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COMMISSION ON SCIENCE AND TECHNOLOGY FOR DEVELOPMENT

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# ACTIVITIES OF THE COMMISSION REGARDING THE COORDINATION OF SCIENCE AND TECHNOLOGY FOR DEVELOPMENT AND OTHER INTER-SESSIONAL ACTIVITIES

Note by the secretariat

### **Executive summary**

The Economic and Social Council, in resolution 1999/61, requested the secretariat of the Commission to continue efforts, in collaboration with other United Nations bodies, to establish an electronic network linking information on their activities in science and technology for development and to build awareness of scientific developments that are particularly important for fostering economic and social development. It also called upon the secretariat and the Bureau of the Commission to interact closely with bodies of the United Nations system in order to promote greater information exchange and coordination of activities in science and technology for development. This note describes the progress made in responding to those requests. Emphasis is placed on the Science and Technology for Development Network as it responds to the above requests. It also reports on the outcome of the World Science Conference.

#### INTRODUCTION

- 1. In accordance with decision 1999/274 of the Economic and Social Council, the Commission on Science and Technology for Development (CSTD) is to consider, at its fifth session, under agenda item 6, the question of the activities of the CSTD regarding the coordination of science and technology for development.
- 2. Since its establishment in 1992, the CSTD has paid particular and continuous attention to the coordination of the activities of the United Nations system in the area of science and technology for development. At its fourth session, it revisited the issue on the basis of a note prepared by the UNCTAD secretariat (E/CN.16/1999/8). In the course of its deliberations, the CSTD noted that playing the role of coordinator within the United Nations system has always been, and will continue to be, a complicated task. For better coordination of science and technology, the CSTD should seek more inter-agency interaction not only to fulfil its mandate as coordinator of science and technology activities more effectively, but also to provide leadership and direction in this critical area. The Bureau was advised to be more proactive, and improvement was requested in networking communication among CSTD experts and UN agencies during the inter-sessional periods. Additional steps need to be taken to encourage the participation of other United Nations organizations in CSTD panels.
- 3. The Economic and Social Council (ECOSOC) took up the issue of coordination in its substantive session in July 1999. In its resolution 1999/61, it urged the secretariat of the Commission to continue its efforts, in collaboration with other United Nations bodies, including regional commissions and the Ad Hoc Open-ended Working Group on Informatics, to establish an electronic network linking information on their activities in science and technology for development and to build awareness of scientific developments that are particularly important for fostering economic and social development.
- 4. In the same resolution, ECOSOC called upon the secretariat and the Bureau of the Commission to identify and take advantage of opportunities to interact closely with bodies of the United Nations system in order to promote greater information exchange and coordination of activities in science and technology for development, including participation by the secretariat in the relevant coordination meetings of the Administrative Committee on Coordination's Consultative Committee on Substantive Questions (Operational Activities).
- 5. Finally, the ECOSOC recommended that every other year one panel meeting be held in Geneva, following which the Bureau would meet the Geneva-based delegations of member States and observers for one day to discuss the status of inter-sessional activities of the Commission and its efforts to coordinate activities of the United Nations system pertaining to science and technology for development.
- 6. This note describes the progress made in responding to these decisions. Emphasis will be placed on the Science and Technology for Development Network as it responds to many of the requests mentioned above. It also reports on the outcome of the World Science Conference.

#### OUTCOME OF THE WORLD CONFERENCE ON SCIENCE

- 7. The world has witnessed increased diffusion of science-based technologies that have far-reaching implications for economic and social development. This was highlighted by the World Conference on Science, held in Budapest, Hungary, from 26 June to 1 July 1999. The Conference involved national Governments and institutions, educational and research establishments, members of the scientific community, the industrial sector, intergovernmental organizations (IGOs) and international scientific non-governmental organizations (NGOs). The outcome of the conference is embodied in two principal documents:
  - (a) The Declaration on Science and the Use of Scientific Knowledge, which underscores the political commitments by the international community to scientific endeavour and to finding solutions to problems at the interface between science and society;
  - (b) The Science Agenda Framework for Action, which contains specific commitments and recommendations with regard to capacity-building in science and the use of science for sustainable development.
- 8. The Declaration emphasizes *inter alia* the following issues:
  - (a) Science for knowledge and knowledge for progress;
  - (b) Science for peace;
  - (c) Science for development, which implies the application of scientific knowledge for the development of technology that has wide-ranging development implications for different countries;
  - (d) Science in society and science for society, which implies that the use of scientific knowledge should aim at the welfare of humankind, including reduction of poverty and respect for the dignity and rights of human beings.
- 9. As regards the Plan for Action adopted by the Conference, it identified a number of priority areas and actors that could help to attain the objectives of the Declaration. A major factor is the strengthening of the role of fundamental research. The message is for countries to continue to carry out fundamental research and provide education in different science disciplines. Public authorities, private companies, universities and research laboratories have a responsibility in this domain. Both the public sector and the private sector have a major role to play in this regard.
- 10. New funding mechanisms should be explored to enable those actors to generate and diffuse scientific research, taking into account the context prevailing in developed and developing countries. Attention was also directed to the sharing of scientific information and knowledge among countries, drawing on the use of information technology services that facilitate the collection and dissemination of information. Furthermore, partnerships have been established using this new technology, including networks for research and training and cooperative arrangements between research communities in developed and developing countries

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<sup>&</sup>lt;sup>1</sup> UNESCO. Science for the 21<sup>st</sup> Century: A New Commitment. Paris, 2000.

- 11. As regards science for peace and development, emphasis was placed on science for the attainment of basic human needs, including food, water, shelter and access to health care. It is against this background that a case for supporting science and development for developing countries is made. A related issue dealt with in this framework is the interrelationships between science, environment and sustainable development. This has been highlighted, given the great challenges that face the international community in the future. Another issue underlined in the Plan of Action is the interrelationship between science and technology. This relationship is becoming increasingly important with the advent of new technology. All countries should develop a science base, taking into account the level of their economic development. On the other hand, science policy should be formulated taking into account the protection of intellectual property rights.
- 12. The Plan of Action has also highlighted the role of science in society and science for society. In this respect, social requirements and human dignity were emphasized, which implies that science should be at the service of humanity as a whole. It should contribute to improving the quality of life for present and future generations. The scientific community, governments and other actors are urged to commit themselves to social and human dignity. The popularization of science, including the increasing participation of society in science-related work, should be encouraged. Participation in the planning, implementation and assessment of scientific research should be promoted.
- 13. The Declaration on Science and the Use of Scientific Knowledge and the Science Agenda Framework of Action are important tools for decision makers in their efforts to promote capacity-building and international cooperation in science. Together, they also provide a follow-up framework of action at the national, regional and international levels for the generation, development and diffusion of scientific knowledge, which is intimately related to the building of technology capacity.

### Science and Technology for Development Network

- 14. On 25 April 2000, the Advisory Committee on Coordination (ACC) issued a statement on information technology and development in which it reaffirmed the critical role of information technology as a tool for knowledge-sharing and development, as well as a means for collaborative action in the UN system. It called for a comprehensive and coordinated system-wide approach to building an effective knowledge acquisition and dissemination capacity. Executive heads requested, *inter alia*, to "organize a system-wide community of IT experts and users through innovative networking arrangements, as a system-wide resource facility and consultancy service for information on options, costs, good practices, and emerging developments; for use by organizations of the system for their IT needs and for operational activities for development."
- 15. In addition, in its resolution A/RES/54/201, the General Assembly called for "proposals for strengthening the coordination mechanisms of the Commission on Science and Technology for Development within the United Nations Conference on Trade and Development in order to ensure coordination of the various efforts and activities in the area of new and innovative technologies, in particular information and communication technologies, and their applications, such as in electronic commerce, with the objective of promoting complementarities of activities within the United Nations System". In response to

this request, UNCTAD prepared a report<sup>2</sup> in which it suggested the setting up of a knowledge and technology network for development.

- 16. For about four years, the UNCTAD secretariat has been taking steps to establish electronic linkages as part of its dissemination activities. These include the launching of a website for the Division on Investment, Technology and Enterprise Development in 1998 and two Internet discussion lists in 1999 (STD@topica.com and CSTD@topica.com). The DITE website includes information on the Division's activities in the areas of investment, enterprise development and technology for development. Information published on science and technology within UNCTAD includes meeting reports of (past, present and future), proceedings of seminars, publications (a list of recent DITE documents with their table of contents or a summary for most of them, and the full text of other papers), the main UN resolutions on science and technology, a list of current members of the CSTD, etc.
- 17. The UNCTAD secretariat, in collaboration with other UN bodies, including regional commissions, has initiated the establishment of the Science and Technology for Development Network (S&TD Net) (see Annex 1) with the following objectives:
  - Providing information on activities in the area of science and technology for development (projects, policies, programmes, networking and partnership opportunities, publications available on-line, etc.) within the United Nations system, other multilateral and bilateral development institutions, NGOs, etc.;
  - Building awareness of scientific and technological developments that are of particular importance for fostering economic and social development in member States;
  - Identification and dissemination of best practices in the assessment, transfer, adaptation, development and diffusion of technology for development purposes.
- 18. On 10 November 2000, the Secretary-General of UNCTAD sent a letter to the members of the ACC requesting them to provide information on their activities on science and technology for development for inclusion in the S&TD Net website. A summary of the content of that initial version of the network is attached as an annex to this note.
- 19. Preliminary responses from UN agencies can be summarized as follows:
  - (a) The Economic Commission for Africa sent a letter describing the three initiatives it has undertaken to assist member States in the area of science and technology.
  - (b) The UN Economic Commission for Europe sent a message summarizing its activities in science and technology with an indication of related websites.
  - (c) The UN Research Institute for Social Development provided a short summary of its research projects in the area of information and social development.

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<sup>&</sup>lt;sup>2</sup> A55/96-E/2000/84 as of 28 June 2000.

- (d) The International Monetary Fund provided an insight into its specialized technical assistance in the area of information technology.
- (e) UNIDO responded with a presentation of the UNIDO International Technology Centres and their Networks, and of the UNIDO Exchange as a new electronic platform linking industrial development agents with UNIDO and its networks.
- (f) The UN High Commissioner for Human Rights provided information on its activities concerning human rights and scientific developments.
- (g) The World Intellectual Property Organization provided an overview of its work in the area of information technology for development.
- (h) The International Labour Organization provided information on its related activities with emphasis on its publication *World Employment Report 2001: Life at Work in the Information Economy.*
- (i) The World Trade Organization described its contribution to science and technology for development, especially in relation to the implementation of the relevant provisions of the WTO Agreements and to the use of information technology to assist developing and least developed countries.
- (j) The Department of Economic and Social Affairs of the UN secretariat sent a description of its efforts in providing a range of technical cooperation services for advising and supporting countries in implementing development strategies.
- 20. As more responses are received from UN departments and specialized agencies, more data are incorporated and more links are created within S&TD Net. S&TD Net is thus expected to evolve into a directory of those active in the field and, ultimately, into a first portal on science and technology for development with continuously expanding and updated information on best practices, knowledge, learning, networking and financing opportunities for science and technology.
- 21. In addition to setting up S&TD Net, the secretariat interacted with other United Nations bodies through participation in several joint meetings and on-line discussions. For example, a representative of the secretariat attended a meeting of the Inter-Agency Network for Safety in Biotechnology<sup>3</sup> (IANB) held at UNIDO headquarters in Vienna, Austria, in April 2000. Since then, the activities of the secretariat have been publicized in the IANB newsletter.
- 22. With regard to the Bureau, the Chairman of the CSTD participated in the OECD Working Party on Biotechnology, held in Paris from 2 to 4 October 2000. In his address, he briefed the participants on the programme and the activities of the CSTD panels.

<sup>3</sup> The Inter-Agency Network for Safety in Biotechnology includes participants from CGIR, CBD, FAO, OECD, OIE, UNCTAD, UNIDO, WHO and WTO.

- 23. The recommendation by the Economic and Social Council that the CSTD collaborate closely with other United Nations bodies was fully taken into consideration by the CSTD in carrying out its inter-sessional activities. Various United Nations bodies and other international organizations were invited to participate in the CSTD panels on biotechnology. A number of organizations responded positively by appointing representatives to the CSTD panels. The panels benefited from the participation of, and substantive inputs provided by, representatives of various United Nations agencies and institutes, including the United Nations University Institute for New Technologies, the World Health Organization, the United Nations Environment Programme, the United Nations Educational, Scientific and Cultural Organization, the International Centre for Genetic Engineering and Biotechnology, the Convention on Biological Diversity and UNCTAD. The costs of those contributions, in terms of human resources and travel, were borne by the respective organizations.
- 24. Also, as requested, the CSTD held its second panel meeting in Geneva on "legal and regulatory issues in biotechnology", from 3 to 5 July 2000. The Bureau briefed the delegations of member States and observers on the status of the CSTD's inter-sessional activities. Furthermore, the secretariat briefed participants in the fifth session of the Commission on Investment, Technology and Related Financial Issues (Geneva, 12–16 February 2001) on the activities of the CSTD.
- 25. Finally, an important decision relevant to coordination issues regarding science and technology in the UN system is the creation by the UN Secretary-General of the Information and Communication Technology Task Force and the appointment of the Advisory Group supporting it. The Task Force was established following a recommendation by the Ad Hoc Open-ended Working Group on Informatics. The recommendation was endorsed by ECOSOC in July 2000. In November 2000, the Secretary-General appointed the former President of Costa Rica, Mr. Jose Maria Figueres-Olsen, as his special representative and head of the Advisory Group on Information and Communication Technologies. The Advisory Group, composed of 21 personalities from the public and private sectors of all continents (see list in annex II), will draw up the specific modalities for the Task Force, in which UNCTAD is expected to participate.

# **ANNEX I**

# Science and Technologyfor Development Network

# Co-ordination of Information on Science & Technology for Development

Site map	Description
CSTD Activities	Here you will find out about the activities of the UN Commission on Science and Technology for Development (CSTD).
About S&TD Network	This page describes the objectives and activities of the S&TD Network.
A-Z Index	A-Z index is limited to the activities of UN science and technology organizations.
Activities of Organizations on Science & Technology:	
• <u>UN</u>	
• <u>Inter-governmental</u>	This page is a one-stop shop for information about the work of various science and technology organizations.
• NGOs	
• <u>National</u>	
Best Practices in Technology Transfer	This page provides information about web resources for best practices in technology transfer as well as lessons and ideas collected from various workshops and conferences.
International Networks & Technology Partnerships Locator	This page provides information for partnering and networking in science and technology. The <i>Research partner</i> provides information for researchers to enable them to exchange information about their research
Research Partner Locator	work and proposals. Researchers can easily find other researchers that
• <u>T</u> echnology Marketplace	work in related fields or that are looking for partnerships, and contact them through the e-mail. The research locator helps users to search for partners
• <u>Technology Partnership</u> <u>Practices:</u>	on the basis of countries and fields. Similarly, the <i>Technology Marketplace</i> helps information seekers to find new products or services.  To find information on best practices in partnering and networking as well
o Best Practices in	as country experiences in technology partnerships, the <i>Technology</i>
Partnering and Networking	Partnership Practices page is an excellent place to begin. The Regulations and Policies facilitating S&T Partnership page is an inventory of international S&T cooperation agreements.
o Country Experiences	Promotion & Technical Assistance for Networks in Developing Countries page describes the activities of the S&TD Network in promoting knowledge networks in developing countries. An inventory of science and
Regulations & Policies	technology networks and their activities is presented on the page entitled
Facilitating International	Register of International Science and Technology Networks.
S&T Partnerships	Inquiries about technical issues in partnering as well as information about related web resources are addressed via the <i>Technology Partnership</i>
	Enquiries: where can I find information page.
Promotion & Technical	

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Assistance for Networks in Developing Countries	
Developing Countries	
Register of International	
Science & Technology	
Networks	
Technology Partnership	
Enquiries: where can I	
find information?	
	This page describes how the S&T Diplomacy Programme will provide
Science & Technology Diplomacy	developing countries with succinct technology diplomacy briefs on
<u>Initiative</u>	important science and technology related treaties, protocols and
	international initiatives.
Funds & Grants for Technology	An inventory of organizations that provide financial support for science
<u>Development</u>	and technology projects can be accessed via the Funds & Grants for Technology Development page.
New Technologies, Reports &	Awareness of the growing number of innovations, research findings and
Research Findings	new technologies is the main objective of this page. Trends in various
	technology fields are comprehensively recorded on this page and presented
Biotechnology	to information users in an easily accessible way. Also on this page is an
Information &	inventory of reports and issues papers of relevant committees of various
Communication	international organizations on science and technology.
General Reports & Issues	
Paper	
• Energy	
• Environment	
Online Exhibition	
Calanda & Tashmala Nasara	News updates from various international media and press releases from
Science & Technology News and Events	research centres are monitored via this page. It covers forthcoming science
Events	and technology events.
Technology of the Month	The Technology of the Month page contains an in-depth analysis of
Technology of the Month	transferable technologies and interviews with technology experts.
	This page contains the lists of all UNCTAD publications and reports of the
UNCTAD's Publications	CSTD. Users can find information on how to order books published by
	UNCTAD. The CSTD reports that contain useful initiatives on science and technology issues can be accessed easily via this page.
	The contact page contains two types of e-mail addresses, one for
Contact	contacting the S&TD Network and the other for sending opinions on the
	discussion lists and suggestions for improving the website.
Distriction of	The disclaimer notice is essential for viewers to understand the general
Disclaimer	implications of information presented on this website.
Search	The search engine is still under construction.
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#### **ANNEX II**

## UN Secretary-General's Information and Communication Technology Advisory Group

José María Figueres-Olsen Special Representative, former President of the Republic

of (Costa Rica)

Zoë Baird President, Markle Foundation (United States) Eric Benhamou Chief Executive Officer, 3Com (United States)

Manuel Castells
Vinton CerfSenior
John T. Chambers
Professor, University of California at Berkeley (Spain)
Vice president, MCI WorldCom (United States)
President and Chief Executive Officer, Cisco Systems

(United States)

Carleton Fiorina President and Chief Executive Officer, Hewlett-Packard

(United States)

Toomas Ilves Minister of Foreign Affairs (Estonia)

Jiang Mian-heng Vice President, Academy of Science (China)

Andrei Korotkov Head of Government Information Department (Russia

Federation)

Richard Li Chairman and Chief Executive Officer, Pacific Century

Group (China)

Erkki Liikanen European Union Commissioner for Enterprise and

Information Society, European Commission (Finland)

Jay Naidoo President of South African Development Bank (South

Africa)

Yoshiji Nogami Deputy Minister of Foreign Affairs (Japan) Jorma Ollila Chairman and Chief Executive Officer, Nokia

Corporation (Finland)

Sam Pitroda Chairman and Chief Executive Officer, WorldTel (India) Nii Quaynor Chairman and Chief Executive Officer, Ghana Internet

Corporation (Ghana)

Tadao Takahashi Ministry of Science and Technology (Brazil)

Serge Tchuruk Chairman and Chief Executive Officer, Alcatel (France)

Makarim Wibisono President of the Economic and Social Council

(Indonesia)

Muhamed Yunus Chairman and Chief Executive Officer, Grameen Bank

(Bangladesh)