



# Economic and Social Council

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Agenda item 13 (b)

## Resolution adopted by the Economic and Social Council

*[on the recommendation of the Commission on Science and Technology  
for Development (E/2012/31 and Corr.1)]*

### 2012/6. Science and technology for development

*The Economic and Social Council,*

*Recognizing* the role of the Commission on Science and Technology for Development as the United Nations torch-bearer for science, technology and innovation for development,

*Recognizing also* the critical role of science, technology and innovation in building and maintaining national competitiveness in the global economy, in addressing global challenges and in realizing sustainable development,

*Recognizing further* the seminal role that information and communications technologies play in promoting and empowering science, technology and innovation for development,

*Recalling* the 2005 World Summit Outcome, in which it was recognized that science and technology, including information and communications technologies, are vital for the achievement of the internationally agreed development goals, and reaffirming the commitments contained therein,<sup>1</sup>

*Recalling also* that the United Nations Conference on Trade and Development is the secretariat of the Commission,

*Recalling further* the work of the Commission on science, technology and engineering for innovation and capacity-building in education and research, and on development-oriented policies for a socioeconomically inclusive information society, including policies relating to access, infrastructure and an enabling environment,

*Welcoming* the work of the Commission on its two current priority themes, “Innovation, research, technology transfer for mutual advantage, entrepreneurship and collaborative development in the information society” and “Open access, virtual science libraries, geospatial analysis and other complementary information and

<sup>1</sup> See General Assembly resolution 60/1, para. 60.



communications technology and science, technology, engineering and mathematics assets to address development issues, with particular attention to education”,

*Recognizing* that collaborative learning is central to innovation, technology transfer and entrepreneurship, and involves absorptive and productive capacity-building at the individual and organizational levels,

*Recognizing also* the work of United Nations institutions, including the United Nations Conference on Trade and Development, in analysing the impact of the transfer of technology on trade and development,

*Noting* that open access and virtual science libraries are two complementary mechanisms to increase and extend knowledge flows and help developing countries to obtain data and research,

*Noting also* that greater attention needs to be paid to the growing array of online scientific and technical resources relevant to scientific and technical communities worldwide,

*Recognizing* that the effective introduction of information and communications technologies in education requires not only access to technology but also capacities for science, technology and innovation, absorption and production through development of human resources, educational framework conditions, infrastructure and progressive national policies,

*Noting* that geographic information systems and geospatial analysis are used in many sectors of society and have important applications in addressing development challenges but remain underutilized for transformational potential,

*Recognizing* that, in its resolution 66/211 of 22 December 2011 on science and technology for development, the General Assembly encouraged the United Nations Conference on Trade and Development to continue to undertake science, technology and innovation policy reviews, with a view to assisting developing countries and countries with economies in transition in identifying the measures that are needed to integrate science, technology and innovation policies into their national development strategies,

*Taking note with appreciation* of the high-quality science, technology and innovation policy reviews prepared by the United Nations Conference on Trade and Development for El Salvador and Peru, and the emphasis placed on the need to monitor the implementation of science, technology and innovation policy reviews by countries, as exemplified in the report by Angola,

*Recalling* Economic and Social Council decision 2011/235 of 26 July 2011 providing for the extension until 2015 of the mandate of the Gender Advisory Board of the Commission, and General Assembly resolutions 66/129 of 19 December 2011, 66/211 and 66/216 of 22 December 2011 addressing, respectively, the improvement of the situation of women in rural areas, barriers to equal access for women and girls to science and technology, and the integration of a gender perspective into development policies and programmes,

*Taking note* of the report entitled “Applying a gender lens to science, technology and innovation”, prepared by the United Nations Conference on Trade and Development in close collaboration with the Gender Advisory Board,<sup>2</sup>

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<sup>2</sup> United Nations Conference on Trade and Development, document UNCTAD/DTL/STICT/2011/5.

*Recognizing* that it is crucial to understand the means by which people of different genders, ages, socioeconomic situations and organizations build the capabilities required to achieve greater capacities for entrepreneurship and collaborative development,

*Decides* to make the following recommendations for consideration by national Governments, the Commission on Science and Technology for Development and the United Nations Conference on Trade and Development:

(a) Governments, individually and collectively, are encouraged to take into account the findings of the Commission and to consider taking the following actions:

(i) Promote the development of information and communications technology platforms, involving national research institutes and universities, with a view to participating in international research networks and benefiting from opportunities for collaborative learning;

(ii) Ensure that multilateral governance mechanisms and standardization bodies of information and communications technology and global networks are democratic, fair and coherent, with effective participation of developing countries;

(iii) Promote national policies to encourage the use of information and communications technologies, especially those that have been tailored to local needs in their countries, and establish programmes for the improvement of human resources in this field;

(iv) Foster partnerships with other stakeholders to overcome basic infrastructural constraints, in areas such as electricity and other services, that limit access to and use of information and communications technology resources, with particular attention to locally adapted solutions that can be scaled up regionally;

(v) Collaborate to address the “content divide” by exploring ways of increasing online scientific publications and accessibility of content in local languages;

(vi) Encourage national research agencies and foundations to provide data and research results to the public domain and make them freely available in an open and accessible format;

(vii) Also encourage international collaboration in disseminating digitized publications resulting from publicly funded research, making them freely available online and easily accessible;

(viii) Further encourage, in partnership with other stakeholders, the logistical and financial viability of virtual science libraries, in particular those that include a platform to facilitate networking among scientists across geographical boundaries and provide an integrated search capability across all available online publications;

(ix) Encourage the formation of national research and education networks, which promote networking among scientists, increase collective buying power for online science research services, including access to journals, and result in the sharing of scarce resources;

(x) Strengthen secondary and post-secondary curricula to better integrate geographic information systems and fundamental concepts of geography that

enrich spatial thinking into national education programmes and support teachers through training to better integrate such systems, geography and spatial thinking into their professional development;

(xi) Establish bodies dedicated to obtaining, storing and disseminating geographic data, including remote sensing data, to make geographic information system data available for public use at the lowest cost;

(xii) Involve the private sector in the process of increasing technology openness for geospatial data, with, for example, public sector organizations such as government agencies and libraries collaborating with private sector firms to index geospatial information and make it easily searchable and available online;

(xiii) Promote the dissemination of successful experiences, including those involving constraint-based innovations, to foster an innovative culture through mechanisms such as the creation of awards and mass media campaigns;

(xiv) Encourage and support efforts aimed at learning and capacity development at the firm and industry levels through the provision of an enabling environment;

(xv) Encourage scientific, research and academic institutions in their countries, especially in developed countries, to collaborate with counterparts in all other countries, with particular attention to those in the least developed countries;

(xvi) Recognize the need to continue providing adequate funding and resources for science and technology, particularly in developing countries;

(xvii) Consider mechanisms with a view to applying a gender lens in scientific research, from the setting of the agenda to the design and implementation of projects, for example, through the use of quotas and gender-sensitive assessment and evaluation;

(b) The Commission and the United Nations Conference on Trade and Development are encouraged:

(i) With respect to the Commission, to continue in the role of torch-bearer for innovation, to raise awareness among policymakers about the process of innovation and to identify particular opportunities for developing countries to benefit from such innovation, with special attention to be placed on new trends in innovation that can offer novel possibilities for developing countries, especially for small and medium enterprises and individual entrepreneurs;

(ii) To share and analyse evidence on the development of innovative capacities, including at the firm level, especially for small and medium enterprises, to understand the social and economic dimensions of those processes and provide insights for the development of public policy;

(iii) To provide a forum for dialogue and for the sharing of best practices and experiences to identify and recommend ways and appropriate measures to promote innovation, research and development, new knowledge creation and technology transfer, as well as information and communications technologies for capacity-building in science, technology and engineering education and research and entrepreneurship for the benefit of developing countries, and in this context explore ways to expand cooperation among all countries, with particular attention to sharing available resources online;

(iv) To develop metrics to assess progress made by countries to implement science, technology and innovation policy review recommendations for developing science and technology and innovation policies and other recommendations they have acted upon and, if requested by those countries, to conduct periodic reviews to monitor such progress;

(v) To encourage the Gender Advisory Board of the Commission to provide inputs to policy deliberations and documentation of the Commission, to invite the Board to report on progress at the annual sessions of the Commission and to consider integrating a gender perspective into the science, technology and innovation policy reviews, where appropriate.

*43rd plenary meeting  
24 July 2012*