



On-line training sessions on STI policy and policy instruments for SDGs for the SADC region

Concept note

6-10 December 2021, 3-5 pm (Central Africa Time)

By UN-IATT Workstream 6 on Capacity-Building in STI for SDGs

Registration link

Background of UN-IATT WS6

The 2030 Agenda for Sustainable Development and the Addis Ababa Action Agenda highlight the importance of Science, Technology and Innovation (STI) policies and actions for meeting the SDGs. The Technology Facilitation Mechanism (TFM) and its UN Interagency Task Team on STI for the SDGs (IATT) were established in order to mobilize STI solutions for attaining the SDGs.

The IATT is composed of diverse entities, including UNCTAD, UNIDO, UNESCO, UNU MERIT, WIPO, UNDESA, UNEP, UNESCWA, UNECA, UNECA, UNECE, UNESCAP and among others. The IATT's *Work Stream 6 (WS6)* is responsible on **STI for SDGs capacity building**, designing and delivering training courses and workshops on STI Policy for SDGs addressed to policy-makers and key STI managers from developing countries.

The WS6 has delivered two pilot regional trainings in presence (for Arab States and Central American Countries) and three series of online trainings (2020-2021) that benefited over 400 officials from over 70 countries. Resources and more information about the training could be found on the IATT WS6 website ¹.

Objectives of the training

Regions and countries need to build capacities to create robust STI systems for achieving SDGs and addressing the pressing environmental, health, economic and social challenges of the global crisis, such as the current pandemic. In Africa, governments are increasingly recognizing the need to invest in STI capacities in order to implement the African Union (AU) Agenda 2063 and the African Strategy on STI (STISA-2024). The Southern African Development Community (SADC) Protocol STI highlights also the need to strengthen capacities for developing robust STI systems in the region.

In this context, SADC, UNESCO and the UNESCO Chair at the Tshwane University of Technology, the UN-IATT and the University of Sussex, developed a virtual STI training framework on STI Policy and Governance Systems for high-level STI officials composed of eight modules. IATT WS6 designed a series of five sessions being the 7th module of this training programme.

The purpose of the five on-line training sessions designed by the IATT WS6 (module 7 of the overall STI training framework) is to build awareness and understanding concerning key aspects of STI policies and instruments, as well as innovation and entrepreneurship, and monitoring and evaluation processes, and how they relate to the SDGs.

The sessions aim at engaging participants in interactive discussions and practical reflection on existing approaches, case studies and national experiences in establishing and managing STI in the context of the SDGs. Interactive tools, such as Mentimeter and Mural will be used during the sessions.

The proposed sessions will have the following specific objectives:

- 1. Sharing knowledge and practices using different methodological approaches to the design, implementation, monitoring, and evaluation (M&E) of STI policies and instruments
- 2. Recognizing the importance of transparent, participatory, inclusive and evidence-based STI policy-making processes
- 3. Understanding the importance of establishing appropriate and well-balanced policy mix of instruments and means that held address the global challenges
- 4. Stressing the importance of effective STI policy M&E

¹ https://sdgs.un.org/tfm/interagency-task-team/capacity

- 5. Sensitizing the participants to the requirement for successful STI policy implementation
- 6. Increasing awareness that productive actors private enterprises, public firms, small and medium-sized enterprises, farmers, inventors, entrepreneurs are as crucial to responding to the global crisis and contributing to the achievement of SDGs
- 7. Appreciating the need to support innovation and entrepreneurship through government support, financing etc.

Content of the training

The proposed on-line sessions will introduce STI policy-makers and managers to theory and practice of STI policy, in the context of the SDGs. Five sessions of two hours each are proposed and structured along the core elements: STI policy-making for SDGs; Policy instruments; Innovation and Entrepreneurship; STI policy implementation; and STI policy M&E.

Session 1: Current approaches to STI Policy making in the context of SDGs (6 December 2021)

Session introducing existing approaches and methodologies for policy – making and implementation across UN agencies with discussion on case studies in developing, reviewing and implementing STI policies and strategies. Illustrations of how STI policies are being geared towards achieving SDGs and strengthening STI systems for better responses to current and future crisis.

Session 2: STI policy instruments design (7 December 2021)

Session introducing the concepts of policy instruments, including legal frameworks, funding mechanisms etc., followed by methodological approaches for the design of policy instruments across UN agencies. The session will illustrate how existing STI policy instruments can be used / adapted to try to find solutions in times of crisis such as COVID-19.

Session 3: Innovation and entrepreneurship (8 December 2021)

Session discussing the concepts of innovation and entrepreneurship, with focus on governmental support to startups, SMEs and innovators, followed by best practices and successful stories from innovation entities in response crisis and global challenges, and examples of direct policy impact on innovation.

Session 4: Implementation of STI policy and policy instruments for SDGs (9 December 2021)

Session focusing on the requirements for successful implementation of policy instruments. Policy implementation will be discussed through the analysis of its key dimensions as well as the presentation of concrete experiences in countries with different levels of development.

Session 5: Monitoring and Evaluation of STI policies (10 December 2021)

Session introducing approaches, practices and methods for M&E with presentation and discussion on case studies and examples of current practices, challenges and lessons learnt. The session will provide overall introduction and answers the question "Why to monitor and Evaluate STI Policies?"

Profile of Participants

A group of 30-40 STI officials from SADC countries have been invited to participate and to engage in the interactive discussions bringing examples of actions and practices from their countries' experiences.

Profile of Trainers

STI policy specialists from the following UN agencies and institutions will animate and deliver lectures during the five sessions: UNESCO, UNCTAD, UNIDO, UNU-Merit, UNEP, UNECA, UNECLAC and EU-JRC.

Interpretation

The training will be delivered in English with interpretation in French and Portuguese.



Session 1 on Current approaches to STI Policy making in the context of SDGs

6 December 2021, 3-5 pm Central African Time

Session 1 introduces existing approaches and methodologies for policymaking and implementation across UN agencies with discussion on case studies in developing, reviewing and implementing STI policies and strategies. The session will present examples of how STI policies are being geared towards achieving SDGs and strengthening STI systems for better responses to current and future crisis.

Session 1 will present different strategic approaches to STI Policy for the SDGs, while highlighting their commonalities, and in particular, their common focus on strategic directionality and multistakeholder participation in the STI policy making due to systemic nature the SDGs. Through multistakeholder, participatory processes, policymakers seek to foster shared visions of strategic goals, identify tested policy tools for scaling up, inform the design of policy incentives or uncover capability gaps between different types of firms or other relevant agents.

This 2-hour training session will be broken up into an introductory session, the main thematic session divided into three presentations, each with interactive Q&A and open discussion with the participants, followed by a wrap-up session of lessons learned and next steps by participants. The three presentations will focus on:

- 1. Introduction to STI policy for SDGs approaches: the presentation will make a brief overview of existing approaches and frameworks in policy-making, focusing on the STI policy cycles, from priority setting to design, review and implementation of STI policies. The presentation will include key aspects and questions that a STI policy might address. It will focus on key challenges in fostering STI for SDGs, highlighting the need to follow participatory and inclusive approaches and engaging broad range of stakeholders at local, national, regional and international levels.
- 2. Science for supporting decision making: broadly this theme will look at how governments, businesses and civil society can build processes to bring the best science and evidence into their decision making processes on STI policy. The presentation will provide some basic principles surrounding these processes, such as ensuring the scientific and evidence-based findings are considered legitimate by the user audience, that they findings are also considered relevant to solving the question at hand and finally that the process developing the science or evidence for decision-making is considered scientifically or technically credible.
- 3. Country examples in STI for SDGs policy-making and implementation: the presentation will present STI policy approaches that have been applied in countries that are currently implementing STI for SDGs projects and activities. Examples will illustrate different practices and experiences in designing strategies and integrating STI for the achievement of the SDGs. The examples will describe policy approaches that have been applied, discussing different participatory and multistakeholders techniques. The examples will also discuss issues of STI governance, coordination and capacity-building bringing lessons learnt from various countries.

The closing part of the session should try to focus on 2-3 key takeaways that participants should take with them for their daily works in STI policy making. Agencies involved can also provide contact points should the participants want to follow up in any specific point or access the support of a specific agency.

Agenda Session 1

Introduction	Welcome remarks (Moderator)	2 min
	Overview and outline of the sessions (Moderator)	5 min
14:00-14:15	Participants profile (Mentimeter questions)	5 min
	Transition (Moderator)	1 min
15min		
Strategic approaches	Introduction to approaches to STI policy for SDGs	15 min
to STI policy for SDGs	- UNESCO presentation	
	Science for supporting decision making	15 min
14:15- 15:50	- UNEP presentation	
	Moderated discussion with participants and IATT	20 min
95min	presenters and discussants, questions and answers,	
	including chat questions	
	Country examples and experience in STI policy for SDGs	25 min
	(diagnostics, policy design, reviews and implementation,	
	governance)	
	 UNCTAD presentation 	
	- UNESCO presentation	
	Moderated discussion with participants and IATT	20 min
	presenters and discussants, questions and answers,	
	including chat questions, and questions / quiz on	
	Mentimeter	
Wrap up	Summary of the session and take away messages	3 min
	(Moderator)	
15:50-16:00	Final quiz on key words STI for SDGs - Mentimeter	5 min
	Transition to session 2	2 min
10 min		





Session 2 on STI Policy instruments Design for the SDGs

7 December 2021, 3-5 pm Central African Time

The second session of the Workstream 6 of the UN- Interagency Task Team (IATT), Technology Facilitation Mechanism (TFM), introduces the discussion of policy instruments, including legal frameworks, funding mechanisms etc., followed by methodological approaches for the design of policy instruments across UN agencies. The session will also illustrate how existing STI policy instruments can be used/adapted to try to find solutions in times of crisis such as COVID-19.

The introductory part of the session will aim at gauging the level of knowledge of participants through a series of questions which participants will vote on, and their answers will be tabulated and projected on screen. This part of the session also serves as an icebreaker and to get participants interested in the upcoming topics.

Part 1 focuses on designing the set of technology and innovation policy instruments that will be required to achieve the SGSs as well as the national development goals. This part of the session will include an introduction to the concepts of policy instruments, definitions, typology, policy mixes and focus on approaches in designing policy instruments. How to develop STI policy instruments that are in line with national objectives and the SDGs and what are the policy instruments, including in which combination, that help to achieve selected objectives are other possible areas to be covered. Additional topics that could be covered in this section of the session include how to design a policy instrument process and which steps are necessary as well as the different tools and methodologies available to design successful instruments. This part of the session is accompanied by the discussion of specific policy instruments design experiences trying to focus on one specific aspect to provide depth to the discussion.

Part 2 addresses the key policy design challenges in practice. This part addresses the need for having a well elaborated set of realistic, yet ambitious, objectives and the specific policy instruments that accompany them. This session examines in its first presentation the connection between policy objectives and policy instruments by identifying the key technology and innovation objectives that a country can pursuit and what instrument mix is required to achieve them. It explores the complex interactions that arise in a setting of multiple objectives and different policy instruments and how these interrelate to achieve results. While the analysis is done at a generic level concrete examples are provided at the regional level to further illustrate how the approach doesn't only apply at international or national levels but also at the regional or local level.

In the second presentation the discussion zooms into a specific policy instrument and illustrates the dilemmas and options faced to achieve a desired objective(s). By comparing the policy instruments' options available to different countries facing a similar challenge, but with different policy making capabilities and availability budgets, the presentation provides insights regarding the choices related to general against focused approaches to policy instruments, to whether competition or cooperation should be pursuit among agents, to whether the necessary human and financial resources are available and how to procure them in the right amounts and qualities, and to the speed of the impact of the policies. As with the previous part, the presentation of the generic issues needs to be supported by concrete experiences drawing on the accumulated knowledge of the different UN agencies involved in WS6.

The closing part of the session should try to focus on 2-3 key takeaways that participants should take with them for their daily works in designing and implementing STI policy instruments for SDGs. Agencies involved can also provide contact points should the participants want to follow up in any specific point or access the support of a specific agency.

Agenda Session 2. STI Policy Instruments Design for SDGs

Opening	Welcome remarks – (Moderator)	1 min
	Overview and outline of the session (Moderator)	3 min
14:00 - 14:15	Participants profile (Mentimeter questions)	10 min
15 min	Transition (Moderator)	1 min
Conceptual Aspects	Part 1. Designing Technology and Innovation Policy	20 min
and Case studies	Instruments	
	Presentation by UNCTAD	
	- Policy objectives	
14:15 – 15:55	- Policy instruments: definition, types, uses,	
	comparisons, effectiveness	
	- Policy instruments mix	
	- Policy instrument design	
101 mn	- Policy instruments links to SDGs	
	Questions/survey of views on Mentimeter	5 min
	Moderated in-depth discussion with participants and IATT	15 min
	presenters and discussants,	
	Part 2. Technology and Innovation Policy Instruments:	
	Case Studies in Policy Instrument Design	
	Introduction (Moderator)	1 min
	Policy Mix in European Union Smart Specialisation Strategies	15 min
	Presentation by the European Union Joint Research	
	Center (EU-JRC)	
	Questions/survey of views on Mentimeter	5 min
	Innovation Calls in Latin America: the immediate STI policy	15 min
	instruments response to Covid-19	
	Presentation by UNECLAC	
	Questions/survey of views on Mentimeter	5 min
	Moderated in-depth discussion with participants and IATT	20 min
	presenters and discussants on both European and Latin	
	American case studies	
Wrap up	Closing of session	
15:56 – 16:00 4 min	Final take-away messages and Mentimeter survey (optional) (Moderator)	3 min
	Transition to session 3	1 min
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Session 3 on Policies to foster innovation and entrepreneurship

8 December 2021, 3-5 pm Central African Time

Introduction

Work stream 6 of the UN-Interagency Task Team (IATT) of the Technology Facilitation Mechanism (TFM) is convening a series of five online interactive training modules to build capacity of policymakers on Science, Technology and Innovation (STI) for achieving the SDGs in countries of the Southern Africa Development Community (SADC). This third session will focus on policies to foster innovative entrepreneurship in the context of SDGs.

The session will characterize different types of innovative entrepreneurship, and illustrate concrete experiences with policies intended to strengthen entrepreneurial ecosystems in developing country contexts. Participants will have opportunities to discuss on how STI policy can foster innovative entrepreneurship; they will be invited to reflect on the implications of introducing SDGs as guiding principles for the design and implementation of policies to support innovative entrepreneurship.

Format

This 2-hour training session will consists of four parts, including presentations, open discussion with participants and an interactive exercise. Each of the parts will focus on:

- 1. An introductory section to overview conceptual issues, characterize different types of innovative entrepreneurship, and identify key challenges faced by innovative entrepreneurs. These challenges substantiate the need for policy intervention. The session addresses concepts and contextual aspects of innovative entrepreneurship, understood as activities that drive productivity, job creation and economic growth. Innovative entrepreneurship is recognized as a problem-solving activity that helps to address pressing developing challenges while creating business opportunities at different scales: from bottom up approaches to ensure livelihoods at the individual or community level, to strategies to foster upgrading of productive activities, including through enhanced insertion into value chains, support corporate R&D and new venture creation..
- 2. A thematic segment with examples of policy interventions to foster the ecosystem around innovative entrepreneurship in developing regions. The presentation by UNIDO will provide some basic insights into the design of innovation and entrepreneurship policies, comparing two countries at different stages of development, Japan and Kenya. This will be followed by a presentation by the Economic Commission for Latin America and the Caribbean (ECLAC) on the experience of Start-Up Chile, as an innovative initiative to strengthen the local entrepreneurial ecosystem by attracting foreign entrepreneurs and supporting nationals businesses.
- 3. To pre-set an interactive dynamic with participants, facilitators propose to prepare a brief exercise prior to the virtual workshop. This will consist of a compilation of cases with real-life examples of innovative entrepreneurship in developing country contexts. Based on these, participants will engage in interactive discussions at the workshop.
- 4. A wrap-up session to highlight the key take-away messages from this session.

Program

Session 5	Description	Duration
		(min)
Opening	Welcome remarks – (Moderator – tbd)	2
	Overview and outline of the session	3
	Participants profile (Mentimeter questions)	6
	Moderator - transition to Part 1	2
Conceptual	Part 1. Overview of conceptual issues on innovative entrepreneurship	
aspects	(presentation by UNIDO)	20
·	Open discussion – Moderator	20
	Moderator - transition to Part 2	2
Case	Part 2. Case studies	
studies	 presentation by UNIDO on Japan and Kenya 	45
	presentation by ECLAC on Start-Up Chile	45
	Moderator - transition to Part 3	2
Exercise	Part 3. understanding innovative entrepreneurs	
	Discussion of pre-assigned exercise led by UNCTAD	25
	Final Q&A	5
Summary	Summary of session and take away messages - (Moderator)	5
Wrap up	Part 4.	
	Transition to next session – Moderator	3
	1	





Session 4 on STI Policy instruments implementation

9 December 2021, 3-5 pm Central African Time

The fourth session of the Workstream 6 (WS6) of the UN- Interagency Task Team (IATT), Technology Facilitation Mechanism (TFM), focuses on the requirements for successful implementation of policy instruments. Policy implementation will be discussed through the analysis of its key dimensions as well as the presentation of concrete experiences in countries with different levels of development.

The introductory part of the session will aim at assessing the level of knowledge and interest of participants through a series of questions which participants will vote on, after which, their answers will be tabulated and projected on screen.

Part 1 addresses the need for having solid roadmaps and systemic implementation plans. It discusses the role of different types and levels of leadership, as well as sound governance structures, and the importance of effective inter-governmental coordination and public-private interaction mechanisms to ensure the timely and successful delivery of policy instruments. Achieving the commitment of all stakeholders involved to ensure implementation runs smoothly is another topic that this session examines. Since, to a very large extent, implementation is about driving available human and financial resources in the desired direction, the available managerial and organizational capabilities are also analyzed in some detail. Finally, whether these human and financial resources are available and how to procure them in the right amounts and qualities is yet another issue that his session section tackles.

Part 2. The webinar moves away from the generic issues and focuses on concrete experiences around the globe drawing on the accumulated knowledge of the different UN and European Union agencies involved in WS6. Based on the implementation of Smart Specialization policies in 54 European and non-European countries and more than 120 regions, the session will provide insights on how the continuous engagement of local actors and the governance of policy implementation via a system designed to multiply the impacts can leverage the results of single policy instruments. The session will specifically shed light on the success-conducive factors and tools that have been used by policymakers to manage these aspects of the policy implementation process.

The session then shifts to Africa and questions the general assumption that African countries have good science, technology, and innovation (STI) policies but the 'good' policies are not implemented. Using the case of Zambia's STI Policy of 1996 and examples drawn from other African countries, the session will rigorously interrogate the commonly held assumptions of policy implementation failure such as lack of political will, funding, private sector interest, R&D, technical competencies etc. The session will highlight the ignored major causes of policy failure and, underscore that 'successful' implementation of policy instruments does not necessarily lead to achieving the desired outcomes and impacts. It will thus address measures African countries could employ to advance STI policy implementation. Noting that policy implementation is the most important stage in policy design and development – commonly referred to as the 'action stage or the relevance and value stages'.

The closing part of the session should try to focus on 2-3 key takeaways that participants should take with them for their daily works in implementing STI policy instruments for SDGs. Agencies involved can also provide contact points should the participants want to follow up in any specific point or access the support of a specific agency.

Agenda Session 4. STI Policy Instruments Implementation

Session 4	Description	Duration (min)
Opening	Welcome remarks – (Moderator)	1
. •	Overview and outline of the session (Moderator)	5
14:00 - 14:15	Participants profile (Mentimeter questions)	8
	Transition (Moderator)	1
15 min		
Conceptual aspects	Part 1. Science, Technology, and Innovation (STI) Policy Instruments: Implementation Challenges	20
14:15 – 14:55	 Presentation by UNU MERIT What is the role of implementation in the policy cycle? Characteristics of the implementation stage Implementation Challenges 	
	Questions/survey of views on Mentimeter	5
	Moderated in-depth discussion with participants and IATT presenters and discussants,	15
Case studies	Part 2. Technology and Innovation Policy Instruments' Implementation: Case Studies	
case studies	Introduction (Moderator)	1
14:55 – 15:56	 Smart Specialisation Implementation Framework. Presentation by the European Union Joint Research Center (EU-JRC) 	15
	Questions/survey of views on Mentimeter	5
	A policy implementation failure? Zambia's 1996 STI Policy. • Presentation by UNECA	15
	Questions/survey of views on Mentimeter	5
	Moderated in-depth discussion with participants and IATT presenters and discussants on both European and African case studies	20
Wrap up 15:56 – 16:00	Closing of session	
	Final take-away messages and Mentimeter survey (optional) (Moderator)	3 min
	Transition to session 5	1 min





Session 5 on Monitoring and Evaluation of STI policies

10 December 2021, 3-5 pm Central African Time

Introduction

Work stream 6 of the UN-Interagency Task Team (IATT) of the Technology Facilitation Mechanism (TFM) is convening a series of five online interactive training modules to build capacity of policymakers on Science, Technology and Innovation (STI) for achieving the SDGs in countries of the Southern Africa Development Community (SADC). This fifth, and final, session will focus on issues related to monitoring and evaluation (M&E) of STI policies in the context of SDGs.

The session will introduce approaches, practices and methods for M&E with presentation and discussion on case studies and examples of current practices, challenges and lessons learnt. The session will provides overall introduction and answers the question "Why to monitor and Evaluate STI Policies?"

Format

This 2-hour training session will be broken up into five parts, three with interactive Q&A and open discussion and interactive exercise with the participants, one with take-away messages, and the last, fifth part, will be a wrap-up session of lessons learned during the entire week-long series of five online sessions. The parts will focus on:

- An introductory presentation to introduce the conceptual issues, characterize different types
 of M&E, and identify key challenges faced. The presentation will focus on the need to conduct
 M&E and will also raise awareness on the different paradigms that co-exist in the STI Policy
 setting and the implications to M&E. The presentation will focus on one side on monitoring of
 STI performance practices, and on another side on methods to conduct evaluations as well
 the paradigms that underpin them.
- 2. A 2nd presentation with provide examples and introduce case studies related to M&E as part of the assessment of the Global Environment Outlook. The case study on the "Free Basic Water Policy" in South Africa will be presented to participants, illustrating common practices and challenges faced in the process of M&E. To set an interactive dynamic with participants, the facilitator will conduct a brief exercise using to online tool Mural, during which participants will have the opportunity to provide their feedback and views on the case studies presented.
- 3. A 3rd intervention will provide practical examples and lessons learnt from STI policy reviews conducted in several countries in Africa and elsewhere. Challenges and gaps in M&E will be discussed with participants in order to discuss practical ways to improving M&E and strengthening skills and institutional capacities to perform M&E in a systematic manner.
- 4. A wrap-up session to highlight the key take-away messages from this final session will close the thematic portion of the online training session.
- 5. A section on lessons learned and feedback by participants will close this five-session series.

Program

Session 5	Description	Duration (min)
Opening	Welcome remarks – (Moderator – tbd)	2
	Overview and outline of the session	5
	Participants profile (Mentimeter questions)	6
	Moderator - transition to Part 1	1
Conceptual aspects	Part 1. Overview of conceptual issues on monitoring and evaluation • Presentation by UNESCO • Open discussion – Moderator	30
	Moderator - transition to Part 2	2
Case studies	Part 2. Case studies • presentation by UNEP • Exercise on Mural	30
	Moderator - transition to Part 3	2
	Part 3. Common practices, challenges and lessons learnt in M&E intervention by UNCTAD Open discussion – Moderator	30
Summary	Part 4. Summary of session and take away messages - (Moderator)	5
	Transition to Closing – Moderator	2
Wrap up of the series of sessions	Part 5. Closing of online training webinar (UNESCO and UNCTAD) • Short closing remarks • Quick Mentimeter feedback survey (2-3 questions)	5