

Structured Dialogues on a technology facilitation mechanism

David O'Connor

UN-DESA, DSD

Dialogue 1, 29 April 2014

Rio+20 mandate

Request to relevant UN agencies to:

“identify options for a facilitation mechanism that promotes the development, transfer and dissemination of clean and environmentally sound technologies ...”

(para 273)

Request to UN SG, on basis of options and taking account of existing models, to make recommendations re: facilitation mechanism

Proposals in SG report A/67/348

Facilitating cooperation, technology develop, diffusion and transfer along entire technology life cycle through global networks of:

- *science foundations* to support research and development and realize international synergies (Possible models: US National Science Foundation, the public-private partnership model applied to vaccines and drugs for neglected tropical diseases, the Consultative Group on International Agricultural Research, the former programme of the European Union for advanced communications technologies, and the Baltic Sea Innovation Network Centres)
- *national business incubators* to share knowledge and pool resources (Possible models: World Bank climate innovation centres, Brazilian Centre for Innovation, Entrepreneurship and Technology, Indian Centre for Innovation, Incubation and Entrepreneurship)
- *policy, intellectual property and organizations that aim to reduce and share risk* (Possible models : the Green Climate Fund private sector facility, the South-South Global Assets and Technology Exchange System, the Pool for open innovation against neglected tropical diseases, the Eco-Patent Commons of the World Business Council for Sustainable Development, and the Re:Search Open Innovation Platform and the Sustainable Technology Marketplace of WIPO)
- *technology transfer and information* (Possible models: the web-based technology transfer facilitation mechanism of the Asian and Pacific Centre for Transfer of Technology, technology centres of UNIDO, green revolution model of publicly funded centres, and the Climate Technology Centre and Network)

Proposals in SG report A/68/310

Initiatives that can be acted on without institutional reform

- Conduct broad, methodical and periodic examinations of needs, gaps and achievements in the development, transfer and dissemination of clean and environmentally sound technologies.
- Strengthen the capacity to help all countries in converging to best practice in data availability regarding science, research and development and technology inputs and outcomes according to internationally comparable methodologies.
- Build/foster a global reporting system covering all multilateral and bilateral capacity-building activities, as well as demonstration and pilot projects on clean and environmentally sound technologies.
- Mobilize UN support for the agreed technology bank for least developed countries.
- Facilitate intergovernmental dialogue on the transfer of publicly owned or funded technologies.

Why not pick up on any of these ideas?

Why not pick up an opportunity for confidence building to change the tenor of the UN discussions on technology issues – from debate to constructive dialogue?

Proposals in SG report A/68/310 – cont'd

Additional, voluntary actions for consideration by countries

- Promote voluntary national peer reviews of clean and environmentally sound technology needs, as well as options and outcomes in addressing them.
- Sustainable development goal and/or targets in the area of technology.

More comprehensive and ambitious initiatives with institutional implications

- Create a forum within the United Nations (perhaps most appropriately under the auspices of the high-level political forum) for regular expert-informed intergovernmental dialogue on how best to facilitate and accelerate international technology cooperation for sustainable development, notably for the development, dissemination and transfer of clean and environmentally sound technologies.
- Create a United Nations global technology facilitation mechanism.
- Develop a comprehensive and fact-based understanding of the role of intellectual property with respect to the development and transfer of clean and environmentally sound technologies and explore the basis for developing a special international intellectual property rights regime for a range of technologies relevant to sustainable development.

GA Resolution A/RES/68/210

Four Structured Dialogues under auspices of OPGA:

“ ... to consider possible arrangements for a facilitation mechanism to promote the development, transfer and dissemination of clean and environmentally sound technologies

by identifying and addressing, where appropriate, fragmentation, synergies, areas of duplication and opportunities for cooperation between existing mechanisms and processes, thus improving overall coherence and enhancing interlinkages,

identifying and addressing gaps throughout the full technology life cycle, from research to development, demonstration, market formation, transfer and diffusion,

fostering innovation and promoting an enabling environment at all levels,

while respecting the mandates of existing institutions, frameworks and processes ... “ (para 11)

Facilitation

- Wikipedia: any activity that makes tasks for others easy
- [Ecological facilitation](#) describes how an organism profits from the presence of another.

Mechanism

- [Mechanism](#), a process, technique, or system for achieving a result
- [Mechanism \(engineering\)](#), rigid bodies connected by joints in order to accomplish a desired force and/or motion transmission
- [Mechanism \(band\)](#), a death metal band from Canada

Source: Webster, Wikipedia

Technology facilitation

- An activity (or set of activities) that impacts on the ease with which technologies are:
 - developed
 - transferred
 - disseminated, diffused
 - adopted, adapted
- International facilitation focuses on cross-border technology collaborations, interactions, exchanges, flows, transfers ...

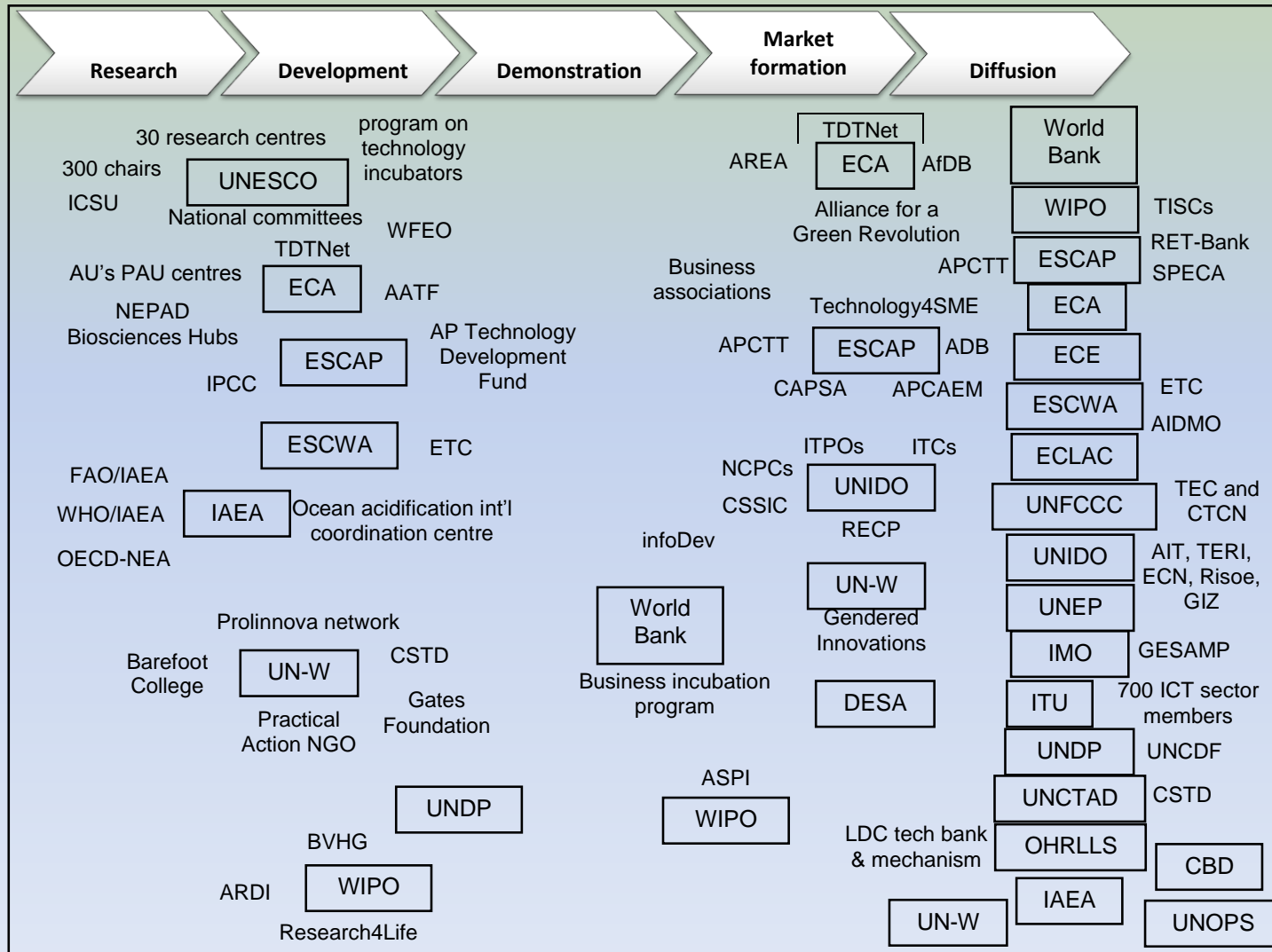
Clean and environmentally sound technologies

- ***Environmentally sound technologies*** : techniques and technologies capable of reducing environmental damage through processes and materials that generate fewer potentially damaging substances, recover such substances from emissions prior to discharge, or utilize and recycle production residues.
- In ***clean*** as opposed to ***end-of-pipe*** technology, the environmental equipment is integrated into the production process.

Source: OECD

Figure 1

Overview of UN contributions (boxes) and selected partnerships (without boxes)



Types of int'l facilitation

- Knowledge and information dissemination, access – clearinghouses, online databases
- Stimulating, directing research to global priorities
- Fostering collaborative research, including networks and multi-stakeholder partnerships
- Easing transition from lab to demonstration
- Matching innovators to investors
- Fostering technology access and affordability
- Strengthening STI capabilities

Institutional models

- CGIAR – int'l agricultural research consortium
- UNIDO/UNEP cleaner production centers
- Climate Technology Center and Network
- Technology Bank for LDCs
- WIPO tools and databases
- CTF and SREP of World Bank
- ARPA-e and EU S&T cooperation programmes

Guiding questions regarding CES technology facilitation

- What is each of these models doing well?
What needs are currently not being met?
- What would best serve to meet unmet needs?
Is there a missing institution or set of actors?
- Or, is a mechanism to facilitate coordination,
cooperation among actors the answer?
- If so, describe how such a mechanism would
look ... its key functions and institutional
features.