prepared by the Legal Subcommittee's working group on that item, on measures to achieve the fullest adherence to the five international legal instruments governing outer space, contained in the report of the Subcommittee (A/AC.105/738, para. 75).

6. Review of the concept of the "launching State"

147. The Committee noted that, in accordance with General Assembly resolution 54/67, the Legal Subcommittee had begun its review of the concept of the "launching State" in accordance with the three-year work plan agreed upon by the Committee at its forty-second session.

148. The Committee noted that the Legal Subcommittee had, in accordance with its three-year work plan, established a working group under the chairmanship of Kai-Uwe Schrogl (Germany) to consider that item.

- 149. The Committee welcomed the progress that had been achieved through the special presentations and resulting discussions that had taken place within the Legal Subcommittee and its working group on that item.
- 150. The view was expressed that the presentations and discussions on the item had indicated a number of issues that would require analysis in greater detail during the fortieth session of the Legal Subcommittee, in 2001. That delegation was of the view that the forthcoming discussions should result in specific conclusions on measures to increase the adherence to and promote the full application of the relevant United Nations treaties governing outer space under the newly emerging conditions and practices relating to space activities.
- 151. The view was expressed that an important contribution to the deliberations on the item by the Legal Subcommittee at its fortieth session, in 2001, would be the paper to be prepared by the Secretariat setting out the key

elements of existing national legislation, illustrating how States were fulfilling their responsibilities in terms of authorizing and providing continuous supervision of nongovernmental entities in outer space.

152. The view was expressed that States parties to the international treaties governing outer space bore international responsibility for their national activities in outer space, irrespective of which agency or party conducted those activities. Therefore, that delegation was of the view that States should consider, if necessary, regulating the space activities of their various domestic agencies and non-governmental parties through domestic laws in full conformity with their international responsibilities.

153. The Committee recommended that the Legal Subcommittee continue its consideration of the item at its fortieth session, in 2001, in accordance with the programme for the second year of its three-year work plan.

7. Draft provisional agenda for the fortieth session of the Legal Subcommittee

154. The Committee noted that, in accordance with General Assembly resolution 54/67, the Legal Subcommittee had begun consideration of a new item entitled "Proposals to the Committee on the Peaceful Uses of Outer Space for new items to be considered by the Legal Subcommittee at its fortieth session", which replaced the informal consultations on new agenda items that the Subcommittee had held at previous sessions.

155. The Committee noted that a substantial exchange of views had taken place in the Legal Subcommittee on numerous proposals by Member States for new agenda items and that agreement had been reached on certain items to be proposed to the Committee for inclusion in the agenda of the fortieth session of the Subcommittee, in 2001 (A/AC.105/738, paras. 91-113).

156. The view was expressed that the fact that, despite its new agenda structure, the Legal Subcommittee had not been able to reach agreement on a single new item to be included on its agenda for its fortieth session, in 2001, was a matter of some concern.

157. The view was expressed that the issue of the international process relating to possible communication with any eventually discovered extraterrestrial civilization, as had been discussed in the context of the presentation by the representative of IAA (see para. 16 above), while not necessarily requiring immediate action, should be given

serious consideration in connection with the future work of the Committee and its Legal Subcommittee.

158. Some delegations reiterated the view that changing the title of item 4 of the agenda of the Legal Subcommittee to read "Status and application of the five United Nations treaties governing outer space", as proposed by the Subcommittee (A/AC.105/738, para. 113), would sufficiently expand the scope of the item to allow for a discussion not only of the status of all international treaties governing the use of outer space, but also of their implementation in the national legislation and practices of States and international organizations, as well as obstacles to their universal acceptance. The view was reiterated that the discussion under that agenda item could also include matters relating to the low level of participation in the Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (General Assembly resolution 34/68, annex).

159. The Committee had before it a working paper submitted by the Russian Federation (A/AC.105/L.225 and Corr.1) relating to a proposal, made by that delegation at the thirty-ninth session of the Legal Subcommittee, to include in the agenda for its fortieth session, in 2001, a new single issue/item for discussion entitled "Advisability of developing a single comprehensive United Nations convention on the law of outer space".

160. At the 470th meeting, Bulgaria, China, Colombia, Greece, the Islamic Republic of Iran and the Russian Federation submitted a working paper (A/AC.105/L.228, Add.1 and Add.2) containing a proposal for the inclusion of a new item in the agenda of the fortieth session of the Legal Subcommittee, in 2001, entitled "Discussion of the appropriateness and desirability of drafting a universal comprehensive convention on international space law".

161. Some delegations expressed the view that a discussion on the appropriateness and desirability of drafting a universal comprehensive convention on international space law, as proposed by Bulgaria, China, Colombia, Greece, the Islamic Republic of Iran and the Russian Federation, should be included as an item on the agenda of the Legal Subcommittee for its fortieth session, in 2001. While acknowledging that the drafting of such a convention could be a lengthy and complex exercise, those delegations were of the view that the preliminary discussion of the proposed item was both warranted and timely and should be initiated as soon as possible within the Legal Subcommittee, without prejudging the outcome of such a discussion.

162. Other delegations, however, reiterated their doubts concerning the need for such a convention, arguing that the existing legal regime was sufficient to govern the exploration and use of outer space. The view was also expressed that the drafting of such a convention held the potential to allow for the examination of a multitude of issues relating to activities in outer space and that, therefore, the existing proposal should be made more specific, indicating the limits of the proposed exercise.

163. Some delegations expressed their concern that consensus on the proposal could not be reached at the current session and recommended that further consultations be conducted.

164. Some delegations reiterated their support for the inclusion in the agenda of the Legal Subcommittee for its fortieth session, in 2001, of a single issue/item for discussion on the commercial aspects of space activities, as had been proposed to the Subcommittee by Argentina, in the light of new requirements arising from the rapid development of space-related ventures and technologies, as well as the growing role of non-state actors in outer space activities. Other delegations, however, reiterated the view that the scope of the item proposed by Argentina was too broad and that, therefore, the item would need to be more clearly defined before the proposal could be supported.

165. Some delegations reiterated the view that an item should be included in the agenda of the Legal Subcommittee for its fortieth session, in 2001, on the review of existing norms of international law applicable to space debris, as had been proposed by the Czech Republic and Greece. Those delegations were of the view that the completion by the Scientific and Technical Subcommittee of its technical report on space debris provided a sufficient basis for such a review of existing international legal norms. However, other delegations reiterated the view that it was premature to consider the manner in which possible legal issues relating to space debris might be addressed.

166. The Committee agreed on the inclusion of a new single issue/item for discussion in the agenda of the Legal Subcommittee for its fortieth session, in 2001, entitled "Consideration of the draft convention of the International Institute for the Unification of Private Law (Unidroit) on international interests in mobile equipment and the preliminary draft protocol thereto on matters specific to space property". The Committee also agreed that the Secretariat and Unidroit should be requested to prepare a

report on the convention and space property protocol that would provide background information for discussion of the item by the Legal Subcommittee.

167. On the basis of the proposals submitted by the Legal Subcommittee and the discussions conducted (see paras. 154-166 above), the Committee agreed on the following draft provisional agenda for the fortieth session of the Subcommittee, in 2001:

Regular items

- 1. Opening of the session, election of the Chairman and adoption of the agenda.
- 2. Statement by the Chairman.
- 3. General exchange of views.
- 4. Status and application of the five United Nations treaties on outer space.
- 5. Information on the activities of international organizations relating to space law.
- 6. Matters relating to:
 - (a) The definition and delimitation of outer space;
 - (b) The character and utilization of the geostationary orbit, including consideration of ways and means to ensure the rational and equitable use of the geostationary orbit without prejudice to the role of the International Telecommunication Union.

Single issues/items for discussion

- 7. Review and possible revision of the Principles Relevant to the Use of Nuclear Power Sources in Outer Space.
- 8. Consideration of the draft convention of the International Institute for the Unification of Private Law (Unidroit) on international interests in mobile equipment and the preliminary draft protocol thereto on matters specific to space property.

Agenda items considered under work plans

- 9. Review of the concept of the "launching State". *New items*
- Proposals to the Committee on the Peaceful Uses of Outer Space for new items to be

considered by the Legal Subcommittee at its forty-first session.

D. Spin-off benefits of space technology: review of current status

- 168. In accordance with General Assembly resolution 54/67, the Committee resumed its consideration of the item entitled "Spin-off benefits of space technology: review of current status".
- 169. At the 470th meeting, the representative of the United States made a special presentation on recent spin-offs of the United States space programme.
- 170. At the 472nd meeting, the representative of ESA made a special presentation entitled "A demonstration of the use of satellite techniques for emergency management: space technology fights forest fires in Canada this summer with REMSAT".
- 171. The publication *Spinoff 1999*, submitted by the National Aeronautics and Space Administration of the United States of America, was made available to the Committee (A/AC.105/739).
- 172. The Committee agreed that spin-offs of space technology were yielding many substantial benefits. It took note of the efforts in many countries to promote such spin-off benefits and to disseminate information on such activities to other interested countries.
- 173. The Committee noted that spin-off technologies had resulted in the development or improvement of many products and processes. In the field of human health, the Committee noted new methods for treating bone disease, derived from microgravity sciences; the use of cool suits, originally worn by astronauts, in treating hypohidrotic ectodermal dysplasia and other disorders; magnetic resonance imaging devices, used to screen for cancer and derived from technology to produce computer-enhanced images; miniaturized ventricular assist devices to increase heart pumping, derived from technology used in fuel pumps; and the increased knowledge of protein crystallization relating to Chagas' disease, gained through microgravity experiments. The Committee also noted environmental benefits of spin-off technologies, including the development of a new robotic arm for nuclear and environmental clean-up operations; the development of a new robotic device used to strip paint from ships without polluting the environment; and applications of remote

sensing in natural resource exploration, agriculture, hydrology, disaster monitoring, environmental protection, monitoring the hole in the ozone layer and research on global change. The Committee noted applications of satellite telecommunications in entertainment, information, maritime and air transport, car navigation systems and air traffic safety. The Committee also noted applications of space technology in other fields, including a new spectral camera used in aircraft wing de-icing, derived from space vision technology; a radar-based system for mounting on rescue vehicles; a new series of neutron dosimeters and spectrometers; and a new thermoplastic offering protection, for instance for artwork and outdoor statues, from ultraviolet radiation.

174. The Committee took note of the AstroChile project, a space science and technology research and dissemination programme introduced by the delegation of Chile. The project participants were representatives of different institutions, including Government bodies, universities and private enterprise. The view was expressed that international cooperation on the part of Member States, in particular the developed countries, was required for the realization of the project, which would afford national and international benefits in areas such as education, medicine, environmental protection, disaster prevention and space law, thus complying with the UNISPACE III recommendations and General Assembly resolution 51/122.

175. The Committee agreed that, in promoting spin-off benefits and effective space applications, in particular in the case of developing countries, it was essential to attach primary importance to capacity-building. The Committee was of the view that developing countries should enhance their potential in basic and advanced research in order to promote capacity-building for space applications and to benefit from spin-offs in space technology.

176. The view was expressed that developing countries, with few exceptions, had been passive onlookers or mere users of technology that was principally developed and provided by developed countries; moreover, it was imperative that efforts be further intensified to enable developing countries to participate in technology development and to have a share in spin-offs from space technology. In that context, the delegation noted that the General Assembly, in its resolution 51/123 of 13 December 1996, had requested the Committee to consider, as appropriate, new projects in outer space activities and to submit a report to the Assembly at its fifty-

second session. That delegation also noted that the Committee had agreed that the Scientific and Technical Subcommittee, beginning with its thirty-fifth session, in 1998, might deliberate on projects or programmes that might be considered appropriate to be undertaken under the auspices of the United Nations. That delegation, noting that the request had not yet been considered by the Scientific and Technical Subcommittee in view of its heavy schedule for the preparations for UNISPACE III, was of the view that the Subcommittee and the Committee should take up the matter at future sessions, as appropriate.

177. The view was expressed that the recent decision by the United States to release precise Global Positioning System (GPS) signals for use by the general public was a welcome development.

178. The Committee recommended that it should continue its consideration of the item at its forty-fourth session, in 2001.

E. Other matters

1. Membership of the Committee

179. The Committee noted that Cuba, Peru and the Republic of Korea had requested that the practice of sharing seats on a rotating basis be ended in order that they might become full members of the Committee.

180. The Committee also noted the requests for membership in the Committee that had been submitted by Saudi Arabia and Slovakia.

181. Some delegations expressed their support for those requests. Some delegations expressed the view that accession of new members would strengthen the role of the Committee.

182. Some delegations expressed the view that, while consensus was a practice of the United Nations, the rules of United Nations decision-making had been established expressly in the Charter of the United Nations.

183. Some delegations were of the view that the Committee should establish a standard for States to become members and should then determine how many new members should be admitted.

184. Some delegations expressed the view that those States which had demonstrated interest and capacity in conducting space activities and had participated in the work of the Committee should be considered for membership of the Committee.

- 185. Some delegations were of the view that States having important space activities should not be excluded from membership of the Committee.
- 186. Some delegations expressed the view that there had been absenteeism among some members of the Committee.
- 187. Some delegations expressed the view that equitable geographical representation should continue to be taken into account in the limited enlargement of membership of the Committee.
- 188. Some delegations expressed the view that analysis of the membership of other United Nations bodies should be carried out, including the criteria for membership and the average number of members.
- 189. The view was expressed that the Committee should take into account the agreement that it had reached at its thirty-seventh session, in 1994, the year in which the last expansion of membership had been agreed upon, that no additional enlargement of the Committee should take place until a comprehensive assessment and thorough examination had been conducted of the impact that the enlargement would have on the efficiency of the Committee and that any further expansion of the membership of the Committee would be based on consensus of member States of the Committee.
- 190. The view was expressed that the enlargement of membership should be considered within the framework of an overall review of the organizational structure of the Committee and its subsidiary bodies, including their working methods.
- 191. The Committee recommended that the issue of enlargement of membership of the Committee be included as an item in the agenda of its forty-fourth session, in 2001. The Committee encouraged member States to take up informal consultations on the subject during the thirty-eighth session of the Scientific and Technical Subcommittee, and if necessary during the fortieth session of the Legal Subcommittee.

2. Organization of a colloquium on the theme "The human dimension in space science and technology applications"

192. The Committee endorsed the recommendation of the Scientific and Technical Subcommittee (A/AC.105/736, annex II, para. 45) that a colloquium on the theme "The

human dimension in space science and technology applications" be organized during the forty-fourth session of the Committee, in 2001, with the participation of eminent scientists, sociologists, philosophers and others.

3. New agenda item of the Committee

193. The Committee had before it a proposal (A/AC.105/L.229) concerning the inclusion of a new item entitled "Space and society" in the agenda of the Committee, sponsored by Austria, Canada, Chile, Nigeria, Turkey and the United States.

194. Some delegations supported the inclusion of the proposed item in the agenda of the Committee at its forty-fourth session. Those delegations expressed the view that the new item would contribute to increasing awareness among decision makers and the general public of the importance of peaceful space activities in improving the common economic and social welfare of humanity and in providing children and youth, especially females, with opportunities to learn more about space science and technology and their importance to human development, as recommended in the Vienna Declaration.

195. Other delegations expressed reservations about the proposal. Some of those delegations were of the view that the Committee was not an appropriate body for discussing the proposed item. The view was also expressed that implementation of the recommendations of UNISPACE III should be conducted in a comprehensive manner, rather than through the selective approach implicit in the proposal, and that the Committee had before it some more important issues to discuss.

4. Medium-term plan

196. The Committee had before it the text of programme 4 (Peaceful uses of outer space), of the proposed mediumterm plan for the period 2002-2005 (A/55/6 (Prog. 4)).

5. Fifty-first International Astronautical Congress

197. The Committee noted with satisfaction the information presented on the preparations for the fifty-first International Astronautical Congress, entitled "Space—a Tool for the Environment and Development", that would be held in Rio de Janeiro, Brazil, from 2 to 6 October 2000.

F. Schedule of work of the Committee and its subsidiary bodies

198. Some delegations expressed the view that a more flexible and results-oriented approach should be taken in scheduling meetings of the Committee and its subsidiary bodies and that the duration of the sessions of those bodies could be shortened in accordance with their actual work.

199. The Committee agreed on the following tentative timetable for its session and those of its Subcommittees in 2001:

	Date	Location
Scientific and Technical	10.00 F.1	¥.7°
Subcommittee	12-23 February	Vienna
Legal Subcommittee	2-12 April	Vienna
Committee on the Peaceful		
Uses of Outer Space	6-15 June	Vienna

Notes

Malaysia and Peru are also members of the Committee and have rotated every two years since 1 January 1995 with the Republic of Korea and Cuba, respectively.

Official Records of the General Assembly, Fifty-second Session, Supplement No. 20 (A/52/20), annex I, para. 2.

³ United Nations publication, Sales No. E.00.I.6.

⁴ A/CONF.184/6.

⁵ Ibid., chap. I, resolution 1.

On behalf of Austria, Canada, the Czech Republic, Germany, Greece, Hungary, India, Indonesia, Italy, Morocco, Pakistan, Poland, Portugal, Romania, Spain, Sweden and the United Kingdom of Great Britain and Northern Ireland.

⁷ A/AC.105/697 and Corr.1, annex III, appendix.

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).

Annex

Programme budget implications of the decision adopted by the Committee at its forty-third session to endorse and recommend implementation of the plan of action proposed by the Office for Outer Space Affairs to implement the recommendations of UNISPACE III*

Before adopting its report to the General Assembly, in accordance with regulation 13.1 of the Financial Regulations and Rules of the United Nations, the Committee was informed through an oral statement of the estimated costs relating to implementation of the decision of the Committee to endorse the plan of action proposed by the Office for Outer Space Affairs and to recommend the implementation of the plan. The text of the oral statement as delivered by Secretary of the Committee is reproduced below:

"I wish to inform the Committee of the estimated costs relating to the implementation of the decision of the Committee to endorse the plan of action as proposed by the Office for Outer Space Affairs.

In accordance with the provisions of the draft report of the Committee on the Peaceful Uses of Outer Space (A/AC.105/L.227/Add.4, paragraph 7), at the Committee would endorse the plan of action proposed by the Office for Outer Space Affairs to implement the recommendations of UNISPACE III, as contained in paragraphs 10 to 26 of the note by the Secretariat (A/AC.105/L.224).

The total costs for the implementation of the above decision of the Committee on the plan of action in the biennium 2000-2001 are estimated at \$441,200, outlined as follows:

- (a) *Posts*. Requirements for 2001 would be \$140, 700, for two additional posts at the P-3 level and one additional post at the P-2 level for the additional work of the programme;
- (b) Consultants and experts. Requirements for 2001 would be \$9,000, for the development of the first of a series of modules for integrating space technology in disaster-specific management, and for a biannual global survey of existing mechanisms for international cooperation in space activities;

- (c) Official travel. Requirements for 2001 would be \$46,000 for: technical assistance in the development of plans and proposals to implement pilot projects, and in the research and observation of near-Earth objects; presenting plans and proposals at meetings of non-governmental entities, space-related industry, non-governmental organizations and non-profit organizations; and support of a workshop on legal aspects of space activities, a round table of legislators who are advocates of space activities and activities during World Space Week;
- (d) Furniture and equipment. Requirements for 2001 would be \$30,000 for: software and hardware for databases on national space policies and laws; and multimedia education materials on space science and technology;
- (e) *Printing*. Requirements for 2001 would be \$5,500 for one booklet on project proposals from developing countries for distribution to space-related industry and donors;
- (f) Others. Requirements for 2001 would be \$210,000 for: a workshop on legal aspects of space activities; technology outreach programmes; space technology in disaster management activity; and regional centres and network support.

No provisions are included in the programme budget for the current biennium for the activities that I have just mentioned.

The potential for absorption as well as any net additional resources required would be included in the programme budget implication statement to be submitted to the Fourth Committee during the fifty-fifth session of the General Assembly in the context of the Committee's review of the report of the Committee on the Peaceful Uses of Outer Space in accordance with rule 153 of the rules of procedure of the General Assembly."

For the text of the plan of action, see A/AC.105/L.224.

Notes

00-55122 (E)

^a This paragraph in A/AC.105/L.227/Add.4 corresponds to paragraph 72 of chapter II, section B, subsection 2, of the present report.