Situational analysis and a catalogue of ISC’s recent and current activities against the seven Domains of the ISC’s mission (Statute 6)

9 APRIL 2024

There have been significant developments since the last ISC General Assembly in October 2021 and more recently the global in-person meeting of ISC Members in Paris in May 2023. These developments highlight the need for both adaptability and responsivity as we frame our future strategy. The ISC has defined science as a global public good, meaning that scientific knowledge and its benefits are shared resources from which everyone should be able to benefit regardless of their geographical location, economic status or cultural background. This principle is rooted in the conviction that scientific discoveries and advancements should contribute to the common welfare of humanity, improving the quality of life for people and planet, transcending national borders, fostering international cooperation and driving sustainable development. This is the vision of the ISC expressed in the current ISC Statutes and Rules of Procedure.

Unequal access to information, education and resources, disinformation and challenges to trust in science, changes in funding priorities of governments, intellectual property rights issues, and geopolitical tensions that adversely affect global cooperation all challenge the notion of science as a global public good.

Science is increasingly scrutinized, facing a growing diversity of public opinions and concerns about safeguarding it from the effects of mis- and disinformation and political biases. Understanding the factors that influence trust in science has become crucial. Science and scientists have come under threat. Moreover, academic freedom is increasingly at risk. Several countries are adopting a utilitarian approach to science, prioritizing practical benefits over fundamental research. The interaction between scientific values and other forms of knowledge systems is becoming more contentious in certain areas, making it more challenging for science to have an impact on core societal issues.

On the other hand, the ISC is presented with a growing number of opportunities to have greater impact. These include the UN General Assembly’s Resolution on an International Decade of Sciences for Sustainable Development, 2024–2033 (the ISC is on the executive board chaired by UNESCO and is working closely with Members for this decade), the establishment of the UN Secretary General’s Science Advisory Board and the ISC’s requested engagement with it, the UN Futures Laboratory (the UN Secretary-General’s foresight unit) and the ISC establishing itself as the go-to organization for input into many other components of the multilateral system.

Issues around the integrity of science have not dissipated. Further, there is growing awareness that science and science systems will continue to undergo significant transformation over the coming decade. The growing role of AI and of generative AI in both the production and reporting of science is an obvious challenge and opportunity.
The Council is therefore increasingly seen by key stakeholders beyond the active scientific community – policy-makers, funders, publishers, and various publics – as a central broker in discussions on the ongoing evolution of science systems. For example, the ISC has become a core partner in an EU-led initiative involving ~60 countries in discussions on the principles and values that should underpin multilateral science cooperation.

Within such a moving context, there is a need to continue providing a platform for the coordination of the science agenda at the global and regional level on issues that are core to the ISC Members, so that the active scientific community can deliver scientific knowledge and science advice with an effective voice and to continue promoting international collaboration in science that contributes to the advancement of knowledge, well-being and peace.

The rest of this document looks at the ISC’s situation and actions via the lens of the seven domains laid out in Statute 6, noting that many actions could be listed against more than one domain.

**Domain 1: Speak for the value of all science and the need for evidence-informed understanding and decision-making at all levels, from local to global.**

*Situational analysis:*

Science is under increasing political and disinformation challenges. The many threats that the world and societies face, including those related to sustainability, require science and actionable knowledge to be valued and used, while all disciplines and forms of science must continue to develop new knowledge. COVID-19, while focusing many policy-makers and communities on the need for evidence-informed policies, has also led to increased politicization and contestation. Indeed, there has been an apparent retreat from valuing scientific advice in some jurisdictions, while on the other hand, there is increased interest in evidence-informed policy within multilateral organizations including the UN system.

*Examples of recent and current actions of the ISC that particularly relate to this domain:*

- The ISC continues to co-chair (with the World Federation of Engineering Organizations) the UN major group on Science and Technology and, in such capacity, the Council is called upon to scope the agenda of the annual UN STI Forum.
- The ISC has been formally selected as the co-secretariat (with UNESCO) to the UN Member States’ Group of Friends on Science for Action in New York, co-chaired by Belgium, India and South Africa. The main objective of the Group of Friends is to support evidence-based policy-making within the General Assembly processes. ISC’s role helps strengthen ties between UN permanent missions and ISC Members to amplify the voice of science at the UN.
- The ISC has been selected as one of the nine global networks to provide systematic input to the UN Secretary-General’s Scientific Advisory Board.
- The ISC is regularly called upon by the office of the President of the General Assembly (PGA) to provide inputs on relevant initiatives such as the PGA Sustainability Week in April 2024.
- Because of these developments, and to support the liaison function with the UN, the Council has established an office at the UN in New York.
- In addition to the UN, the ISC now regularly engages with UNESCO, several other relevant UN organizations, the European Commission, the OECD and other regional bodies and groupings on multiple aspects of evidence-informed policy including the provision of advisory groups and briefing papers.
Several partnerships with UN organizations are being implemented around inputs by the ISC to the activities of/joint projects with UN organizations (and in many cases Memoranda of Understanding have been put in place with these organizations), in relation to:

- COVID-19, youth mental health and evidence-informed policy-making (WHO);
- the sustainability agenda (STI Forum, High-Level Political Forum, relevant UN summits) (UNDESA);
- environmental foresight (UNEP);
- human development, beyond GDP, and joint expert work on affective polarization and social cohesion (UNDP);
- disaster risk reduction (UNDRR);
- normative and policy frameworks for transformative science, technology and innovation (OECD, UNESCO, UNCTAD);
- safety of science and scientists (UNESCO);
- trust in science and the science of trust (UNEP, UNDRR, WHO, the European Commission);
- foresight in sustainable economic development (World Economic Forum).

- The ISC interacts with the office of the UN Secretary-General’s Special Envoy for Technology, with a focus on the evolution and implications of AI and other digital technology (cf. Domain 2).
- To continue mobilizing expertise from within the membership to assist where requested in UN processes, the ISC has developed a roster of experts (cf. Domain 2).
- The ISC works with the International Network on Government Science Advice (INGSA, an ISC Member and Affiliated Body) on promoting and developing skills in evidence to policy at national levels (cf. Domains 2 and 4).
- A priority in 2024 will be to give input to the Summit of the Future where the ISC has been asked to provide specific inputs both directly as well as in our capacity as co-secretariat to the Group of Friends.
- In 2025 the UN will hold the Social Development Summit (“Copenhagen+30”) and the ISC will work with Members and partners in the social sciences area to ensure scientific input.
- The ISC is heavily involved in populating and operationalizing the UN Decade of Science for Sustainability (the ISC sits on the executive board chaired by UNESCO) (cf. Domain 2).
- In close collaboration with the Regional Focal Points for Asia and the Pacific and Latin America and the Caribbean, the Council is convening and supporting scholars from small island developing states to participate in the fourth International Conference on Small Island Developing States (SIDS4) in May 2024.
- Since 2023, the ISC is invited systematically as a participating observer to S7 and S20 meetings (the scientific component of G7 and G20 meetings) (S20 2023: India; S20 2024: Brazil; S20 2025: South Africa).
- The Council has organized two conferences, in 2022 and 2023, on science in times of conflict and released a working guide on science in times of crisis in February 2024 (cf. domain 4), which is relevant to the peace and security agenda and has provided inputs to the relevant chapter of the Pact for the Future.
- As a core sponsor of the World Science Forum, the ISC has worked with UNESCO to make the Forum more relevant to the science–policy nexus. The UN Secretary-General has agreed to open the 2024 WSF.
Domain 2: Stimulate and support international, interdisciplinary collaboration, particularly among Members of the Council, on scientific research and scholarship on issues of global concern.

Situational analysis:

International science cooperation is hampered by overlapping organizations often competing for funds, leading to both gaps and duplications, and can be complicated by geostrategic interests. A level playing field is required to ensure coordination of the science agenda on issues of global relevance that require elucidation by science. The ISC’s predecessors had a central role in organizing the science agenda at the international level and in informing the directions of science funding both in the areas of exact and natural, and social and human sciences. The ISC therefore has a central role in promoting better cross-jurisdictional cooperation in the future. Much of this happens via the Council’s fifteen Affiliated Bodies and its Members with transnational responsibilities. The ISC will continue providing a platform for all emerging science initiatives that reflect the need for coordination of the science agenda that are relevant to the Council’s mandate.

Examples of recent and current actions of the ISC that particularly relate to this domain:

- The Mid-term meeting of ISC Members in Paris in 2023 was the first of an agreed two-yearly Members’ meeting (one on the fringes of the four-yearly General Assembly) designed to promote cooperation among ISC Members. Moreover, the ISC Affiliated Bodies will meet and cross-fertilize at an in-person meeting in 2024. These actions will be crucial to reenergizing the ISC’s role as a catalyst and organizer of the global science agenda.
- The ISC has been engaged in, and has expressed a strong interest in leading, the International Polar Year (IPY) 2032-2033, and is involved in the operationalization of the International Polar Decade supported by France and several other governments, in close collaboration with the Scientific Committee for Antarctic Research, other relevant ISC Affiliated Bodies and the International Arctic Science Committee.
- The ISC has proactively initiated strategic collaborations with the newly appointed leaders of the World Meteorological Organization (WMO) and the Intergovernmental Oceanographic Commission (IOC), setting a transformative course for the World Climate Research Programme (WCRP) that they jointly sponsor. The ISC is seeking to take a more active role in the forthcoming COP29 in Azerbaijan in November 2024.
- The ISC and UN Office for Disaster Risk Reduction (UNDRR) have agreed to enter a second phase of the International Disaster Risk Reduction (IDRR) research agenda in support of the Sendai Strategy for IDRR, starting in 2024. The ISC and UNDRR continue to co-sponsor the international programme on Integrated Research on Disaster Risk (IRDR) and have ensured the continuation of the generous support by the Chinese Association for Science and Technology to the IRDR international project office for the next ten years.
- The ISC has collaborated with its Member and Affiliated Body Future Earth to support and organize the Sustainability Research & Innovation Congresses for the years 2022, 2023 and 2024. The ISC has held thematic sessions at the SRI conference series since its inception.
- Building on its Member and Affiliated Body GRIP (the Global Research Programme on Inequalities), the ISC is designing a broader initiative on combating inequalities federating the multiple research initiatives and schools of epistemological thought in this important area.
- Together with ISC Members, UNESCO and the Club of Rome, the ISC is actively involved in designing the science and action plan of the UN International Decade of Sciences for Sustainable Development 2024–2033. Several ISC members are participating actively in the initiative.
• The ISC continues to co-sponsor its Member and Affiliated Body the international programme on Urban Health and Well-being. This important set of issues related to the evolution of urban systems and the solutions required to ensure their sustainability and well-being calls for a proper reflection on a transformative science agenda in this area, which the ISC is leading.

• Through its Members and Affiliated Bodies CODATA and the World Data System, the ISC continues its convening role in the area of data standards, policies and procedures, data repositories, and related strategies, including in the emerging area of FAIR data for AI.

• Together with the WMO, IOC and UNEP, the ISC is engaged in a review of synergies between and the integration of the global monitoring systems for the world ocean and for climate in support of the UNFCCC and its Paris Agreement, and the UNFCCC COP series.

• Following a resolution passed during the UN Environment Assembly in March 2022 to establish an Intergovernmental Negotiating Committee (INC) to end plastic pollution, and in view of the realization that a dedicated scientific process in support of the INC was missing, in 2023 the ISC formed an expert group selected from nominations submitted by ISC Members ensuring a strong voice from the scientific community during the negotiations.

• The ISC, along with the Stockholm Environment Institute (SEI), the UN Sustainable Development Solutions Network (SDSN), the United Nations Development Programme (UNDP), and the United Nations Department of Economic and Social Affairs (UNDESA) joined forces in the organization of the inaugural Science Day at the UN High-Level Political Forum to promote evidence-based strategies to fast-track the implementation of SDGs. The ISC is striving for this initiative to be institutionalized and to become an annual event.

• The Council has been invited to contribute science elements into the ‘Pact for the Future’, the cornerstone outcome of the 2024 Summit of the Future. Moreover, the UN secretariat has solicited the ISC to organize relevant contributions from ISC Members to the UN World Social Development Summit in 2025 (cf. Domain 1).

• The ISC Secretariat is scoping a discussion with Members over how best the sustainability agenda may be advanced through giving greater focus to the critical transformations that must be addressed. This discussion will be critical to support countries’ inputs to the monitoring, reporting on and the evolution of the 2030 Agenda as well as the definition of the post-2030 Agenda and the role of science therein.

• The Council is actively engaged in the INGSA conference in Kigali on science advice to governments and in the future evolution of the International Network of Government Science Advice (INGSA), with a view to operationalizing the science diplomacy function under the ISC current statutes (cf. Domain 4).

• After extensive consultation with key experts and actors in the AI area the ISC has released a discussion paper on the ontological gap between principles related to AI and considerations of governance and regulation. Scholarly work on the assessment and regulation of rapidly emerging technologies with a focus on the Global South has been initiated in the context of a recently approved ISC grant by Canada’s International Development Research Center (IDRC).

• The ISC’s Centre for Science Futures has released a preliminary analysis of the integration of AI in science and research across various low-middle- and high-income countries in March 2024. A follow-up edition is planned for the second half of 2024.

• The ISC has argued that “big science” approaches are needed in social and sustainability sciences as they have existed in the exact sciences for a long time. Addressing this, the ISC is spearheading pilot projects as advocated in the "Flipping the Science Model" report by its Global Commission on Science Missions for Sustainability, with the initiative kicked off in March 2024. This effort aims at operationalizing and mainstreaming approaches to the co-design of the research agenda, co-production of knowledge and co-delivery of solutions by multiple stakeholders in addition to the active scientists themselves; the effort also underscores the need for enhanced recognition and support from broader societal and policy-making spheres.
• In light of the growing interest of ISC Members in actively contributing to relevant ISC expert activities, the Secretariat has embarked on the creation of an ISC Experts Roster, which has received more than 1100 nominations by the Members.

• The ISC has engaged with international bodies focused on the humanities, namely the International Council for Philosophy and Human Sciences and Union Académique Internationale (International Union of Academies), on a mapping exercise aimed at identifying opportunities for collaboration and related synergies in their respective programmes of work.

• The ISC continues to assist science coordination at the regional level via the ISC’s reinforced Regional Focal Points in Asia and the Pacific, and Latin America and the Caribbean.

• Through a series of Global Knowledge Dialogues in Asia and the Pacific, Latin America and the Caribbean and Africa, and the potential for one for the MENA region on the fringes of the General Assembly in Oman, the Council’s Members are having the opportunity to meet and shape the future of the science agenda, science systems and collaborations among the ISC Members in those various regions.

**Domain 3: Articulate scientific knowledge on issues of global concern in the public and policy domains.**

**Situational analysis:**

This is a central domain of action of the ISC, where the Council’s evidential synthesis and brokerage roles are increasingly being applied. The ISC’s growing access to key international science fora and its growing ability to place Members’ nominees on advisory boards to fora such as UN organizations is central to promoting the global voice for science. The UN itself is increasingly turning to the ISC for expert input, and Members are receiving an increasing number of requests to nominate individual experts to advisory groups. ISC Affiliated Bodies such as INGSA play a growing role at this interface (see also domain 2). Many of the ISC’s resources provide support to ISC Members to work within their local or disciplinary contexts.

**Examples of recent and current actions of the ISC that particularly relate to this domain:**

- The ISC has continued to publish on the role of science as a global public good.
- The ISC’s major contribution to addressing knowledge gaps during the pandemic resulted in a first and second edition of *Unprecedented & Unfinished: COVID-19 and Implications for National and Global Policy*, leading to closer engagement with the WHO. The second ISC report on the COVID-19 pandemic issued in 2023 focused specifically on the policy lessons and, in particular, on the importance of science advice and risk analysis.
- The ISC was invited by UNEP to co-lead, with the involvement of many Members’ nominees, on applying foresight to environment-related issues. The ensuing report, to be published in June 2024, will be presented to the UN Environment Assembly as a basis for discussions among member states on pressing signals of environmental change requiring attention.
- The Council has a new partnership with UN Futures Lab, recently engaging Members to join an expert group on the role of foresight in policy in low- and middle-income countries, due in June 2024.
- The ISC has contributed to the scientific knowledge base on the issue of plastic pollution through relevant briefs (cf. Domain 2).
- Through the engagement of an expert scientific working group the ISC produced a policy brief for the UN 2023 Water Conference.
• In the context of their longstanding collaboration in relation to the Human Development Report, the ISC and UNDP have held an initial expert workshop on issues affecting social cohesion and affective polarization.

• A working party on the social determinants of the rising rates of concern regarding youth mental health has been formed and includes members from new ISC community, such as academies of medicine and young academies. Joint work in this area is framed by the MoU between the ISC and WHO.

• The UN International Decade on Sciences for Sustainable Development (cf. Domains 1 and 2) also reflects the dimension of public engagement in science.

• The ISC has been invited to join the Advisory Board to UNESCO’s Management of Social Transformations (MOST) programme.

• The ISC is engaged with the host of the UNFCCC COP29 (Azerbaijan, November 2024) in an initiative aimed at providing support for better country engagement in pledges for COP29 and beyond (cf. Domain 2).

Domain 4: Promote and assist science diplomacy, particularly where it advances the common good and addresses global challenges.

Situational analysis:

The world is increasingly in a contested space with the multilateral system struggling to address existential issues such as climate change. Conflicts and nationalism increasingly threaten progress on many issues. International cooperation is needed on both such issues. Science diplomacy, both formal and informal, may have a key role in assisting progress on such matters. In the cold war period, ICSU was particularly active in this domain. Increasingly the ISC is being asked whether it could take a greater role. Because the ISC stays resolutely away from geostrategic contestation and is comprehensive in its geographic membership, its potential value in ‘Track 2’ science diplomacy is real. By working with multilateral agencies, the ISC can try to ensure that science is not overridden by geopolitical interests, which is always challenging.

There is also increasing interest in the ISC taking a more explicit role in science diplomacy over areas that are emerging largely due to the impact of technologies (AI related, geoengineering, synthetic biology) and in respect of ungoverned spaces (e.g. space, ocean areas beyond national jurisdiction) or where science can help reduce tensions.

But the ISC must be realistic and pragmatic as this is a domain that may be more opportunistic than others.

Examples of recent and current actions of the ISC that particularly relate to this mission:

• This is now an explicit goal for the ISC in the current statutes although informally both ISC and its predecessors have been well engaged in such activities, and the ISC is actively in discussions with science diplomats about how we should manage this role and contribute. The ISC President will establish an informal advisory group of science diplomats to assist in how the ISC can best progress work in this new domain under the current statutes.

• The ISC has been invited to contribute to the organization of UNFCCC COP29’s scientific events that aim at facilitating the formal negotiations. In this context, the ISC and UNDP are developing an initiative on scientific validation of country pledges in support of COP29 and the
UNFCCC Paris Agreement, supported by Azerbaijan and to be launched at COP29 in November 2024.

- The ISC is co-sponsoring the INGSA conference in Kigali in May 2024, at which a special session on science diplomacy organized by the ISC will be held.
- Discussions with INGSA and FMSTAN (the Foreign Ministries Science & Technology Advice Network) have started to ensure how they might collectively progress more effectively as a participant in Track 2 diplomacy.
- The ISC has been invited by the Academic Initiative of the UN Department of Public Communications (UNAI) to co-organize a side event on science diplomacy at the Summit of the Future in New York in September 2024. The event will see the launch of a joint ISC-UNAI publication featuring 15 case studies illustrating science diplomacy in action. The exercise is supported by the work of a group of experts on science diplomacy jointly set up by the ISC and UNAI.
- Scholarly work by the ISC in this domain includes the already-mentioned ISC discussion paper on the regulation of AI and other rapidly emerging technologies, now being finalized in the form of a working paper to be launched at the OECD Ministerial Meeting in Paris in April 2024 (cf. Domains 2 and 3).
- The ISC and the Geneva Graduate Institute will hold an expert workshop on adaptive regulation of synthetic biology in the autumn of 2024.
- The ISC has produced a major report providing guidance on actions related to scientists and science systems in times of conflicts and crises, building on the two ISC conferences on science in times of conflict held in 2023 and 2024.

Domain 5: Promote the continued and equal advancement of scientific rigour, creativity and relevance in all parts of the world.

Situational analysis:

There remains a critical need to promote the importance of science to social, economic and environmental development in most countries. Policies for science remain very mixed across the globe and in some countries public investment in science and, in particular, the independence of science is under threat. Beyond these realities, there remain issues in the conduct of science and in the reporting of science. Trust in science has been somewhat undermined in many places by both politics and a changed environmental analysis.

Examples of recent and current actions of the ISC that particularly relate to this domain:

- Work has started on a partnership approach to addressing issues of trust in science (see Domain 7).
- The ISC strives to ensure diversity in all respects is included in international science advisory groups and in its own committees and activities.
- The ISC has welcomed young science academies and associations as Members.
- The report of the ISC on protecting science and scientists in the face of conflicts and crises has been released.
- The ISC Committee on Freedom and Responsibility of Science (CFRS) is charged with addressing issues related to the conduct of science and works closely with UNESCO on this and related issues (see Domain 7), including on issues of protecting scientists and academic freedom.
• The Board’s working group on the future of scientific publishing has produced reports addressing issues in the reporting of science.
• The ISC Centre for Science Futures has released a report on research assessment (in conjunction with IAP and the GYA).
• The ISC Centre for Science Futures has started work on how AI will impact on the production and reporting of science.
• The ISC works closely with UNESCO and others on issues of gender equity in science.
• The ISC Board has established a working group on science education, with representation from inter alia UNESCO, OECD and the United Nations University.
• The ISC has strengthened its Small Island Developing States Liaison Committee alongside strengthening its regional presence through regional focal points.
• Regional focal points and governing councils have been established in Latin America and the Caribbean and in Asia and the Pacific. The Council is working with Future Africa, the African Academy of Sciences, NASAC and other relevant organizations on a scoping exercise related to the future ISC regional presence in Africa. Reinforcing the ISC regional presence helps to bring all parts of the regional and global scientific communities closer together and to build capacities in less advantaged countries.
• The Global Knowledge Dialogue series has had editions in Cape Town, Kuala Lumpur, and Santiago.
• The ISC coordinates nominations from developing countries for the Frontiers Prizes related to planetary boundary research.

Domain 6: Assist the scientific community and relevant stakeholders in their respective roles in the conduct of science and in the face of the evolution of science systems.

Situational analysis:

An increasing focus of the ISC and policy partners has been on confronting issues within science systems and addressing issues of how these might evolve. The way in which ‘science systems’ are organized and operate encompasses multiple stakeholders beyond the scientists themselves, including funders, publishers, policy, technology, research infrastructure providers, networks, and research platforms, and increasingly must consider the broader context of the society in which they operate (developmental and economic state, impact of colonialism).

In recent years, ISC work in these areas has focused on science publishing, research assessment and peer review, the transformative agenda related to open access and open data, FAIR science in light of AI and other rapidly emerging technologies. Other work includes consideration of funding models, co-design of the research agenda, co-production of knowledge (including dialogue between science and other knowledge systems). The range of current and emerging issues is broad; many can be addressed most effectively through the collective action of ISC Members and the above-mentioned stakeholders. In this way, ISC Members and the global science community will be better equipped to operate in an open science and open data space, to lead on, and benefit from, transdisciplinary research and other forms of ‘mode 2’ research and their better inclusion within science systems, their funding at different scales, the training of scholars in such modes of research and, more generally, in this evolving environment.
Examples of recent and current actions of the ISC that particularly relate to this domain:

- The establishment of the Centre for Science Futures – the ISC internal think tank – responds to the need for exploratory analytical work and synthesis of findings in such emerging areas.
- The working party on Scientific Publishing has issued discussion papers and reports for feedback building on the report presented at the 2021 General Assembly.
- A joint paper with the GYA and IAP on research assessment was released, and a follow-up project on research assessment in relation to performance of scientists, career development and evaluation of research proposals is being designed.
- The ISC issued the report *Unleashing Science* after extensive consultation highlighting the need for changes in the way science systems operate to address major challenges of sustainability. This publication provided the basis for work by the ISC Commission on Science Missions for Sustainability, leading to the report *Flipping the Science Model*, which demonstrates the need for transdisciplinary science in action to assist the quest for sustainability.
- The ISC released a discussion paper on the future of transdisciplinary research and is currently implementing a pilot call for transdisciplinary science missions for sustainability (cf. Domain 2).
- The ISC has presented to the OECD and the EU ministerial segments as well as to consortia of national research councils (the Global Research Council) and led discussions on international science collaboration arguing for changes in science funding mechanisms to promote transdisciplinary research. In 2025, the Council will reactivate and reconvene the Global Forum of Funders.
- The ISC has proposed and promoted the development of a Pacific Academy of Sciences and Humanities, which is likely to be launched later this year.

**Domain 7: Defend and promote the free and responsible practice of science.**

*Situational analysis:*

Research integrity, academic freedom and freedom and responsibility in science, equity within science systems, other ethical aspects of science and specific Global South challenges all constitute key ingredients of an enabling framework for scientists and science to thrive. The Committee on Freedom and Responsibility in Science takes a primary lead but all components of the ISC are engaged and involved. As discussed above there are increasing threats to the safety of scientists, their freedom to operate, and perceptions of science are increasing valued. It is a very high priority of the ISC to consider how to address the growing threats to trust in science that come from politicization, disinformation, changed political and public attitudes and the challenges that increased nationalism brings to the conduct of science as a global endeavour. Science has to navigate how it both protects its core modes of production while acknowledging it must also recognize the role in society of indigenous knowledge and other knowledge systems.

Examples of recent and current actions of the ISC that particularly relate to this domain:

- The ISC Committee on Freedom and Responsibility of Science (CFRS) continues to deal with multiple individual and collective cases of scientists at risk.
- The ISC regularly coordinates with the UN Refugee Agency and with Scholars at Risk, Falling Walls and other organizations to assist on issues of refugee scientists.
• The ISC and the Inter-Academy Partnership (IAP) produced a joint statement on the importance of independent scientific academies.
• The ISC and UNESCO have engaged in a collaboration in the area of academic freedom and on the right to science, through planned expert conferences, desktop studies and joint public events.
• The ISC regularly issues commentaries and position statements where appropriate on issues where science is put at risk – for example, over the exclusion of women from academia in Afghanistan.
• The ISC advocates directly for scientists and science systems in places where science is under threat (most recently in Argentina).
• The ISC is organizing an initiative federating the efforts of multiple organizations, including the UN, the European Commission’s Joint Research Centre and the OECD, to enhance trust in science, understanding the science of trust and how to protect the perception of science as trustworthy in the face of disinformation. Societal trust is a key condition for the sustainability of the science endeavour. The ISC has developed a dedicated session on this theme for a plenary session at the World Science Forum in Budapest in November 2024.
• The ISC is represented on COMEST, UNESCO’s committee on the ethics of science and technology.
• The ISC is exploring a possible initiative on how faith leaders might assist in promoting trust in science.

Enabling activities that support the realization of the ISC vision and mission

The above seven domains of the mission must be delivered by a small but effective secretariat supporting the efforts of our Members and their members. The committees and working parties of the ISC increasingly align with actions in these domains. It is, however, recognized that the breadth of activities that the ISC undertakes on behalf of the global scientific community is not well understood and this remains a challenge. Relevant activities and actions that underpin the ISC’s operations and strategic development include:

• The revision of the ISC Statutes, which were ratified on 8 March 2024.
• The staggering of the Governing Board and advisory committees’ appointments will ensure greater continuity.
• The Governing Board has developed a code of conduct for the organization.
• The ISC Foundation (a charitable trust) is now established to assist in resourcing the ambitions of the organization on behalf of its Members and the promise of the ISC which requires funding beyond what Members can provide. A sponsorship and endorsement policy and a due diligence policy have been developed.
• We are working with potential donor nations to expand the ISC’s funding base.
• The regional focal points and their governing bodies have been reinvigorated.
• The ISC Fellowship now has a critical mass, and ISC Fellows are being asked to support the work of the ISC at multiple levels.
• The ISC secretariat has been restructured to provide more effective service to action in the seven domains, acknowledging that some efforts contribute to multiple domains.
• There has been increased membership engagement and Members’ interactions and supporting Members in their own activities through targeted capacity development activities. These efforts must remain a priority, especially in areas where organized science has challenges (such as in the case of Small Island Developing States).
• The ISC has expanded the membership and has welcomed young scientists’ academies and associations as full Members.
• The ISC President has been undertaking quarterly Q&A sessions with Members since 2022.
• An annual bulletin containing an outline of ISC activities will be implemented as of 2024/25, asking ISC Members to distribute it to their respective members to best promote and ensure a high level of reciprocal communication between the ISC secretariat, the Members and the Members’ members.
• The Council’s current statutes provide for biennial meetings, with the Midterm Meeting of ISC Members in May 2023 in Paris having paved the way for midterm in-person dialogues.
• Coordination with other relevant science and scholarly bodies (IAP, WFEO, CIPSH, etc.) is now more routine.
• Relationships with key science policy bodies but also science funders (e.g. the Global Research Council) are essential, and relationship management is now a higher priority.
• The role of the Finance Committee has been strengthened to include compliance and risk.
• The relationship with the host country is reinforced through the newly approved Liaison Committee.

Dr Salvatore Arico, CEO

Sir Peter Gluckman, President