



United Nations Interagency Working Group on a Technology Facilitation Mechanism (IAWG)

Brief: preliminary lessons learnt (June 2015)

Rio+20 follow-up process on technology

In the Rio+20 outcome document (A/RES/66/288¹), Member States requested the Secretary General (SG) to identify options for a facilitation mechanism that promotes the development, transfer and dissemination of clean and environmentally sound technologies. The SG outlined his recommendations on the functions, format and working methods of a technology facilitation mechanism to the General Assembly in two complementary reports in 2012 and 2013 (A/67/348² and A/68/310³) which were based on written inputs of the UN system and Member States. These reports also included a preliminary mapping of technology-related UN initiatives and mechanisms, as well as an inventory of existing technology-related proposals.

Member States continued discussions on the way forward, in particular in the form of eight “workshops” and “structured dialogues” that were convened by the President of the General Assembly in 2013 and 2014, respectively. In the summary report and recommendations arising from the “structured dialogues” on “Possible arrangements for a facilitation mechanism to promote the development, transfer and dissemination of clean and environmentally sound technologies”, the co-facilitators (Brazil and Switzerland) identified three consensus areas where the SG could come forward to the GA with a concrete proposal: (a) developing an online platform to undertake a thorough mapping of existing technology facilitation mechanisms, frameworks and processes; (b) improving coordination within the UN System; and (c) analysis of technology needs and gaps in addressing them.

In line with resolution A/RES/68/310, the Secretary-General proposed in paragraph 125 of his Synthesis Report (A/69/700⁴) to take into account the recommendations emerging from the structured dialogues, specifically to “establish an online, global platform building on and complementing existing initiatives, and with the participation of all relevant stakeholders.”

The Interagency Working Group

In order to support the Secretary General’s proposal, the *Interagency Working Group on a Technology Facilitation Mechanism* (IAWG) was initiated by UN DESA and UNEP at the end of 2014. The group is open for participation by all ECESA Plus entities. At present it comprises UN DESA, UNEP, UNIDO, UNCTAD, UNESCO, ITU, WIPO, and the World Bank Group.

The group’s work is structured around four work streams where it identified opportunities to collectively achieve greater impact within the scope of existing mandates: (a) mapping of existing technology facilitation initiatives including support for policy formulation and strengthening of technological capabilities and innovation systems; (b) identifying areas of synergy and areas of possible cooperation; (c) developing options for a possible online knowledge hub and information-sharing platform; and (d) cooperating with relevant stakeholders on technology-focused partnerships and collaborations.

In the remainder of this brief, preliminary lessons learnt are outlined. The analysis draws on written submissions by UN Member States and UN system entities since 2012, as well as on two successive surveys carried out in early 2015 by the IAWG among the eight IAWG members (see above) and FAO, WHO, UNU, UN Regional Commissions, CBD, GEF, IAEA, IMO, ITC, OHRLLS, OSA, UNCCD, UNDP, UNOSSC, UNFCCC, UN-Habitat, UNICEF, UNISDR, UNV, and WMO. Forty of the 70 responses received included rather detailed information. The surveys also asked about institutional arrangements and technologies used, such as for online platforms, and their inter-operability.

As of June 2015, a number of lessons can be learnt from the work of the IAWG on an overview of UN technology related initiatives which might be considered by Member States in their deliberations on the post-2015 development agenda and the Addis Ababa Accord. This Brief is guided by the technology-related elements contained in the draft Addis Ababa Accord of the Third International Conference on Financing for Development as of June 26, 2015.⁵

Online knowledge hub and information-sharing platform

In their responses to the above mentioned surveys, UN system entities highlighted more than 46 existing online platforms/websites in support of science, technology and innovation (STI). These platforms are operated largely in isolation from each other and serve a range of different communities, mostly focused on particular sectors, themes or country groups. Most of these platforms do not share formal coordination or joint governance arrangements. However, they typically engage a range of stakeholders and partners beyond the UN system. Furthermore, they are operated based on a range of technologies. Significant efforts would be needed to make them inter-operable. A “single window” entry to these distributed resources would enable users to make better choices. The IAWG made a preliminary assessment of three options for development of an “online knowledge hub and information-sharing platform” (see

¹ <https://sustainabledevelopment.un.org/futurewewant.html>

² http://www.un.org/ga/search/view_doc.asp?symbol=A/67/348&Lang=E

³ http://www.un.org/ga/search/view_doc.asp?symbol=A/68/310&Lang=E

⁴ http://www.un.org/ga/search/view_doc.asp?symbol=A/69/700&Lang=E

⁵ <http://www.un.org/esa/ffd/ffd3/index.html>

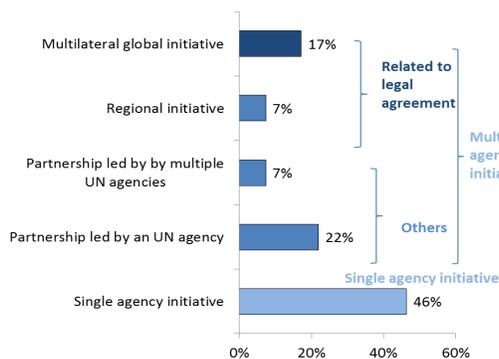
table) in ascending order of ambition. The more ambitious options with scopes beyond the UN system could especially benefit from multi-stakeholder engagement in all stages – from feasibility evaluation to operation. The last page of this Brief shows a graphical illustration of how such a platform could look like with sample contents.

Options	Scope of platform functions	Operational implications
Option 1: Online Library	Repository and mapping of STI-related UN resources, platforms and activities, and directory of partnerships. Periodic updates and news. Limited inter-operability with UN platforms.	Small maintenance team (content and IT). Low cost.
Option 2: Dynamic Exchange of Knowledge and Experiences	All of the above plus: Content exchange with public and private users, including through forums and partnerships. Community-of-practice, user-generated content, tools for knowledge capture. Quality assurance, common taxonomies, user ID and access control, and wiki-type metadata architecture.	Interagency team of several staff with multi-stakeholder participation. Moderate cost.
Option 3: Fully Integrated Platform for Operational Delivery	All of the above plus: Functions related to a coordinated STI capacity building programme, with online and offline delivery, content coordination and integration, supported by communities of practice (COP) and various partnerships, going beyond the UN system.	Interagency technical and programmatic management team with multi-stakeholder governance. High cost.

Coordinated STI capacity building programme

Based on the 40 technology-related initiatives with detailed information, the UN system survey showed a clear need for a more coordinated STI capacity building programme. Almost half of the UN system STI initiatives are planned and carried out independently from each other with another 24 per cent tied to a specific legal agreement and context. Only about a quarter of initiatives are based on partnerships between any of the 53 ECESA Plus Members.

Types of STI initiatives currently undertaken by the UN system (% share out of 40 surveyed initiatives)



Source: IAWG Survey (2015).

The content focus of the surveyed STI initiatives is very uneven – for example, only a few of them specifically target institutions, inequality, gender, education, cities, or forestry (see figure below).

SDG coverage of surveyed STI initiatives



Source: IAWG Survey (2015).

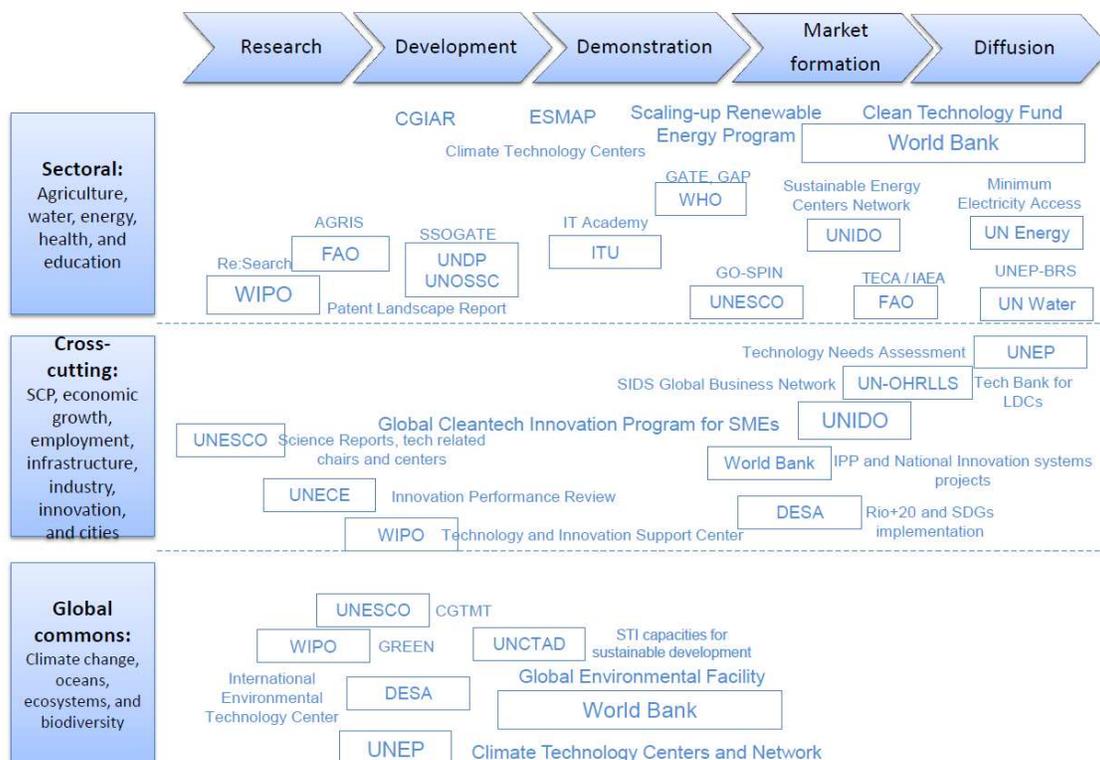
It is important to note that the surveyed STI initiatives differ greatly in terms of their approach, content focus, target groups, working methods, and size. Hence, when mapped against these dimensions, gaps and “fragmentation” in the STI capacity development system become apparent.

When situating the surveyed STI initiatives along the technology cycle, grouped by their SDG coverage, the following becomes evident (see figure). More initiatives capture the technology diffusion as well as the research and development stage, with comparatively less work on the middle stage of technology demonstration. This is especially so in the case of UN initiatives of a cross-cutting nature. UN initiatives that focus on specific sectoral SDGs (e.g., sustainable energy) primarily aim at supporting the market formation and technology diffusion stages. In contrast, UN initiatives that aim to facilitate technologies to address concerns related to global commons tend to focus on the R&D stage and are comparatively limited in terms of resources.

It was also noted that few of the UN capacity building initiatives had a good understanding of technology needs and related potential impacts.

Against the backdrop of these findings, the IAWG has started to look into the organizing principles of a coordinated STI capacity building programme that would build on existing UN initiatives, be based on technology needs and gap assessments and be conducted in partnership with relevant stakeholders.

SDG coverage and resources dedicated to surveyed UN system activities on STI



Note: Size of box/text indicates respective agencies' size of relevant activities, by administrative budget and financial disbursement. Three size classes are defined as: large (US\$10m or more annual admin budget, or US\$1bn or more annual financial disbursement); medium (US\$1m-10m budget or US\$100m-1bn disbursement); small (less than US\$1m budget or US\$100m disbursement). For presentational simplicity, agencies and activities covering multiple stages of technology cycle are mapped to the most relevant stages. **Source:** authors' elaboration based on the mapping surveys to UN Agencies; and SG report A/67/348.

Annual forum on STI for the SDGs

Another lesson from the work of the Interagency Working Group is that there is a need for a regular forum for exchange of experience and for forging of partnerships on STI for the SDGs among public and private actors in developed and developing countries alike. To be effective, such forum would need to be embedded into the existing system of relevant UN bodies and forums, notably the high-level political forum on sustainable development (HLPF) and Commission on Science and Technology for Development (CSTD). The STI forum could be organized as a multi-stakeholder forum, perhaps with a multi-stakeholder advisory group. It could, *inter alia*, address technology "grand challenges" related to the SDGs, possibly with a different thematic focus each year (see Secretary General's Scientific Advisory Board). Depending on identified needs, technology solutions may range from grassroots technologies for the poor to large-scale technologies with high sustainable development impact for which markets alone have not delivered. Innovation prize awards might be considered for technologies achieving ambitious social, economic and environmental technology performance characteristics.

The above mentioned survey identified 11 relevant global forums for the discussion of various STI issues.⁶ In addition, there are legislated meetings associated with all of the 18 international agreements,

⁶ It includes, for example, a biennial Ministerial Forum on Science, Technology and Innovation in Africa. It should also be noted that there are other relevant STI fora beyond the UN system, such as the World Science Forum, the OECD Global Science Forum, and the Daejeon Global Innovation Forum.

conventions, and protocols with technology provisions that were identified in the areas of environment, health and safety. These forums have varied functions to carry out their mandates for the relevant processes. Some forums are focusing on global policies and policy frameworks, while others are more technical in nature, focusing on specific areas of work for filling knowledge gaps and agreeing on global technology related standards. Few forums are focusing on mobilizing or channelling resources, match-making, transferring technologies, and assisting public and private implementation in a local context.

Looking forward

Given these preliminary findings, and the latest development of the post-2015 development agenda and Ffd3 process, the IAWG stands ready to support pro-actively Member States' ambitions to establish the envisaged technology facilitation mechanism. A strengthened UN system interagency working group, or task team, on STI for the SDGs together with strong multi-stakeholder engagement could play an important role in effective delivery, in support of the future implementation of the post-2015 development agenda and the SDGs.

Contact

For further information regarding the IAWG's studies on an overview of UN technology related initiatives, and developing options for an online knowledge hubs and information sharing platform, please contact Wei Liu (liuw@un.org).



Knowledgebase
An online knowledge hub of relevant technologies with information-sharing on experience, good practices, lessons learned; enhance coordination and cooperation; support "matchmaking" between technology supply and needs

Enter



Interactive Tools
Online tools for data visualization and knowledge capture for technology clusters and policy areas under SDGs and targets. It also facilitate exchanges of dynamic contents base on mapping of UN facilitation initiatives and open information channel on demands and non-UN initiatives

Enter



Forums
Discussion forums on relevant issues related to science, technology and innovation to promote networking among governments, private sector, academics and others active in technology promotion, development and transfer, and build multi-stakeholder partnerships

Enter



Interagency Working Groups
Coordinate UN system work for optimal efficiency of delivery and promote technology cooperation, identify synergy and cooperation and promote partnerships in support of the SDGs

Enter



Capacity Building Programmes
Built incrementally on existing programmes by the UN system, development banks, and international organizations; to partnership with academic consortia, national R&D labs, and the business sector

Enter

What is new on the platform

- Interactive Interface – enables users to contribute to the GTF Hub (other than mutual learning) and captures tacit knowledge.
- Provides structured navigation of the online knowledge platform's resources by browsing categories (e.g. modules, nodes, topics, etc.), through keyword search.
- Platform Nodes and Core Modules – provides limited and functional number of key areas where the platform structure remains relatively stable over time.
- Information Repository - provides detailed information and analysis on related topics Indicators, Typologies, Briefs, Case Studies, Country Profiles and Methods Notes.

Top News

- Platform for the UN system's technology facilitation activities, built on a common knowledge base.
- Increase the visibility of the Global Technology Facilitation Platform as a clearing house for existing initiatives.
- Promote coordination, synergies and delivery on technology issues while ensuring the participation of all relevant stakeholders.
- Map out new and emerging platforms and resources in the field of Global Technology to form a consolidated "Delivery as One" tool.

Content Delivery

Fully integrated web services based on coordinated STI capacity development to support online and offline content coordination, subscription, and delivery.

Learn more...

- Recent Publications & Reports**
- Collaborative grant; reimbursable loan; R&D prize; strategic program
 - Public venture capital funds; loss underwriting and guarantees
 - Entrepreneur training; researchers exchange; subsidy for R&D labor
 - Contact / patent database; technology fairs; benchmarking
 - Science park; incubation center; foresight exercise; science diplomacy
 - Sector specific technical standards; platform to coordinate development
 - Cluster and supply chain policies; investment climate improvement
 - R&D procurement; public procurement of innovative goods

Events

Sections about activities and events

Information about the networks and donors are included to provide an overview to outsiders, the platform also allow access to detailed information on global technology facilitation's work down to the level of individual projects of global technology facilitation member agencies.

Popular Communities

Collaborative spaces

Allow internal users to create collaborative spaces to easily upload and share draft versions of their work for review and to track changes in these documents within the platform so users are able to discuss and comment on their work.

Blogs

Web 2.0 platform for topics discussion or Social Networking

The platform will enable users to identify other online users and provides tools for online discussions, such as the possibility to initiate discussions in designated fora or chat rooms.

Top Knowledgebase

- Innovation Policy
- Country Profiles
- Policy Reviews
- Research
- Expertise
- Guideline

Most Accessed Tools

- Technology & Innovation
- Information Economy Reports
- Cybersecurity
- Health Projects
- Child Protection
- Environmental
- Digital Terrestrial TV
- Partnership

Platforms