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 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 programmes.

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.

DESA carried out initial capacity building work in the context of its project on STI for SDGs, which was implemented from 2017 to 2021. As more countries are expressing interest in the development of STI for SDGs roadmaps and actions, additional initiatives and programmes are now being carried out. In 2022, the Join Research Centre together with Directorate General for International Partnerships of the European Commission launched a project on STI for SDGs roadmaps in Sub-Saharan Africa, which focuses on the design of roadmaps in six countries in the region. Discussing the priority areas, identifying funding and other partners, and jointly exploring a voluntary funding model, as mandated by GA resolution A/RES/77/150, are important steps in the next phase of the implementation.

This workshop will build on the 2023 RPTC on building capacity and scaling up adoption of countries’ STI4SDGs Roadmaps in Africa. It will contribute to an upcoming 17 Tranche of the UN Development Account Project on Science, Technology and Innovation (STI) for Integrated Climate Action for Small Island Developing States (SIDS). It will also present an opportunity for discussing the preparation of a *Guidebook for the Development and Implementation of Science, Technology and Innovation (STI) for SDGs Roadmap for the Six Transitions*.

### 2. Objective:

The overall objective of the joint DESA/ECA workshop is to support governments in assessing and advancing the implementation of STI roadmaps/actions and promoting partnerships.

It intends to:
- Present an opportunity for policy makers to explore resources for implementing STI4SDGs Roadmaps.
- Gain better knowledge of the status of STI4SDGs Roadmaps in the pilot countries, with a focus on ways to address gaps, needs and challenges.
- Discuss the preparation of *Guidebook for the Development and Implementation of Science, Technology and Innovation (STI) for SDGs Roadmap for the Six Transitions*. 
3. Target countries:

- The target countries of DESA’s previous roadmap project from Africa: Kenya (2 representatives), Ethiopia (4 representatives), and Ghana (2 representatives).
- 10 participants from other African countries, including from DA project target countries (Cabo Verde, Guinea-Bissau, and Sao Tome and Principe) as well as members of the Coalition on STI for Africa’s Development (South Africa, Morocco, Ghana, Ethiopia and Cameroon) supported by DESA and ECA.

4. Key Issues

Science and evidence-based actions are indispensable for eradicating poverty, ending hunger, tackling climate change, reversing biodiversity loss, and reducing inequality. Science is the key, and our best hope, for accelerating progress across the Sustainable Development Goals. Achieving this requires shared expertise from all disciplines. This was evident at the SDG Summit in September 2023, where the role of Science, Technology, and Innovation (STI) and the importance of closing STI gaps were central to discussions. In their political declaration at the Summit, Member States committed to bridging the science, technology, and innovation divides, responsibly using STI as drivers of sustainable development, and building the capacities necessary for sustainable transformations.

The Global Sustainable Development Report (GSDR) 2023, written at the request of UN Member States by the Independent Group of Scientists (IGS), revealed a general lack of progress in reaching the SDGs—whether on national, regional, or global scales. The IGS attributed this in part to insufficient attention to the interactions between goals and targets and they underline that implementation of the 2030 Agenda requires a systemic approach focusing on interlinkages between goals and targets. GSDR provides a framework for integrated action on the SDGs, working through six entry points for transformation employing levers capable of bringing about substantial change including science and technology and capacity building.

Aligning the framework of entry points and levers with evidence from ambitious global scenarios, the UN Sustainable Development Group (UNSDG) identified six systems or "Transitions" where policy interventions and strategic investments can have compounding benefits across the SDGs: (i) food systems, (ii) energy access and affordability, (iii) digital

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connectivity, (iv) education, (v) jobs and social protection, and (vi) climate change, biodiversity loss, and pollution. UNSDG has also identified four "engine room actions": transforming policy and regulatory frameworks, developing pipelines of bankable and market-ready national projects, attracting the necessary financing mix including through innovative instruments, and investing in capacity-building for public institutions and civil society.

Under this framework of a systems approach, a UN-supported global collaboration program and platform uses the STI for SDGs roadmaps to design cross-sectoral, interconnected development strategies. These strategies can accelerate and sustain progress across entire development systems and planning cycles, serving as the basis for tackling complex and persistent development challenges. The STI for SDG roadmaps are a tool for enhancing actions to accelerate the six transitions.

The workshop will frame the discussion around roadmaps as a catalyst for sustainable development and the SDGs. In order to ensure strong and sustainable roadmaps, inclusive processes and voluntary funding models/mechanisms need to be established. In this connection, the workshop could discuss how to mobilize youth, the Diaspora, innovators, the private sector and others to engage in the development of STI roadmaps. The STI roadmap workshop will also inform the development of the Guidebook for the Development and Implementation of Science, Technology and Innovation (STI) for SDGs Roadmap for the Six Transitions. It will discuss the following key challenges and issues that the STI roadmaps are aiming to address:

- Mapping national STI stakeholders, skills, capacities, and activities in transition areas;
- Identifying opportunities for strengthening STI networks and partnerships and fostering interdisciplinary collaboration to support national priority transitions;
- Assessing initiatives and investments to build STI capacities to accelerate priority transitions, including capacity to analyse and address SDG synergies and trade-offs;
- Identifying impediments to the application of scientific knowledge in SDG policy-making, and defining the roles of stakeholders such as funders, publishers, policymakers, and research infrastructure providers to leveraging STI for the SDGs;
- Ensuring adequate funding for R&D, identifying voluntary funding models on STI for the SDGs, and channelling resources to empower women and girls in science.

5. Draft agenda (latest programme in a separate document)

Day One:

Opening: Innovation ecosystems - the path towards STI for SDGs roadmaps/actions

Thematic Session 1: Overview and mapping exercise to understand the landscape of skills, capacities and activities related to STI Roadmaps (Future Africa)

Thematic Session 2: Deep dive of challenge led STI4SDG Roadmaps (EC/JRC, CBAS)
Side meeting with the target countries of the UN Development Account Project on Science, Technology and Innovation (STI) for Integrated Climate Action for Small Island Developing States (SIDS).

**Day Two:**

Thematic Session 3: The evolution of science systems as a prerequisite for the six sustainability transitions
(ISC)

Thematic Session 4: Voluntary funding models on STI for the SDGs, STI Policy Instruments and Capacity Building in support of national implementation of the STI Roadmaps
(Africa-Europe Science Collaboration and Innovation Platform)

Roundtable 5: Closing and the way forward.
(DESA and ECA)

6. **Key Reference:**

Briefing Note on STI for SDGs Roadmaps, June 2024

Concept Note for Guidebook for the Development and Implementation of Science, Technology and Innovation (STI) for SDGs Roadmap for the Six Transitions

Concept Note for the 17th Tranche of the Development Account Project: Science, Technology and Innovation (STI) for Integrated Climate Action for Small Island Developing States (SIDS)

UN DESA Policy Brief No. 158: How can we accelerate transformations to achieve the Sustainable Development Goals (SDGs)? Insights from the 2023 Global Sustainable Development Report

UNSDG: Six Transitions: Investment Pathways to Deliver the SDGs

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