Pact for the Future: ISC Submission to the Zero Draft
Version dated 31 December 2023, revised on 7 February 2024

Chapeau

Science\(^1\) is a critical, cross-cutting tool to support multilevel, multisectoral action across the entire multilateral agenda. It is an essential tool for enhancing evidence-informed decision-making, international relations, and collective action, and is essential to accelerating progress on shared global challenges. Because science has been historically underutilized at all levels of decision-making and in particular multilateral, Member States, the UN and other actors are increasingly acknowledging the need to strengthen the interface between global science and the multilateral system. This is all the more urgent in order to catalyze effective multilateral action on major global issues during this time of rapid change and polycrises.

Therefore, the Chapeau should:
Reaffirm Member States’ commitment to meaningful engagement of science in multilateral, regional and national processes, noting the importance of science for evidence-informed decision-making and action across all chapters of the Pact for the Future.

About the International Science Council

The International Science Council is a non-governmental organization with a unique global membership that brings together 250 organizations including international scientific Associations and Societies, national and regional scientific Academies and Research Councils, and Young Academies and Associations. [https://council.science](https://council.science)

Focal point: Morgan Seag, ISC Liaison to the UN System, morgan.seag@council.science

---

\(^1\) Throughout this submission, “science” refers to the systematic organization of knowledge that can be rationally explained and reliably applied, tested against reality and the scrutiny of peers, referring to a knowledge community inclusive of natural sciences and social sciences as well as humanities, medical, health, computer, and engineering sciences. This submission also refers to “interdisciplinary science,” which indicates scientific practice involving multiple disciplinary approaches, as well as “transdisciplinary science,” which indicates the co-design of research and co-production of knowledge by scientific and societal actors.
Chapter I. Sustainable development and financing for development

1. Science is an essential tool for sustainable development.

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.

Therefore, Chapter I should:
• Affirm the crucial importance of disciplinary, interdisciplinary and transdisciplinary science to understanding and addressing interconnected obstacles to achieving the SDGs and related intergovernmental commitments.

2. Evidence-informed sustainable development requires multilateral support.

Among the most urgent challenges for the global scientific community is to support accelerated progress toward the transformative vision of the SDGs. Both natural and social sciences have made significant contributions in this regard; however, to effectively support the rapid progress required to achieve the SDGs, new approaches to conducting, harnessing, assessing, and funding science are urgently needed.

To unlock the full potential of science for sustainable development requires a transformative approach by Member States. This includes a well-funded, globally-supported, “big science” approach, including the social sciences, to complex sustainability challenges (especially in regions where SDG progress is most lagging); implementation of “science missions for sustainability,” which mobilize and implement knowledge across disciplines and sectors for societal transformations towards sustainability; and a shift in funding and institutional arrangements away from intense competition and fragmentation, and toward transdisciplinary integration, collaboration, and societally-relevant outcomes.

Therefore, Chapter I should:
• Express Member State support for transformative approaches to sustainable development via transdisciplinary and mission-oriented science as a key priority in pursuing the SDGs.

Chapter II. International peace and security

1. Science is vital to advancing international peace and security.

Scientific inputs are vital to understanding the root causes of conflict and advancing conditions that enable social stability and sustainable development in diverse contexts. 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.
Therefore, Chapter II should:

- Highlight the value of open and responsible science to understand and advance conditions that support peace and security and mitigate the impacts of conflict.

2. Evidence-informed sustainable development requires multilateral support.

It is critical to engage the scientific community in multilateral discussion to understand both the risks to peace and security associated with emerging scientific and technological developments, and the benefits of these developments that can be harnessed toward advancing development, peace and security. 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 iv.

Therefore, Chapter II should:

- Emphasize the importance of engaging the scientific community to identify and assess risks and benefits to peace and security associated with emerging scientific and technological developments.

3. Scientific collaboration can support peaceful international relations.

Science has long been a global enterprise underpinned by universal principles and plays a valuable role in strengthening international relations in support of international peace and security.

Cross-national scientific collaborations support track two diplomacy to help build relationships across borders, achieve common understanding around shared questions, and identify cooperative approaches to global challenges.

Therefore, Chapter II should:

- Affirm the importance of enhancing and expanding international scientific collaborations to advance peaceful international relations.

Chapter III. Science, technology and innovation and digital cooperation

1. Science is critical to evidence-informed decision-making and action.

The multi-scale and multi-faceted natures of issues on the multilateral agenda require inputs from across the natural and social sciences, as well as practitioner and other forms of knowledge. Such disciplinary, interdisciplinary, and transdisciplinary scientific inputs and effective national and multilateral mechanisms of evidence brokerage between the science and policy communities are critical to breaking deep-seated siloes in how global issues are framed, understood, and acted upon, thereby enabling more effective responses. This is vital to addressing the root causes of global issues, identifying synergies and trade-offs in solutions, and enabling effective anticipatory action to enhance prevention, preparedness, resilience and transformation. For science to play its optimal role in advancing collective action, national systems of knowledge synthesis and brokerage need to be strengthened both for domestic actions and to assist informed collective decision-making within the multilateral system.
Therefore, Chapter III should:

- Explicitly refer to the importance of science as a critical, cross-cutting tool to advance evidence-informed decision-making across the multilateral agenda.
- Reflect increased commitment among Member States to enhancing the science-policy interface in the UN General Assembly and UN organizations.
- Affirm Member States’ support for enhancing trust in science across the UN system, including among and within Member States.
- Affirm Member States’ commitment to strengthening science advisory processes.

2. Science is a global public good requiring multilateral support

Science has the potential to be among the most powerful of public goods, serving as a vital tool to build capacity, enhance human well-being, and tackle complex issues across demographics, geographies, and scales.

To realize the full potential of science as a global public good requires multilateral support for open science policies and practices, including through equitable inclusion of historically underrepresented groups such as women and researchers from low-income countries; as well as for increasing international scientific collaboration to address urgent, emerging, and future global challenges.

Furthermore, as the COVID-19 pandemic illustrated, addressing global challenges depends on the ability of global, national, and local decision-makers and communities to take up scientific evidence to inform action. As such, science as a global public good requires multilateral support for national science systems worldwide, including through multilateral finance, knowledge sharing, capacity building, and technology transfer; as well as country-level commitments to enhancing country-specific scientific advisory systems.

Therefore, Chapter III should:

- Highlight the value of science as a global public good.
- Reaffirm Member State commitment to full implementation of the UNESCO Recommendation on Open Science as well as support for mission-oriented science.
- Affirm Member States’ commitment to capacitating and/or strengthening national science and science-advisory systems worldwide to advance evidence-informed decision-making across scales.

Chapter IV. Youth and future generations

The following input has been coordinated with the Global Young Academy.

Chapter IV represents a critical opportunity for Member States to acknowledge and leverage science as an essential tool to support youth and future generations, and to facilitate the engagement of youth and early career scientists in advancing evidence-informed policymaking for the benefit of all.

---

2 The Global Young Academy (GYA, https://globalyoungacademy.net) develops, connects and mobilizes young talent from six continents, and empowers young researchers to lead international, interdisciplinary and intergenerational dialogue. The ISC, through its network of members including the GYA and national young academies and international associations, stands ready to support the UN in its aims to include the voices of early career scientists in UN scientific mechanisms and processes, such as the newly established Group of Friends on Science for Action and the UNSG’s Scientific Advisor Board. See: https://council.science/current/blog/isc-engagements-emcr-2023/.
To successfully promote thinking and acting in the interests of youth and future generations, the Pact must acknowledge that science is essential to:

- Creating an enabling environment that empowers young people to reach their development potential through a comprehensive and holistic approach to growth;
- Building capacity among youth and future generations, including women and other underrepresented groups, by creating economic opportunities and helping to solve future social, environmental, and economic challenges and improve well-being, including through intergenerational conversations incorporating young scientists;
- Foresight analysis and anticipatory action to mitigate future consequences of today’s actions, enhance long-term resilience and transformation, and safeguard the rights and interests of youth and future generations;
- Facilitating systems leadership among young and future leaders by fostering diversity, inclusivity and equity in bringing about systems-level change towards an equitable future;
- Supporting evidence-based approaches to achieving the SDGs for the benefit of present and future generations.

Furthermore, the Pact must acknowledge the importance of youth and early career scientists to science, and therefore to evidence-informed decision-making in the United Nations. Youth and young scientists must be engaged in dialogue and deliberations related to science across the UN.

**Therefore, Chapter IV should:**

- Refer to the central importance of engaging diverse scientific inputs to safeguard the rights and interests of youth and future generations.
- Reflect Member States’ commitment to enhancing the science-policy interface across the UN system including by engaging young scientists.

**Chapter V. Transforming global governance**

1. **Scientific insights are key to effective transformation of global governance.**

   The value of science extends to questions around reforming governance and renewing multilateralism. Disciplinary, interdisciplinary, and transdisciplinary scientific insights illuminate the root causes of governance challenges, as well as synergies and trade-offs in interventions; and they are critical to understanding key dynamics, impediments and enabling conditions to achieve meaningful transformation to global governance, including as related to global commons such as Outer Space and ocean areas beyond national jurisdiction.

   **Therefore, Chapter IV should:**

   - Reflect the central importance of science as a critical, cross-cutting tool to support an effective and equitable transformation of global governance.

2. **Transforming global governance requires enhancing science-policy interfaces.**

   Challenges on the multilateral agenda are complex, urgent, and interconnected. Reversing biodiversity loss, tackling deepening...
inequalities, addressing the climate emergency, governing technological change for the public good, and transforming to a sustainable, equitable and resilient world all require global cooperation and robust scientific information. The challenge for multilateral governance is 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, and greater coordination between science-policy interfaces at national and international levels. In the context of the UN General Assembly, it requires an institutionalized science-policy interface through which actionable science can be integrated across all stages of decision-making and action. This will help ensure that the latest and best available science is made available on an equitable basis to all Member States; it will support consensus-building through common understanding of the nature, scope, and scale of challenges, as well as the range of possible solutions and their implications; and it will support risk-informed (anticipatory) governance arrangements with a view to building whole-of-society resilience.

Experts have drawn on large bodies of evidence to highlight concrete options for enhancing the multilateral science-policy interface, including but not limited to:

- Establishing a regular UNGA platform for science-policy exchange during the high-level segment, with parallel regional events; and
- Creating a set of principles or suggested mechanisms for national delegations on how to effectively consult with knowledge actors ahead of UNGA participation;
- 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;
- Developing science-policy-action networks to draw from existing bodies and generate recommended actions for governments and non-state actors (e.g., around earth system risks and/or to support the Independent Group of Scientists producing the Global Sustainable Development Report);
- 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.

Therefore, Chapter IV should:
- Affirm Member States’ commitment to integrating enhanced interfaces between science, policy, and society across the multilateral agenda through a UN system-wide approach.
- Affirm Member States’ commitment to enhancing and/or institutionalizing the science-policy interface in the UN General Assembly.
References


x Stauffer et al. 2023.


xii Espey and Casarin. 2023.

