

United Nations

Commission on Science and Technology for Development

Report on the third session (12-16 May 1997)

Economic and Social Council

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NOTE

Symbols of United Nations documents are composed of capital letters combined with figures.

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SUMMARY

At its third session, the Commission on Science and Technology for Development considered five main items, including the examination of a report on the substantive theme for the session, "Information and communication technologies (ICT) for development", submitted by the Working Group on Information Technology for Development. Other substantive agenda items covered science, technology and innovation policy reviews (STIPs); action arising from the second session; consideration of ways and means of commemorating in 1999 the twentieth anniversary of the United Nations Conference on Science and Technology for Development and the vision of the United Nations role in the area of science and technology for development; and the role and activities of the Commission regarding the coordination of science and technology for development.

After consideration of the substantive agenda items, the Commission adopted an omnibus resolution, entitled "Science and technology for development", which addressed all the major issues discussed at the third session, and recommended it for adoption by the Economic and Social Council.

In the above-mentioned resolution, it was decided that the substantive theme and the focus of the work of the Commission during the inter-sessional period 1997-1999 would be "Science and technology partnerships and networking for national capacity-building". Panels or working groups of the Commission would analyse and make recommendations on a number of issues related to the subject, including North-South as well as South-South partnerships and networks involving, <u>inter alia</u>, enterprises, educational bodies, research institutions, governmental science and technology departments, and other actors in the field of science and technology, with particular attention to be paid to biotechnology and energy. It was further decided to hold a panel meeting on biotechnology and its impact on development, bringing together national experts and experts from relevant institutions and United Nations agencies working on that subject, in order to identify critical issues relevant to development not sufficiently covered by existing forums, with particular attention to food production.

Regarding ICTs, it was recommended under the resolution that Governments establish national ICT strategies, and establish task forces or ensure that existing entities be charged with the design of national ICT strategies. They were requested to report to the Commission on those activities at its fourth session. To assist countries in the preparation of those reports, workshops may be organized, provided extrabudgetary resources can be found. The relevant bodies of the United Nations system were also invited to assess their capability to provide assistance and promote cooperation in the ICT area, and to suggest areas in which they are best able to assist developing countries and countries in transition in the design and implementation of their national ICT strategies. The secretariat of the Commission was requested to synthesize the results of those assessments, and to organize, within existing resources, an inter-agency meeting to discuss the synthesis report. The Commission was requested to identify an independent institute to prepare a study for the next session of the Commission on new forms of resource generation, focusing on ICTs that might support economic and social development priorities.

Furthermore, under the resolution, the Council would recommend the continuation of cooperation between the Commission and the United Nations Conference on Trade and Development on science, technology and innovation policy reviews (STIPs), and would decide that the Commission should organize a workshop comparing the experiences in STIP or similar reviews in developing countries and countries in transition.

The Council would also recommend under the resolution that the Commission, in the form of expert group meetings, carry out a programme of preparation for a common vision of the future of science and technology for development. The Council would further recommend that the Commission convene a workshop to provide a forum for coalition of resources, particularly in relation to ICTs. The Council would also recommend that in any future session of the Commission, the report on the budget and inter-sessional activities of the Commission be considered under a separate agenda item. It would request the Gender Advisory Board to continue its work, as reported in collaboration with all relevant organizations, in particular those within the United Nations system.

Regarding the coordination of activities in science and technology for development of the United Nations system, under the resolution the Council would decide that the secretariat of the Commission should be requested to study the possibility of setting up, in collaboration with other United Nations bodies, including the regional commissions, an electronic network on their activities in science and technology for development. It would further decide that in order to promote better interaction with United Nations bodies, especially the regional commissions, the Commission should give consideration to including suitably qualified members of those bodies in the working groups of the Commission; in addition, meetings of the working groups of the Commission might be held in the offices of the regional commissions, whenever possible.

The Commission also recommended in draft decision I that the Council decide (a) to hold an organizational meeting of the Commission at Geneva or in New York as early as possible in January 1998 for the sole purpose of electing the members of the Bureau other than the Chairman, the meeting to be attended by representatives of permanent missions at either venue; (b) to extend the term of the current members of the Commission's Bureau until 31 December 1997.

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<u>Chapter I</u>

MATTERS CALLING FOR ACTION BY THE ECONOMIC AND SOCIAL COUNCIL OR BROUGHT TO ITS ATTENTION

A. <u>Draft resolution</u>

1. The Commission on Science and Technology for Development recommends to the Economic and Social Council the adoption of the followiing draft resolution:

DRAFT RESOLUTION

Science and technology for development

The Economic and Social Council,

Recognizing the role of the Commission on Science and Technology for Development as a forum for the examination of science and technology questions, for improving understanding of science and technology policies for development, and for the formulation of recommendations and guidelines on science and technology matters within the United Nations system, all in relation to development,

Also recognizing that the Commission, in carrying out its work, should pay special attention to the needs and requirements of developing countries, in particular the least developed countries and landlocked and small island developing States, and that it should in addition take into consideration the relevant problems of countries with economies in transition,

<u>Taking note with appreciation</u> of the report of the Commission's Working Group on Information and Communication Technologies for Development $\underline{1}$ / and the conclusions and recommendations contained therein,

<u>Recognizing</u> that the social and economic potential of information and communication technologies is enormous, and that the risks for those without the capabilities to access, design, produce and use the new products and service applications may lead to their marginalization from active participation in the global economy,

Noting with satisfaction the report on the scientific and technological aspects of sustainable energy systems, $\underline{2}/$

Also noting with satisfaction the report by the Gender Advisory Board on its work, $\underline{3}/$

<u>1</u>/ See E/CN.16/1997/4.

<u>2</u>/ See E/CN.16/1997/3.

^{3/} As summarized in E/CN.16/1997/8, paras. 19-22.

<u>Further noting with satisfaction</u> that the science, technology and innovation policy reviews directed at a broad spectrum of sectors, including industry, social sectors and government itself, have started, with one review already completed, another under way and a third awaiting financing,

 $\underline{\rm Noting}$ the other relevant documentation submitted to the Commission for consideration at its third session, $\underline{4}/$

Also noting that the fourth session of the Commission is scheduled to take place 20 years after the United Nations Conference on Science and Technology for Development, held at Vienna, and recognizing that there is a need to define a new vision and to enhance continuously the role for the United Nations system in the area of science and technology for development,

<u>Recalling</u> Commission decision 2/101 on its working methods, which was ratified by the Council,

<u>Recognizing</u> that enhanced transparency and accountability are essential for the efficient and effective functioning of the Commission,

<u>Welcoming</u> the initiative taken by the United Nations Educational, Scientific and Cultural Organization in holding a World Science Conference in 1999 to strengthen the commitment of countries to scientific research and development in the service of societal progress,

Activities as follow-up to the earlier work of the Commission

A. Information and communication technologies for development

1. <u>Recommends</u> that each developing country and country in transition establish a national strategy for information and communication technologies, taking into account, <u>inter alia</u>, the guidelines proposed by the Working Group on Information and Communication Technologies for Development of the Commission on Science and Technology for Development. Where such strategies already exist, they could be reviewed in the light of those guidelines;

2. <u>Recommends</u> that action be taken by national Governments to establish a task force or commission, or to ensure that an existing entity be charged with the design of the national strategy for information and communication technologies;

3. <u>Invites</u> countries, in order to facilitate the exchange of experience among them at the international and regional levels, to prepare a report on their strategies for information and communication technologies for the next session of the Commission, to be held in 1999. Countries' reports should include the priorities of each national strategy, the mechanisms for updating, and the procedures for implementing the strategy, and to enhance the value of the reports, consideration might be given to the organization of workshops, all of which should be financed from extrabudgetary resources;

 $[\]underline{4}/$ E/CN.16/1997/2, 3, 5 and 7; E/CN.16/1997/CRP.1-5; and E/CN.16/1997/Misc.1-5.

4. <u>Invites</u> relevant bodies of the United Nations system to assess their capability to provide assistance and promote cooperation in the area of information and communication technologies, and to suggest areas in which they are best able to assist developing countries and countries in transition in the design and implementation of their national strategies for information and communication technologies;

5. <u>Requests</u> the secretariat of the Commission to synthesize the results of those assessments, and - within existing resources - to hold an inter-agency meeting in cooperation with the Commission to review that synthesis;

6. <u>Invites</u> Governments, the public and business sectors, academia and non-governmental organizations in industrialized countries to engage in technological cooperation activities with their counterparts in developing countries and countries in transition in order to facilitate their access, encourage the use, production and development of information and communication technologies, and to ensure their effective participation in building the global information infrastructure;

7. <u>Requests</u> the Commission to identify an independent institute to prepare a study for the next session of the Commission on new forms of resource generation, focusing on information and communication technologies that might support social and economic development priorities;

B. <u>Science, technology and innovation policy reviews</u>

8. <u>Decides</u> that the Commission shall organize a workshop comparing experience in science, technology and innovation policy or similar reviews in developing countries and countries in transition in order to stimulate a learning process in those innovative efforts, subject to the availability of extrabudgetary resources;

9. <u>Recommends</u> the continuation of cooperation between the Commission and the United Nations Conference on Trade and Development on science, technology and innovation policy reviews;

C. <u>Common vision of the future of science and technology for</u> <u>development</u>

10. <u>Recommends</u> that the Commission, in the form of expert group meetings, carry out a programme of preparation, as outlined in the report of the meeting of the preparatory working group on that subject, held on 20 and 21 December 1996 at Geneva, 5/ taking into account regional inputs;

^{5/} See E/CN.16/1997/CRP.2.

D. <u>Gender Advisory Board</u>

11. <u>Requests</u> the Gender Advisory Board to continue its work as reported, in collaboration with all relevant organizations, in particular those within the United Nations system;

E. <u>New substantive theme and other activities</u>

12. Decides that the substantive theme for the inter-sessional period 1997-1999 will be "Science and technology partnerships and networking for national capacity-building". The theme will include North-South as well as South-South partnerships and networks involving, <u>inter alia</u>, enterprises, educational bodies, research institutions, governmental science and technology departments, and other actors in the field of science and technology, with particular attention to be paid to biotechnology and energy;

13. <u>Also decides</u> to hold a panel meeting on biotechnology and its impact on development, bringing together country experts and experts from relevant institutions and United Nations agencies working on that subject, in order to identify critical issues relevant to development that are not sufficiently covered by existing forums, with particular attention to food production, and in order to recommend how further work on those issues might be undertaken;

F. Budget and inter-sessional activities

14. <u>Recommends</u> that at future sessions of the Commission, the report on the budget and inter-sessional activities of the Commission be considered under a separate agenda item;

G. <u>Coordination of science and technology for development in the</u> <u>United Nations system</u>

15. <u>Decides</u> that the secretariat of the Commission on Science and Technology for Development shall be requested to study the possibility of setting up, in collaboration with other United Nations bodies, including regional commissions, an electronic network on their activities in science and technology for development, making that network widely accessible to science and technology institutes around the world;

16. <u>Also decides</u> that in order to promote better interaction with United Nations bodies, especially the regional commissions, the Commission shall give consideration to including suitably qualified members of those bodies in the working groups of the Commission. In addition, meetings of the Commission's working groups might be held in the offices of the regional commissions, whenever possible;

H. <u>Coalition of resources</u>

17. <u>Recommends</u> that a workshop be convened by the Commission on Science and Technology for Development to provide a forum for coalition of resources, particularly in relation to information and communication technologies.

B. <u>Draft decisions</u>

2. The Commission on Science and Technology for Development recommends to the Economic and Social Council the adoption of the following draft decisions:

DRAFT DECISION I

Election of the members of the Bureau other than the Chairman

The Economic and Social Council* decides:

(a) That an organizational meeting of the Commission on Science and Technology for Development shall be held at Geneva or in New York as early as possible in January 1998 for a duration of half a day, within existing resources, for the sole purpose of electing the members of the Commission's Bureau other than the Chairman, the meeting to be attended by representatives of permanent missions at either venue;

(b) That the current members of the Bureau shall stay in office until 31 December 1997.

DRAFT DECISION II

Report of the Commission on Science and Technology for Development on its third session and provisional agenda and documentation for the fourth session of the Commission**

The Economic and Social Council:

(a) Takes note of the report of the Commission on Science and Technology for Development on its third session;

(b) Approves the provisional agenda and documentation for the fourth session of the Commission set out below:

PROVISIONAL AGENDA FOR THE FOURTH SESSION OF THE COMMISSION

- 1. Adoption of the agenda and other organizational matters.
- Substantive theme: "Science and technology partnerships and networking for national capacity-building".

Documentation Report of the Secretary-General

^{*} For the discussion, see chap. VII.

^{**} For the discussion, see chap. VIII.

3. Panel on biotechnology.

Documentation Reports of the panel on biotechnology

4. Common vision on the future of science and technology for development on the occasion of the twentieth anniversary of the United Nations Conference on Science and Technology for Development.

<u>Documentation</u> Report of panels/working groups on common vision on the future of science and technology for development

5. Budget and inter-sessional activities of the Commission.

Documentation Note by the secretariat

6. Coalition of resources.

Documentation Note by the secretariat

7. Comprehensive note on implementation and progress made on decisions taken at the third session of the Commission, including follow-up work on information communication technologies and science, technology and innovation policy review.

Documentation Note by the secretariat

8. Role and activities of the Commission regarding the coordination of science and technology for development.

Documentation Note by the secretariat

- 9. Election of the Chairperson and other officers for the fifth session of the Commission.
- 10. Provisional agenda and organization of work for the fifth session of the Commission.
- 11. Other matters.
- 12. Adoption of the report of the Commission on its fourth session.

C. Decision brought to the attention of the Council

3. The following decision adopted by the Commission is brought to the attention of the Economic and Social Council:

Decision 3/101. Chairman's summaries of the discussions*

At its 9th meeting, on 16 May 1997, the Commission on Science and Technology for Development decided to include the Chairman's summaries of the discussions at its third session in the report of the Commission on that session.

Chapter II

SUBSTANTIVE THEME: INFORMATION AND COMMUNICATION TECHNOLOGIES FOR DEVELOPMENT

1. The Commission considered item 2 of its agenda at its 1st, 2nd, 3rd and 9th meetings, on 12, 13 and 16 May 1997. It had before it a note by the Secretary-General transmitting the report of the Working Group on Information and Communication Technologies for Development (E/CN.16/1997/4).

2. At its 1st meeting, on 12 May, the Director of the National Centre for Software Technology (India) made an introductory statement.

3. At the same meeting, the Co-Chairman of the Working Group on Information Technology (United Kingdom of Great Britain and Northern Ireland) also made an introductory statement.

4. Also at the same meeting, the representative of China made a statement.

5. At the same meeting, the representative of the Economic and Social Commission for Asia and the Pacific made a statement.

6. At the 2nd meeting, on 12 May, the representatives of the United Kingdom, Uruguay, Colombia, Chile, Malta, the Russian Federation, Belarus, Jamaica and Germany made statements.

7. At the 3rd meeting, on 13 May, the representatives of the United Kingdom, Bulgaria, Ethiopia, Uruguay, Colombia, the United Republic of Tanzania, Malta, Pakistan, Romania, Egypt, Togo, Germany and Jamaica made statements.

8. At the same meeting, the representative of the Economic and Social Commission for Asia and the Pacific (ESCAP) made a statement.

For the discussion, see chap. IX, sect. B.

*

Chairman's summary of the general discussion

9. The Working Group on Information and Communication Technologies for Development, in its report and recommendations, had focused on the problems of access to and the impacts of those technologies in developing countries and countries in transition. The work of the Working Group had led to the preparation, in addition to its report, of two background documents. The first document dealt with scenarios for the development and impact of information and communication technologies (ICTs) on developing countries and countries in transition. The second was an extensive and in-depth analysis of the role of ICTs in building innovative knowledge societies, which could serve as a source book for, among others, the national task forces that were recommended by the Working Group.

10. Having considered the arguments and evidence on the pattern of diffusion of ICTs and their impacts on countries, the Working Group had arrived at three basic working assumptions, which underlined its recommendations to the Commission:

(a) The potential of ICTs far exceeded their impacts to date, and although in the short run the cost of joining the global information infrastructure might be high, in the long run the cost of not joining was likely to be even higher. There was therefore no alternative for developing countries but to gain access to those technologies and join the emerging global information infrastructure;

(b) There was a need for the active involvement of the private sector in the diffusion of ICTs in developing countries and countries in transition, although in countries in which the private sector was still at an early stage of development, public/private sector partnerships might be necessary to prompt access to and effective application of ICTs;

(c) Developing countries and countries in transition were at very different starting positions in developing their respective national information infrastructures.

11. The Working Group had proposed four key recommendations and guidelines for developing countries and countries in transition with regard to developing and strengthening their national ICT strategies:

(a) Each developing country and country in transition should establish a national ICT strategy, and where such strategies already existed, they should be reviewed to ensure that they took note of the guidelines proposed by the Working Group;

(b) Action should be taken by national Governments to establish a task force or commission, or to ensure that an existing entity was charged with establishing the guidelines for their national ICT strategies;

(c) Each body of the United Nations system should review the financing, production and use of ICTs for social and economic development in its area of responsibility; and

(d) The United Nations Conference on Trade and Development (UNCTAD) should prepare a study for the next session of the Commission on the implications of new forms of revenue generation, focusing especially on those involving ICTs that might support social and economic development objectives.

12. It was emphasized by some members of the Commission that, although the recommendations and guidelines of the Working Group were pertinent, they lacked the focus and specificity necessary for effective implementation. Some developing countries, in particular the least developed countries, might lack the resources, both financial and technical, to implement effectively the guidelines and recommendations proposed without concerted support from the international community. The financing aspects of entry into the global information infrastructure by developing countries and countries in transition should be given serious consideration. In responding to that comment, one member reported that the Commission was preparing three studies on coalition of resources, with a focus on ICTs, specifically the financing of the applications of ICTs in three areas: transmission infrastructure, education and health. The reports would be finalized and distributed in due course.

13. Several members emphasized the need to consider carefully the wider dissemination of the work of the Working Group and the Commission as a whole. One possible channel for disseminating the findings, conclusions and recommendations of the Working Group was via the Internet World Wide Web site. However, since access to the Internet was limited in most developing countries, other more traditional methods of dissemination should be pursued.

14. While the "window of opportunity" opened by the new ICTs was widely acknowledged, the challenges faced by developing countries and countries in transition were numerous, and coping with them would require concerted efforts at the national and international levels. The Working Group had concluded that, to make the most of the opportunities offered, countries needed to develop a national ICT strategy and build local skills, a technological capability, and an organizational and institutional capacity. That would require a technology assessment in each country in order to determine its starting position and ICT needs.

Action taken by the Commission

15. At the 9th meeting, on 16 May, the Commission had before it a draft resolution (E/CN.16/1997/L.3) entitled "Science and technology for development", which was submitted by the Chairman on the basis of informal consultations.

16. At the same meeting, before the adoption of the draft resolution, statements were made by the representatives of Malta, Belgium, Denmark, India, the United Kingdom, Germany, Chile, Belarus, the Russian Federation, China, Bulgaria, Jamaica and Romania.

17. Also at the same meeting, the Chairman read out the agreed amendments to the draft resolution.

18. At the same meeting, the Commission adopted the draft resolution, as orally amended (for the final text, see chap. I, sect. A).

<u>Chapter III</u>

SCIENCE, TECHNOLOGY AND INNOVATION POLICY REVIEWS

1. The Commission considered agenda item 3 at its 4th and 9th meetings, on 13 and 16 May 1997. It had before it a note by the UNCTAD secretariat on the implementation of the programme on science, technology and innovation policy reviews (E/CN.16/1997/5).

2. At its 4th meeting, on 13 May, an economic affairs officer of UNCTAD made an introductory statement.

3. At the same meeting, the Director of the Division for Science and Technology of UNCTAD made an introductory statement.

4. Also at the same meeting, presentations were made by the representatives of Colombia and Jamaica in connection with science, technology and innovation policy reviews in Colombia and Jamaica.

5. At the same meeting, the representatives of Uruguay, Malta, the United Kingdom, Denmark, Spain, Nigeria, Togo, Antigua and Barbuda, and Egypt made statements.

Chairman's summary of the general discussion

6. The work on science, technology and innovation policy (STIP) reviews received the endorsement and support of the Commission. STIP reviews were a powerful tool in building up national science and technology capabilities, and could help mobilize resources for that purpose. They could also be undertaken at the regional level with a view to addressing the situation of all countries in a region simultaneously, although it was recognized that for follow-up activities, national efforts were essential.

7. Several members supported the organization by the Commission of a workshop on STIP reviews and other similar reviews in order to promote the sharing of experiences among countries at different stages of development, and suggested that a monograph could subsequently be published for the benefit of other countries. Based on its discussion of the first STIP review recently completed in Colombia, the Commission discussed the STIP review process and the lessons learned from that experience, including the influence engendered on development and technical change in the country concerned. Similar reviews were undertaken by other multilateral organizations, such as the Inter-American Development Bank, and it might be possible to improve coordination by combining that kind of experience with the experience of the STIP reviews for consideration at the above-mentioned workshop.

8. The discussion also addressed the issue of technical assistance to member States in the formulation of STIPs through the STIP reviews. Although the STIP reviews needed to be tailored to the needs and characteristics of each participating country, it was emphasized by some members that there should nevertheless be some common themes, such as (a) a review of STIPs; (b) the financing of innovation and coalition of resources; and (c) the role of external resources in endogenous science and technology capacity-building aimed at improving the coordination of donor contributions.

Action taken by the Commission

9. At its ninth meeting, on 16 May, the Commission adopted a draft resolution entitled "Science and technology for development" (see chap. II, paras. 15-18; for the final text, see chap. I, sect. A).

Chapter IV

ACTION ARISING FROM THE SECOND SESSION

1. The Commission considered item 4 at its 5th and 9th meetings, on 14 and 16 May 1997. It had before it the following documents:

(a) Note by the UNCTAD secretariat on the implementation of and progress made on decisions taken at the second session of the Commission, including follow-up work on technology for basic needs, gender and sustainable development, and coalition of resources (E/CN.16/1997/8).

(b) Note by the UNCTAD secretariat on the scientific and technological aspects of sustainable energy systems (E/CN.16/1997/3).

2. At the 5th meeting, on 14 May, the Chief of the Science and Technology Policy Analysis Section of UNCTAD made an introductory statement.

3. At the same meeting, statements were made by the representatives of Denmark, Brazil, Malta, the Russian Federation, Belarus, Japan, Jamaica, Ethiopia and China.

4. Also at the same meeting, the representatives of the United Nations Educational, Scientific and Cultural Organization (UNESCO) and ESCAP made statements.

5. At the same meeting, the representative of the Department for Policy Coordination and Sustainable Development of the United Nations Secretariat made a statement.

6. Also at the same meeting, an economic affairs officer of UNCTAD made an introductory statement.

Chairman's summary of the general discussion

7. The Commission evaluated positively the note by the UNCTAD secretariat on the implementation of decisions taken at the second session of the Commission. In the course of the discussion, additional information was provided on the issue of implementation of Commission decisions by some members of the Commission and representatives of secretariats of a number of bodies of the United Nations system, in such areas as coalition of resources; poverty alleviation; rural industrialization; strengthening of research and development systems and technological capabilities in developing countries; integrated land management; transfer of environmentally sound technologies; and development of energy systems. The opinion was expressed by one delegation that the abolition of the Senior Advisers on Science and Technology of the Economic Commission for Europe had created an additional responsibility for the Commission on Science and Technology for Development. Another delegation emphasized the importance of continuing to monitor the implementation of Commission decisions. The Commission considered it useful to continue to monitor developments in the area of science and technology.

Scientific and technological aspects of sustainable energy systems

8. The Commission considered the note of the UNCTAD secretariat on this topic (E/CN.16/1997/3), which had been prepared at the request of the Commission at its second session. The topic was also discussed under agenda item 8 on future work. During the substantive discussion, a number of general as well as more specific comments were made. Regarding energy as a substantive topic, it was considered vital to take into account a number of pertinent issues, such as the uneven distribution of fuel and energy resources, the interactive management of energy, energy savings, the problems related to biomass sources from contaminated forests and the need for a total energy system, and the special needs of small island countries.

9. More generally, it was noted that energy was an important issue that could not be ignored by the Commission. However, efforts should be made to ensure that duplication was avoided within the United Nations system. The need for coordination of energy-related activities undertaken by United Nations bodies and organizations was vital.

The budget and inter-sessional activities of the Commission

10. The Commission expressed appreciation for the contributions of its Bureau, experts and secretariat to the inter-sessional work of the Commission. It also expressed its appreciation to Governments and organizations that had contributed financial resources to support the Commission's style of work, involving the setting-up of panels and working groups to deal with specific issues identified for further consideration.

11. Some members urged that a provisional work programme and budget be circulated to members of the Commission at the beginning of the new inter-sessional period, and that for the purposes of transparency, the secretariat continue to provide progress reports on both the work programme and its financial aspects at six-month intervals. The provisional agenda for the fourth and subsequent sessions of the Commission should also reflect the members' wish that an item dealing with the budget be included.

12. Members of the Commission also emphasized the need to make use of the competences available within the secretariat, whenever possible.

Action taken by the Commission

13. At the 9th meeting, on 16 May, the Commission adopted a draft resolution entitled "Science and technology for development" (see chap. II, paras. 15-18; for the final text, see chap. I, sect. A).

<u>Chapter V</u>

CONSIDERATION OF WAYS AND MEANS OF COMMEMORATING IN 1999 THE TWENTIETH ANNIVERSARY OF THE UNITED NATIONS CONFERENCE ON SCIENCE AND TECHNOLOGY FOR DEVELOPMENT AND THE VISION OF THE UNITED NATIONS ROLE IN THE AREA OF SCIENCE AND TECHNOLOGY FOR DEVELOPMENT

1. The Commission considered item 5 of its agenda at its 6th, 7th and 9th meetings, on 14, 15 and 16 May 1997. It had before it a note by the UNCTAD secretariat on the consideration of ways and means of commemorating in 1999 the twentieth anniversary of the United Nations Conference on Science and Technology for Development (E/CN.16/1997/7).

2. At the 6th meeting, on 14 May, the Chief of the Competitiveness and Technological Capacity-building Section, Enterprise Development Branch, UNCTAD, made an introductory statement.

3. At the same meeting, the Commission held a video conference between Geneva and New York with the Chairman of the Ad Hoc Open-ended Working Group on Informatics.

4. Also at the same meeting, statements were made by the representatives of Belgium, Austria, Belarus, Chile and Malta.

5. At the same meeting, the representative of the Department for Policy Coordination and Sustainable Development made a statement.

6. At the 7th meeting, on 15 May, the representatives of Uruguay, India and Germany made statements.

7. At the same meeting, the representative of UNESCO made a statement.

Chairman's summary of the general discussion

8. In addition to the note by the UNCTAD secretariat on this agenda item (E/CN.16/1997/7), documentation included a report on a meeting of experts outlining specific areas that could be dealt with by small expert group meetings as a basis for developing a common vision for the future contribution of science and technology for development (E/CN.16/1997/CRP.2), as well as another document containing a summary of the discussions at a workshop held at Ocho Rios, Jamaica (E/CN.16/1997/Misc.1).

9. The Commission expressed its appreciation for the note by the UNCTAD secretariat, and suggestions were made concerning additional elements to be taken into account for the elaboration of a common vision, including consideration of the evolution from a State-led to a science-led system, and the involvement of civil society and stakeholders, including Governments, enterprises, academia and non-governmental organizations, as well as individual citizens, in the process of formulating a common vision for the future contribution of science and technology to development. Science and technology were to be seen as incorporating not only the natural and physical sciences but the social sciences as well. The process for elaborating a common vision, as outlined in document E/CN.16/1997/CRP.2, should be anchored in effective international cooperation, with a recognized role and responsibility for the United Nations system; should bridge conceptual and practical issues; and should combine both global and regional dimensions. Ιt should also cover such concerns as the development of South-South cooperation; the integration of least developed countries and economies in transition into the world economy; the transfer of technological capabilities to developing countries; and the preservation and development of the scientific and technological potential of countries in transition. That process should be linked to the follow-up work to the United Nations Conference on Environment and Development and Agenda 21.

10. With regard to further modalities for the elaboration of the vision, in particular in the context of the twentieth anniversary of the Vienna Conference, diverse proposals were presented, including the discussion of a common vision at a global level, with a number of variations, such as the holding of a special session of the General Assembly or the preparation of a special high-level meeting at the fourth session of the Commission on Science and Technology for Development. The holding of regional events, such as science and technology exhibitions, was also suggested, along with the preparation of a video film on science and technology in relation to development, highlighting both positive and negative aspects. In the course of the discussion, the representative of UNESCO officially invited the Commission and the secretariat to participate in the preparations for the World Science Conference, to be held in 1999.

Action taken by the Commission

11. At the 9th meeting, on 16 May, the Commission adopted a draft resolution entitled "Science and technology for development" (see chap. II, paras. 15-18; for the final text, see chap. I, sect. A).

<u>Chapter VI</u>

ROLE AND ACTIVITIES OF THE COMMISSION REGARDING THE COORDINATION OF SCIENCE AND TECHNOLOGY FOR DEVELOPMENT

1. The Commission considered agenda item 6 at its 7th and 9th meetings, on 15 and 16 May 1997. It had before it a note by the UNCTAD secretariat on the role and activities of the Commission regarding the coordination of science and technology for development (E/CN.16/1997/2).

2. At the 7th meeting, on 15 May, the Chief of the National Policy Reviews Section of UNCTAD made an introductory statement.

3. At the same meeting, statements were made by the representatives of Malta, Egypt and China.

4. Also at the same meeting, the representatives of ESCAP and the Economic Commission for Africa made statements.

5. At the same meeting, the representative of the Department for Policy Coordination and Sustainable Development made a statement.

Chairman's summary of the general discussion

The Commission considered the note prepared by the UNCTAD secretariat at б. the request of the Commission at its second session (E/CN.16/1997/2). It was noted that, with the ongoing process of restructuring of the economic and social sectors of the United Nations, which had brought the Commission to Geneva and had also made UNCTAD the secretariat of the Commission, the mandate for the coordination of the activities of United Nations bodies in the area of science and technology belonged to the Department for Policy Coordination and Sustainable Development. In addition, the functions of the former Inter-Agency Task Force on Science and Technology for Development had been assumed by the existing coordinating bodies under the Administrative Committee on Coordination. The Consultative Committee on Programme and Operational Questions and the Inter-Agency Committee on Sustainable Development were the two bodies that dealt with issues related to inter-agency coordination in the field of science and technology for development; in that regard, a close working relationship had been established between the secretariats of the Commission on Science and Technology for Development and the Commission on Sustainable Development. As to the role and responsibilities of the Commission, one delegation emphasized the importance of continuing to strengthen its activities. Another delegation expressed support for the idea of strengthening the Commission's involvement in the coordination of science and technology for development.

7. It was pointed out that requesting United Nations organizations and bodies to contribute to the preparation of reports fell short of the requirements of active collaboration and coordination. In pursuing its coordinating responsibilities, the Commission should involve United Nations organizations and bodies in the conceptualization and planning of its inter-sessional work and the implementation of its recommendations, to the extent that financial resources were available for that purpose.

8. It was also suggested that the use of information technology, such as video-conferencing, could provide a possible channel for facilitating close communication and cooperation among the organizations and bodies of the United Nations system.

Action taken by the Commission

9. At the 9th meeting, on 16 May, the Commission adopted a draft resolution entitled "Science and Technology for Development" (see chap. II, paras. 15-18; for the final text, see chap. I, sect. A).

<u>Chapter VII</u>

ELECTION OF THE CHAIRPERSON AND OTHER OFFICERS FOR THE FOURTH SESSION OF THE COMMISSION

1. The Commission considered item 7 of the agenda at its 8th and 9th meetings, on 16 May 1997.

2. At its 8th meeting, on 16 May, upon nomination by the representative of Morocco (on behalf of the African Group), the Commission elected by acclamation Mr. Aserat Bulbula (Ethiopia) as Chairman of its fourth session.

3. At its 9th meeting, the Commission had before it a draft decision submitted by the Chairman on the basis of informal consultations, entitled "Election of the members of the Bureau other than the Chairman" (E/CN.16/1997/L.2).

4. At the same meeting, the Commission adopted the draft decision (see chap. I, sect. B, draft decision I).

Chapter VIII

PROVISIONAL AGENDA FOR THE FOURTH SESSION

1. The Commission considered item 8 of its agenda at its 9th meeting, on 16 May 1997. It had before it an informal paper by the UNCTAD secretariat containing the draft provisional agenda for the fourth session.

2. At the same meeting, the representatives of Germany and Romania made statements.

3. Also at the same meeting, the Commission approved the provisional agenda for the fourth session, as orally amended, and decided to entrust the UNCTAD secretariat with the task of completing the provisional agenda in the light of the resolution and decisions adopted by the Commission at its third session (see chap. I, sect. B, draft decision II).

<u>Chapter IX</u>

OTHER MATTERS

A. Budget and inter-sessional activities of the Commission

1. The Commission considered item 9 of its agenda at the 7th and 9th meetings, on 15 and 16 May 1997. It had before it a note by the Secretariat on the budget and inter-sessional activities of the Commission (E/CN.16/1997/CRP.3).

2. At the 7th meeting, on 15 May, the Director of the Division for Science and Technology of UNCTAD made an introductory statement.

3. At the same meeting, statements were made by the representatives of Austria, the United Kingdom, Belgium, Colombia, Egypt, Chile and Mexico.

4. Also at the same meeting, the Chairman made a statement.

5. At the same meeting, the Secretary made a statement.

B. Chairman's summaries of the discussions

6. At the 9th meeting, on 16 May, the Chairman made a statement.

7. At the same meeting, the Commission decided to include the Chairman's summaries of the discussions in the report of the Commission (E/CN.16/1997/L.1/Add.1 to 5) (see chap. I, sect. C, decision 3/101).

8. Also at the same meeting, statements were made by the representatives of the United Kingdom, Chile, Malta, China and Bulgaria.

9. At the same meeting, the representative of the Department for Policy Coordination and Sustainable Development made a statement.

Action taken by the Commission

10. At the 9th meeting, on 16 May, the Commission adopted a draft resolution entitled "Science and technology for development" (see chap. II, paras. 15-18; for the final text, see chap. I, sect. A).

<u>Chapter X</u>

ADOPTION OF THE REPORT OF THE COMMISSION ON ITS THIRD SESSION

1. At its 9th meeting, on 16 May 1997, the Vice-Chairperson/Rapporteur introduced the report of the Commission and orally corrected it.

2. At the same meeting, the Commission adopted the report on its third session (E/CN.16/1997/L.1 and Add.1-5), as orally corrected.

3. Also at the same meeting, the Commission decided to entrust the Rapporteur with finalizing the report of the Commission on its third session for submission to the Economic and Social Council.

<u>Chapter XI</u>

ORGANIZATION OF THE SESSION

A. Opening and duration of the session

1. The Commission on Science and Technology for Development held its third session at Geneva from 12 to 16 May 1997. The Commission held nine meetings (1st to 9th) and a number of informal meetings.

2. In his introductory statement, the Deputy Secretary-General of UNCTAD outlined the major global economic and technological changes that were occurring, and noted that although some developing countries were able to reap the benefits arising from those changes, others, especially the least developed countries, lacked the resource base and technological capability necessary to take advantage of the opportunities offered, and ran the risk of marginalization or even total exclusion. At its ninth session, UNCTAD had emphasized the need for mastery of technology in order to achieve sustainable economic progress. Acquiring technological capability, especially in new technologies such as information and communication technologies, was a sine qua non for effective integration into the international economic system and for enhancing competitiveness. While noting the timely decision taken at the second session of the Commission to focus on information technologies, he emphasized the need to address the challenges that those technologies posed for developing countries and countries in transition. For the United Nations, the critical question was what could be done to facilitate the access of those countries to the new information and communication technologies and to make those technologies contribute to development. Since the mid-1980s, UNCTAD had been playing an important role in promoting the diffusion and effective application of information technologies in developing countries, and had developed several programmes to ease some of the constraints faced by developing countries and countries in transition in taking advantage of those technologies. UNCTAD had developed software to improve debt management and promote trade efficiency through the establishment of trade points, which provided up-to-date information on global markets and enhanced the competitiveness of small and medium-sized enterprises. In contemplating the key issues in science and technology for the next millennium, it was essential to bear in mind that bridging the gap between those countries that had the capacity to generate and utilize knowledge and those that did not would remain a major challenge for Governments and the international community in the years to come.

The Chairman of the Commission on Science and Technology for Development 3. noted that science and technology were together a tremendous force for progress, and developing countries and countries in transition placed great hope in science and technology as an ally in their struggle for development. To deal adequately with science and technology, a judicious mix of market and government involvement was necessary. Referring to the work of the Commission, he stressed that it should be a functional advisory board on science and technology matters to United Nations bodies and Governments. That objective was being pursued, and the gap between the Commission's necessary paperwork and concrete action in favour of beneficiaries was being bridged. General quidelines worked out by the Commission could be instrumental in working out specific national strategies. During the period 1995-1997, the Commission had undertaken many useful activities, including through the work of the Working Group on Information and Communication Technologies for Development and the Advisory Board on Gender Issues, as well as the work carried out jointly with UNCTAD on STIP reviews, and work on a common vision for the future contribution of science and technology to development.

4. The success of that work owed a great deal to the personal involvement and active participation of many members of the Commission, as well as to the effective support of the UNCTAD secretariat and the financial support received from the regular budget and extrabudgetary sources. The Chairman expressed the hope that beyond the circles of United Nations bodies and Governments, non-governmental organizations, academics and the private sector would read the reports and recommendations of the Commission and help public institutions to translate the advice of the Commission into concrete actions. The Commission should continue dealing primarily with generic or intersectoral issues, and should maintain the high quality of its work. Finally, he paid tribute to the late representative of Burundi to the Commission, Mr. S. Ruzenza, and to his contribution to the work of the Commission.

B. <u>Attendance</u>

5. In accordance with Economic and Social Council resolution 46/235, the Commission is composed of 53 States Members of the United Nations, elected by the Economic and Social Council for a term of four years on the principle of equitable geographical distribution.

6. The session was attended by 44 States members of the Commission. Observers of other States Members of the United Nations and of non-member States and representatives of specialized agencies and intergovernmental and non-governmental organizations also attended. A list of participants is given in annex I to the present report.

C. <u>Election of officers</u>

7. At its second session, in 1995, the Commission had elected the following officers by acclamation for its third session:

<u>Chairman</u> :	Mr. J. George Waardenburg (Netherlands)
<u>Vice-Chairmen</u> :	Mr. Arnoldo K. Ventura (Jamaica) Mr. Hilal A. Raza (Pakistan) Ms. Marina Ranga (Romania) Mr. Messanvi Gbeassor (Togo)

D. Agenda and organization of work

8. At the 1st meeting, on 12 May, the Commission adopted its provisional agenda for the session, as contained in document E/CN.16/1997/1 (see annex II to the present report).

9. At the same meeting, the Commission approved the organization of work of the session (E/CN.16/1997/1/Add.1, annex).

<u>Annex I</u>

ATTENDANCE

Antiqua and Barbuda:	Conrad Hunte		
<u>Austria</u> :	Bernd Michael Rode, Elke Atzler, Thomas Loidl		
<u>Azerbaijan</u> :	Agadadash Aliyev		
<u>Belarus</u> :	V.V. Vantsevich		
Belgium:	Luk van Langenhove		
<u>Bolivia</u> :	Carlos Aguirre, Jorge Lema Patiño, Maria Victoria Montalvo		
<u>Brazil</u> :	Ancelmo Cesar Lins de Gois, Ana Lucy Gentil Cabral Petersen		
<u>Bulgaria</u> :	Petko Baev, Nikolay Trifonov		
<u>Burundi</u> :			
<u>Canada</u> :	Andrew Kenyon		
<u>Cape Verde</u> :			
<u>Chile</u> :	Eduardo Gálvez		
<u>China</u> :	Wang Shaoqi, Sun Mengxin		
<u>Colombia</u> :	Gustavo Castro Guerrero, Jorge Ahumada, Miguel Camilo Ruiz Blanco		
<u>Conqo</u> :	Maurice Onanga		
<u>Costa Rica</u> :	Manuel Dengo, Rafael Carrillo Zucher, Joaquin Alvarez, Eugenia Flores		
<u>Denmark</u> :	Niels Busch		
Egypt:	M.M. El Halwagi, Hesham Youssef		
<u>Ethiopia</u> :	Getaneh Yemene, Mussie Delelegn		
<u>Germany</u> :	Wolfgang Hillebrand		
<u>Guatemala</u> :	Velez de García		

<u>India</u>: S. Ramani, Dilip Sinha Thomas Hanney <u>Ireland</u>: Arnoldo K. Ventura Jamaica: Jun Yokota, Hitoshi Kikuchi, <u>Japan</u>: Michiyuki Nishioka, Mikoto Usui <u>Jordan</u>: Khaled El-Shuraydeh, Karim Masri <u>Kuwait</u>: Libyan Arab Jamahiriya: Ali Bel Ashar, Ahsour Ebais, Ali Abdulgader <u>Malawi</u>: <u>Malaysia</u>: Ishak Ismail, Mohammed Nordin Hassan <u>Malta</u>: Jennifer Cassingena Harper Marshall Islands: Samira Naranjo Moda, Edgar Cubero Gomez <u>Mexico</u>: Mohamed Zinoune, M.H. Aboutahir Morocco: <u>Netherlands</u>: J. Georg Waardenburg, J. Frederiks <u>Niger</u>: R.A. Boroffice <u>Nigeria</u>: Mukhtar Mohammad Zafar <u>Pakistan</u>: Philippines: Estrella F. Alabastro, Angelina M. Sta. Catalina Romania: Marina Ranga Chakine Youri, A. Petrov, Y. Kochevoi Russian Federation: <u>Saudi Arabia</u>: Saud Abdul Aziz Al-Mubarak Rosa Sancho <u>Spain</u>: <u>Toqo</u>: Messanvi Gbeassor <u>Uganda</u>: <u>Ukraine</u>: Yurii Dosenko, Serhii Yampolsky

<u>United Kingdom of Great Britain</u> <u>and Northern Ireland</u> :	P.M.A. Jones, Geoffrey Oldham, I.S. Danson
<u>United Republic of Tanzania</u> :	Titus Mteleka
<u>United States of America</u> :	William McPherson
<u>Uruquay</u> :	Teodoro Kunin
<u>Viet Nam</u> :	Chu Hao

States Members of the United Nations represented by observers

Algeria, Côte d'Ivoire, Cuba, El Salvador, Indonesia, Iran (Islamic Republic of), Iraq, Kenya, Luxembourg, Madagascar, Democratic People's Republic of Korea, Czech Republic, South Africa, Sri Lanka, The former Yugoslav Republic of Macedonia, Tunisia, Turkey, Yemen, Zambia

Non-Member State represented by observers

Switzerland

United Nations

Economic and Social Commission for Asia and the Pacific, Economic Commission for Africa, United Nations Conference on Trade and Development, Department for Policy Coordination and Sustainable Development, Department for Development Support and Management Services

Specialized agencies

International Telecommunication Union, United Nations Educational, Scientific and Cultural Organization, World Health Organization

Intergovernmental organizations

Agency for Cultural and Technical Co-operation, Arab Labour Organization, European Community, Organization of African Unity

Non-governmental organization (General consultative status)

World Federation of United Nations Associations

<u>Annex II</u>

AGENDA OF THE THIRD SESSION

- 1. Adoption of the agenda and other organizational matters.
- 2. Substantive theme: "Information and communication technologies for development".
- 3. Science, technology and innovation policy reviews.
- 4. Action arising from the second session.
- 5. Consideration of ways and means of commemorating in 1999 the twentieth anniversary of the United Nations Conference on Science and Technology for Development, and the vision of the United Nations role in the area of science and technology for development.
- 6. Role and activities of the Commission regarding the coordination of science and technology for development.
- 7. Election of the Chairperson and other officers for the fourth session of the Commission.
- 8. Provisional agenda and organization of work of the fourth session of the Commission.
- 9. Other matters.
- 10. Adoption of the report of the Commission on its third session.

<u>Annex III</u>

LIST OF DOCUMENTS BEFORE THE COMMISSION AT ITS THIRD SESSION

Document symbol	<u>Agenda</u> <u>item</u>	Title or description
E/CN.16/1997/1	1	Provisional agenda
E/CN.16/1997/1/Add.1		Organization of work of the session
E/CN.16/1997/2	6	Note by the UNCTAD secretariat on the role and activities of the Commission regarding the coordination of science and technology for development
E/CN.16/1997/3	4	Note by the UNCTAD secretariat on scientific and technological aspects of sustainable energy systems
E/CN.16/1997/4	2	Note by the Secretary-General transmitting the report of the Working Group on Information and Communication Technologies for Development
E/CN.16/1997/5	3	Note by the UNCTAD secretariat on the implementation of the programme on science, technology and innovation policy reviews
E/CN.16/1997/6	-	Not issued
E/CN.16/1997/7	5	Note by the UNCTAD secretariat on consideration of ways and means of commemorating in 1999 the twentieth anniversary of the United Nations Conference on Science and Technology for Development
E/CN.16/1997/8	4	Note by the UNCTAD secretariat on the implementation of and progress made on decisions taken at the second session of the Commission, including follow-up work on technology for basic needs, gender and sustainable development, and coalition of resources

E/CN.16/1997/L.1 and Add.1-5	Draft report of the Commission on its third session	
E/CN.16/1997/CRP.1	4	Note by the UNCTAD secretariat transmitting the comments and suggestions of Commission members on scientific and technological aspects of sustainable energy system
E/CN.16/1997/CRP.2	5	Report by the UNCTAD secretariat on a panel meeting on consideration of ways and means of commemorating in 1999 the twentieth anniversary of the United Nations Conference on Science and Technology for Development
E/CN.16/1997/CRP.3	9	Note by the secretariat of the Commission on Science and Technology for Development on budget and inter-sessional activities of the Commission
E/CN.16/1997/CRP.4	3	Note by the UNCTAD secretariat containing a summary of the Colombian science, technology and innovation policy review
E/CN.16/1997/CRP.5	9	Proposals for themes for the inter-sessional period
E/CN.16/1997/Misc.1		Summary of discussions at a workshop conducted at Ocho Rios, Jamaica, from 30 April to 2 May 1997, on the theme "Towards a common vision on the future of science and technology for development"
E/CN.16/1997/Misc.2	9	Report of the fifth meeting of the Bureau of the Commission on Science and Technology for Development
E/CN.16/1997/Misc.3	9	Inter-agency project on universal access to basic communication and information services
E/CN.16/1997/INF.1		Provisional list of participants

E/CN.17/1997/7 and Corr.1

Report of the Secretary-General on an inventory of ongoing energy-related programmes and activities of entities within the United Nations system, on coordination of such activities, and on arrangements needed to foster the linkage between energy and sustainable development within the system

Report of the Committee for Regional Economic Cooperation on its sixth session on the emerging issues and developments at the regional level on the theme "Regional economic cooperation"

E/ESCAP/1049