

1-3 April and 4 April 2025, UN City, Copenhagen, Denmark

Agenda item 4 (a) (i)

National Systems of Innovation

TEC/2025/30/4 Scoping note: Concept and design of the knowledge product and mapping exercise on supporting countries in establishing and strengthening National Systems of Innovation



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Climate Change

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Background:

- TEC initiates new work on National Systems of Innovation this year as per rolling workplan 2023-2027.
- TEC 29 provided guidance to review activities that have multiple deliverables between 2025–2027.
- The activity group on this item reviewed the workplan taking into account the previous TEC work on NSI and the guidance above.
- The activity group propose re-organizing the activities, including timeline, deliverables, and potential partners to collaborate with in the scoping note.



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Objective:

- Identify needs of countries for establish and strengthening NSI, and accelerate and foster climate actions and effective support through enhanced NSI focusing on climate change
- Drawing upon the previous TEC work and other existing work under the UN system, develop a tool/guide for identifying country needs and action
- Provide key recommendations for policy makers for practical steps and strategic interventions on using the tool to strengthen their NSIs



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Summary for Policy makers: Good practices and lessons learned on the setup and implementation of National Systems of Innovation (TEC, 2023)



“Drawing from the analysis of the case studies, the overall recommendation is that implementation of the NSI is best guided through a **systemic approach** that draws upon **NSI functions** and **structure-function frameworks** as a way to suitably organize efforts”.

This is done by:

1. Defining the **scope** of the analysis
2. Identifying system **structural components**
3. Assessing their strengths and weaknesses throughout the **seven structure-functions**
4. Designing **interventions** to address systemic problems
5. Ensuring **monitoring, evaluation, and review**

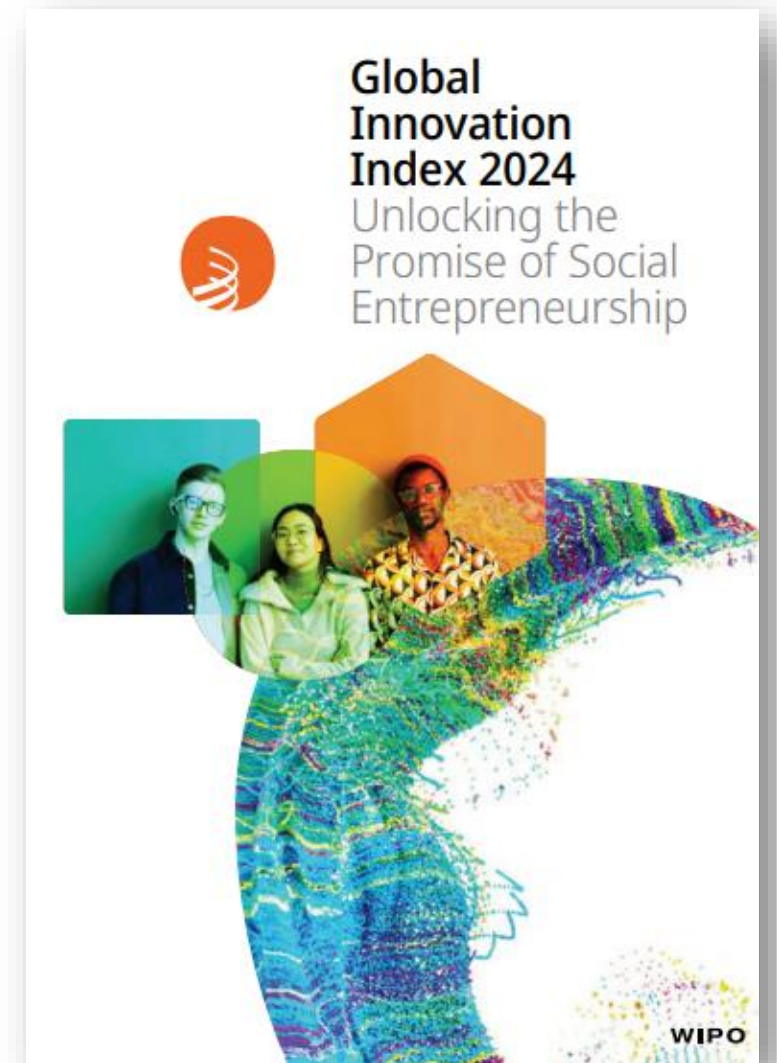
Seven main functions identified in SPM:

- | |
|--|
| F1 Knowledge development & diffusion; |
| F2 Entrepreneurial experimentation; |
| F3 Market formation; |
| F4 Influence on the direction of the search; |
| F5 Resource mobilization; |
| F6 Legitimation; |
| F7 Development of positive externalities. |

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Global Innovation Index (GII) (WIPO)

- GII is published annually by WIPO
- It assesses the innovation performance of countries with about 80 indicators (institution, human capital and research, infrastructure, market sophistication, etc.)
- It doesn't focus on specific industry, policy and area such as climate change, but on overall condition for innovation



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Key deliverables:

- Will be informed by the previous TEC work and other existing work under the UN system such as WIPO
- Supported by experts such as IPCC and WIPO, NDEs, and other stakeholders

>>> Tool/Guide for identifying country needs

A user-friendly, interactive interface that:

- Incorporates specific GII indicators from WIPO and systematically map each indicator to one of the seven NSI functions (F1–F7) and visually represents the mapping of them
- Enables comparative analysis and the identification of specific areas for improvement in NSI
- Will be tested in six countries and the results included in the analysis report

>>> Knowledge product

Comprehensive paper which includes:

- Methodology used for tool development;
- Case studies of six countries;
- Input to WIPO on GII with a climate focus
- Recommendations for policy makers;
- Gender aspect to be considered.

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Timeline:

2025: Develop and present an initial concept of the mapping tool at TEC 31, including detailed methodology and specific indicators (including GII or additional new indicators)

2025–2026: Conduct beta testing of the tool in 2-3 pilot countries and present preliminary results at TEC 32, and complete developing the tool followed by case studies of six countries;

2026 (TEC 33): Present the first results of the 3 pilot countries and draft of the knowledge product, incorporating feedback from pilot testing

2027 (TEC 34): Present the first draft of the knowledge product;

2027(TEC 35): Finalize the knowledge product, including the key messages and recommendations.



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Point of discussion:

- Timeline
- Scope of the work
- Deliverables
- Partners and experts to engage



TEC 30 meeting and Joint session of the TEC-CTCN – 1-3 April and 4 April 2025

Thank you!

Dietram Oppelet, Co-lead of Activity Group on NSI, TEC Chair



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