

## Workshop on Science, Technology and Innovation for SDGs

29 November – 1 December 2017

Songdo Convensia, Incheon, Republic of Korea

### Concept Note

#### Summary

UN DESA, in collaboration with UNCTAD, is organising a three-day workshop on Science, Technology and Innovation (STI) for the achievement of the Sustainable Development Goals (SDGs) as a major preparatory event for the 2018 STI Forum, as well as to collect inputs for the development of the Online Platform of the technology facilitation mechanism (TFM). The workshop will have the participation of 40 to 50 technology experts from governments, the private sector, financial institutions, non-governmental organisations, and research institutions. It will be held on the margin of the International Exhibition on Smart Technology for Sustainable Development and Procurement in Songdo Convensia, Incheon, Republic of Korea, from 29 November to 1 December 2017. The workshop will focus on STI for the achievement of SDGs 6, 7, 11, 12, 15 (SDGs that will be considered during the High-Level Political Forum in 2018). The discussions will consider the role of traditional knowledge, the impact of emerging technologies, the barriers for scaling-up solutions, and ways to ensure that STI benefits all, leaving no one behind.

#### Context

The Addis Ababa Action Agenda and the 2030 Agenda for sustainable development established the TFM to support the achievement of the SDGs. The TFM is composed of a collaborative multi-stakeholder forum on science, technology and innovation for the sustainable development goals (STI Forum), an Online Platform, and of a United Nations inter-agency task team on science, technology and innovation for the sustainable development goals (IATT).

The IATT is tasked to prepare the sessions of the STI Forum in collaboration with a group of 10 representatives from civil society, the private sector and the scientific community (the 10 Member Group) appointed by the Secretary-General. The IATT is also tasked to support the development and operationalization of the Online Platform. UN DESA serves as one of the co-conveners of the IATT and provides logistical support for the organization of the STI Forum.

The 2018 STI Forum will be held on 17 and 18 May 2018. The Forum will provide inputs for the 2018 High-Level Political Forum (HLPF), which, in addition to SDG 17, will consider the following SDGs:

- Goal 6: Ensure availability and sustainable management of water and sanitation for all
- Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all
- Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable
- Goal 12: Ensure sustainable consumption and production patterns
- Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

#### Objective

The objective of the workshop is to contribute the preparations of the STI Forum 2018 by mobilizing all stakeholders to share information on trends in the deployment of science, technology and innovation for the SDGs 6, 7, 11, 12, 15, including specific solutions and achievements, state of the art expertise on specific issues and practice areas, emerging priorities, critical knowledge and innovation

gaps, as well as their views on ways of mobilizing science, technology and innovation responses to address these gaps. The Workshop also aims at collecting inputs for the development of the TFM Online Platform.

### **Structure**

The Workshop will be organized around the theme of the 2018 STI Forum: STI for resilient and inclusive societies, with a special focus on SDGs 6,7,11,12, and 15. In addition, some cross-cutting issues will also be taken up, as decided by the 2017 Forum. Following a formal opening, the remainder of the workshop will be held in a highly interactive roundtable style, moderated by members of IATT and 10 Member group.

### **Expected outcome**

The expected outcome of the meeting will be a set of recommendations that will assist the IATT and 10 Member Group in the preparation of the 2018 STI Forum. These recommendations should build upon lessons learned from the STI Forum in 2016/17 and should include:

- the status of existing knowledge on the ways that STI could support the achievement of each of the selected SDGs, as well as the main knowledge gaps and challenges;
- suggestions on how to structure and organize the sessions;
- the suggested concrete outcomes and recommendations that should result from the Forum;
- a list of key partners, stakeholders and communities that should be involved in the preparation of the STI Forum 2018;
- the indication of voluntary contributions;
- the identification of potential inter-sessional activities by partners leading up to the 2018 STI Forum; and
- reflections on the TFM's progress and suggestions for improvement.

The outcome of the conference will be summarized in a report by the co-chairs of the 10-Member Group, which will serve as guiding reference and inputs to the 2018 STI Forum and the 2018 HLPF. It will improve understanding of the priorities and concerns of different groups in the area of technology under the Technology Facilitation Mechanism. The co-chairs or the host government will have an opportunity to report on the outcome of this high-level workshop during the ministerial segment of the 2018 STI Forum.

### **Participation**

It is envisaged that 40 to 50 participants, including 30 to 40 international participants, will attend the workshop. The meeting will be attended by the 10 representatives selected by the Secretary-General (10 Member Group), which will be participants funded by UN DESA. Representatives of governments and major institutional stakeholders of the TFM process will be identified based on the relevance of their responsibilities, experience and knowledge to the focus areas of the meeting. Members of the UN Inter-Agency Tasks Team on STI for the SDGs will participate and contribute to the Workshop. The participation of selected IATT members will be supported by UN DESA, contingent of the availability of funds. Funded participants will serve as resource persons during the workshop, and will prepare and present background notes related to the discussions.

### **Date and venue**

The meeting will be held at Songdo Convensia in Incheon, Republic of Korea, from 29 November to 1 December 2017.

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### Tentative Programme

Day One - 29 November 2017	
9:15 – 9:30	<i>Welcome coffee</i>
9:30 – 10:00	<p><b>Opening</b></p> <ul style="list-style-type: none"> <li>• Welcome remarks from the host/ Director DSD</li> <li>• Mr. Jiří Muchka, Special Representative for ECOSOC, Permanent Mission of the Czech Republic to the UN <b>(tbc)</b></li> <li>• Mr. Vaughan C Turekian, co-Chair of STI Forum 2016/17, Senior Board Director, Science, Technology and Sustainability, National Academy of Sciences, Engineering and Medicine</li> <li>• Dr. Heide Hackmann, Executive Director, International Council for Science (ICSU) and co-chairs of the 10-Member Group <b>(tbc)</b></li> <li>• Congratulatory remarks by Dr. Young Sook Yoo, Korea Institute of Science and Technology, Former Minister of Environment</li> </ul>
<b>Group photo (10:00 – 10:15)</b>	
10:15 – 10:45	<p><b><u>Session 1: Introduction to the STI Forum</u></b></p> <p>Remarks:</p> <ul style="list-style-type: none"> <li>• Mr. Juwang Zhu, Director, Division for Sustainable Development, DESA <b>(tbc)</b></li> <li>• Ms. Shamika Sirimanne, Director, Division on Technology and Logistics, UNCTAD <b>(tbc)</b></li> </ul>
10:45 – 11:00	<i>Coffee Break</i>
	<p><b><u>Session 2: STI challenges and solutions for the five selected SDGs</u></b></p> <p><i>These sessions will address key SDG challenges and potential STI solutions for each of the five goals (6, 7, 11, 12 and 15) that will be on the agenda of the High-level Political Forum on Sustainable Development in 2018. Sessions for the SDGs 6 and 7, and 11 and 12 will be held in parallel. The sessions will be structured as interactive panel sessions followed by Q&amp;A and moderated discussion.</i></p> <p><u>Guiding questions:</u></p> <ul style="list-style-type: none"> <li>• What are the most effective ways that STI could support the achievement of the selected SDGs?</li> <li>• What are the main challenges for developing, adopting, disseminating or scaling these STI solutions?</li> <li>• What are the knowledge/implementation gaps requiring more research and technology development?</li> <li>• How to structure and organize a session on STI for the selected SDGs in the 2018 STI Forum to facilitate discussion and the identification of relevant recommendations in that area?</li> <li>• What should be the expected concrete outcomes and recommendations that should result from the Forum in relation of STI for the selected SDGs?</li> </ul>

	<ul style="list-style-type: none"> <li>• What are the key partners, stakeholders and communities that should be involved in the preparation of the STI Forum 2018 in relation to STI for the selected SDGs?</li> </ul>
11:00 – 12:30	<p><b>Session 2a: STI for ensuring availability and sustainable management of water and sanitation for all (SDG 6)</b> (Breakout session)</p> <p>Moderator: (tbc)</p> <ul style="list-style-type: none"> <li>• Mr. Eun Namkung, Professor, Seoul National University</li> <li>• Ms. Angela Renata Cordeiro Ortigara, WWAP</li> <li>• Ms. Lot Felizco, Country Director-Philippines, Water, Sanitation and Hygiene (WASH) program, Oxfam <b>(tbc)</b></li> <li>• Ms. Shirley Malcom, co-chair, CSTD Gender Advisory Board <b>(tbc)</b></li> </ul>
11:00 – 12:30	<p><b>Session 2b: STI for ensuring access to affordable, reliable, sustainable and modern energy for all (SDG 7)</b> (Breakout session)</p> <p>Moderator: Ms. Shamika Sirimanne, Director, Division on Technology and Logistics, UNCTAD (tbc)</p> <p>Panelists:</p> <ul style="list-style-type: none"> <li>• Mr. Jim Watson, UK Energy Research Centre and University of Sussex</li> <li>• Mr. Woosung Lee, Director of Global Policy Researches, Science and Technology Policy Institute</li> <li>• Ms. Katherin Steel, Energy Director, Power Africa, USAID <b>(tbc)</b></li> </ul>
12:30 – 14:00	<i>Lunch break</i>
14:00 – 15:30	<p><b>Session 2c: STI for making cities and human settlements inclusive, safe, resilient and sustainable (SDG 11)</b> (Breakout session)</p> <p>Moderator: Ms. Hayat Sindi, Founder and President, Institute for Imagination and Ingenuity (i2institute)</p> <p>Panelists:</p> <ul style="list-style-type: none"> <li>• Mr. Eugene Atiemo, Director, Building and Road Research Institute of the Council for Scientific and Industrial Research of Ghana</li> <li>• Ms. Sujaya Sathi, Centre for Study of Science, Technology and Policy (C-STEP)</li> <li>• Mr. Richalls Martins, coordinator of the Brazilian Network of Population and Development in Brazil, representative of Brazil in the Latin American Network of Equality and Social Justice</li> </ul>
14:00 – 15:30	<p><b>Session 2d: STI for ensuring sustainable consumption and production patterns (SDG 12)</b> (Breakout session)</p> <p>Moderator: Mr. Zitouni Ould-Dada, Head of Technology Unit, UN Environment</p> <p>Panelists:</p> <ul style="list-style-type: none"> <li>• Mr. Jonghwan Kim, Director, Korea Environmental Industry and Technology Institute</li> </ul>
15:30 – 15:45	<i>Coffee Break</i>

15:45 – 17:15	<p><b>Session 2e: STI for preserving and sustainably using terrestrial ecosystems (SDG 15)</b> (Plenary session)</p> <p>Moderator: Ms. Elenita Daño, Asia Director, Action Group on Erosion, Technology and Concentration (ETC Group) (tbc)</p> <p>Panelists:</p> <ul style="list-style-type: none"> <li>• Mr. Wooyeong Joo, Senior Researcher, National Institute of Ecology</li> <li>• Ms. Marcia Chame, Coordinator, Institutional Platform of Biodiversity and Health, Fiocruz, Brazil</li> </ul>
17:15 – 18:00	<p><b>Session 2f: Harnessing the crosscutting nature of STI for resilience and inclusion</b> (Plenary session)</p> <p><i>This session will take stock of the key messages and recommendations highlighted in the breakout sessions and discuss the common elements and ways to harness the crosscutting nature of STI for the achievement of the SDGs. It will also provide recommendations on how to structure a session on that theme during the STI Forum 2018.</i></p> <p>Moderator: Mr. George Essegbey, Director of the Science and Technology Policy Research Institute (STEPRI) of the Council of Science and Industrial Research</p> <p>Panelists: moderators of previous sessions</p> <ul style="list-style-type: none"> <li>• Ms. Erika Kraemer-Mbula, Senior Lecturer and Research Fellow at the Institute for Economic Research on Innovation at Tshwane University of Technology</li> <li>• Mr. Jean-Eric Aubert, International expert on STI Policies (previous career in World Bank and OECD)</li> <li>• Dr Michiharu Nakamura, Former President and Advisor, Japan Science and Technology Agency (tbc)</li> </ul> <p><u>Guiding questions:</u></p> <ul style="list-style-type: none"> <li>• How to harness the crosscutting nature of the STI and interlinkages between the SDGs to accelerate the implementation of the 2030 Agenda, particularly for resilience and inclusion?</li> <li>• How to structure and organize a session on harnessing the crosscutting nature of STI during the 2018 STI Forum to facilitate discussion and the identification of relevant recommendations in that area?</li> </ul>
18:30-20:00	<i>Dinner reception</i>

<b>Day Two - 30 November 2017</b>	
8:30 - 9:30	Closed meeting of the 10 MG
9:30 – 10:45	<p><b>Session 3: Harnessing indigenous knowledge for the achievement of the SDGs</b></p> <p><i>This session will discuss how to harness indigenous and traditional knowledge relevant to the achievement of the SDGs. It will also present recommendations on how better highlight and mainstream the role of indigenous knowledge in the 2018 STI Forum.</i></p>

	<p>Moderator: Dr. Myrna Cunningham, President, Center for Autonomy and Development of Indigenous Peoples (CADPI) (tbc)</p> <p>Panelists:</p> <ul style="list-style-type: none"> <li>• Ms. Aminata Sall Diallo, Executive Director of the PASET (Partnership for applied science engineering and technology) and Special Advisor to the Minister of Higher Education and Research and STI Adviser to the Minister of Foreign Affairs of Senegal</li> <li>• Eun Mee Kim, EWHA</li> <li>• Ms. Anita Gurumurthy, Executive Director, IT for Change</li> <li>• Mr. Stanley Kimare Riमित, Executive Director, Indigenous Livelihoods Enhancement Partners, Kenya (tbc)</li> <li>• Ms. Joan Carling, Co-convenor, Indigenous Peoples Major Group for SDGs (tbc)</li> </ul> <p><u>Guiding questions:</u></p> <ul style="list-style-type: none"> <li>• How to harness indigenous knowledge and grassroots technologies for achieving the selected SDGs?</li> <li>• How to ensure that STI for SDGs leaves no one behind?</li> <li>• How to structure and organize a session on harnessing indigenous knowledge for achieving the SDGs during the 2018 STI Forum to facilitate discussion and identification of relevant recommendations?</li> </ul>
10:45 – 11:00	<i>Coffee Break</i>
11:00 – 12:30	<p><b><u>Session 4: Emerging frontiers: evolving STI developments with implications for SDGs</u></b></p> <p><i>This session will discuss emerging technologies and their impact on the 2030 Agenda. It will also present recommendations on how to structure and organize a session on that topic during the 2018 STI Forum. Various emerging technologies such as AI, biotechnology, new materials etc. can be discussed.</i></p> <p>Moderator Prof. Nebojsa Nakicenovic, Deputy Director General and Deputy Chief Executive Officer, International Institute for Applied System Analysis (IIASA)</p> <p>Panelists:</p> <ul style="list-style-type: none"> <li>• Dr Catherine Adeya-Weya, ICT4D Consultant/ Senior Representative, Fieldstone Africa</li> <li>• Mr. Kyungbae Park, Sangji Univeristy</li> <li>• Mr. Mark Graham, Professor of Internet Geography, Oxford Internet Institute</li> <li>• Mr. Edward Lorenz, Professor of Economics, University of Côte d’Azur</li> <li>• Mr Michael Zichy, University of Salzburg</li> </ul> <p><u>Guiding questions:</u></p> <ul style="list-style-type: none"> <li>• What are the new disruptive technologies that could change the paradigm in the field and transform the way to reach the SDGs as a whole?</li> <li>• How to structure and organize a session on emerging technologies during the 2018 STI Forum to facilitate discussion and identification of relevant recommendations?</li> </ul>

12:30 – 14:00	Lunch break
14:00 – 18:00	<p><b>Study visit for the group with further opportunity for questions and discussion.</b></p> <ul style="list-style-type: none"> <li>• Sudokwon landfill site (SDGs 7 and 12)</li> <li>• National Institute of biological resources (SDG 15)</li> <li>• Restored river in Seoul Metropolitan city (SDGs 6 and 11)</li> </ul>

Day Three - 1 December 2017	
9:00 – 10:30	<p><b>Session 5: STI roadmaps incorporating SDGs and their implications for policy and capacity building</b></p> <p><i>The session will discuss STI policy and roadmaps and explore options for more efficient governance approaches, including the responsible research and innovation approach. It will also present recommendations on how structure and organize a session on that topic during the 2018 STI Forum.</i></p> <p>Moderator: Bill Colglazier, co-chair of the 10-Member Group, Senior Scholar, Visiting Scientist, Center for Science Diplomacy, American Association for the Advancement of Science</p> <p>Panelists:</p> <ul style="list-style-type: none"> <li>• Mr. Tateo Arimoto, Professor of Science, Technology and Innovation Policy Program, National Graduate Institute for Policy Studies (GRIPS) / Senior Fellow, Center for Research Development Strategy (CRDS), Japan Science and Technology Agency (JST)</li> <li>• Mr. Ozcan Satiras, Professor of Innovation and Strategy, National Research University, Higher School of Economics, Moscow. Expert on Foresight and STI Policy</li> <li>• Mr. Almaty Konte, Senior expert in Innovation Policy with the African Observatory for STI</li> <li>• Dr. Philippe Kuhutama Mawoko, Director of the African Observatory for STI</li> <li>• Mr. Paolo Correa, World Bank</li> </ul> <p><u>Guiding questions:</u></p> <ul style="list-style-type: none"> <li>• What lessons can be learnt from thematic and national STI plans and policies and, in particular, STI roadmaps? What are current gaps and high priority actions? What role can scientific and engineering communities play in this regard?</li> <li>• How to structure and organize a session on this topic during the 2018 STI Forum to facilitate discussion and identification of relevant recommendations?</li> <li>• What are the concrete recommendations for action by the United Nations system, governments, businesses, scientists, civil society, and others that should result for such a discussion at the 2018 STI Forum?</li> </ul>
10:30 – 10:45	Coffee Break

10:45 – 12:30	<p><b>Session 6: TFM Online Platform</b></p> <p><i>This session will discuss key elements for the implementation of the TFM Online Platform, including: a standard classification of STI for facilitating matchmaking of supply and demand of STI for SDGs; the types of technologies that would be more suitable to be disseminated through the platform, and the user requirements for effective use of the platform.</i></p> <p>Moderator: Mr. Paulo Gadelha, President, Fundação Oswaldo Cruz (Fiocruz)</p> <p>Panelists:</p> <ul style="list-style-type: none"> <li>• Mr. Mustapha Mokrane, Exec Director, ICSU World Data System</li> <li>• Ms. Nina Harjula, Chairman of the board, NIA, Co-founder &amp; Board member, GCCA</li> <li>• Mr. Jorge Martinez Navarrete, UN OICT (tbc)</li> <li>• ESCWA (tbc)</li> <li>• ESCAP (tbc)</li> <li>• Global Pulse (tbc)</li> </ul> <p><u>Guiding questions:</u></p> <ul style="list-style-type: none"> <li>• In relation to the selected SDGs, what are the relevant technologies that are more suitable for dissemination through the online platform?</li> <li>• What are the potential users of the platform? How to facilitate their use by assisting the matchmaking process?</li> <li>• What are the main risks for the successful implementation of the online platform and how to minimize them?</li> <li>• What are the recommendations in relation to standard classifications of STI for facilitating matchmaking of supply and demand of STI for the selected SDGs?</li> </ul>
12:30 – 14:00	<i>Lunch break</i>
14:00 – 15:00	<p><b>Wrap up and next steps</b></p> <ul style="list-style-type: none"> <li>• Next steps</li> <li>• Acknowledgment and thanks (DESA)</li> </ul>
15:15 – 17:00	<p>Closed meeting of IATT and the 10 MG</p> <p><b>STI Forum 2018</b></p> <p><i>co-lead: DESA and UNCTAD</i></p> <p><i>This session will discuss the draft concept note, innovative ideas and proposals for the STI Forum, potential partners, and outreach plans.</i></p> <ul style="list-style-type: none"> <li>• Review of concept note/programme <ul style="list-style-type: none"> <li>Key guiding questions</li> <li>Plan for the background papers and briefs</li> <li>Format of the sessions</li> <li>Potential speakers for each session</li> <li>Identifying potential partnerships and the role of the 10-MG</li> </ul> </li> </ul> <p>Next steps</p>