

# **UN Task Team on Science Technology and Innovation for the Sustainable Development Goals Roadmaps (STI4SDGs Roadmaps)**



## **Briefing Note**

June 2024

## 1. Background

Science, technology and innovation (STI) have enormous potential for accelerating progress towards the Sustainable Development Goals (SDGs) and facilitating key transitions across sectors such as agriculture, energy, healthcare, and education. STI is an important tool for managing trade-offs between Goals and Targets, and building synergies among the environmental, social, and economic pillars of sustainability. But as was underscored in the [political declaration](#) of the SDG Summit in 2023, STI will only have these impacts if structural impediments to STI access are addressed, if funding for SDG-related research and innovation is scaled up, if capacity is built to contribute to and benefit from this research, and if the risks of STI are managed. The Summit of the Future will further emphasize the need to bridge the growing STI divide between developed and developing countries and deepen partnerships so that STI can be a catalyst for a more sustainable, secure and prosperous world.

The Technology Facilitation Mechanism (TFM) remains the key instrument and means for leveraging STI for the SDGs. Agreed in 2015 by Member States through General Assembly resolutions A/RES/70/1 (Transforming our world: the 2030 Agenda for Sustainable Development) and A/RES/69/313 (Addis Ababa Action Agenda), the TFM consists of: (a) the UN Inter-Agency Task Team on Science, Technology and Innovation for the SDGs ([IATT](#)) and the 10-Member-Group Group of High-level Representatives of Scientific Community, Private Sector and Civil Society appointed by the Secretary-General (10-Member-Group); (b) the Annual Multi-stakeholder Forum on Science, Technology and Innovation for the SDGs (STI Forum); and (c) an online platform serving as a gateway for information on existing STI initiatives, mechanisms and programs.

UNDESA (United Nations Department of Economic and Social Affairs) serves as the Secretariat for the IATT, the 10-Member Group, and all components of the TFM. The IATT promotes coordination, coherence, and cooperation within the UN System on STI-related matters, enhancing synergies and efficiency, in particular to enhance capacity-building initiatives. The IATT is co-convened by UNDESA and UNCTAD, and at present, it has 48 UN entities and over 150 active staff members.

A key workstream under the IATT for harnessing the potential of STI to deliver on the SDGs, with a focus on building partnerships and STI capacity in developing countries, is the ***STI for SDGs Roadmaps Programme*** (STI4SDGs Roadmaps). The initiative is co-led by UNDESA, the European Commission/Joint Research Centre (EC/JRC) and UNESCO, with support by IATT members and other institutional partners from academia, civil society and the private sector.

The Roadmaps Programme brings together a network of partners from the UN system and beyond to develop common guidance, principles, frameworks and methodologies to support countries to harness STI in their unique contexts to achieve the SDGs. The Programme helps interested countries to identify partners who can support them in developing country specific STI4SDGs Roadmaps. The Roadmaps developed at the national level include mapping ways to build STI capacity, secure funding for research and innovation aligned with the SDGs, foster a more dynamic learning and knowledge sharing environment, track STI policy impacts, overcome gender barriers in STI, enhance STI communications, build trust in STI and strengthen science-policy-society interfaces among many others.

## 2. Global Pilot Programme on STI for SDGs Roadmaps

The initial stages of the STI4SDGs Roadmaps Programme established networks of experts to support STI for the SDGs, generated common guidelines for producing national roadmaps, and supported six pilot countries in producing national roadmaps.

**Networks of experts** - In response to interest from countries to harness the potential of STI for delivering on the SDGs, DESA worked with IATT partners to build a network of STI experts from the UN system and beyond, who can offer STI guidance through publications, technology resources including blueprints and other design materials, STI-related virtual and in-person events, and other resources.

A technical working group to offer support to national governments was established and co-led by UNDESA, EC/JRC, and UNESCO. The working group has undertaken analytical and operational work on STI roadmaps and action plans for the SDGs. Its members include the World Bank, UNCTAD, UNIDO, ESCAP, ESCWA, ECA, UNDP, UNOSSC, ITU, UNU and FAO, International Science Council, World Federation of Engineering Organizations (WFEO), International Research Centre on Big Data for the SDGs (CBAS), the African Union Commission (AUC), Future Africa, China Association for Science and Technology (CAST), Africa-Europe Science Collaboration and Innovation Platform (AERAP), Major Group for children and Youth (MGYC), and African Academy of Science (AAS). Additional support has been provided by international stakeholders, including the Organization for Economic Co-operation and Development (OECD) and the Government of Japan.

**Pilot National Roadmaps** - In July 2019, IATT launched the [Global Pilot Programme](#) on STI4SDGs Roadmaps during the High-Level Political Forum on Sustainable Development. Six pilot countries participated - Ethiopia, Ghana, India, Kenya, Serbia and Ukraine. The programme reviewed national SDG priorities of pilot countries and their STI policy frameworks, identified lead institutions and key partners, and milestones. DESA, as the Secretariat of the Programme, played a global convening role and coordinated the activities on the ground.

**Roadmap guidance** - In 2020, IATT together with the EC/JRC, synthesized inputs from various networks of experts and dialogues with national authorities to produce a [Guidebook for the Preparation of STI for SDGs Roadmaps](#). The Guidebook provides a framework, common language and step by step advice for preparing Roadmaps at the national level including on such cross-cutting issues such as addressing systemic gender disparity in STEM education and building capacity for R&D personnel. The Guidebook has been translated into all official UN languages. The Guidebook is also informed by two background papers: [Overview of the available STI roadmapping Methodologies](#) and [International STI Collaboration and Investment for SDGs](#).

In response to country feedback on the Guidebook, DESA also prepared an “[Operational Note](#) for Implementing STI4SDGs Roadmaps” to further assist pilot countries in the development of national STI for SDGs Roadmaps. Noting the increasing potential of AI for advancing SDG progress, a [Resource Guide on Artificial Intelligence \(AI\) Strategies](#) was also prepared and launched in the 6<sup>th</sup> Session of STI Forum in May 2021.

Course options have been developed to support countries in roadmap development. DESA and UNITAR launched a [Massive Online Open Course \(MOOC\)](#) to Develop and Implement STI for SDGs Roadmaps in early 2022. EC/JRC is developing an additional MOOC building on the Guidebook preparation and the Global Pilot Programme at the country level. The MOOC will also benefit from the expertise of the UN/IATT workstream on Capacity Building.

### **3. Looking beyond the pilot programme**

The next stages of the STI for SDG Roadmaps programme can build on lessons learned in the pilot process and also respond to the current urgency of scaling up and accelerating solutions in the last 6 years of implementation. This includes attention to systemic change in key entry points that have been called for in the [Global Sustainable Development Report and by the UN Sustainable Development Group](#). STI can help to drive change in food systems, energy systems, digital connectivity, education, jobs and social protection, and climate change, biodiversity loss and pollution.

**Guidebook update** - In early 2024, IATT began preparing updated guidance in the form of a *Guidebook for the Development and Implementation of STI for SDGs Roadmap for [the Six Transitions](#)*, in consultation with interested countries and networks of experts. The Guidebook will build upon the first edition adapting to the evolving STI and SDG landscape since the first edition's publication and advancing the multi-stakeholder approach that is crucial for successful SDG roadmaps. It will also aim to support countries working with UN Country Teams to employ STI for the SDGs working through the six transitions.

As of May 2024, the concept note and draft annotated outline of the second edition Guidebook have been prepared and a core team of chapter leads has been set up. The first draft of the Guidebook is on course to be launched by the 2025 STI Forum to serve as an input to the 10-year anniversary of the Forum. New and committed partners are encouraged to support the Guidebook working group.

**National roadmaps** - More than 20 countries have expressed interest in producing STI4SDGs Roadmaps. In part this interest has been generated by the launch of the Coalition on Science, Technology, and Innovation for Africa's Development ([the STI Coalition](#)) in 2023 during the an STI in Africa Day that was held on the margins of the 8th STI Forum. In response to the growing demand, EC/JRC in partnership with IATT and other development partners, started a new project on "STI4SDGs Roadmaps in Sub-Saharan African" (2022-2024), to support six African countries in the development of Roadmaps, namely The Gambia, Malawi, Mauritius, Namibia, Rwanda, and Seychelles.

In October 2023, UNDESA, in collaboration with ECA and EC/JRC, organized a two-day regional [Workshop](#) in Ethiopia on Building Capacity and Scaling up STI Actions and Adoption of Countries' STI4SDGs Roadmaps in Africa. The workshop discussed how roadmaps could help Africa mobilize youth, the Diaspora, innovation, and the private sector for SDG implementation, and proposed to establish thematic technical groups to further advance the STI4SDGs Roadmaps in Africa and beyond. It facilitated peer-learning and partnership building and supported governments in assessing national approaches to STI4SDG Roadmaps.

In coming months, the 17th Tranche of the UN Development Account project on Science, Technology and Innovation (STI) for Integrated Climate Action for Small Island Developing States (SIDS) will support Cabo Verde, Guinea-Bissau, and Sao Tome and Principe to access, develop, deploy, and expand their use of STI in the context of the SDGs, particularly related to climate resilience and nature-based solutions. This project will help inform the development of STI4SDGs Roadmaps.