Draft Resolution on Science, technology and innovation 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 and contribution of science, technology and innovation in building and maintaining national competitiveness in the global economy, addressing global challenges and 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, ¹ 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,

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

Recognizing that the General Assembly, in its resolution 68/220 of 20 December 2013 on science, technology and innovation for development, 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,

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, as well as 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 programs,

Recognizing the instrumental role of science, technology and innovation in the achievement of a number of Millennium Development Goals, and highlighting the role of science, technology and innovation as an enabler of the Post-2015 Development Agenda to continue to address global challenges,

-

¹ General Assembly resolution 60/1.

Noting the report of the Open Working Group of the General Assembly on Sustainable Development Goals ² and the implications of the same to the global STI community,

Noting "The road to dignity by 2030: ending poverty, transforming all lives and protecting the planet: Synthesis report of the Secretary-General on the Post-2015 Sustainable Development Agenda³" which identifies technology, science and innovation as means to implement the Sustainable Development Agenda.

Welcoming the work of the Commission on its two current priority themes, "strategic foresight for the post-2015 development agenda" and "Digital development",

Noting the need for new approaches that embed STI policies and capacity-building as crucial components of national development plans, inter alia through collaboration between sectoral ministries, STI and ICT agencies and a range of regulatory bodies,

Recognizing that technology foresight exercises could help policymakers and stakeholders in the future implementation of the Post-2015 Development Agenda through the identification of challenges and opportunities that can be addressed strategically and that technology trends should be analyzed recognizing the wider socioeconomic context,

Recognizing that a well-developed digital ecosystem ⁴ is a primary requirement for effective digital development and facilitation of STI,

Recognizing the increased regional integration efforts across the world and associated regional dimension of STI issues,

Noting the significant achievements and continuing potential contribution of information and communications technologies to human welfare, economic prosperity and employment,

Noting that the success of using technology and innovation policies in countries is facilitated by, among others, creating policy environments that enable education and research institutions, businesses and industry to innovate, invest, and transform STI into employment and economic growth incorporating all inter-related elements, including knowledge transfer,

Recommends the following for consideration by national Governments, the Commission on Science and Technology for Development and the United Nations Conference on Trade and Development:

A/0

² A/68/970

³ A/69/700

⁴ Digital ecosystem involves components such as technological infrastructure, data infrastructure, financial infrastructure, institutional infrastructure and human infrastructure.

- (a) Governments, individually and collectively, are encouraged to take into account the findings of the Commission and to consider taking the following actions:
- (i) To closely link science, technology, innovation and strategies of sustainable development by prominently featuring capacity-building in information and communications technologies and science, technology and innovation in national development planning;
- (ii) To promote local innovation capabilities for inclusive and sustainable economic development by bringing together local scientific, vocational and engineering knowledge, including through collaboration with and among national programmes;
- (iii) To undertake systemic research, including foresight exercises, on new STI & ICT trends and their impact on development, particularly in the context of the Post-2015 Development Agenda;
- (iv)To use strategic foresight exercises to identify potential gaps in education for the medium and long term and addressing such gaps with a policy mix including promotion of science, technology, engineering and mathematics education and vocational training;
- (v) To use strategic foresight as a process to encourage structured debate among all stakeholders, including representatives of Government, science, industry and civil society and the private sector (particularly small and medium-sized enterprises), towards creating a shared understanding of long-term issues and building consensus on future policies;
- (vi) To undertake strategic foresight initiatives on global and regional challenges at regular intervals and cooperate towards the establishment of a mapping system to review and share technology foresight outcomes, including pilot projects, with other member States, making use of existing regional mechanisms, and in collaboration with relevant stakeholders;
- (vii) To conduct assessments of national innovation system, including digital ecosystem, to identify weaknesses and make effective policy interventions to strengthen its weaker components, while recognizing the interlinkages between its diverse components;
- (viii) To mobilize resources through multiple channels to strengthen national innovation system for STI;
 - (ix) To encourage digital natives to play a key role in community-based approach to STI capacity-building, and facilitate the use of ICTs in the context of the Post-2015 Development Agenda;
 - (x) To put in place policies that support the development of digital ecosystems, that are inclusive and that encourage the development of local content and attract and support private investment, innovation and entrepreneurship;

- (xi) To collaborate with all relevant stakeholders, promote the application of ICTs in all sectors, to improve environmental sustainability and encourage the creation of suitable facilities to recycle and dispose of e-waste;
- (xii) To address the ongoing and persistent gender gap in the fields of science, technology and innovation as a whole, and science, technology, engineering and mathematics education in particular, by encouraging mentoring and supporting other efforts to attract and retain women and girls in STEM fields;
- (xiii) To support the policies and activities of developing countries in the fields of science and technology through North-South and South-South cooperation by encouraging financial and technical assistance, capacity-building, technology transfer on mutually agreed terms and conditions, and technical training programmes or courses;

(b) The Commission is encouraged:

- (i) To continue its role as a torch-bearer for science, technology and innovation and to provide high-level advice to the Economic and Social Council and the General Assembly on relevant science, technology, engineering and innovation issues;
- (ii) To help articulate the important role of information and communications technologies and science, technology, innovation and engineering as enablers in the future Post 2015 Development Agenda, by acting as a forum for strategic planning and providing foresight about critical trends in science, technology and innovation in key sectors of the economy and drawing attention to emerging and disruptive technologies;
- (iii) To raise awareness and facilitate networking and partnerships between various technology foresight organizations and networks, in collaboration with other stakeholders, with the objectives of improving international cooperation in emerging technology foresight tools and methodologies, sharing of experiences and best practices, organization of training programs and collaborative projects such as future of work, STI skills and future employability of STI professionals;
- (iv) 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 being placed on new trends in innovation that can offer novel possibilities for developing countries;
- (v) To proactively strengthen and revitalize global STI partnerships for sustainable development. This would entail CSTD's engagement in (a) translating technology foresight into elaborating the scope of specific international projects for targeted research, technology development/deployment and STI human resource capacity building initiatives; and (b) exploring innovative financing models and other resources contributing to enhancing developing countries' capacities in collaborative STI projects and initiatives;
- (vi) To discuss and explore innovative financing models as a means to attract new sources of investment capital for science, technology, engineering

- and innovation-based solutions, in collaboration with other organizations where appropriate;
- (vii) To promote capacity building and cooperation in research and development.
- (viii) To provide a forum for sharing best practices, successful local innovation models, case studies and experience on the use of science, technology and engineering for innovation, including the application of new emerging technologies, in symbiotic relationship with information and communications technologies, for inclusive and sustainable development and share findings with all relevant UN entities;
- (ix) To play an active role in creating awareness of the potential contribution of science, technology and innovation to the Post-2015 Development Agenda through substantive inputs, as appropriate, to relevant processes and bodies of the United Nations and to share findings and good practices on science, technology and innovation among Member States and beyond;
- (x) To highlight the importance of the work of the Commission related to the implementation of and follow-up to the areas of information and communications technologies and science, technology and innovation related to the Millennium Development Goals, with the Chair of the Commission to report at appropriate reviews and meetings of the Economic and Social Council, taking into account that 2015 is a year of transition to the Post-2015 Development Agenda;

(c) The United Nations Conference on Trade and Development is encouraged:

- (i) To seek funding proactively for the expansion of science, technology and innovation policy reviews, with an emphasis on the critical role of information and communications technologies in empowering science, technology and innovation and engineering capacity-building and utilization, and the implementation of the recommendations on those reviews, as appropriate, in close cooperation with United Nations agencies and international organizations;
- (ii) To look into the feasibility of Science, Technology and Innovation Policy Reviews and ICT Policy Reviews to include elements of strategic foresight and digital ecosystem assessment, possibly by including a dedicated chapter on these themes;
- (iii) To plan for periodic updates on progress made in countries for which science, technology and innovation policy reviews have been performed and to invite those countries to report to the Commission on progress made, lessons learned and challenges encountered in implementing recommendations:
- (iv) To encourage the Gender Advisory Board of the Commission to provide inputs to the policy deliberations and documentation of the Commission, to report on progress at the annual sessions of the Commission and to better integrate gender perspectives into science, technology and innovation policy reviews.

Commission on Science and Technology for Development, 18^{th} session 8 May 2015