



## **General Assembly**

Distr. GENERAL

A/52/307

28 August 1997

ORIGINAL: ENGLISH

Fifty-second session
Item 85 of the provisional agenda\*

INTERNATIONAL COOPERATION IN THE PEACEFUL USES OF OUTER SPACE

<u>Implementation of the recommendations of the Second United Nations</u>

<u>Conference on the Exploration and Peaceful Uses of Outer Space</u>

## Report of the Secretary-General

## CONTENTS

	<u>Paragraphs</u>	<u>Page</u>
INTRODUCTION	1 - 3	3
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	4 – 5	3
INTER-AGENCY COOPERATION	6 - 8	3
STUDIES	9 - 11	4
UNITED NATIONS PROGRAMME ON SPACE APPLICATIONS	12 - 27	5
A. Training courses/workshops/conferences/symposia	13 - 14	5
B. Development of indigenous capability	15 - 19	6
C. Technical advisory services	20	7
D. Long-term fellowships	21	8
	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  INTER-AGENCY COOPERATION  STUDIES  UNITED NATIONS PROGRAMME ON SPACE APPLICATIONS  A. Training courses/workshops/conferences/symposia  B. Development of indigenous capability  C. Technical advisory services	INTRODUCTION

<sup>\*</sup> A/52/150 and Corr.1.

## CONTENTS (continued)

		<u>Paragraphs</u>	<u>Page</u>
	E. Regional mechanisms of cooperation	22 - 27	8
VI.	INTERNATIONAL SPACE INFORMATION SERVICE	28 - 30	9
VII.	VOLUNTARY CONTRIBUTIONS	31 - 32	10
VIII.	THIRD UNITED NATIONS CONFERENCE ON THE EXPLORATION AND PEACEFUL USES OF OUTER SPACE	33 - 35	11

#### I. INTRODUCTION

- 1. The General Assembly, in its resolution 51/123 of 13 December 1996, requested the Secretary-General to report to the Assembly at its fifty-second session on the implementation of the recommendations of the Second United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE 82).  $^1$
- 2. In response to that request, the present report provides information on the progress made in the implementation of the recommendations of the Conference.
- 3. The Committee on the Peaceful Uses of Outer Space, its Scientific and Technical Subcommittee and 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 considered the question of the implementation of the recommendations of the Conference during their 1997 sessions. Accordingly, the information contained in the present report primarily reflects the result of the work of the Committee, whose report<sup>2</sup> is also before the General Assembly.
  - II. 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
- 4. The Working Group of the Whole was reconvened by the Scientific and Technical Subcommittee at its 1997 session in accordance with General Assembly resolution 51/123 to continue its work.
- 5. At its 1997 session, the Committee endorsed the recommendations of the Working Group of the Whole as contained in its report (A/AC.105/672, annex II) and recommended that the Working Group be reconvened in 1998 to continue its work.

## III. INTER-AGENCY COOPERATION

- 6. In paragraph 25 of its resolution 51/123, the General Assembly invited all Governments within the organizations of the United Nations system and other intergovernmental organizations working in the field of outer space or on space-related matters to take effective action for the implementation of the recommendations of the Conference. In that connection, the Committee noted with appreciation the participation in all stages of its work and that of its Scientific and Technical Subcommittee by representatives of United Nations bodies, the specialized agencies and other international organizations.
- 7. Several United Nations bodies and specialized agencies have extensive space-related programmes that are contributing to the implementation of the recommendations of the Second United Nations Conference on the Exploration and Peaceful Uses of Outer Space, particularly the United Nations Environment

Programme, the Economic Commission for Africa, the Economic and Social Commission for Asia and the Pacific, the United Nations Development Programme, the Food and Agriculture Organization of the United Nations, the United Nations Educational, Scientific and Cultural Organization, the International Civil Aviation Organization, the International Maritime Organization, the International Telecommunication Union and the World Meteorological Organization. Details of these programmes can be found in the yearly reports of the Secretary-General on coordination of outer space activities within the United Nations system. The latest report (A/AC.105/675) contains an overview of the work programme of United Nations bodies and agencies for 1997 and 1998.

8. The programmes and projects of the organizations of the United Nations system are coordinated at annual inter-agency meetings. At its eighteenth session, the Inter-Agency Meeting on Outer Space Activities welcomed a proposal submitted by the Office for Outer Space Affairs on enhancement of the coordination of space activities within the United Nations system through the use of advanced information technologies. The Meeting agreed that the Office should proceed to establish, within its home page, a page that would allow a visitor to the home page of the Office to visit the home pages of other organizations with space activities. The Meeting also agreed to continue its consideration at its next session on the procedure to utilize the Internet and its services in preparing the annual report of the Secretary-General, mentioned in paragraph 7 above, and in creating an electronic forum for informal inter-agency dialogue to further enhance the coordination of space applications activities. The nineteenth session of the Inter-Agency Meeting is scheduled to be held in May 1998 at the United Nations Office at Vienna.

### IV. STUDIES

- 9. In response to the requests of the Working Group of the Whole at its tenth session, the Secretariat prepared and submitted to the Scientific and Technical Subcommittee at its thirty-fourth session, in 1997, the following reports and studies: "Implementation of the recommendations of the Second United Nations Conference on the Exploration and Peaceful Uses of Outer Space: international cooperation in the peaceful uses of outer space: activities of Member States" (A/AC.105/661 and Add.1-2), "Basic space science in developing countries" (A/AC.105/664) and "Use of new technologies in satellite communications and information networks" (A/AC.105/665).
- 10. In endorsing the recommendations of the Working Group of the Whole at its eleventh session, the Committee on the Peaceful Uses of Outer Space noted that further technical studies and reports to be prepared by the Office for Outer Space Affairs would be on subjects commissioned by the Scientific and Technical Subcommittee, acting as Advisory Committee for the UNISPACE III Conference (see sect. VIII below on the UNISPACE III Conference) and on subjects that could serve as background papers either for the preparatory activities for the UNISPACE III Conference or for the Conference itself.
- 11. In addition, and in accordance with the recommendations of the Working Group, the Secretariat will prepare for submission to the Subcommittee at its 1998 session the following reports and studies: reports from Member States and

international organizations involved in space activities on their space activities subject to greater international cooperation, on their research on space debris, particularly on practices that have been adopted and that have proved effective in minimizing the creation of space debris, and on the use of nuclear power sources in outer space, as well as reports from Member States on their national and cooperative international space activities, on their resources and technological capabilities in the fields of space activities for the promotion of cooperation in the peaceful uses of outer space, on safety of space objects with nuclear power sources (NPS), and on the collision of orbiting space objects with NPS on board with space debris.

#### V. UNITED NATIONS PROGRAMME ON SPACE APPLICATIONS

12. In paragraph 7 of its resolution 37/90 of 10 December 1982, the General Assembly endorsed the recommendations of the Conference that the United Nations Programme on Space Applications should be directed towards seven specific objectives. The activities conducted in 1996 by the Programme and the plans for the period 1997-1998 to meet those objectives are contained in the report of the United Nations Expert on Space Applications (A/AC.105/660 and Add.1).

## A. Training courses/workshops/conferences/symposia

13. Part of the activities carried out or planned under the Programme in 1997, in cooperation with other United Nations bodies, intergovernmental and non-governmental organizations and Governments of Member States, include the following training courses, workshops, conference, symposium and seminar: United Nations/European Space Agency (ESA) Workshop on Satellite Communications, organized in cooperation with the Government of India and ESA; United Nations Seminar on Space Futures and Human Security, organized in cooperation with the Government of Austria; Seventh United Nations/Sweden International Training Course on Remote Sensing Education for Educators, organized in cooperation with the Government of Sweden; Seventh United Nations/ESA Workshop on Basic Space Science, organized in cooperation with the Government of Honduras and ESA; United Nations/ESA Symposium on Space Industry Cooperation with the Developing World, organized in cooperation with the Government of Austria, the State of Styria, the City of Graz and ESA; United Nations/Israel International Workshop on Satellite Communications Technology for Capacity-building, organized in cooperation with the Government of Israel; United Nations/International Astronautical Federation (IAF)/ESA Workshop on Space Technology as a Costeffective Tool to Improve Infrastructure in Developing Countries, organized in cooperation with the Government of Italy, the European Commission, ESA and IAF; United Nations/Committee on Space Research (COSPAR)/Brazil Workshop on Data Analysis Techniques, organized in cooperation with the Government of Brazil, COSPAR and ESA; Fourth United Nations/ESA Training Course on Applications of the European Remote Sensing Satellite Data for Natural Resources, Renewable Energy and the Environment, organized in cooperation with the Department for Development Support and Management of the Secretariat and ESA; and Second United Nations International Conference on Spin-off Benefits of Space Technology: Challenges and Opportunities, organized in cooperation with the Government of the United States of America.

- 14. In 1998, the following training course, workshops, conferences, symposium, seminar and meetings are planned:
- (a) The Eighth United Nations/Sweden International Training Course on Remote Sensing Education for Educators;
- (b) The United Nations/ESA Regional Meeting on Space Technology and Applications for Development (with emphasis on microwave remote sensing applications and including preparations for the UNISPACE III Conference), to be held in Malaysia;
- (c) The United Nations Regional Conference for Decision Makers on Space Technology Development (including preparations for the UNISPACE III Conference), to be held in Africa;
- (d) The United Nations Regional Meeting on Space Technology and Applications for Development (with emphasis on information technology and including preparations for the UNISPACE III Conference), to be held in Latin America and the Caribbean;
- (e) The Third United Nations Regional Conference on Spin-off Benefits of Space Technology, to be held in Asia;
- (f) The United Nations/Austria Symposium on Space Technology and Applications for Development (including preparations for the UNISPACE III Conference), to be held at Graz, Austria;
- (g) The United Nations/IAF Workshop on Space Technology Applications for Developing Countries, to be held at Melbourne, Australia;
- (h) The United Nations/Austria Second Seminar on Space Futures and Human Security, to be held in the State of Tyrol, Austria.

## B. <u>Development of indigenous capability</u>

15. In accordance with the recommendation of the Second United Nations Conference on the Exploration and Peaceful Uses of Outer Space concerning the development of indigenous capabilities, General Assembly resolution 45/72 of 11 December 1990, in which the Assembly endorsed the recommendation of the Committee that the United Nations should lead an international effort to establish regional centres for space science and technology in existing national/regional educational institutions in the developing countries, and resolution 51/123, in which the Assembly once again considered it particularly urgent that the United Nations should support the creation of adequate training centres at the regional level, the Secretariat has made significant progress in establishing regional centres for space science and technology education, affiliated to the United Nations. The Secretariat has provided updated information on its activities concerning the regional centres in the report of the United Nations Expert on Space Applications (A/AC.105/660 and Add.1) and has also reported to the Committee on the latest status of this initiative.

- 16. The Centre for Space Science and Technology Education in Asia and the Pacific was inaugurated in India in November 1995, and its second education programme, focusing on satellite communications, started in January 1997. Participation in the Governing Board of the Centre and in its activities is open to Member States of the region, and in due course and upon approval by the Governing Board, the Centre would grow into a network of nodes enabling it to fully utilize the resources and potential of the region.
- 17. As for the Centre for Space Science and Technology Education in Latin America and the Caribbean, its host countries, Brazil and Mexico, signed in March 1997 an agreement establishing the Centre. Regarding the region of Africa, Morocco, for French-speaking African countries, and Nigeria, for English-speaking African countries, had prepared the draft agreements to establish the centres, which were circulated among countries in the region for their comments. The agreements are expected to be entered into by the countries concerned by the end of 1997.
- 18. In Western Asia, discussions are in progress with Jordan, Saudi Arabia and the Syrian Arab Republic on the establishment of a regional centre for space science and technology education. In the case of eastern, central-eastern and south-eastern Europe, discussions among Bulgaria, Greece, Poland, Romania, Slovakia and Turkey are in progress on the establishment of a network of space science and technology education and research institutions. Experts from those countries agreed to work with the Office for Outer Space Affairs to undertake a study on the technical requirements, design, operation mechanism and funding of the network.
- 19. For all the regional centres for space science and technology education, a model curriculum has been developed to provide each centre with a benchmark of the academic level necessary for international recognition. The document entitled "Centres for space science and technology education: education curricula" (A/AC.105/649) was submitted to the Scientific and Technical Subcommittee at its 1997 session.

## C. <u>Technical advisory services</u>

- 20. In paragraph 7 (g) of its resolution 37/90, the General Assembly decided that the United Nations Programme on Space Applications should, upon request by Member States or any of the specialized agencies, be directed towards the provision or arrangements for provision of technical advisory services on space applications projects. With regard to that mandate, the Programme has provided or is providing assistance in the following areas:
- (a) In collaboration with ESA and the Department for Development Support and Management Services, in identifying and implementing support mechanisms to enable scientists from Africa, Asia and the Pacific and Latin America and the Caribbean to receive and utilize data from the European Remote Sensing Satellite of ESA;

- (b) To the Government of Uruguay, in its follow-up, as <u>pro tempore</u> secretariat, of the recommendations of the Third Space Conference of the Americas;
- (c) To the Government of the Republic of Korea, in the growth and operation of the Asia-Pacific Satellite Communications Council (see para. 23 below);
- (d) In collaboration with ESA, in follow-up activities relating to the series of workshops on basic space science (details are provided in document A/AC.105/664, mentioned in para. 9 above);
- (e) To the region of Africa, in implementing the project entitled "Cooperative Information Network Linking Scientists and Professionals in Africa (COPINE)", which would establish an efficient communication network among African and European professionals and scientists at national, continental and intercontinental levels, and would allow for the exchange of valuable information on health care, agriculture, education, science and technology, and the management and monitoring of natural resources and environment;
- (f) In collaboration with interested organizations within the United Nations system in elaborating an inter-agency project proposal on a satellite-based disaster-warning broadcasting system for rural and remote communities of small island developing States, particularly in Asia and the Pacific and in the Caribbean;
- (g) To the region of Africa, in implementing follow-up actions within the framework of the Pretoria Memorandum on Space Technology for Africa, which was adopted by the Second United Nations Regional Conference on Space Technology for Sustainable Development in Africa (see para. 26 below).

## D. Long-term fellowships

21. In promoting the development of indigenous capability, five long-term fellowships will be awarded for the in-depth training of individuals from developing countries in the areas of space antennas and propagation; communications systems; remote sensing information systems; and remote sensing instrumentation. ESA has renewed its offer of five fellowships for the 1997-1998 period.

## E. Regional mechanisms of cooperation

- 22. In accordance with General Assembly resolution 51/123, the Secretariat continued its efforts to strengthen the regional mechanisms of cooperation in carrying out various activities in the implementation of the recommendations of the Second United Nations Conference on the Exploration and Peaceful Uses of Outer Space.
- 23. The efforts of the Programme made through its advisory service to the Government of the Republic of Korea resulted in the rapid growth and operation

of the Asia-Pacific Satellite Communications Council, which aims at promoting cooperation and harmonization in the development and utilization of satellite communications in the region. At its conference in November 1996, the Council placed special emphasis on the contribution of satellite technology to global information infrastructure. As of June 1997, membership of the Council had grown to 60 and had spread from the Asia-Pacific geographical area to Europe and North America.

- 24. The establishment of regional centres for space science and technology education, the primary goal of which is to enhance the academic and professional capabilities as well as the technical infrastructure in space science and technology in the institutions in developing countries in each region, is also viewed as being very much a part of the Secretariat's effort to strengthen mechanisms of regional cooperation. Once established, each centre would be able to expand and become part of a network that could cover specific programme elements in established institutions related to space technology in each region.
- 25. The follow-up activities to the workshops on basic space science (see para. 20 (d) above) also resulted in the enhancement of regional cooperation. The assistance provided to the Governments of Colombia, Egypt, Honduras and Sri Lanka in developing facilities required for activities in astronomy and planetary exploration contributed to the development of international astronomical observatory networks in Western Asia, Central America, South America and Asia.
- 26. The Second United Nations Regional Conference on Space Technology for Sustainable Development in Africa, organized by the Programme in South Africa in November 1996, adopted the Pretoria Memorandum on Space Technology in Africa. The Pretoria Memorandum identified priority needs of the region that could be addressed by using space technology, and specified actions to be taken at the national and regional levels in order to take advantage of the usefulness of space science and technology in the economic and social development of the region.
- 27. The Programme also contributes to the implementation of the recommendations of the Third Space Conference of the Americas, which adopted the Punta del Este Declaration (A/51/682, annex). The Declaration reaffirms the commitment of States in the Americas to the exploration and peaceful uses of outer space. The Conference adopted a plan of action, aimed at promoting and strengthening multilateral cooperation programmes in the region.

## VI. INTERNATIONAL SPACE INFORMATION SERVICE

- 28. In paragraph 8 of its resolution 37/90, the General Assembly decided to establish an International Space Information Service, consisting initially of a directory of sources of information and data services to provide direction, upon request, to accessible data banks and information sources.
- 29. With regard to that mandate, the International Space Information Service published <u>Highlights in Space</u> (A/AC.105/654), based on annual reports prepared by COSPAR and IAF, including a submission by the International Institute of

Space Law (IISL); the eighth volume of <u>Seminars of the United Nations Programme on Space Applications</u> (A/AC.105/650), containing selected papers from the seminars, workshops and training courses of the Programme in 1996; and <u>Education</u>, <u>Training</u>, <u>Research and Fellowship Opportunities in Space Science and Technology and its Applications: A Directory</u> (A/AC.105/671).

30. Further progress has been made to augment the International Space Information Service through the development of a limited database capability and the home page on the Internet. The home page of the Office for Outer Space Affairs currently contains information on all the space-related legal instruments adopted by the General Assembly, information on the Committee and its subsidiary bodies, an overview of the Programme on Space Applications, space-related information submitted by Member States, and a "frequently-asked questions" page where common questions relating to the United Nations and outer space are answered. In the light of the above, the Secretariat is continuing to cooperate with the Committee on Earth Observation Satellites (CEOS) and the German space agency in establishing a CEOS Information Locator Service, the prime function of which is to assist users in developing countries to locate and access the sources of information on Earth observation data, projects and services.

#### VII. VOLUNTARY CONTRIBUTIONS

- 31. In paragraph 10 of its resolution 37/90, the General Assembly appealed to all Governments to make voluntary contributions, either in money or in kind, towards carrying out the recommendations of the Second United Nations Conference on the Exploration and Peaceful Uses of Outer Space. In his note verbale dated 11 March 1983, the Secretary-General brought that paragraph to the attention of Member States, particularly with respect to the newly mandated and expanded activities of the United Nations Programme on Space Applications. Member States and intergovernmental organizations that have responded to this appeal since the fifty-first session of the Assembly have been mentioned under appropriate headings in the report of the Committee on the Peaceful Uses of Outer Space.<sup>2</sup>
- 32. Following the recommendation of the Committee in 1993 to the General Assembly that it should increase the budget allocation for the United Nations Programme on Space Applications so that the Programme would be able to implement more fully the recommendations of the Conference, the Assembly, at its forty-eighth session, had approved an additional budget allocation for the Programme for the biennium 1994-1995. However, the budget reductions during the current biennium led to the reduced budget allocation for the Programme and the curtailment and postponement of some of its mandatory activities. The Committee at its 1997 session took note of the disappointment expressed by representatives of developing countries at the lack of financial resources available to fully implement the recommendations of the Conference.

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

- 33. In paragraph 28 of its resolution 51/123, the General Assembly endorsed the recommendation of the Committee on the Peaceful Uses of Outer Space that a special session of the Committee (UNISPACE III), open to all States Members of the United Nations, should be convened at the United Nations Office at Vienna. In the same resolution, the Assembly requested the Committee and the Scientific and Technical Subcommittee to act as the Preparatory Committee and the Advisory Committee for UNISPACE III and the Office for Outer Space Affairs to act as the executive secretariat. The Assembly also requested the Preparatory Committee and the Advisory Committee to carry out the tasks entrusted to them in the report of the Committee on its thirty-ninth session<sup>3</sup> and to report to the Assembly at its fifty-second session on the progress made in the preparatory work for UNISPACE III.
- 34. The Advisory Committee, through the Working Group of the Whole of the Scientific and Technical Subcommittee, carried out the tasks entrusted to it by the General Assembly. The Working Group recommended that the UNISPACE III Conference, a special session of the Committee on the Peaceful Uses of Outer Space, be held at the United Nations Office at Vienna in July 1999. The Working Group also made recommendations concerning the objectives, participants, provisional annotated agenda, financial aspects and additional components of the UNISPACE III Conference. The Subcommittee noted that the report of the Working Group (A/AC.105/672, annex II) provided the basis for the Committee, in its role as the Preparatory Committee, to carry out the tasks entrusted to it by the Assembly. The Subcommittee, in its role as the Advisory Committee, also made a recommendation concerning the duration and pattern of meetings that would apply to the sessions of the Committee and its subsidiary bodies during 1999. The deliberations in the Advisory Committee are reflected in the report of the Subcommittee on its thirty-fourth session (A/AC.105/672, paras. 156-165).
- 35. The Preparatory Committee considered the matter and endorsed the recommendations of the Working Group of the Subcommittee and the Advisory Committee. The Preparatory Committee made a number of recommendations, including those relating to the preparation of a draft report of the Conference and background papers, the theme of the Conference, organization of regional preparatory meetings, participation of intergovernmental and non-governmental organizations and private industry and financial aspects of the Conference. The Office for Outer Space Affairs, as the executive secretariat for the Conference, was requested to prepare, in time for the 1998 session of the Advisory Committee, an initial draft of the report of the Conference and an indicative schedule of events to be held prior to and during the Conference. The Office was also requested to prepare, in time for the consideration by Governments for their preparation of national papers, background papers for the Conference, as listed in the proposal made by the Office (A/AC.105/1997/CRP.4/Rev.2). The recommendations of the Preparatory Committee are contained in paragraphs 150 to 161 of the report of the Committee on the Peaceful Uses of Outer Space on its fortieth session.<sup>2</sup>

## <u>Notes</u>

- <sup>1</sup> See <u>Report of the Second United Nations Conference on the Exploration and Peaceful Uses of Outer Space, Vienna, 9-21 August 1982 (A/CONF.101/10 and Corr.1 and 2).</u>
- $^2$  Official Records of the General Assembly, Fifty-second Session, Supplement No. 20 (A/52/20).
  - <sup>3</sup> Ibid., <u>Fifty-first Session</u>, <u>Supplement No. 20</u> (A/51/20).

\_\_\_\_