THE PRESIDENT
OF THE
GENERAL ASSEMBLY

13 August, 2014

Excellency,

I have the pleasure to enclose herewith the Summary Report and recommendations emerging from the series of four one-day structured dialogues organised during the 68th session of the General Assembly with the aim of considering possible arrangements for a facilitation mechanism to promote the development, transfer and dissemination of clean and environmentally sound technologies, as mandated by Resolution 68/210.

I would like to express my sincere appreciation and gratitude for the dedication and innovative work of the Co-moderators appointed to lead the structured dialogues, H.E. Mr. Paul Seger, Permanent Representative of Switzerland and H.E. Mr. Guihlerme de Aguiar Patriota, Deputy Permanent Representative of Brazil.

During the last structured dialogue, of 23 of July, 2014, delegations had an opportunity to express preliminary views with respect to the proposal of adopting a procedural Resolution, to pave the way for further consultations during the 69th Session of the General Assembly.

In this regard, I have decided to appoint H.E. Mr. Paul Seger and H.E. Mr. Guihlerme de Aguira Patriota as co-facilitators for the consultations on the draft resolution, a copy of which is also hereto attached.

Please accept, Excellency, the assurances of my highest consideration.

John W. Ashe

To All Permanent Representatives and
Permanent Observers to the United Nations
New York

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Permanent Mission of Switzerland to the United Nations

Permanent Mission of Brazil
to the United Nations

His Excellency
Mr. John W. Ashe
President of the General Assembly
68th Session
CB – 0250
United Nations Headquarters
New York

New York, 08.11.2014

Mr. President,

We have the honor to submit herewith the report of the co-moderators of the four one-day structured dialogues on possible arrangements for a facilitation mechanism to promote the development, transfer and dissemination of clean and environmentally sound technology, which took place on April 29th and 30th, June 4th and July 23rd, in New York. We kindly request you to circulate it to all member States.

Following the mandate contained in GA resolution 68/210, the structured dialogues resulted in a summary of the discussions and recommendations emerging therefrom, including on the possible modalities and organization of such a mechanism, to be submitted to the Assembly at its sixty-eighth session and for consideration and appropriate action by the Assembly at its sixty-ninth session, with the aim of reaching a conclusion in this regard.

In order to advance deliberations on this issue, and bearing in mind the importance of these deliberations in view of the post-2015 sustainable development framework, we introduced, at the last dialogue, the possibility of adopting a procedural resolution during the ongoing session of the General Assembly in order to request: i) the 69th President of the General Assembly to continue consultations during the 69th Session of the General Assembly based on the recommendations contained in the above mentioned summary; and ii) the Secretary-General to consider in his synthesis report the summary and recommendations emerging from the dialogues.

In light of the above, we hereby also submit for your consideration a proposal containing elements for a possible draft resolution.

We thank you, Mr. President, once again for entrusting us with this important mandate.

Please accept, Mr. President, the assurances of our highest consideration.

Guilherme de Aguiar Patriota
Ambassador
Deputy Permanent Representative of Brazil to the
United Nations

Paul Seger
Ambassador Extraordinary Plenipotentiary
Permanent Representative of Switzerland to
the United Nations

General Assembly Structured Dialogues on:

"Possible arrangements for a facilitation mechanism to promote the development, transfer and dissemination of clean and environmentally sound technologies"

REPORT

I. Introduction

Four Structured Dialogues were convened by the President of the 68th Session of the United Nations General Assembly (GA) in accordance with the GA resolution 68/210 of December 2013, "to consider possible arrangements for a facilitation mechanism to promote the development, transfer and dissemination of clean and environmentally sound technologies". The Dialogues were held at the UN Headquarters in New York on 29 and 30 April, 4 June and 23 July 2014. Upon the invitation of the President of the GA, the Dialogues were moderated jointly by H.E. Ambassador. Paul Seger, Permanent Representative of Switzerland, and H.E. Ambassador Guilherme de Aguiar Patriota, Deputy Permanent Representative of Brazil.

This report provides a summary of the discussions and recommendations emerging from the Structured Dialogues, including on the possible modalities and organisation of such a mechanism, as stipulated by resolution 68/210. Section II summarises the tenor and evolution of the discussions in individual Dialogues. Section III outlines recommendations on the way forward, based on a considerable convergence of views that was observed by the end of the fourth Dialogue. All papers and statements presented at the Dialogues can be accessed via the URL: http://sustainabledevelopment.un.org/index.php?menu=1822.

II. The Dialogues

Dialogues 1 and 2 - Stocktaking and review of recent developments

29 - 30 April 2014

The first two Dialogues were focused on taking stock of UN consideration of a possible technology facilitation mechanism, as well as reviewing recent developments regarding existing mechanisms and processes. They also discussed the scope and extent of fragmentation amongst them and options for enhancing synergy and coherence.

Expert presentations at the first two Dialogues provided an update of recent developments in technology facilitation, building on the body of evidence and ideas submitted to the UN GA membership through the 2013 GA Workshops on technology facilitation as well as the UN SG's reports on the subject since the Rio+20 Conference.[1] Recent developments of note included:

- The evolution of the CGIAR which is striving to transform itself from a technology-push agricultural research and extension system focusing on raising agricultural productivity, towards a more participatory system for innovation that is demand-driven and seeks to promote sustainable agricultural production, taking advantage of latest advances in ICTs.

- The changing role of the UN Commission on Science and Technology for Development, striving to move from being principally a torch-bearer on S&T to being also a "horizon scanner", helping countries in terms of anticipating disruptive technologies and harnessing ICTs for sustainable development.

- The start off of the Climate Technology Centre and Network's beneficiary-driven advisory services activity helping countries to address identified technology needs relating to climate change mitigation and adaptation. A key difficulty CTCN is striving to address is not so much a lack of information on what is on offer but rather the huge amount and fragmented nature of it.

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[1] http://sustainabledevelopment.un.org/technology/2013.

- The World Bank's Climate Investment Funds (CIF), which is a collection of distinct programmes with separate boards providing highly concessional financing for pilot demonstration of clean and environmentally sound technologies, in particular renewable energy technologies. The CIF's support is targeted at the intermediate stage of the technology cycle, demonstrating the feasibility of key technologies such as concentrated solar power generation in middle income countries.

The Dialogues also heard three types of case experiences on capacity building, including:

- Malaysia's experience with strong public investment in science and technology (and engineering and mathematics education) in order to advance towards a knowledge-based economy, including lessons from difficulties it has faced in obtaining high returns to public investment in R&D (5% in the Malaysian case).

- A case study on the EARTH University (*Escuela de Agricultura de la Región Tropical Húmeda*, Costa Rica), which is a partnership promoting a type of higher education enabling students from under-privileged backgrounds to transform themselves into entrepreneurs building ethical businesses focused on sustainable innovation.

- The European Union's multilateral approach and resources put in place to facilitate the development and transfer of technologies, many relevant to sustainability concerns, with programmes open to participation by developing countries.

- WIPO's experience with building innovation capacity within beneficiary countries, underlining the importance of international platforms that promote knowledge transfer and provide technical assistance to help countries in understanding and managing intellectual property issues.

The first two Dialogues confirmed that there is a shared understanding amongst participants that, while a wide range of activities regarding the development, dissemination and transfer of clean and environmentally sound technologies exists, more needs to be done to address fragmentation and strengthen synergies of efforts in this area. In the words of the UNSG, "the scale of efforts is yet to match the scale of the challenge."

The first two Dialogues clarified the range of debate on key questions that need to be answered before an agreement can be reached on the way forward. This included:

- The scope of a possible technology facilitation mechanism: Some delegations maintain that it should include only clean and environmentally sound technologies, while others highlight the importance of technologies that can help a transformative shift in the area of sustainable development including its economic and social dimensions.

- The nature of fragmentation in existing facilitation efforts: There are several dimensions to fragmentation, including geographical (different needs of different countries), amongst international bodies engaged in technology facilitation, between finance providers and technology facilitators, and across different stages of the technology cycle. Fragmentation within and among donor governments and the earmarking of funds contributes to the above. Similar issues exist on the side of the beneficiaries.

- The breath of the technology cycle that should be addressed by technology facilitation: Many delegations and experts maintain that it should address the full cycle from research, development and demonstration to market formation and diffusion, whereas others maintain that it should focus on stages where the needs are highest.

- In this regard, there is an oft repeated recognition that needs differ across the national, regional and country-group levels. It is also often observed that international collaboration on upstream research and development is only imperfectly served by current international initiatives. Also, there is inadequate attention to bridging the gap between technology development and deployment on a large scale. Much international cooperation happens at the technology diffusion end of the cycle where there is room for greater coordination.

- Urgency vs. prudence: While many delegations underlined the urgency of responding to a mandate to discuss options for a technology facilitation mechanism, others have underlined the need to gather more detailed information on technology facilitation efforts underway to be able to discuss the question of a technology facilitation mechanism in a more informed manner. More genuine efforts need to be undertaken in mapping.

The debates suggested a number of additional proposals that could be taken into account as subsequent Dialogues discuss the way ahead, including that:

- The challenge at hand is much broader than technology transfer as such, and that, while the transfer of commercially viable technologies is a private sector issue, governments can do a lot by facilitating an enabling regulatory framework, including good economic governance, rule of law and effective enforcement of rules, including on IPRs.

- It is crucial to include non-state actors (academia, civil society, business) on a regular basis in further discussions on technology facilitation at the UN .

The Dialogues also heard an update on preparations to launch a technology bank for the least developed countries, the modalities of which are to be determined on the basis of a feasibility study soon to be undertaken. The technology bank is understood as a time-bound mechanism that would logically reach its conclusion with the graduation of all countries out of LDC status.

Dialogue 3 – Identifying areas of convergence

4 June 2014

The third Dialogue was focused on identifying possible functions that could be undertaken by technology facilitation and options for the way forward, on the basis of discussion notes proposed by the co-moderators. On these issues, the statements delivered at the meeting by member States and other participants, while building on positions presented at earlier dialogues and workshops on this subject, revealed a certain alignment of assessments and proposals in a number of areas. These included:

- Improving synergy and coherence: While proposing different modalities and formats, a wide range of participants called for an improved framework for system-wide coordination and cooperation in the area of technology cooperation, while respecting the rules and/or mandates of existing institutions, frameworks and processes.

- Improving data and information: While using different terminology to describe it, a wide range of delegations called for promoting a better mapping, sharing and dissemination of knowledge and information on existing technology facilitation activities and/or technologies themselves, across the UN system and beyond, through electronic platforms or otherwise.

- Analysis of needs and gaps: Many delegations appeared to support further analysis by the UN to draw a more complete picture of technology needs in relation to sustainable development, and identify any important gaps in addressing these needs.

There were other functions, which a number of delegations thought essential for further consideration:

- Capacity building: Articulate capacity development programmes and knowledge platforms within the UN System, facilitating access to existing capacity building initiatives.

- Knowledge sharing and networking: Build and expand open international networks of collaboration in research, development and demonstration that allow for the participation of all countries, including the poorest.

- Technology access and transfer: Promote technology access and transfer to developing countries on preferential and/or concessional terms, especially in the context of publicly-funded technologies, and encourage the expansion of clean and environmentally sound technologies in public domains.

The third Dialogue was enriched by a number of complementary perspectives on technology and innovation issues presented by a number of experts:

- The OECD presented lessons from a large body of national innovation system reviews for developed and developing countries. These underline the importance of building national capacities (investment in skills, R&D and innovation) to be able to make good use of technology transfer and facilitation, and the role of multinational enterprises and participation in global value chains (GVCs) as major conduits for technology acquisition (hence the importance of framework conditions such as competition, entrepreneurship, etc.). Developed jointly with the World Bank, their Innovation Policy Platform represents an online learning tool on innovation and innovation policies, and includes significant content relevant for developing countries.

- Very supportive of a UN technology facilitation mechanism as proposed in the UNSG's 2012 report A/67/348, the South Centre underlined the importance of such a mechanism to promote technology in a broader sense, going beyond clean and environmentally sound technologies, and across the full tech life cycle from R&D to demonstration, market formation and diffusion. The South Centre is of the view that developing countries participate in GVCs at the lowest levels of technology and that getting framework conditions right does not necessarily lead to the transfer of technologies or the capacity to benefit from them. Regarding IP issues, there is a great deal of technology in the public domain that can be used for sustainable development and one should not hesitate to make greater use of compulsory licensing for privately-owned IP.

- The International Centre for Trade and Sustainable Development (ICTSD) was convinced of the need to set up a technology facilitation mechanism under UN auspices. The key function of such a mechanism should be to coordinate existing facilitation activities within the UN system and beyond which are currently scattered, splintered and carried out inside separate sectoral "silos" (energy, bio-diversity, hazardous wastes, etc.), thus weakening the efforts. The participation of all relevant stakeholders in such a mechanism was considered very important. In their view, to be effective, any mapping or database activities ought to be backed by concrete knowledge-sharing and capacity building activities.

- Providing a civil society perspective, the representative of the ETC Group was convinced of the need for a UN technology facilitation mechanism, backed by activities on "horizon scanning" as well as technology assessments.

- The European Union underlined that any possible technology facilitation mechanism put in place by the UN should avoid being static. Technology solutions require more knowledge and its being shared more widely, therefore process is an important contributor. It is also important to go beyond increased efficiency (such as resource efficiency) and seek breakthrough solutions, which justifies the scale of the resources allocated to STI in the EU's Horizon 2020. The EU representative also underlined the importance of using innovative tools such as more modern use of public procurement, innovation prizes or crowd funding.

The Dialogue heard a proposal by two independent experts from academia and the private sector aimed at significantly enhancing the institutional capabilities to develop technologies to meet sustainable development challenges, and consisting of several elements, including:

- An Advanced Research Projects Agency for Sustainable Development (ARPA-SD) providing thought leadership and targeted funding to fill the gap between research/proof-of-concept and demonstrable prototype stages (i.e., overcoming "valley of death") to create successful outcomes that can then find application at scale.

- A Global R&D Facility for Sustainable Development providing long-term perspective in R&D efforts performed by talented individuals drawn from all over the world on limited-term assignments within a lean, state-of-art institutional design to maximise effectiveness.

- Crowd-sourcing solutions, including a platform for prize-driven innovation for sustainable development, which can potentially leverage technological expertise (and resources) from multiple individuals/organizations, and is results-based (i.e., prize only if goal met).

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The presentation of the preliminary outline of this proposal was welcomed by some delegations as a thought-provoking idea that should be discussed further as part of deliberations on the way forward regarding a technology facilitation mechanism.

Dialogue 4 – Recommendations on deliverables and the way forward

23 July 2014

The fourth and final Dialogue discussed concrete options regarding possible functions, modalities and organisation of a technology facilitation mechanism on the basis of notes proposed by co-moderators. These included:

1. Better information and mapping of existing facilitation activities;

2. Improving coherence and synergy between existing facilitation activities;

3. Conducting analyses of technology needs and gaps in addressing them; and,

4. Promoting the development, transfer and dissemination of clean and environmentally sound technologies through a technology facilitation mechanism.

The co-moderators welcomed the increased participation by member states and other participants in this dialogue and emphasised the link to the successful conclusion of discussions on Sustainable Development Goals (SDGs) in which "fostering innovation" figures in one goal and "technology" is mentioned in several targets. In this regard, it is important to be mindful of coherence in the way forward given the close linkages between technology facilitation and the SDGs within the post-2015 process.

The final dialogue's deliberations benefited from interventions by resource persons representing different types of agencies that could participate in the functioning of a possible technology facilitation mechanism:

- UN DESA underlined that hardly any SDG could be achieved without significant progress in the availability of technologies, and discussed possible implications of the co-moderators' proposed options in terms of institutional design and resources.

- The Office of the UN Assistant Secretary General for Strategic Planning briefed participants on the UN's experience with operating multi-stakeholder partnerships, such as the example of Global Pulse making use of an institutional model based on open software/big data, and underlined that the time it takes to build such partnerships should not be underestimated.

- Providing a perspective from the private sector, a representative of the International Chamber of Commerce underlined key considerations in building a successful innovation-based partnership, including a) the ability of the private sector to link with local universities and R&D, b) the presence of adequate infrastructure and stable political and regulatory environment (e.g., contract law), c) significant investment in education and capacity building, and d) reduction of market barriers (including tariffs) on clean technologies.

Interventions from member states and civil society representatives suggested broad support for further discussion and consideration of some or all elements of the first three options put on the table by the co-moderators, with some delegations underlining the need for a more detailed analysis of needs and gaps prior to discussing concrete next steps. While a large number of delegations expressed support for all four options proposed by the co-moderators, several delegations emphasised that it is too early for substantive deliberations of some or all elements of option four and further information is needed on the elements therein. Some delegations once again underlined during the dialogue that there is difference of opinion regarding what precisely was mandated by the Rio+20 conference.. There was some discussion on the merit of an incremental approach beginning with deliverables that receive wide support.

There was also an inconclusive debate as to whether a procedural resolution is needed during the remainder of the GA's 68th session to ensure the continuation of the discussions on the technology facilitation aspects of sustainable development, with some delegations generally supporting this and others arguing that it is implicit in resolution 68/210 mandating the dialogues.

The co-moderators concluded the meeting by stating that they will provide their report on the four Structured Dialogues to the PGA including recommendations (see Section III below) based on their notes and discussions in this meeting.

The co-moderators also stated that their report to the PGA will include elements of a procedural resolution on the continuation of discussions on technology issues during the 69th session of the GA, noting the divergent views voiced during the fourth Dialogue on its merits, and seek guidance from the PGA on this matter. Following the publication of the PGA's own report on the Structural Dialogues, and for practical reasons, any further discussions in this subject area would not take place before September 2014.

III. Recommendations for the way forward

The fourth Structured Dialogue has provided an interactive discussion amongst member states and other stakeholders on concrete next steps in the area of technology facilitation, on the basis of notes proposed by the co-moderators. It was widely expressed that one important next step is to facilitate the launch of the Technology Bank and STI supporting mechanism for LDCs as mandated in General Assembly resolution 68/224.

Based on the discussions at the fourth Structured Dialogue the co-moderators draw two conclusions from this dialogue: first, there is support for initial tangible deliverables and second, further discussion is needed regarding other actions

These measures can be initiated concurrently or in a phased way and can constitute a basis for further incremental action in the future.

Therefore, the co-moderators believe 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 for clean and environmentally sound technologies*

The creation of an online knowledge-sharing platform would include the continuous mapping of and linking to existing facilitation activities, as well as the dissemination of open and publicly-available information and knowledge on clean and environmentally sound technologies themselves. This platform could be maintained by an appropriate UN entity, supported through a collaborative partnership with relevant international bodies, the private sector, NGOs and other relevant stakeholders, and be backed by an advisory group consisting of both users and suppliers of information, the public and private sectors and key international agencies/organisations. It would have to operate through a process which ensures that information provided is kept up-to-date and accessible and meaningful in terms of promoting the uptake and impact of technologies by end users.

2. *Improve coordination within the UN System on clean and environmentally sound technologies*

Make better use of the existing UN infrastructure through increased coherence and synergies among technology transfer initiatives, programmes and mechanisms already operating within the UN system and under the Rio Conventions.

As views differed on how to better coordinate, the co-moderators think that the Secretary General could present several options in order to have a better basis to move forward.

Elements the UNSG may want to consider include enhancing dialogue among relevant actors through regular meetings and creating an inter-agency coordination mechanism for technology broadly along lines of UN Energy, strengthening coherence and synergy among ongoing technology facilitation activities within the UN System and under the Rio Conventions. Such a mechanism could also enhance coordination among international initiatives for STI capacity building in developing countries. Coordination and synergy could benefit from better transparency and aggregation of information on work programmes and budgets, while respecting the mandates of existing bodies and programmes. It could be backed by a network of universities, research organisations, and national STI and technology transfer bodies, participating on a voluntary basis.

Progress on the deliverables above will contribute to more focused and substantial discussions with regards to the following option:

3. *Analysis of technology needs and gaps in addressing them*

A UN inter-agency technology coordination mechanism could also promote sharing of existing analyses of technology needs and gaps in addressing them, as well as encourage new such analyses where clear needs and gaps are identified. In particular, this coordination mechanism could foster inter-agency cooperation on focused capacity building initiatives to help countries, especially LDCs and other countries in special situations, in accessing technology and know-how and deploying them effectively to address their sustainable development needs and challenges. This inter-agency coordination could also extend to innovation policy reviews that support strengthening of national innovation systems, possibly in cooperation with other relevant intergovernmental bodies and international organizations.

4. *Elements for continued discussions*

As the Structured Dialogues have shown that views differ on the question whether to establish a technology facilitation mechanism as contained in the co-moderator's option four, the co-moderators recommend continuing the discussion on the following elements and functions that have been proposed as part of future UN actions on technology facilitation:

- 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 cooperation 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.

ANNEX

Structured dialogues on technology facilitation mechanism - Elements for a Procedural Resolution

Welcoming the convening of four structured dialogues on possible arrangements for a facilitation mechanism to promote the development, transfer and dissemination of clean and environmentally sound technology, on 29 and 30 April, 4 June and 23 July 2014, in accordance with General Assembly resolution 68/210 of December 2013,

Taking note of the summary of the discussions and recommendations emerging from the four one-day structured dialogues to consider possible arrangements for a facilitation mechanism to promote clean and environmentally sound technologies, held during the 68th session of the General Assembly.

Taking note of the views expressed and active participation of Member States and other stakeholders as well as experts and panelists during the dialogues,

Requests the President of the 69th General Assembly to continue consultations based on the above mentioned recommendations with the aim of reaching a conclusion during the 69th Session of the General Assembly in the context of the post-2015 development agenda.

Invites the Secretary-General to take into account the recommendations emerging from the structured dialogues on possible arrangements for a facilitation mechanism to promote the development, transfer and dissemination of clean and environmentally sound technologies, contained in the summary of the President of the 68th General Assembly, when preparing his synthesis report.