

24th session of the Committee of Experts on Public Administration

Written statement by the International Science Council

Agenda item 3: Institutional aspects of the theme of the 2025 session of the Economic and Social Council and the 2025 high-level political forum on sustainable development

Science, including disciplines across natural and social sciences, is a critical, cross-cutting tool to support multilevel, multisectoral action across the 2030 Agenda. Science is essential to enhancing evidence-informed decision-making, international relations, and collective action, and therefore to leveraging public administration toward accelerating progress across the Sustainable Development Goals. This is all the more urgent during this time of rapid change, polycrisis, and declining trust in institutions, including institutions of science and governance. Strengthening trust in science and science-policy interfaces is vital to address major global challenges.

It is therefore timely that the 2025 High-level Political Forum (HLPF) shines a spotlight on advancing sustainable, inclusive, science and evidence-based solutions for the Sustainable Development Goals (SDGs), with input from the Committee of Experts on Public Administration.

The International Science Council (the Council) is a non-governmental organization with a unique global membership that brings together over 250 national academies of science, international scientific unions, and other leading scientific organizations across natural, social, and human sciences and across all world regions. As the “global voice for science,” the Council is frequently called upon as a partner and collaborator in accelerating science-informed action toward the 2030 Agenda and in enhancing science-policy interfaces at national and multilateral levels.

This input reflects upon governance and institutional perspectives on the HLPF theme and opportunities to leverage the global scientific community’s expertise toward that end, organized according to **four key messages to inform HLPF discussion and the Ministerial Declaration:**

1. Science is vital for evidence-informed decision-making and governance, including to accelerate progress on the SDGs
2. Open and responsible science can also advance international peace and security in support of the SDGs
3. Harnessing science for decision-making toward the SDGs requires building and enhancing appropriate institutional frameworks for science-policy interfacing
4. Leveraging science for the SDGs also requires enhancing the conditions for open, responsible, and mission-oriented science to thrive

1. Science is vital for evidence-informed decision-making and governance, including to accelerate progress on the SDGs

In the Pact for the Future, Member States acknowledge that “Advances in knowledge, science, technology and innovation could deliver a breakthrough to a better and more

sustainable future for all” (Chapeau) and decided to “Increase the use of science, scientific knowledge and scientific evidence in policymaking and ensure that complex global challenges are addressed through interdisciplinary collaboration” (Chapter III, Action 28b).

Indeed, science is essential to accelerating the implementation of the SDGs. It plays a key role in breaking deep-seated siloes in understanding and action, enabling decision-makers to address the root causes of challenges and identify synergies and trade-offs among solutions. Science also can help decision-makers assess vital transformation pathways and roadmaps, while identifying key areas for sustainable investments that maximize development and sustainability co-benefits (International Science Council, 2024a).

A key to leveraging science for evidence-informed decision-making is meaningful and sustained exchange between governance institutions and science systems, including engagement of interdisciplinary science, transdisciplinary science, and scientific foresight analysis.

- *Interdisciplinary science* integrates knowledge and approaches from different scientific disciplines, and plays a key role in understanding interlinkages among the SDGs.
- *Transdisciplinary science* integrates diverse knowledge-making systems (i.e., natural sciences, social sciences, humanities, practitioner knowledges, local knowledges, and Indigenous knowledges) in support of contextually-appropriate solutions. The Council’s Science Missions for Sustainability represent a visionary model for policy-relevant transdisciplinary collaboration (International Science Council, 2023), which can inform public administration toward the SDGs.
- *Scientific foresight* is essential to effective anticipatory action to mitigate future consequences of today’s actions, enhance long-term resilience and transformation, and safeguard the rights and interests of future generations (International Science Council, 2024b; United Nations Environment Programme, 2024).

2. Open and responsible science can advance international peace and security in support of the SDGs

Scientific inputs help understand the root causes of conflict and advance conditions that enable social stability and sustainable development in diverse contexts, which in turn is essential to achieving the SDGs. Science also is crucial to mitigating and managing the impacts of complex environmental, social, and economic challenges that exacerbate risk and instability, and for facilitating anticipatory action to meet emerging security challenges related to energy, climate, environment, health, technology, nuclear weapons, inequality, and more: for example, as related to ocean governance and AI governance.

It also is critical to engage the scientific community in multilateral discussion to understand both the risks to peace, security, and the SDGs associated with emerging scientific and technological developments, and the benefits of these developments that can be harnessed. For example, artificial intelligence and synthetic biology are fast-developing science-based technologies with limited oversight, large implications in terms of misuse, and large potential benefits, which must be considered through active dialogue between global scientific and policymaking communities. The Council has published a guide for policy-makers offering a comprehensive framework for considering the implications of emerging technologies (International Science Council, 2024c).

Furthermore, science, as a global enterprise and universal language, plays an important role in advancing peaceful international relations and sustainable development through science diplomacy. Cross-national scientific collaborations help build relationships across borders, achieve common understanding around shared questions, and identify cooperative approaches to global challenges, and require strong support from Member States.

Non-governmental organizations like the Council play a critical role in science diplomacy, through, *inter alia*:

- Fostering equitable dialogue on issues of global concern
- Advancing international scientific collaboration and equity
- Encouraging responsible governance of disruptive technologies
- Supporting the protection of the global commons
- Strengthening science-policy interfaces and providing science advice to inform decision-making

3. To harness science for decision-making toward the SDGs requires building and enhancing appropriate institutional frameworks for science-policy interfacing

Member States and multilateral bodies must be able to mobilize authoritative and integrated knowledge taking full account of complex interactions across human and planetary systems, to inform decision-making at multiple levels and steer action towards desired outcomes. This requires effective coordination between interface mechanisms operating within and between multilateral forums and agencies; greater coordination between national and international science-policy interfaces; and a meaningful and structured presence for scientists in global decision-making processes.

Benefits of institutionalizing robust and inclusive science-policy interfaces include:

- Helping ensure that the latest and best available science is made available on an equitable basis to all Member States;
- Supporting consensus-building through common understanding of the nature, scope, and scale of challenges, as well as the range of possible solutions and their implications;
- Supporting risk-informed (anticipatory) governance arrangements with a view to building whole-of-society resilience.

Large bodies of evidence highlight concrete options for enhancing the multilateral science-policy interface (Stockholm Environment Institute et al., 2023), including but not limited to:

- Establishing a regular **UNGA platform for science-policy exchange** (Schmidt et al., 2024);
- Creating a set of **principles or suggested mechanisms for national delegations** on how to effectively consult with scientists (Espey and Casarin, 2023);
- Further **engaging the scientific community** within UNGA and ECOSOC proceedings to provide expert inputs and briefings, thus systematizing a practice of working with scientific knowledge in multilateral deliberations;
- Establishing modalities for a clear set of policy priorities and challenges with a corresponding **call for scientific inputs, to be issued ahead of each UNGA term** (Espey and Casarin, 2023);
- Developing **science-policy-action networks** to draw from existing bodies and generate recommended actions (Climate Governance Commission, 2023);

- Ensuring the **High-level Political Forum** is a knowledge-based, coherent, and action-oriented arena through improved evaluation and analysis of evidence-based inputs, including those stemming from the STI Forum;
- Leveraging **funding across scales** to ensure institutional science-policy frameworks are adequately resourced to ensure sustained effectiveness.

National science advisory systems also are crucial but under-utilized tools for leveraging science for the SDGs. National science advisory systems should be capacitated such that science brokers have the necessary skills and the needed independence to ensure the robustness, integrity, and actionable nature of inputs provided. A strong example is the work of the International Network for Government Science Advice (INGSA), an affiliated body of the Council.

The International Science Council stands ready to share insights on diverse models for effective science-policy interfacing at national and multilateral levels, based on analysis of past and current experiences with, *inter alia*, rapid and/or extensive scientific assessments, science advisory mechanisms to the UN, and independent reviews of established and/or potential science-policy interfaces.

4. Leveraging science for the SDGs requires enhancing the conditions for open, responsible, and mission-oriented science to thrive

The future of global scientific collaboration is at risk, jeopardizing progress on the SDGs. Geopolitical tensions, the securitization of research, and growing restrictions on scientific freedom are undermining international cooperation at a time when collective action is essential.

To safeguard science and engineering as global public goods, governments and funders must strengthen STI ecosystems and protect the right to participate in and benefit from science. Member State support is required to advance the continued transformation of science systems away from intense competition and fragmentation and toward transdisciplinary integration, collaboration, and societally-relevant outcomes, including through new approaches to conducting, harnessing, assessing, and funding science.

A leading model for this can be found in the Council’s “Science Missions for Sustainability,” which are collaborative, transdisciplinary consortia of scientists, policy-makers, NGOs, local and Indigenous communities, and/or businesses working together to design and implement projects with ambitious aims around major sustainability challenges (International Science Council, 2023). Science Missions for Sustainability pilot projects show how co-designed, solution-driven science can deliver real-world impact across the 2030 Agenda.

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