

# 10<sup>th</sup> Multi-stakeholder Forum on Science, Technology and Innovation for the Sustainable Development Goals

7-8 May 2025

**ECOSOC Chamber** 

#### **United Nations Headquarters, New York**

"Advancing sustainable, inclusive, and evidence-based science and technology solutions and innovations for the 2030 Agenda and its SDGs for leaving no one behind"

### **DRAFT Programme**

#### Wednesday, 7 May 2025

Welcome and Opening - Celebrating the 10th anniversary of the STI Forum - learning from 10 years of leveraging STI for the SDGs

(10:00 - 11:00)

#### Opening Remarks

- H.E. Mr. Bob Rae, President, United Nations Economic and Social Council
- Ms. Amina Mohammed, Deputy Secretary-General of the United Nations (video remarks)
- Mr. Li Junhua, Under-Secretary-General for Economic and Social Affairs, UN Department of Economic and Social Affairs (video remarks)

#### Keynote speaker

 H.E. Ms. Amal EL Fallah Seghrouchni, Minister Delegate to the Head of Government in charge of Digital Transition and Administrative Reform, Kingdom of Morocco

Fireside Chat: The opening will reflect on STI progress made over the past 10 years, and how to turbocharge STI for SDG delivery and Pact implementation. In the context of a revitalization of STI commitments in the Pact of the Future, and after 10 years of lessons in strengthening the contributions of science to SDG progress, the next 5 years to 2030 will require bold and creative action to overcome persistent impediments to nurturing innovation, technology diffusion and science collaboration. SDG achievement depends on an enabling environment for harnessing STI solutions.

#### Moderator:

Mr. Latif Nasser, Director of Research and co-host at Radiolab, WNYC Studios

#### Speakers:

- Ms. Xiaolan Fu, Founder of OxValue.AI, and Founding Director, Technology and Management Centre for Development, University of Oxford, UK; and Fellow of Green Templeton College and of the Academy of Social Sciences (and Member of the first 10MG)
- Mr. Carlos Henrique Brito Cruz OBE, Senior Vice-President, Research Networks, Elsevier; and Co-chair, Secretary-General's Group of Ten High-level Representatives of Scientific Community, Civil Society and Private Sector
- Mr. Joon Baek, Major Group on Children and Youth, and Co-founder, Youth for Privacy

### Ministerial session under the theme "Harnessing science and technology for the effective delivery of sustainable, resilient, and innovative solutions"

(11:00 - 13:00)

Chaired, opened and closed, and moderated by Forum co-chairs

- H.E. Mr. Omar Hilale, Ambassador and Permanent Representative of the Kingdom of Morocco to the United Nations, Co-Chair of the 2025 STI Forum
- H.E. Ms. Elina Kalkku, Ambassador and Permanent Representative of Finland to the United Nations, Co-Chair of the 2025 STI Forum

#### Guiding questions

- What lessons have we learned about harnessing STI to enable SDG progress?
- What should we do differently in the second half of 2030 Agenda implementation to enable STI solutions to drive transformation?
- What are some promising country experiences and practices that can inform the way forward?

#### Remarks:

• H.E. Mr. Philémon Yang, President of the General Assembly

Statements reporting on the results of the 27<sup>th</sup> session of the UN Commission on Science and Technology for Development and of the work of the Technology Facilitation Mechanism

- Mr. Muhammadou M.O. Kah, Chair, UN Commission on Science and Technology for Development
- Ms. Bjørg Sandkjaer, Assistant Secretary-General for Policy Coordination, UN Department of Economic and Social Affairs

General debate / Speaker List of Ministers

#### **Special event by the 10-Member-Group of High-level Representatives**

(13:15 - 14:45)

The objective of this special event is for the 10-Member-Group of High-level Representatives to present and discuss initiatives and partnerships on science, technology and innovation and their potential impacts on global science and technology cooperation.

10-Members

The event will also look at one specific example initiative in depth, specifically on the global importance of the Built Environment to the SDGs, which will be an opportunity to explore the latest clean building materials and solutions and partnership ideas for their deployment.

 Moderator/presenter: Ms. Karen Scrivener, Professor, Laboratory of Construction Materials, Ecole Polytechnique Fédérale de Lausanne, Switzerland; founder, Nanocem.

### Session 1. Making artificial intelligence (AI) accessible, inclusive and beneficial for all

(15:00 - 18:00)

This session explores pathways and solutions to making artificial intelligence (AI) accessible, inclusive and beneficial for all.

Part 1 explores actionable pathways for AI to reduce inequalities, promote innovation, and empower communities worldwide, in line with sustainable development and the well-being and rights of individuals. Discussions delve into the technical, ethical, and societal dimensions of democratizing AI

applications and capabilities, highlighting approaches that ensure open and equitable access, affordability, transparency, accountability, and utility for diverse contexts and populations. Building on the Pact for the Future, this session will explore bridging AI gaps including through policy exchanges, knowledge-sharing, training, and preventing brain drain.

- What specific, proven approaches or existing initiatives demonstrate how AI can be leveraged to bridge digital divides, reduce inequalities, and empower marginalized communities while ensuring affordability and accessibility?
- What concrete policies, governance frameworks, and capacity-building initiatives can support the democratization of AI and prevent brain drain and misuse of data in developing countries?
- How can AI be developed and deployed in ways that uphold transparency, accountability, and ethical considerations while balancing innovation and regulation? How can we meaningfully measure the success and impact of AI initiatives, including how to select the right ones to invest in?
- What mechanisms can enhance global and regional collaboration, knowledge-sharing, and skill development to ensure that AI benefits all, in alignment with the Pact for the Future?

Part 2 will highlight solutions and breakthroughs in AI that are currently improving work conditions, creating jobs and supporting economic growth as well as advancing health and well-being. Examples will be showcased in access to healthcare services and social protection, and in entrepreneurial ecosystems including in developing countries. It will also consider examples of national capacity development and funding models for promising applications.

- What are the most impactful AI applications currently driving job creation, improving work conditions, and fostering inclusive economic growth?
- How is AI transforming healthcare and social protection, particularly in expanding access to underserved populations and enhancing service delivery?
- How can AI, robotics, and digital tools improve workplace safety by preventing injuries, reducing hazards, detecting risks, and enhancing OSH training? What policies and frameworks ensure their safe implementation? How can regulation, social dialogue, and risk management mitigate digitalization risks?
- What funding models and investment strategies can accelerate the deployment of AI solutions that support sustainable development and national capacity-building?
- What role do local innovation ecosystems, including academia, startups, and SMEs, play in scaling impactful AI solutions, and how can international actors best support these ecosystems in developing economies? How can this best foster long-term resilience and equitable growth

Chaired and opened by H.E. Ms. Elina Kalkku, Ambassador and Permanent Representative of Finland to the United Nations, Co-Chair of the 2025 STI Forum

#### Moderator

• Mr. Tony Maciulis, Chief Content Officer, GZERO Media

Part 1: Actionable pathways for Al to reduce inequalities, promote innovation, and empower communities worldwide (15:00-16:30)

#### Opening keynote

 Mr. Risto Siilasmaa, Technology investor, founder and chairman of WithSecure Inc.; and former Chairman, Board of Directors of Nokia Corporation, Finland

Panel (joined by keynote speaker):

 Mr. Risto Siilasmaa, Technology Investor, Founder and Chairman of WithSecure Inc.; and former Chairman, Board of Directors of Nokia Corporation, Finland

- Ms. Joyeeta Gupta, Professor of Environment and Development, Faculty of Social and Behavioral Sciences, University of Amsterdam; and Professor on Sustainability, IHE Delft Institute for Water Education.
- Mr. Juan M. Lavista Ferres, Microsoft Chief Data Scientist and Corporate Vice President, Lab Director AI For Good Lab
- Mr. Keywan Riahi, Director, Energy, Climate and Environment Program, International Institute for Applied Systems Analysis, Austria; and Secretary-General's Group of Ten High-level Representatives of Scientific Community, Civil Society and Private Sector
- Ms. Maria Leptin, President, European Research Council

#### High-level respondents / lead discussants:

- Mr. Amandeep Sing Gill, Special Envoy of the Secretary-General for Technology, ODET
- Mr. Hassan Nasser, Special Envoy for Multilateral Affairs, Digital Cooperation Organization
- Mr. Hwanil Park, Chief Director, Division of Global Innovation Strategy Research, Science and Technology Policy Institute (STEPI), Republic of Korea
- Mr. Jeffrey Ding, Assistant Professor of Political Science, George Washington University

#### Open Q&A

#### Part 2: Al solutions and breakthroughs (16:30-18:00)

#### Lightning talks

- Ms. Jin Davod, Peace Therapist, Türkiye
- Ms. Lutendo Ndhlovu, *Training initiative of 400 informal Refrigeration and Airconditioning*, South Africa
- Mr. Karunarathnalage Lilan Udayanga Dayananda, *Elzian*, Sri Lanka

#### Panel and presentation:

- Mr. Vladimir Crnojević, Founder and Director of BioSense Institute; Professor in Computer Science, University of Novi Sad, Serbia; and Secretary-General's Group of Ten High-level Representatives of Scientific Community, Civil Society and Private Sector (Presentation)
- Ms. Celina Lee, CEO and co-founder, Zindi, South Africa
- Mr. Magnus Andersson, Associate Professor of Economic Geography, Department for Urban Studies, Malmö University, Sweden
- Mr. Jerry John Kponyo, Associate Professor of Telecommunication Engineering at Kwame Nkrumah' University of Science and Technology, Ghana
- Ms. Victoria Lee, Corporate Director, Fraser Health Authority, Canada; and Board member, CARE Canada

#### High-level respondents / lead discussants:

- Mr. Vincent Martin, Director of Office of Innovation, FAO
- Mr. Robert Opp, Chief Digital Officer, UNDP
- Ms. Caroline Fredrickson, Director, Research and Publications, International Labour Organization

#### Open Q&A

Chaired and closing by H.E. Mr. Omar Hilale, Ambassador and Permanent Representative of the Kingdom of Morocco to the United Nations, Co-Chair of the 2025 STI Forum

## Special event and networking reception by Forum Co-chairs: Innovating, connecting and scaling up STI solutions

18:15 - 19:30, Sputnik Lounge

The STI Forum co-chairs invite participants to a reception and event to showcase innovations in local communities and beyond. A particular focus will be highlighting innovations that address multiple SDGs (the in-focus SDGs 3, 5, 8, 14 and 17) and/or that address the needs of vulnerable communities. Innovators will describe their cutting-edge initiatives and share insights from their experience implementing development solutions.

- STI Forum co-chairs
- Innovators

#### Thursday, 8 May 2025

#### Session 2. Advancing science, technology and innovation for gender equality

(10:00 - 11:30)

As called for in the Pact of the Future, this session will identify ways to close the gender digital divide and to advance leadership in STI for women and girls. It will focus on removing barriers to the full, equal and meaningful access to and participation and leadership in education, employment and research in STEM fields and will also consider how to ensure that advances in technology do not amplify gender inequalities or introduce new risks and challenges for women.

#### Guiding questions:

- What key policies and institutional frameworks have proven effective in ensuring that STI is gender-responsive? How can global and national policy frameworks ensure that women and girls are at the heart of STI?
- What systemic barriers continue to limit women's participation in Science, Technology, Engineering and Mathematics (STEM), and how can they be addressed at different levels (education, workplace, policymaking)? What successful models have demonstrably improved women's leadership in STI, and how can they be scaled globally?
- What best practices and policies have led to increased recruitment, retention, and career progression of women in STEM? How can organizations, universities, and industries implement sustainable gender-inclusive career pathways?
- What are some best practices in advancing women's participation in and benefits from the digital transformation, including in industry, especially to provide economic opportunities for women in developing countries?
- How can policymakers and all stakeholders ensure that advances in AI and other technologies do not mirror existing gender biases and stereotypes, or create new risks and challenges for women?

Chaired and opened by H.E. Ms. Elina Kalkku, Ambassador and Permanent Representative of Finland to the United Nations, Co-Chair of the 2025 STI Forum

#### Moderator:

Mr. Tony Maciulis, Chief Content Officer, GZERO Media

#### Lightning talks

- Ms. Mariana Costa, Laboratoria, Peru
- Ms. Lucy Etoa Mbarga, Sentinel Forensics Sexual Assault Kit, Nigeria (pre-recorded video)

#### Panel and presentation

- Ms. Aree Moon, President, Korea Foundation for Women in Science, Engineering and Technology; and Vice President, The Korean Academy of Science and Technology, Republic of Korea; Secretary-General's Group of Ten High-level Representatives of Scientific Community, Civil Society and Private Sector (Presentation)
- Ms. Paola Cecchi Dimeglio, Chair, Executive Leadership Research Initiative for Women and Minority Attorneys, Harvard University, USA
- Ms. Catherine Ngila, Executive Director, African Foundation for Women and Youth in Education, Sciences, Technology and Innovation, Kenya
- Lady Mariéme Jamme, Founder, lamtheCODE, UK
- Ms. Sunungurai Dominica Chingarande, Vice-Chancellor Women's University in Africa, Zimbabwe

#### High-level respondents / lead discussants:

- Ms. Cristina Jandîc, Deputy Secretary-General, Ministry of Labour and Social Protection, Moldova
- Ms. Rita Orji, Canada Research Chair in Persuasive Technology, and Professor of Computer Science, Dalhousi University, Canada; and representative of the ISC Gender Expert Group

#### Open Q&A

Closing by H.E. Ms. Elina Kalkku, Ambassador and Permanent Representative of Finland to the United Nations, Co-Chair of the 2025 STI Forum

### Session 3. Leveraging science to conserve, restore and sustainably use the ocean and coastal ecosystems

(11:30 - 13:00)

This session examines the latest science and technology solutions for improving the health of the planet and crucial ecosystems including the ocean. It considers the application of emerging technologies like space based remote sensing and satellite data, as well as technologies that show promise for enabling circular economy approaches or addressing the pollution of air, land and soil, fresh water and the ocean. It also considers practical approaches to deployment by using open science, open-source technologies and open innovation.

#### Guiding questions:

- How can science, technology, and innovation enhance sustainable livelihoods for coastal and marine-dependent communities? What policy frameworks are needed to support STI uptake for sustainable ocean livelihoods?
- How can scientific advancements in ocean observation, engineering, and conservation be effectively translated into policy frameworks and governance structures while still prioritizing equity and sustainability, especially for coastal communities and developing nations?
- How can remote sensing, satellite data, and digital twins of the ocean improve ocean conservation and management? What are the biggest gaps in data collection and analysis, particularly for coastal and low-lying communities?
- What more robust data collection, analytics and modelling, as well as engineering and infrastructure innovations are needed to make coastal ecosystems more resilient, and/or ocean-based climate adaptation and solutions, including carbon capture and storage (CCS), viable?
- How can we balance economic development in the blue economy with the urgent need for biodiversity conservation?
- How can grassroots conservation initiatives (like those led by local communities or citizen science projects) complement high-tech ocean monitoring efforts? How can we empower local

- communities with data, tools, and financing to turn marine and coastal protection ambitions into reality?
- How can we improve global scientific collaboration in ocean research, particularly between developed and developing nations?

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#### Moderator:

Mr. Latif Nasser, Director of Research and co-host, Radiolab, WNYC Studios

#### Lightning Talks

- Mr. Joseph Nguthiru, HyaPak, Kenya (biodegradable alternatives to single-use plastic)
- Mr. Lennox Omondi, ECOBANA, Kenya (biodegradable sanitary pads)

#### Panel:

- Mr. Xavier Estico, Founder of the Seychelles Centre for Innovation, and Sustainable Development, Seychelles; and Secretary-General's Group of Ten High-level Representatives of Scientific Community, Civil Society and Private Sector, Seychelles
- Mr. Nianzhi Jiao, Chair Professor of Cheung Kong Scholar, Xiamen University, China
- Ms. Awa Bousso Drame, CoastGIS Research Institute, Senegal, and University College London, UK; 2022 Young Talent of the L'Oreal-UNESCO For Women in Science Sub-Saharan Africa Programme, 2023 Forbes Africa 30under30s Lister
- Mr. Kwame Adu Agyekum, Remote Sensing Scientist, University of Ghana GMES & Africa Project Coordinator; Co-Chair, GEO Blue Planet Steering Committee, Ghana

#### High-level respondents / lead discussants

- Mr. Jamil Ahmad, Director, New York Office of the United Nations Environment Programme
- Mr. Jerry Sheehan, Director of the Science, Technology, and Innovation Directorate, Organisation for Economic Co-operation and Development
- Mr. Lorant Czaran, Scientific Affairs Officer and Chief of the UN Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER), United Nations Office for Outer Space Affairs

#### Open Q&A

Closing by H.E. Mr. Omar Hilale, Ambassador and Permanent Representative of the Kingdom of Morocco to the United Nations, Co-Chair of the 2025 STI Forum

## Special event on Celebrating a Decade of STI for the SDGs – Progress and Future Opportunities

Organized by DESA and UN Inter-agency Task Team (IATT) on STI for the SDGs, in collaboration with organized science and technology communities (World Federation Engineering Organization and International Science Council)

13:15 - 14:45, ECOSOC Chamber

Marking the 10th anniversary of the STI Forum, this special event will reflect on a decade of progress in leveraging science, technology, and innovation (STI) to advance the Sustainable Development Goals (SDGs). It will highlight key achievements, lessons learned, and the critical role of multistakeholder collaboration in supporting Member States to leverage the power of STI for sustainable development. The event will also serve as a platform to look toward the next five years, reinforcing the global momentum generated at the Summit of the Future for STI-driven solutions to sustainable development challenges.

### Session 4: Scaling up STI financing and capacity building and strengthening research infrastructures for sustainable development

(15:00 - 17:30)

In follow up to the Pact of the Future and in preparation for the Fourth International Conference on Financing for Development (FfD4), this session focuses on ways to scale up financing from all sources for scientific research and research infrastructures that support sustainable development. It will consider how to increase opportunities for research cooperation, especially in developing countries, as well as how to attract private sector investment in STI and how to deepen public-private partnerships.

Panel 1, which focuses on scaling up STI financing and capacity building, will explore:

- How can the upcoming Fourth International Conference on Financing for Development (<u>FFD4</u>)
  help to address financing challenges and unleash investments in the science and technology
  solutions we know could be impactful for the SDGs?
- What are some proven ways that governments, international financial institutions, and the
  private sector have collaborated to boost investments in scientific research, technology
  advancement, innovation ecosystems, and STI4SDG roadmaps, in line with the SDGs and
  national development goals?
- What innovative financing models—such as blended finance, catalytic capital, and multilateral funding mechanisms—can be leveraged to strengthen research infrastructures and STI ecosystems in developing countries thereby helping to close STI financing and capacity gaps?
- How can promising capacity-building efforts, including engineering capacity building programs, strengthening of STI infrastructure, foresight and SDG modelling, technology transfer, and digital upskilling, be scaled up to ensure that all countries, especially in the Global South, can address context specific challenges and fully participate in the global STI landscape?
- What policy and regulatory frameworks could enhance public-private partnerships in STI financing and engineering and research capacity building, ensuring alignment with sustainable development goals and long-term economic growth?

Panel 2, which focuses on strengthening research infrastructures for sustainable development, will explore

 What opportunities do the recent agreement of the <u>Pact of the Future</u> and the <u>Global Digital</u> <u>Compact</u> bring for mobilizing knowledge networks, innovators and research communities around the SDGs?

- How can digital infrastructure investments be made in ways that enhance data and knowledge sharing and global scientific collaboration, while increasing access to research and emerging technologies, particularly in developing economies?
- What policies and financing mechanisms can support the development of open-access knowledge platforms, AI-powered research tools, and virtual science hubs to expand global research participation? How can the UN Decade of Sciences for Sustainable Development be leveraged for this purpose?
- How can governments and multilateral institutions align digital connectivity efforts with investments in physical research infrastructures to create more integrated STI ecosystems?
   How can initiatives like STI4SDG Roadmaps be conduits for this integration?
- What are the best practices for leveraging public-private partnerships to accelerate digital transformation in science and education?

Chaired and opening by H.E. Ms. Elina Kalkku, Ambassador and Permanent Representative of Finland to the United Nations, Co-Chair of the 2025 STI Forum

#### Moderator:

• Mr. Latif Nasser, Director Research and co-host at Radiolab, WNYC Studios

#### Panel 1 (15:00-16:15)

#### Lightning talks

- Ms. Ailín Svagzdys, Alkemio, Argentina
- Mr. Willie Ng, Global Cerah, Malaysia (pre-recorded video)

Presentation on the FFD4 process on behalf of the co-facilitators:

 H.E. Mr. Chola Milambo, Permanent Representative of the Republic of Zambia to the United Nations

#### Panel

- Mr. Gong Ke, Chair, Task Force for Engineering Capacity Building for Africa; Former President, World Federation of Engineering Organizations; Professor, Nankai University, China
- Mr. Marco Gilli, Chair, Fondazione Compagnia di San Paolo, Italy.
- Ms. Thandi Mgwebi, Group Executive: Business Advancement, Business Development & Global Partnerships, National Research Foundation, South Africa
- Ms. Peggy Oti-Boateng, Executive Director, African Academy of Science, Ghana

#### High-level respondents / lead discussants

- H.E. Ms. Jainaba Jagne, Ambassador and Permanent Secretary of the Ministry of Higher Education, Research, Science and Technology, The Gambia.
- Ms. Angela Sarcina, Economic and Policy Analyst, Joint Research Centre, European Commission
- Mr. Antonio Gomes Souza Filho, Professor and Director for Evaluation, CAPES, Brazil
- Mr. Deodat Maharaj, Managing Director, UN Technology Bank for LDCs, Gebze, Turkey (prerecorded video)

#### Open Q&A

#### Panel 2 (16:15-17:30)

#### Lightning talk

• Mr. Addisu Fekadu Andeta, Enset Starter Culture, Ethiopia

#### Presentation

 Mr. Navid Hanif, Assistant Secretary-General for Economic Development, UN Department of Economic and Social Affairs

#### Panel

- Mr. Ibrahima Guimba Saidou, CEO, Partnership for Digital Access in Africa
- Ms. Jelena Begovic, Principal Research Fellow, Institute of Molecular Genetics and Genetic Engineering, Serbia; and President, Board of Governors ICGEB
- Mr. Carlos Henrique Brito Cruz OBE, Senior Vice-President, Research Networks, Elsevier; and Co-chair, Secretary-General's Group of Ten High-level Representatives of Scientific Community, Civil Society and Private Sector
- Ms. Motoko Kotani, Executive Vice President for Research, Professor and Principal Investigator, Advanced Institute for Materials Research & Mathematics Institute, Tohoku University, Japan; and Vice President, International Science Council; and Secretary-General's Group of Ten Highlevel Representatives of Scientific Community, Civil Society and Private Sector

#### High-level respondents

- H.E. Mr. Peter Hanke, Federal Minister of Innovation, Mobility, and Infrastructure, Austria
- Ms. Lidia Arthur Brito, Assistant Director-General for Natural Sciences, UNESCO
- Mr. Seizo Onoe, Director, Director, Telecommunication Standardization Bureau, ITU
- Mr. Chris Sharrock, Vice President of UN and International Organizations, Microsoft
- Mr. Mustafa Shehu, President, World Federation of Engineering Organization (WFEO)

#### Open Q&A

Closing by H.E. Mr. Omar Hilale, Ambassador and Permanent Representative of the Kingdom of Morocco to the United Nations, Co-Chair of the 2025 STI Forum

#### **Closing session**

(17:30 - 18:00)

- H.E. Mr. Omar Hilale, Ambassador and Permanent Representative of the Kingdom of Morocco to the United Nations, Co-Chair of the 2025 STI Forum
- H.E. Ms. Elina Kalkku, Ambassador and Permanent Representative of Finland to the United Nations, Co-Chair of the 2025 STI Forum
- Ms. Joyeeta Gupta, Co-chair, Secretary General's 10-Member-Group of High-level Representatives of Scientific Community, Civil Society and Private Sector
- H.E. Mr. Bob Rae, President, United Nations Economic and Social Council