Science and technology for development

I. Technology development, capacity-building for competitiveness in a digital society

The Economic and Social Council,

Welcoming the work of the Commission on Science and Technology for Development on its theme on "Technology development and capacity-building for competitiveness in a digital society", and noting the findings, which indicate, inter alia, the following:

- (a) Information and communication technologies (ICT) create new opportunities to tackle the problems of poverty, poor communications, economic stagnation and environmental degradation. At the same time, they generate new challenges, especially for those countries in which technological capability, skill capacity and supporting infrastructure are not sufficiently developed;
- (b) The diffusion of ICT throughout the world is extremely uneven. Many of the developing countries face significant barriers in access to and effective applications of ICT owing to limited telecommunications infrastructure, low computer literacy levels and lack of a regulatory framework;
- (c) ICT will continue to play an increasingly important role in development. Most developing countries are not in a position to compete with industrialized countries at the frontier of innovation. The most effective way of raising the level of technology in developing countries is therefore through acquisition of technology from the industrialized countries. The experience of successful economies suggests that foreign direct investment has a crucial role to play in the acquisition of technology by developing countries;
- (d) Mere transfer and imports of new technology through foreign direct investment and other channels do not ensure technology acquisition. In order to build capacity to acquire and master technology, it is essential that Governments build a sound human resources capital and put in place credible and more focused long-term policies and regulations that encourage the active international transfer, effective diffusion and development of technology;
- (e) In order to facilitate and promote ICT use in developing countries, there is a need for an enhanced partnership between Governments, the private sector, academic institutions and non-governmental organizations;

Heeding the call of the ministerial declaration adopted at the high-level segment of the Economic and Social Council in 2000 to work cooperatively to bridge the digital divide and to foster "digital opportunity",

Decides to recommend the following actions for consideration by national Governments, the Commission on Science and Technology for Development and the international community:

- 1. Governments are encouraged to undertake the following actions:
- (a) Utilize the benchmarking tools developed by the Commission to assess their progress in ICT development and to establish mechanisms involving all stakeholders for the ongoing review, evaluation and analysis of ICT strategies, programmes and projects, including strategies to facilitate the attraction of foreign direct investment in ICT:
- (b) Accelerate investment in ICT human capacity-building and promote computer literacy and lifelong learning;
- (c) Build up physical and institutional infrastructure to facilitate ICT development and improve efficiency and transparency through egovernment;
- (d) Develop policy initiatives in order to facilitate the building of regional level ICT infrastructure;
- (e) Develop strategies to facilitate access to and lower costs of ICT hardware and software through providing tax incentives and encouraging the use and further development of free and open source software:
- (f) Apply innovative approaches with a focus on shared infrastructure, public access facilities and the use of intermediaries and other services to interact with individuals who may lack functional literacy;
- (g) Establish a regulatory framework that supports infrastructure development and accelerate deployment of appropriate and cost-effective technologies;
- (h) Promote sustained measures to ensure the mastery and adaptation of technology by creating and/or strengthening local research and development units, promoting foreign direct investment with high-technology content and fostering collaboration in research and development between foreign investors and domestic research institutions:
- (i) Develop strategies for local content development, including the use of icon-based programmes and the integration of traditional mass media, print, television and radio, with electronic media;
 - 2. The international community is invited to:
- (a) Promote the compilation of more appropriate data on technology indicators, taking into account that that there is a lack of data for many developing countries, which typically have a large informal sector so that more accurate ICT and technology development indices could be developed;
- (b) Reaffirm the right of developing countries to use to the full the flexibilities provided in international agreements such as the Agreement on Trade-Related Aspects of Intellectual Property Rights;
- 3. The Commission on Science and Technology for Development is invited to:

- (a) Interact closely with the ICT Task Force to promote greater information-exchange and coordination of activities in the field of ICT in order to contribute to the World Summit on the Information Society and, as feasible, update its publication *Knowledge Societies: Information Technologies for Sustainable Development* in order to raise awareness on recent developments in the field of ICT;
- (b) Play an active role within the United Nations system in the analysis, promotion and recommendation of applications of science and technology to meet the development goals contained in the Millennium Declaration;
- (c) Ensure that the Science and Technology for Development Network¹ further develops and expands into an inter-agency gateway on information on science and technology activities, which also links information technology networks at the regional, subregional and interregional levels to the network;
- (d) Liaise with the United Nations Conference on Trade and Development to further develop its benchmarking tool in ICT, promote its use by other relevant United Nations agencies and consider the possibility of carrying out ICT needs assessment for interested developing countries, in particular least developed countries, to help formulate/update national strategies and action plans for ICT, coordinating efforts with the United Nations Development Programme and other entities carrying out similar work in order to promote complementarity and efficiency.

II. New substantive theme and other activities

The Economic and Social Council,

Welcomes the choice of the theme "Promoting the application of science and technology to meet the development goals contained in the Millennium Declaration for the Commission's work during the intersessional period 2003-2004. In undertaking work on this theme, the Commission is invited to analyse policies and measures that would lead to:

- (a) Improving the policy environment for the application of science and technology to development by identifying potential risks and benefits of new and emerging technologies;
- (b) Strengthening basic and applied research in developing countries and international scientific networking;
- (c) Strengthening technology support institutions and science advisory mechanisms; building human capacity; identifying new technologies and applications; and encouraging international collaboration to support research in neglected fields;
- (d) Promoting affordable universal Internet access and building strategic partnerships in the field of science and technology for development and capacity-building for competitiveness "taking care to ensure complementarity with efforts under way by other organizations, such as the United Nations Development Programme, the International

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¹ http://rO.unctad.org/stdev/.

Telecommunication Union and the United Nations Information and Communication Technologies Task Force, and to promote efficiency".

All entities of the United Nations system working in these areas are invited to collaborate and provide input to the work of the Commission on its main theme.

III. Strengthening coordination of science and technology for development in the United Nations system

The Economic and Social Council,

Noting with appreciation the work carried out by the Gender Advisory Board of the Commission, including at the regional and national levels,

Requests the Commission to take into account the need to meaningfully and systematically integrate a gender component into all its programmes and to improve its collaboration with its Gender Advisory Board.

48th plenary meeting 24 July 2003