Background Note on Possible arrangements for a Technology Facilitation Mechanism and other science, technology and innovation issues

Introduction

This background note outlines, in a non-exhaustive manner, relevant processes undertaken and commitments made at the UN in relation to science, technology and innovation in the area of sustainable development. It places a particular focus on options for a Technology Facilitation Mechanism.

This paper looks to inform the session on 'Technology facilitation mechanism, and other science, technology and innovation issues' during the joint meeting of the intergovernmental negotiations on the Post-2015 Development Agenda and the preparatory process of the Third International Conference on Financing for Development.

In preparation for this session, and on the basis of the relevant processes and commitments outlined below, member states may wish to consider the following questions:

> Q: *What are the key enablers for strengthening science, technology and innovation for sustainable development at the national and international level?*

> Q: *What is the best way to address the different options outlined in the PGA's Summary of the Structured Dialogues and the SG's Synthesis Report?*

Overview of relevant processes and commitments

Rio 1992: *Agenda 21*

The importance of Science, Technology and Innovation (STI) for sustainable development was emphasized in the Earth Summit (1992), with Agenda 21 containing chapters 34 and 35 on "Transfer of environmentally sound technology, cooperation and capacity-building" and "Science for sustainable development", respectively.

Rio+20: *The Future We Want*

In the Means of Implementation section of *The Future We Want[1]*, the Rio+20 Conference stresses "the importance of access by all countries to environmentally sound technologies, new knowledge, know-how and expertise" (para 270), underlines "the need for enabling environments for the development, adaptation, dissemination and transfer of environmentally sound technologies" (para 271), recognizes "the importance of national, scientific and technological capacities for sustainable development" (para 272), and requests "relevant United Nations agencies to identify options for a facilitation mechanism that promotes the development, transfer and dissemination of clean and environmentally

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[1] http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/66/288&Lang=E

sound technologies by, inter alia, assessing the technology needs of developing countries, options to address those needs and capacity building" (para 273).

Rio+20 Follow-up: Secretary-General's Reports

As requested by the Rio+20 Conference and the General Assembly in subsequent resolutions, the UN Secretary General proposed specific options for the way forward in two complementary reports on "Options for facilitating the development, transfer and dissemination of clean and environmentally sound technologies" (A/67/348 and A/68/310). His proposals were based on an analysis of recent trends and on proposals made by member States and the UN system, including on the functions, format and working methods of a technology facilitation mechanism. In the second report, a range of options was presented from *"Initiatives that can be acted on without institutional reform"*, through *"Additional, voluntary actions for consideration by countries"*, to *"More comprehensive and ambitious initiatives with institutional implications"*.

Rio+20 Follow-up: Workshops and Structured Dialogues

The General Assembly deliberated on these options through four workshops (convened in 2013) and four structured dialogues (convened in 2014), held during its 67th and 68th sessions. Informed by numerous expert presentations, Member States reviewed gaps and issues across all stages of the technology cycle; the roles of governments, the private sector, and other actors in technology facilitation; and the activities of existing platforms, centres and networks facilitated by the UN system and other organizations.

The Structured Dialogues on Possible Arrangements for a Technology Facilitation Mechanism were convened by the President of the 68th General Assembly who appointed two co-moderators, the Permanent Representative of Switzerland and the Deputy Permanent Representative of Brazil to facilitate the discussions. Following their conclusion, on 13 August 2014 the PGA issued – under his authority and in close consultation with the co-moderators – a summary of the discussions, identifying areas of convergence and making recommendations for the way forward (see Annex 1).

Inter alia, the summary suggests that "the Secretary General could come forward to the General Assembly with a concrete proposal without further delay" regarding the following deliverables:

1. Develop an online platform to undertake a thorough mapping of existing technology facilitation mechanisms, frameworks and processes of clean and environmentally sound technologies;
2. Improve coordination within the UN System on clean and environmentally sound technologies;
3. Analyse technology needs and gaps in addressing them.

The PGA's summary also proposed continued deliberations on a number of the elements and functions that have been proposed as part of future UN actions on technology facilitation, viz.:

- Developing capacity development programmes and technology needs assessments;
- Conducting technology assessments;
- Building public-private partnerships including on collaborative IP systems and licensing;
- Setting up a technology development fund, to strengthen global R&D and demonstration co-operation and technology transfer and developing countries' participation in these;
- Setting up a management and coordination structure within the UN, including regional and sub-regional cooperative mechanisms and national coordination units that actively facilitate and promote the transfer of technology;
- Reviewing the proposal for creating a global Advanced Research Projects Agency for Sustainable Development with a view to identifying synergies between the concrete deliverables proposed above and this proposal.

Follow-up to Structured Dialogues: General Assembly resolution A/RES/68/310

General Assembly resolution A/RES/68/310 of 19 September 2014[2] noted the conclusions and recommendations contained in the PGA's summary of the structured dialogues, as well as the views expressed by participants in the dialogues.

It requested the PGA to continue consultations based on the recommendations prepared by the PGA, with the aim of reaching a conclusion during the 69th session in the context of the post-2015 development agenda, and invited the Secretary-General to take into account the recommendations that emerged from the structured dialogues when preparing his synthesis report. In December 2014, through its resolution on Agenda 21, the General Assembly further stressed its resolve to continue consultations based on the recommendations prepared by the PGA "with the aim of reaching a conclusion during its sixty-ninth session in the context of the elaboration of the post-2015 development agenda" (para 12, A/RES/69/214[3]).

Report of Open Working Group on SDGs

The Open Working Group on Sustainable Development Goals (OWG) also considered the implications of technology for the implementation of the SDGs. Technology cooperation, development, transfer and capacity building feature as targets under several of the proposed SDGs, and Goal 17 on the means of implementation and global partnership for sustainable development calls for enhancing "regional and international cooperation on and access to science, technology and innovation and enhanc[ing] knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism when agreed" (target 17.6). Target 17.8 in turn calls for "fully operationaliz[ing] the technology bank and science, technology and innovation capacity-

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[2] http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/68/310
[3] http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/69/214

building mechanism for least developed countries by 2017 and enhanc[ing] the use of enabling technology, in particular information and communications technology"[4].

<u>Main elements of the proposals contained in the Secretary General's Synthesis Report</u>

In paragraph 125 of the Synthesis Report[5], taking into account the recommendations of the structured dialogues of the General Assembly, the Secretary-General proposes to "establish an online, global platform building on and complementing existing initiatives, and with the participation of all relevant stakeholders, in order to:

(a) map existing technology facilitation initiatives, needs and gaps, including in areas vital for sustainable development, including agriculture, cities and health;

(b) enhance international cooperation and coordination in this field, addressing fragmentation and facilitating synergies, including within the UN system; and

(c) promote networking, information sharing, knowledge transfer, and technical assistance, to advance the scaling up of clean technology initiatives."

In addition, in paragraph 126 the Secretary General called upon Member States:

"to (a) urgently finalize the arrangements for the establishment of the proposed Technology Bank and the Science, Technology, and Innovation Capacity Building Mechanism for LDCs,

(b) significantly scale up cooperation for the sharing of technologies, strengthening knowledge and capacity building for usage, innovation capacities, including ICTs,

(c) make the adjustments necessary in the national and international policy frameworks to facilitate these actions,

(d) substantially progress in the development, transfer, and dissemination of such technologies and knowledge to developing countries on favorable, concessional, and preferential terms;

(e) ensure that our global intellectual property regimes and the application of TRIPS flexibilities are fully consistent with and contribute to the goals of sustainable development;

(f) make specific commitments to shifting public resources out of harmful technologies, and into our sustainable development goals; and

(g) promote the acceleration of the innovation-to-market-to-public good cycle of clean and environmentally sound technologies."

<u>Addis Accord Zero Draft</u>

The zero draft[6] emphasizes three aspects of technology policy: national science, technology, and innovation (STI) strategies domestically; international collaboration – financial and technology facilitation – to complement national efforts; and options to address financing gaps in innovation.

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[4] https://sustainabledevelopment.un.org/content/documents/1579SDGs%20Proposal.pdf
[5] http://www.un.org/ga/search/view_doc.asp?symbol=A/69/700&Lang=E
[6] http://www.un.org/esa/ffd/wp-content/uploads/2015/03/1ds-zero-draft-outcome.pdf

The draft calls on countries to adopt STI strategies as integral elements of national sustainable development strategies, with a view to strengthen knowledge sharing and collaboration among all stakeholders, scale up investments in STEM education, particularly for women, and create enabling policy environments for innovation.

The draft also proposes options for increased financing for innovation, research and development, at national and international levels. This includes national innovation funds and ODA to support national STI strategies.

On technology facilitation, the draft refers to the recommendations from the structured dialogues and supports the proposal of the Secretary-General in his synthesis report "to establish an online global platform, building on and complementing existing initiatives, in partnership with all relevant stakeholders. The global platform will map existing technology facilitation mechanisms, needs and gaps, including in areas vital for sustainable development, including environment, agriculture, cities and health. It will enhance international cooperation and coordination in this field, address fragmentation and facilitate synergies, including within the United Nations system, and promote networking, information sharing, knowledge transfer and technical assistance, in order to advance the scaling up of clean technology initiatives. We welcome the identification of further steps in line with our shared objectives to accelerate technology facilitation" (para 112).

In para 113, the zero draft "commits to expeditiously establish and make fully operational the technology bank and the science, technology and innovation supporting mechanism dedicated to LDCs", based on the outcome of the report of the High-Level Panel on organizational and operational functions of a proposed technology bank for LDCs. It further commits to "work towards enhancing ICT infrastructure development and capacity building in LLDCs and SIDS."

Para 108 states that governments would commit to "step up international collaboration in scientific research focusing on specific needs of developing countries, including those related to the achievement of the SDGs, and to adopt open access to research as a general principle for publicly funded research projects. To this end, we will scale up support to PPPs targeting technology development and diffusion in priority areas, including low-carbon climate resilient technologies, climate-resilient agriculture, sustainable urban development (transport, buildings, food and service provision) and vaccines and medicines."

Informal interagency working group

In order to support the initiative of the Secretary-General, several UN entities have convened an informal inter-agency working group, including the main actors in the UN system engaged in international initiatives aimed at facilitating the development, diffusion and transfer of environmentally sound technologies. The group comprises UNDESA and UNEP, who act as co-facilitators, as well as UNCTAD, UNIDO, UNESCO, ITU, WIPO and the World Bank. It is open to other interested UN system entities. It held its first face-to-face meeting at UN Headquarters on 11 February 2015, and continues its work in several work streams normally co-led by two of the informal group member organizations.

In line with the recommendations of the President of GA68 and of the Secretary-General, the work streams of the Inter-agency group cover: a) mapping and creating an inventory of existing technology facilitation frameworks, processes and initiatives, including technology needs assessments, where the UN system is an active participant; b) reflecting on ideas to improve coordination within the UN system on development, diffusion and transfer of clean and environmentally sound technologies; c) defining the parameters of a possible online knowledge hub and information-sharing platform; d) cooperating with relevant stakeholders on building or strengthening technology-focused partnerships and collaborations.