

## ISC Activity and Achievement Report, October 2021–December 2022

#### Document 3

This report (version 29 November 2024, updated 21 January 2025) will be edited and designed ahead of the ISC General Assembly in January 2025.

For noting





# International Science Council Activity and Achievement Report October 2021 – December 2024

v.21 January 2025

© International Science Council, 2024.

This report is published by The International Science Council, 5 rue Auguste Vacquerie, 75116 Paris, France.

#### **About the International Science Council**

The International Science Council (ISC) works at the global level to catalyse change by convening scientific expertise, advice and influence on issues of major importance to both science and society.

The ISC is an international non-governmental organization with a unique global membership brings together 250 international scientific unions and associations, national and regional scientific organizations including science academies, research councils, regional scientific organizations, international federations and societies, and academies of young scientists and associations.

#### **Cover Photograph**

To be added

#### Connect with us at

council.science
secretariat@council.science

International Science Council 5 rue Auguste Vacquerie 75116 Paris, France

linkedin.com/company/international-science-council threads.net/@council.science
bsky.app/profile/sciencecouncil.bsky.social
facebook.com/InternationalScience
instagram.com/council.science
x.com/ISC

#### Acknowledgements

The International Science Council acknowledges and thanks its funders and supporters during the 2022–2024 period: first and foremost its nearly 250 Members and host country, France; but also the many Members and partners which have funded, directly or indirectly, specific ISC activities and initiatives. These are:

- Australian Academy of Science
- China Association of Science and Technology (CAST)
- Colombian Academy of Sciences
- Frontiers Research Foundation
- Geneva Science-Policy Interface
- Government of Australia
- International Development Research Centre (IDRC) of Canada
- IRDR International Centre of Excellence in Taipei
- National Science Foundation (NSF), USA
- New Zealand Government, Ministry of Business, Innovation & Employment
- Richard Lounsbery Foundation
- Royal Society Te Apārangi
- Sasakawa Peace Foundation
- Swedish International Development Cooperation Agency (Sida)
- United Nations Development Programme
- United Nations Environment Programme
- University of Bergen, Norway

#### The ISC vision, mission and domains of impact

The vision of the Council is of science as a global public good.

The mission of the Council is to be the global voice for science.

The Council seeks to provide a powerful and credible global voice that is respected in both the public and policy domains and within the scientific community. It will use that voice to:

- i. Speak for the value of all science and the need for evidence-informed understanding and decision-making at all levels, from local to global;
- ii. Stimulate and support international, interdisciplinary collaboration, particularly among Members of the Council, on scientific research and scholarship on issues of global concern;
- iii. Articulate scientific knowledge on issues of global concern in the public and policy domains;
- iv. Promote and assist science diplomacy, particularly where it advances the common good and addresses global challenges;
- v. Promote the continued and equal advancement of scientific rigour, creativity and relevance in all parts of the world;
- vi. 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;
- vii. Defend and promote the free and responsible practice of science.

#### Key reference documents

- High-Level Strategy
- Activity and Achievement Report 2018–2021
- Resolution One of the 2021 ISC General Assembly
- Resolution Two of the 2021 ISC General Assembly
- 2022–2024 Action Plan
- 2021 Annual Report
- 2022 Annual Report
- 2023 Annual Report

#### List of abbreviations

Al Artificial Intelligence
AP Asia and the Pacific

APEC Asia-Pacific Economic Cooperation
ASEAN Association of Southeast Asian Nations

BWC Biological Weapons Convention
CAS Chinese Academy of Sciences

CAST China Association of Science and Technology
CBRN Chemical, Biological, Radiological and Nuclear
CCAF Climate Change, Agriculture and Food Security
CDIF Cross-Domain Interoperability Framework
CERN European Organization for Nuclear Research

CFRS Committee for Freedom and Responsibility in Science

CLACSO Latin American Council of Social Sciences
CNRS French National Centre for Scientific Research

CODATA Committee on Data of the International Science Council

CODES Coalition for Digital Environmental Sustainability

COE Committee on Outreach and Engagement

CONICET National Scientific and Technical Research Council

COP Conference of the Parties

COP16 16th Conference of the Parties to the Convention on Biological Diversity

COP29 29th Conference of the Parties to the UN Framework Convention on Climate Change

CSP Committee for Science and Planning

DRR Disaster Risk Reduction

ECOSOC United Nations Economic and Social Council

EMCR Early and Mid-Career Researcher

FAIR Findable, Accessible, Interoperable, and Reusable

FAO Food and Agriculture Organization
GEO-7 Global Environment Outlook

GEWEX Global Energy and Water Exchanges

GKD Global Knowledge Dialogue

GKD-AP Global Knowledge Dialogue in Asia and the Pacific

GKD-LAC Global Knowledge Dialogue in Latin America and the Caribbean

GRIP Global Research on Inequality Programme
GSDR Global Sustainable Development Report

GYA Global Young Academy
HIP Hazard Information Profile
HLPF High Level Political Forum
IAP InterAcademy Partnership

IAU International Astronomical Union
ICOE International Centre of Excellence
ICSU International Council for Science

ICT Information and communication technology
ICTP International Centre for Theoretical Physics

IIASA International Institute for Applied Systems Analysis

IMU International Mathematical Union

INC Intergovernmental Negotiating Committee

INGSA International Network for Government Science Advice

IOC Intergovernmental Oceanographic Commission

IPBES Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services

IPCC International Panel on Climate Change

IRDR Integrated Research on Disaster Risk Reduction

ISC International Science Council
ISSC International Social Science Council

IUAES International Union of Anthropological and Ethnological Sciences

IUBS International Union of Biological Sciences

IUE Institute of Urban Environment

IUGG International Union of Geodesy and Geophysics

IUHPST International Union of History and Philosophy of Science and Technology

IUPAP International Union of Pure and Applied Physics
IUPsyS International Union of Psychological Science

IUVSTA International Union for Vacuum Science, Technique and Applications

KAN Knowledge-Action Networks

LAC Latin America and the Caribbean

LIRA Leading Integrated Research in Africa

LOW- and middle-income countries

MG Major Group

MoU Memorandum of Understanding

NACOSTI National Commission for Science, Technology and Innovation, Kenya

NSF US National Science Foundation

OECD Organisation for Economic Co-operation and Development
OWSD Organization for Women in Science for the Developing World

PNG Papua New Guinea

RAND Research and Development

RFP Regional Focal Point

RFP-LAC Regional Focal Point for Latin America and the Caribbean of the ISC

RSC Royal Society of Canada SAB Scientific Advisory Board

SAR Scholars at Risk

SCAR Scientific Committee on Antarctic Research

SCGES Standing Committee on Gender Equality in Science

SCOR Scientific Committee on Oceanic Research
SCOSTEP Scientific Committee on Solar-terrestrial Physics

SDG Sustainable Development Goal SHS Social and Human Sciences

Sida Swedish International Development Cooperation Agency

SIDS Small Island Developing States

SIDS4 4th International Conference on Small Island Developing States

SPP Science-Policy Panel

SSHRC Social Science and Humanities Research Council of Canada

STAG Scientific and Technical Advisory Group
START-TEA Global Change Research Center for East Asia
STC Scientific and Technological Community

STC MG Scientific and Technological Community Major Group

STI Science, Technology and Innovation

STI Forum Multistakeholder Forum on Science, Technology and Innovation
STM International Association of Scientific, Technical & Medical Publishers

STS Science and Technology in Society
T2S Transformations to Sustainability

TAPESTRY Transformation as Praxis

TUBITAK Scientific and Technological Research Council

TWAS The World Academy of Science
TYAN TWAS Young Affiliates Network

UABC Universidad Autónoma de Baja California

UAE United Arab Emirates
UArctic University of the Arctic

UFRJ Federal University of Rio de Janeiro
UHWB Urban Health and Wellbeing programme

UIS International Union of Speleology

UK United Kingdom

UKCEH UK Centre for Ecology & Hydrology

UKHSA UK Health Security Agency

UN United Nations

UN DESA United Nations Department of Economic and Social Affairs

UN Habitat United Nations Human Settlement Programme
UNAM National Autonomous University of Mexico

UNC Universidad Nacional de Colombia

UNDP United Nations Development Programme

UNDRR United Nations Office for Disaster Risk Reduction

UNEA UN Environmental Assembly

UNECA United Nations Economic Commission for Africa

UNEP United Nations Environment Programme

UNESCO United Nations Educational, Scientific and Cultural Organization
UNFCCC United Nations Framework Convention on Climate Change

UNGA United Nations General Assembly
UNOC United Nations Ocean Conference

UNODA United Nations Office for Disarmament Affairs

US NAS US National Academy of Sciences
UWI University of the West Indies

VaRM Vulnerability and Resilience Metrics

WAU World Anthropological Union

WCRP World Climate Research Programme

WDS World Data System

WFEO World Federation of Engineering Organizations

WHO World Health Organization

WIPO World Intellectual Property Organization
WMO World Meteorological Organization

YASAS Young Academies Scientific Advice Mechanism to the European Commission

### Table of Contents

		vledgements	
		Evision, mission and domains of impact	
	•	erence documents	
		abbreviations	
M	ESSA	GE FROM THE PRESIDENT AND CEO	9
1.		GOVERNANCE	11
	1.1.	Governing Board	11
	1.2.	General Assembly	12
	1.3.	Standing Committees	13
	1.4.	Advisory bodies and working groups	13
2.		MEMBERSHIP, OUTREACH AND ENGAGEMENT	15
	2.1.	Membership engagement	15
	2.2.	Strengthening the membership base	16
	2.3.	Global Knowledge Dialogue series and Midterm Membership meeting	17
	2.4.	Early- and Mid-Career Researchers	18
	2.5.	The ISC Fellowship	19
	2.6.	ISC Patrons	20
	2.7.	Awards: The Frontiers Planet Prize and Stein Rokkan Prize	20
	2.8.	Communications highlights	21
	2.9.	Sponsorship and endorsement	22
3.		REGIONAL PRESENCE	24
	3.1.	Introduction	24
	3.2.	Regional Focal Point for Latin America and the Caribbean	24
	3.3.	Regional Focal Point for Asia and the Pacific	26
	3.4.	Scoping in Africa	28
4.		CONVENING SCIENCE AND ENABLING INTERNATIONAL SCIENCE COLLABORATION	29
	4.1.	Introduction	29
	4.2.	International scientific coordination	30
	4.3.	The Centre for Science Futures	31
	4.4.	Global Sustainability	34
	4.5.	Converging Science and Technology in a Digital Era	39
	4.6.	Science in Policy and Public Discourse	43
	4.7	Changing Practices in Science and Science Systems	47
5.		FREEDOM AND RESPONSIBILITY IN SCIENCE	50
	5.1	Introduction	50
	5.2	Contemporary perspectives on freedom and responsibility in science	51
	5.3	Science in Times of Crisis	52
	5.4	Gender equality in science: from awareness to transformation	54
6.		GLOBAL SCIENCE POLICY	56
	6.1	Introduction	56
	6.2	Strengthening science to support the Sustainable Development Goals	59
	6.3	Strengthening science in intergovernmental policymaking	62
7.		FINANCE, COMPLIANCE AND RISK	72
	7.1	Introduction	72
	7.2	Finances	
	7.3	Grant income	
	7.4	Hosting in France	74
	7.5	Membership dues	
	7.6	Policies, processes, systems	
8.		SECRETARIAT	

APPENDICES				
A.	Governing Board and advisory body members	77		
В.	ISC Member movements since October 2021	81		
C.	ISC Affiliated Bodies	83		
D.	Activities endorsed or sponsored by the ISC	86		
E.	Main ISC publications October 2021 – December 2024	88		
F.	Composition of project steering groups and expert bodies	92		
G.	Formal agreements and Memoranda of Understanding	100		
Н.	Regional Focal Point staff and governing bodies	103		
l.	Secretariat staff	104		

#### **MESSAGE FROM THE PRESIDENT AND CEO**

As the world emerged from the COVID-19 pandemic, it was clear that science had played a key role in responding to a global crisis. Yet we can and should learn multiple lessons from the COVID-19 pandemic. The first most relevant lesson is possibly that policymakers had ignored the warnings from science on the unsustainable relationship between intensive human activities related to animals and health (think, for example, of the SARS event in the early 2000s) and also on the importance of maintaining clear barriers between human activities and settlements and wild biodiversity (transgressions of which were the presumed causes of COVID-19). Another significant lesson was that science too was suffering from a crisis in trust across institutions, fuelled by a digital information space which is supposedly democratic, but which in reality is controlled by powerful algorithms.

Even in the early stages of the 2021–2024 cycle, and equipped with a new Action Plan, we had to face new, unexpected challenges. Our priorities and strategies had to evolve in line with major developments in science and society: deepening geopolitical tensions, outbreaks of armed conflict, rising inequality and an acceleration in digital technologies, to name some. This report demonstrates how the ISC adapted to these new challenges.

The pandemic had underscored the need for more effective science—policy interfaces, and the ISC took up these new opportunities to promote the use of science to address urgent and emerging global issues. At the General Assembly in 2021, the membership had resolved, among other things, that the ISC should position itself as a trusted advisor to international policy organizations, fostering strategic alliances that enhance our ability to advocate for the central role of science in tackling existential challenges. Through partnerships with organizations like the United Nations, the OECD and the European Union, the ISC has contributed valuable insights into frameworks for future-oriented topics such as sustainable development and technology governance. The orientations in 2022–2024 included a strengthened mandate in relation to freedom and responsibility in science; reinvigorating the coordination of the science agenda on issues of global importance and the role of the ISC affiliated bodies therein; engaging with actors in the science landscape other than scientists and funders, including publishers and universities; and widening the funding base by cultivating relationships with philanthropic and charitable donors.

Navigating these new waters has required adaptability, determination, continuous dialogue with existing and new partners, and a new 'value proposition' for the ISC, reflecting a broadening of the ISC membership and new and closer interfaces with policy.

Among the most significant outward developments for the ISC in this period were the establishment of two Regional Focal Points, the creation of the ISC Fellowship, the launch of the Centre for Science Futures, the appointment of an ISC liaison in New York to strengthen multilateral engagement, the revision of the ISC Statutes and Rules of Procedure to enhance governance structures and widen membership opportunities, the opening of membership to academies and associations of young scientists worldwide and the creation of a charitable foundation to support fundraising efforts. Another significant contribution was the facilitation of the creation of the Pacific Academy of Sciences in 2024.

The Governing Board's and the Secretariat's commitment to engaging with and serving its Members in this new phase in its history has been clear. Through many virtual meetings but also through the in-person Global Knowledge Dialogue series and the Midterm Meeting in Paris in May 2023, we have kept in close touch with our Members and their concerns, regionally and worldwide. We have

offered many opportunities to our Members to connect with and learn from each other, across scientific, regional and disciplinary lines, and to participate in international scientific and science-policy fora. It should be acknowledged that Alison Meston, Communications Director until she left the organization for new opportunities in November 2024, led a real transformation in how the ISC communicates and engages with its Members and wider audiences.

The Secretariat demonstrated commitment and resourcefulness, delivering on the ISC's strategic objectives during a period which included major staff changes and reorganization. Heide Hackmann stepped down as ISC CEO in February 2022. Her leadership had been instrumental in establishing the ISC and in its early success, and her legacy endures. Mathieu Denis, who played an equally critical role in the merger of the International Social Science Council and ICSU, acted as CEO until the end of 2022 and went on to become the Head of the Centre for Science Futures, before stepping down in mid-2024 to pursue new opportunities.

The Three-Year Activity and Achievement Report covers the ISC's five science priorities as presented in the 2022–2024 Action Plan, but also shows that the Secretariat has responded to emerging challenges. Although presented succinctly, the list of activities and results is long. From the report emerges a picture of how the ISC has been engaging and learning from its Members, giving them visibility, influencing science, informing policy and growing as an organization; and, ultimately, providing a forum for organizations of active scientists, but also for other science organizations operating in the science ecosystem, to convene, exchange and shape the future of science and its responses to the multiple crises and opportunities that world faces today.

Many challenges lie ahead. As we look towards the next planning period, we are resolute in our mission to elevate science's role in building a sustainable future. The ISC remains committed to empowering its Members and the global scientific community, fostering impactful partnerships, and ensuring that science continues to serve the collective aspirations of humanity.

Signature Signature

Peter Gluckman, President Salvatore Arico, CEO

#### 1. GOVERNANCE

It is evident that an organization as complex as the ISC needs to have continuity in its governance. With a skilled and dedicated complement of 15 continuing and new members, the second ISC Governing Board took office in October 2021 as the COVID pandemic was receding. We had the responsibility of re-orienting the ISC after a period of great disruption to the world at large and setting its new strategic direction in line with its vision and mission. It has been a privilege to work with this Board, and a great achievement of their term that the ISC Statutes and Rules of Procedure have been revised to ensure continuity in the future.

The Governing Board of the ISC has the responsibility to provide scientific and strategic leadership, uphold the Council's principles and values, oversee the pursuit of the Council's vision and mission, and secure the financial and operational robustness of the Council. In all these domains it benefits greatly from the work and advice of the Standing Committees and numerous ad hoc working groups and task forces who give generously of their time and knowledge to serve our collective mission. The fruits of their efforts can be seen throughout this report.

Peter Gluckman, President

#### 1.1. Governing Board

By the end of their term in January 2025, the current 15-member Governing Board, elected in October 2021, will have met more than 16 times, including three times in person, while the officers (since February 2024 called the Executive Committee) will have met separately nearly as often. Two of the in-person meetings, in 2022 and 2023, took place in Paris, while in 2024 the Board was honoured to be invited to Kenya, and hosted by our three Members there, NACOSTI, the Kenyan Academy of Sciences and the African Academy of Sciences.

The Governing Board had a number of unique challenges and highlights in this period. The Covid pandemic had lingered, meaning that the 2021 General Assembly could not be held in person in Oman, nor could the Muscat Global Knowledge Dialogue, as it was originally conceived, be held in person in 2022. The Knowledge Dialogue was very successfully re-envisioned as a series of regional meetings, starting in Africa in 2022, then moving on to Asia-Pacific in 2023 and Latin America and the Caribbean in 2024. It is only fitting that we can complete the first cycle of the Global Knowledge Dialogues with a major event in Oman in 2024, just prior to the ISC General Assembly.

Heide Hackmann stepped down as CEO in February 2022, launching a transition period with Mathieu Denis as acting CEO and an eight-month search process for the new CEO which culminated in the appointment of Salvatore Aricò as CEO in January 2023.

In 2022, the Governing Board established the ISC Fellowship with 66 inaugural Fellows, including past and present members of the Governing Board. At the end of 2024 the Fellowship counts some 200 Fellows (see also <u>Section 2.5</u>).

This Governing Board took some major decisions in relation to strategic directions of the organization. Pursuing the resolution of the 2021 General Assembly, to develop the ISC's role in the

intergovernmental system, the Board decided to establish a presence in New York as of 2022. The Centre for Science Futures was established as the ISC think tank on the evolution of science systems in mid-2023, to improve our understanding of emerging trends in science and science systems, and to provide options and tools for action.

In a major step for fundraising potential, the ISC Foundation (UK) was established in 2023 to facilitate major donations to the ISC, becoming operational in late 2024.

The Board mandated and launched a major revision of the Statutes and Rules of Procedure in 2023, which was accomplished, through an intensive consultative process, in February 2024. The Working Group on Constitutional Revision and the Members are to be thanked for their commitment to this important and complex task. The main changes introduced by this revision concerned governance and membership. The changes aimed to ensure commitment, diversity and continuity in governance, and to open up membership categories.

With that accomplished, the Governing Board mandated the revision of the ISC dues structure, an equally delicate and complex task. A dedicated Working Group, established in late 2024 under the aegis of the Committee for Finance, Compliance and Risk, will take this work forward, with the aim of having a new dues structure approved by the membership for application in 2026.

The last major task for the current Governing Board was to develop the Strategic Plan for the next period. The Board agreed that the Council needed a document that sat between the still applicable High-Level Strategy set in 2018 and the detailed Action Plan of the 2022–2024 period. The draft Strategic Plan that will be presented for adoption at the General Assembly in January 2025 has drawn on numerous consultations with Members in 2023 and 2024.

#### → About the Governing Board

#### 1.2. General Assembly

The General Assembly is the highest authority of the Council, consisting of representatives of all Members as defined in <u>ISC Statute 9</u>. In the period 2022–2024, the General Assembly convened seven extraordinary electronic sessions, voting on the following matters:

June 2022	Approval of the 2021 annual audited accounts
May 2023	Modification of the ISC Statutes and Rules of Procedure to define the
	role of the ISC Chief Executive Officer as an observer to the Governing
	Board, rather than a (non-voting member)
June 2023	Approval of the 2022 annual audited accounts
February 2024	Adoption of revised ISC Statutes and Rules of Procedure and of a
	proposal for a transition to staggered Governing Board terms of office
May 2024	Approval of proposed composition of ISC Nominations and Elections
	Committee (2024–2028)
June 2024	Approval of the 2023 annual audited accounts.
December 2024	Governing Board elections

Each vote of the Members requires a considerable effort, from the Secretariat and the Members, including the individuals who serve as tellers, and Members are to be thanked for participating so actively in the democratic life of the organization, with a consistently high turn-out for critical votes. It should be noted that as of March 2024 Category 3 Members have a vote in the General Assembly.

It was with great enthusiasm that the Members convened for a meeting without voting business in Paris in May 2023, the first in-person meeting since the inaugural General Assembly in July 2018; and with equal enthusiasm that we look forward to the third ISC General Assembly, generously hosted by our Member the Ministry for Higher Education, Research and Innovation of Oman in Muscat in January 2025.

#### 1.3. Standing Committees

The members of the 2019–2022 Standing Committees stood down in mid-2022 and the Committees were subsequently renewed with nominations from the Members. Their composition can be seen in Appendix A and their work is detailed in the relevant sections of this report.

- Committee for Freedom and Responsibility in Science
- Committee for Science Planning
- Committee for Outreach and Engagement
- Committee for Finance, Compliance and Risk

In the revision of the Statutes and Rules of Procedure over the course of 2023, only the Committee for Freedom and Responsibility in Science and the Committee for Finance, Compliance and Risk were retained as statutory committees, with all other advisory bodies being formed and dissolved at the discretion of the Governing Board in response to evolving needs. The Committee for Science Planning and the Committee for Outreach and Engagement will be dissolved at the time of the General Assembly 2025, and the vice-presidents will shape a call for the members of appropriate new advisory bodies. Members of all the serving committees are warmly thanked for their commitment and contributions.

#### 1.4. Advisory bodies and working groups

In 2022–2024 the following statutory or ad hoc committees and working groups advised the Governing Board on governance, membership and scientific matters. The composition of the committees can be seen in Appendix A.

#### **Consultative Group on Science Education (July 2023 – tbc)**

The Science Education Consultative Group was established in response to long-standing requests from Members for ISC action in this critical domain. The group, chaired by Vice President for Science and Society, Motoko Kotani, and co-chaired by Governing Board member Mei-Hung Chiu, was constituted in July 2023 and produced a report for the Governing Board in October 2024. Its recommendations and potential actions will be discussed at the General Assembly in January 2025.

#### **Dues Revision Working Group (September 2024 – tbc)**

The Dues Revision Working Group was established following the revision of the ISC Statutes and Rules of Procedure in March 2024 to develop a unified, fair and sustainable dues structure for ISC Members.

#### **General Assembly 2025 Programme Committee (January 2024 – January 2025)**

A subset of Governing Board members formed a Programme Committee to advise the secretariat on the scientific agenda of the General Assembly and to interface with counterparts from the host country, Oman.

#### Nominations and Elections Committee (May 2024 – May 2028)

The 11-person Nominations and Elections Committee is a new statutory body introduced with the revised Statutes and Rules of Procedure in March 2024. It is overseeing the first Governing Board elections with the new, staggered terms of office.

#### Small Island Developing States (SIDS) Liaison Committee

After a hiatus since March 2021, the SIDS Liaison Committee was reconvened in late 2023 in preparation for several key multilateral events including the 4<sup>th</sup> International Conference on Small Island Developing States, the High-Level Political Forum, and United Nations Ocean Conference in 2025. In 2024, the Committee met twice, writing "From Shores to Horizons" Declaration for SIDS4. See also Section 6.9.8.

#### Working Group on Constitutional Revision (December 2022 – March 2024)

The Working Group on Constitutional Revision was established to deal with significant issues regarding governance and membership. The Working Group was formed in December 2022, met several times, consulted intensively with the Members, including at the Midterm Membership meeting in May 2023, and concluded its work with the adoption of the revised Statutes and Rules of Procedure by a vote of the membership in February 2024.

#### Working Group on Inequalities (2024)

The Working Group on action in the area of inequality was established to report on the current research landscape relating to poverty and inequality, including global experts and initiatives. The objective was to provide a recommendation the Governing board on needs and opportunities for an ISC Affiliated body or other international coordinating initiative in this domain, building on the work of the Global Research on Inequality Programme (GRIP). The Working Group was formed in July 2024 and will deliver their work by the end of 2024.

#### 2. MEMBERSHIP, OUTREACH AND ENGAGEMENT

I am deeply grateful for the trust placed in me by ISC Members as their Vice President of Outreach and Engagement, especially during a period when science itself faces significant challenges. Whether during the pandemic, when science was thrust into the global spotlight, or in response to the rapid advancements in artificial intelligence that pose both opportunities and risks, the need for trustworthy science has never been more critical to ensure fair and equitable outcomes. The ISC's outreach and engagement strategies are essential in mobilizing our communities to support strong scientific ecosystems and the surrounding sectors—such as health, media, and education—that foster trust in science.

Throughout my tenure as Vice President, I have been fortunate to work with an enthusiastic Committee for Outreach and Engagement (COE). Meeting twice a year, the COE has been instrumental in shaping membership approval and engagement strategies, and in representing the ISC at key events, such as general assemblies and global policy forums like the High-Level Political Forum and the Summit of the Future. Among its priorities, the COE discussed the complex rules related to membership of multiple organizations in one country, a problem that will need further deliberation by the incoming Vice-President for Membership. COE members have also supported the ISC's Membership Liaison Officer by facilitating initial meetings with prospective members and reviewing ISC policies and the revised Statutes and Rules of Procedure.

I extend my heartfelt thanks to the COE for their dedication and wish all ISC Members a successful General Assembly in Oman, 2025

Salim Abdool Karim, Vice-President for Outreach and Engagement

#### 2.1. Membership engagement

Members are the heart and soul of the International Science Council. During the reporting period, ISC Members, like the Secretariat, were coming out of pandemic conditions, switching meetings from online to hybrid and finally back to in-person. The ISC membership team continued to support Members through regular mailouts, one-to-one meetings and handling of queries, and promoting Members' events and activities through newsletters, the website and social media.

Critical tasks led by the membership team include both servicing existing Members, convening regular quarterly meetings with the President and knowledge-sharing sessions, and promoting calls for scientific expertise, as well as prospecting for potential new members. The ISC Membership Liaison Officer acts as the focal point for all ISC Members and continued to ensure consistent and regular exchange between the ISC secretariat, ISC governance structures and the ISC membership.

The weekly newsletter, which exclusively targets representatives of ISC Member organizations, continued to be the main means of regular membership communication, containing crucial updates regarding ISC activities, projects and partnerships, as well as information on current opportunities of engagement, General Assemblies and voting processes.

Upon request by ISC Members, an ISC WhatsApp group was launched to provide an additional channel of communication. The group was later transformed into a WhatsApp community, which

counted 200 members in October 2024 and actively fosters Member-Member engagement. The various groups within the community provide spaces for region- and topic-related conversations, and a platform to share opportunities and events.

The membership section of the ISC website was expanded to feature and highlight news items from ISC Members and to provide a hub for all membership-related updates. The ISC <u>Membership Notice</u> Board in particular continued to feature ISC events for Members and opportunities for engagement.

The ISC continued to create unique opportunities for the membership of ISC Member organizations to contribute scientific expertise, for example by co-authoring policy briefs, serving on expert panels or in ISC delegations, and, where needed, to help build their capacity. In particular, ISC Members strongly benefitted from the ISC's increased cooperation with the multilateral system, through which the Council was able to relay numerous calls for experts from UN-led initiatives and special accreditations to UN meetings, opening exclusive nomination and engagement tracks to its membership. Examples include calls to advise the seventh edition of UNEP's flagship assessment, GEO-7, for an expert group dedicated to developing a policy brief for the UN 2023 Water Conference, and for an expert group on plastic pollution to inform the ongoing negotiations around an international plastic pollution treaty. Such opportunities to participate in high-level international working groups and expert panels were published regularly on the ISC Membership Noticeboard and communicated via the weekly Member newsletter and the ISC WhatsApp community.

- → Membership portal
- → <u>Noticeboard</u> (Members are encouraged to bookmark this page and visit regularly)
- → Meetings and resources

#### 2.2. Strengthening the membership base

The Membership team at the ISC continued its energetic efforts to re-engage inactive Members and to recruit new Members. Thirty-two membership applications were approved during the 2022–2024 period (see Appendix B), including:

- four former Category 3 Members that moved to Category 1
- six Members from Africa
- one Member from Europe
- two Members from Latin America and the Caribbean
- one medical academy
- one international interdisciplinary Member
- 17 academies of young scientists and one association of young scientists.

In addition, some 50 inactive Members have been re-engaged since 2020.

Regrettably, nine Members left the ISC in the reporting period. Some of the reasons for a non-renewal of membership include Members moving to an umbrella organization which maintains the ISC membership, or lack of resources or capacity of the organization to engage.

The revision of the Statutes and Rules of Procedure in 2023-2024 opened up membership opportunities. Category 3 Members became voting Members, and a new Category 4 was created for observer organizations which endorse the ISC's mission, vision and values, but which do not or do not meet the criteria for membership.

#### 2.3. Global Knowledge Dialogue series and Midterm Membership meeting

With the pandemic again forcing the cancellation of the planned Global Knowledge Dialogue in early 2022, the concept was re-imagined as not just one major event but rather a series of regional events to bring Members together after years of pandemic-enforced distance. Three Global Knowledge Dialogues (GKDs) and a 'Midterm Membership Meeting' were convened between December 2022 and April 2024.

The in-person events in this series brought the scientific community together to think collectively and creatively about the role and contribution of science to solving some of the most pressing issues of our time, drawing on ISC Members around the world to future-proof and strengthen the global voice of and for science. All GKDs had side event workshops or panels on topics such as freedom and responsibility in science, early- and mid-career researchers and Al, and they all benefited from a partnership with the Frontiers Planet Prize to encourage ISC Members to participate in the prize competition. Some of the events had expo booths or film events in partnership with Organization of Women Scientists in the Developing World (OWSD) to promote women in science.

The Global Knowledge Dialogue series showcased the importance of regional scientific collaboration and input in addressing global challenges. These gatherings highlighted the value of integrating diverse knowledge systems, including indigenous and local expertise, into mainstream scientific discourse.

Members benefited from strengthened in-person networking, increased opportunities for collaboration, and enhanced representation in discussions that shape regional and global science agendas. These dialogues empowered ISC Members, many of which received ISC bursaries to attend, to take an active role in promoting science-led solutions and reinforced their collective influence in advocating for science-driven policies and initiatives. The ISC membership also benefitted from the partnership with OWSD, ensuring emerging women leaders in science were engaged in the meetings.

#### Regional dialogue for Africa, 7 December 2022, Cape Town, South Africa

The Global Knowledge Dialogue series was launched with a <u>regional dialogue for Africa</u> linked to the World Science Forum. More than 120 Member representatives from 40 countries attended this dialogue, which addressed key issues in governance, capacity strengthening, funding, African knowledge systems, African identity, education, and the specific role of social sciences.

#### Regional dialogue for Asia and the Pacific, 6 October 2023, Kuala Lumpur, Malaysia

The <u>Global Knowledge Dialogue Asia-Pacific</u> was hosted by the ISC, together with its <u>Regional Focal Point for Asia and the Pacific</u>, through the Australian Academy of Science, and the <u>Academy of Sciences Malaysia</u> during the 2023 International Greentech and Eco Products Exhibition and Conference. More than 140 Member representatives from 30 countries attended the dialogue, which renewed and strengthened scientific collaboration in the region. The meeting focused on how to progress the role of science in achieving the Sustainable Development Goals in Asia and the Pacific and informed future programmes and activities of the ISC Regional Focal Point for Asia and the Pacific.

#### Mid-term Membership Meeting, 10-12 May 2023, Paris, France

The <u>mid-term meeting of ISC Members in Paris</u> was the first occasion for all ISC Members to meet in person since the founding General Assembly in 2018 and focused on strengthening Member

relationships. Over three days, 300 delegates from almost 100 countries discussed the evolution of science in a global context and how the climate crisis, heightened nationalism and geopolitical realignments, outbreaks of armed aggression, economic instability, and the continued aftermath of the pandemic, determining the current positioning of the ISC and possible future roles in science diplomacy. Internal matters around the ISC workplan for global policy processes, constitutional revision, regional presence and membership were also discussed.

Regional dialogue for Latin America and the Caribbean, 9–11 April 2024, Santiago, Chile
The Global Knowledge Dialogue for Latin America and the Caribbean was hosted by the ISC,
together with the ISC Regional Focal Point for Latin America and the Caribbean and its Liaison
Committee, the Colombian Academy of Exact, Physical and Natural Sciences, and the Chilean
Academy of Sciences, with support from the Latin American Open Data Initiative (ILDA). More
than 160 delegates from 30 countries were represented at this event, which brought together the
leading lights of the regional scientific community, diplomats, and policy influencers, with a
special focus on enhancing the region's scientific and diplomatic engagements.

#### → About the Global Knowledge Dialogues

#### Key news items:

- Global Knowledge Dialogue held in South Africa a grand success
- The Global Knowledge Dialogue for Asia and the Pacific rallies ISC Members around planetary health
- Mid-term meeting of Members: Capitalizing on Synergies in Science
- Strengthening the Voice of Science: Reflections from the Global Knowledge Dialogue in Santiago, Chile

#### 2.4. Early- and Mid-Career Researchers

The International Science Council recognizes that young academies and early- and mid-career scientists are confronted with many challenges when navigating and evolving within complex science systems. These challenges include funding, access to resources and support, as well as the need to build collaborative relationships within the scientific community.

To address these challenges, the ISC has made a commitment to fostering an ecosystem of collaboration, resource sharing and partnership by engaging with young scientists at national, regional and global levels. As part of this commitment, the ISC launched a membership campaign in 2022 which offered free affiliate membership to all eligible young scientist organizations. Seventeen young academies and associations have consequently joined the ISC, from all around the world.

In 2023 the ISC initiated the first Early and Mid-Career Researchers (EMCR) Forum, dedicated to organizing events and regional initiatives supporting EMCRs.

In October 2024, the ISC, with the financial support of the China Association for Science and Technology (CAST), launched a transformative project, "Empowering and Elevating the Voice of Early- and Mid-Career Researchers in International Science and Global Policy Processes." This initiative, set to run for two years, is designed to amplify the voices of EMCRs from across the globe

- especially those in low- and middle-income countries - helping them shape the future of international science and play a significant role in solving the world's most pressing challenges.

Key activities of the project include science leadership training modules, a podcast exploring the future skills young scientists will need, and residencies at leading Chinese and international research institutions. EMCRs will also have opportunities to participate in major global scientific events such as the ISC's General Assembly in Oman.

#### Main outputs

- 17 young academies and associations in the membership
- **Forum:** An active community of around 600 young scientists are part of the ISC's global network of Early- and Mid-Career Researchers.
- Sessions at the Mid-Term Meeting and Global Knowledge Dialogues with large attendance.
- Newsletter: A dedicated newsletter was launched in 2022, with currently 1233 subscribers.

#### **Partners**

- China Association for Science and Technology (CAST)
- Global Young Academy (GYA)
- International Institute for Applied Systems Analysis (IIASA)
- Marie Curie Alumni Association (MCAA)
- Young Academies Scientific Advice Mechanism to the European Commission (YASAS)

#### Key news items

- Invitation to Young Academies and Associations to join the ISC as Members
- <u>Fostering tomorrow's science: the ISC's engagements with Early and Mid-Career Researchers</u> in 2023 International Science Council
- New ISC-CAST initiative to empower Early- and Mid-Career Researchers worldwide

#### 2.5. The ISC Fellowship

The creation of the ISC Fellowship was announced in June 2022 with the appointment of 66 Foundation Fellows, being individuals recognized for their outstanding contributions to promoting science as a global public good, including all members of past and present ISC Governing Boards.

In December 2022, the ISC awarded a further 57 Fellowships, as well as three Honorary Fellowships for the inaugural and outgoing ISC Patrons, Vint Cerf, Mary Robinson and Ismail Serageldin. Another 100 Fellows were appointed in December 2023.

The Fellowship is an honour awarded to those who champion science in society and policy making. Through their scientific leadership and work to promote science in the public domain, the Fellows support the ISC's mission to act as the global voice for science.

The Fellows are led by the 13-member <u>Foundation Council</u>. Chaired by Terrence Forrester, with the support of Vice-President for Science and Society, Motoko Kotani, as Deputy Chair, the Council steers the Fellowship for an initial period of three years.

Fellows form a significant body of experts disposed to help the ISC in various ways, including by acting as expert contributors, advisors and reviewers. The Fellowship increases the ISC's direct access to individual scientists and experts and has already proven a valuable resource.

#### Main outputs

- Letter in *Nature*: <u>ISC Fellows Letter to the scientific community on the occasion of the 2024</u> Summit of the Future
- Position paper for the 2023 High-Level Political Forum, <u>Rescuing and integrating the Global Agenda: Harnessing Science and Technology more effectively</u> which was presented in plenary by ISC Fellows.
- Frontiers Policy Labs: Special issue 'Making sense of science in the 21st Century, featuring an editorial co-written by Salvatore Aricò and commentaries from the broader ISC community.

#### → About the ISC Fellowship

#### 2.6. ISC Patrons

Patrons help the Council with advice, name recognition and credibility within and beyond the scientific world. In 2022 the ISC's three inaugural patrons, Vinton Cerf, Mary Robinson and Ismail Serageldin were made Honorary Fellows.

Irina Bokova, former Director-General of UNESCO, became the ISC's new Patron in 2022, taking up many duties, including as Co-Chair of the ISC's Global Commission on Science Missions for Sustainability, speaking at the ISC's Mid-Term meeting of Members in 2023 and chairing the newly formed Nominations and Election Committee. Ms Bokova also assisted the ISC by raising its profile during many intergovernmental events and processes, including the European Open Science Forum (ESOF) and the HLPF.

#### Key news items:

- Bulgarian politician and diplomat Irina Bokova becomes Patron of the ISC
- Preventing Crisis: Science Diplomacy and Track Two Organizations
- Closing remarks by Irina Bokova, ISC Patron, at the Mid-term Meeting of Members

#### → About ISC Patrons

#### 2.7. Awards: The Frontiers Planet Prize and Stein Rokkan Prize

The ISC celebrates and supports scientific excellence through a small number of prestigious awards and partnerships. These initiatives recognize groundbreaking research, innovative solutions, and significant contributions to science and society. In the 2022–2024 period, the ISC awarded the Stein Rokkan Prize for Comparative Social Science Research, which highlights impactful work in social sciences, and partnered with the Frontiers Planet Prize to champion sustainability science.

These awards not only spotlight individual achievements but also emphasize the importance of inclusive and collaborative efforts in advancing science for the public good.

#### **Stein Rokkan Prize for Comparative Social Science Research**

The annual Prize, presented by the International Science Council, the University of Bergen and the European Consortium for Political Research (ECPR), celebrates the legacy of Stein Rokkan, a true pioneer in comparative social science research, acknowledging a submission deemed a substantial

and original contribution in the field. Where possible, the ISC has engaged the prize winners in its conferences, such as the Global Knowledge Dialogues.

#### Key news items:

- 2022: <u>"Theoretically ambitious, methodologically rigorous, and empirically rich" Vineeta Yadav wins the 2022 Stein Rokkan Prize</u>, with her study on "Religious Parties and the Politics of Civil Liberties".
- 2023: <u>Elisabeth Anderson wins the 2023 Stein Rokkan Prize</u> with her study, "Agents of Reform: Child Labor and the Origins of the Welfare State"
- 2024: <u>Anu Bradford wins the 2024 Stein Rokkan Prize with her 'path-breaking' book</u> on "Digital Empires: The Global Battle to Regulate"
- → About the Prize

#### **Frontiers Planet Prize**

Since 2022 the International Science Council supports the Frontiers Planet Prize to recognize and reward exceptional scientists working in sustainability science. Launched by the Frontiers Research Foundation on Earth Day 2022, the Prize aims to mobilize nations and the global community of scientists conducting research on earth system science. Three prizes worth a total of USD \$3.2m are awarded annually to sustainability scientists who propose innovative globally scalable solutions which protect and restore planetary health. The ISC works as a partner widening the visibility of the Prize, to ensure all relevant members of the ISC can participate. The ISC also facilitates nominations from institutions in regions and countries which do not yet have a National Representative Body.

#### Key news items:

- The Frontiers Planet Prize announces 2024 International Champions
- The Frontiers Planet Prize unveils its champions 2023
- → About the Prize

#### 2.8. Communications highlights

The ISC has achieved substantial growth in visibility, reflected in increased appearances in Google search results. This improvement stems from a continually evolving website, regular web development to maintain cutting-edge technology (highlighted by a complete website relaunch in 2024), and a consistent flow of high-quality content. Together, these efforts enhance visibility, elevate search rankings, and expand the website's reach to a broader audience.

- Last period<sup>1</sup>: on average, **6M** impressions per year
- Current period<sup>2</sup>: on average, 43.7M impressions per year

As a result of these advancements, the ISC website has seen a remarkable increase in **pageviews** to <u>council.science</u>, reflecting heightened engagement and interest from users.

- Last period: 1.27M pageviews

<sup>&</sup>lt;sup>1</sup> Last report date range: July 2018 to June 2021

<sup>&</sup>lt;sup>2</sup> Current reporting period: 1 July 2021 – 31 October 2024

- Current period: **5.8M³** pageviews

#### **High-quality content**

This significant rise in visibility and engagement aligns with the ISC's ongoing commitment to high-quality **content production**. Over the years the ISC has continued to steadily produce timely and relevant resources to meet the needs of our audiences. On average, 180+ posts (blogs, news, long stories, press releases) and 20+ publications are produced every year.

#### Multi-lingual accessibility

The ISC's commitment to multilingual accessibility has greatly expanded its reach and engagement. With the number of available languages growing from 30 to 140, translated content has experienced a dramatic increase in web traffic, now totalling 38 million requests<sup>4</sup> as of 4 November, 2024. This growth reflects the ISC's strategic efforts to expand reach to a broader audience.

#### **Growing readership of ISC newsletters**

The ISC newsletters have become an increasingly valuable channel for connecting with a growing and engaged audience. Through carefully curated content and consistent distribution, the ISC has seen continuous growth in its subscriber base, reflecting strong interest in its updates, insights, and publications. This expanding readership demonstrates the impact of the team's efforts to deliver relevant information directly to our audience, fostering a loyal community that values staying informed on ISC activities and initiatives. On average, in total, we send 50 newsletters per year.

#### Newsletters:

- ISC Monthly
- UN Science at the United Nations
- Open Science round-up
- Early and Mid-Career Researchers (EMCR)
- Science for Disaster Risk Reduction
- Centre for Science Futures
- ISC Job Alerts
- Regional updates: Latin America and the Caribbean
- Regional updates: Asia-Pacific

#### Accelerated growth:

- Last period: 2.1K new subscribers per year on average
- This period: 3.9K new subscribers per year on average

#### **ISC SciComm Network**

In May 2021, the ISC set up the <u>ISC Science Communications Network</u>, which brings together communications colleagues from across the ISC community and external science communications experts. Today, it includes over 320 members, including a separate subgroup for Asia and the Pacific. The ISC has organized four workshops to help build communication capacity among the membership.

#### 2.9. Sponsorship and endorsement

<sup>&</sup>lt;sup>3</sup> Adjusted to compensate for approximately one month of data lost during the transition period after the website relaunch in 2024.

<sup>&</sup>lt;sup>4</sup> Excluding 2.7 million that can likely be attributed to bot activity

The ISC is frequently asked to sponsor or endorse activities initiated by its Members or other bodies, and it often does so, for activities that fit with its vision, mission, values, strategy, objectives. The Governing Board agreed on an ISC Sponsorship and Endorsement policy to guide prospective applicants, and also on a <u>Due Diligence policy</u> to guide its decisions on engaging with private sector bodies. A list of activities sponsored or endorsed by the ISC in the reporting period is found in <u>Appendix D</u>.

A list of current agreements and memoranda of understanding with partners is available in Annex G.

#### 3. REGIONAL PRESENCE

#### 3.1. Introduction

In order to deepen the Council's engagement with its Members and with the scientific community across the world the ISC has established Regional Focal Points. Regional focal points are crucial to ensuring that the ISC is representative of scientific communities across the world and of the concerns of different regions. The staff of the Regional Focal Points are employed by their host organization but work closely with the ISC Secretariat in Paris to ensure alignment and coordination.

Two Regional Focal Points have already been established, and others are under consideration:

- The Regional Focal Point for Latin America and the Caribbean is hosted by the <u>Academia</u> Colombiana de Ciencias Exactas, Fisicas y Naturales and was launched in 2021.
- The Regional Focal Point for Asia and the Pacific region is hosted by the <u>Australian Academy</u> of <u>Science</u> and was launched in 2022.
- Scoping for a potential presence in Africa started in 2022 in partnership with Future Africa.
- The Council is in discussions with Oman on a possible ISC presence in the MENA region.

#### 3.2. Regional Focal Point for Latin America and the Caribbean

The Regional Focal Point for Latin America and the Caribbean region (RFP-LAC) was the first regional structure of the International Science Council (ISC). The RFP-LAC, based at the Colombian Academy of Exact, Physical and Natural Sciences, convenes the scientific community in Latin America and the Caribbean and acts as a hub for ISC Members and activities in the region. The RFP works closely with civil society, governments, international organizations and the private sector to identify regional needs and opportunities.

The RFP has a Director, a dedicated, full-time Science Officer, administrative support from the host institution, and an 11-member Liaison Committee (see <u>Appendix H</u>).

The ISC greatly regretted the passing of Dr Enrique Forero Gonzalez, first Director and Chair of the Regional Focal Point for Latin America and the Caribbean in September 2023.

#### **Highlights**

- Collaboration with the Centre for Science Futures on the report: <u>Preparing National Research Ecosystems for AI</u>: <u>Strategies and progress in 2024 (ISC 2024)</u>, which featured a series of country case studies, including from Brazil, Chile, Mexico and Uruguay. Collaboration with ILDA (<u>Iniciativa Latinoamericana por los Datos Abiertos</u>) for the workshop held during the Global Knowledge Dialogue in Santiago, Chile, in April 2024.
- Promoting the establishment of young academies in the LAC region. Connecting young scientific associations to the <u>Focal Point for EMCR at the ISC</u>, promoting participation in the recently launched <u>ISC Early and Mid-Career Researchers (EMCR) Forum</u> and in opportunities communicated in the dedicated <u>Newsletter</u>. The ISC RFP-LAC supported the organization of the <u>ISC Early and Mid-Career Researchers (EMCR) Forum: Latin America and the Caribbean held during the Global Knowledge Dialogue LAC in Santiago de Chile, in April 2024.
  </u>
- Invitations to present the ISC at regional scientific events.
- Development of a **regional database of experts** which can be consulted for ISC needs.

- Contribution to the report <u>Looking beyond research co-production</u>: <u>Exploring the challenges of evidence use</u> (Institute of Development Studies 2023).
- Supported the <u>Caribbean Academy of Sciences 23rd Biennial Conference (2023)</u>.
- Supported one of a series of workshops organized by UNEP in collaboration with the ISC as part of the global foresight exercise: <u>Regional Foresight Workshop - Latin America and the</u> Caribbean.
- Participated in a roundtable on the futures of development with the United Nations
  Development Program (UNDP), which will serve as input for the UNDP Global Signals Report
  2024 in consultation with ISC.
- Recommended women scientists in SDGs and sustainability to the 2027 Global Sustainable
   Development Report, through the ISC science policy unit.
- Invited by Latin America and the Caribbean Office of the United Nations Environment Programme - UNEP to be part of REIN (Regional Environmental Information Network), which was established in 2022 from a decision of the forum of ministers of environment of Latin America and the Caribbean.
- Participated in the Meeting of the GYA-IAP-ISC Stakeholder Engagement in Re-Thinking Research Assessment bringing the LAC regional perspective.
- Co-organized a LAC regional webinar to present the "Towards IPOS" initiative, to introduce the panel to the regional scientific community dedicated to research about oceans.
- Formal collaborator of the TWAS Young Affiliates Network (TYAN) and its 3rd TYAN Hands-on School, as part of the TEACH-4-SD initiative, which focuses on equipping students from developing countries with practical skills essential for sustainable development research. One edition will take place in Santiago, Chile, from December 11-15, 2024.
- Invited to moderate several sessions at The Landscape Study and Benchmarking Workshop for the APEC Open Science Alliance held in Lima, Peru and organized by the Malaysian Academy of Science.
- Scoping a joint effort with ParlAmericas (an institution that promotes parliamentary diplomacy in the inter-American system) to promote interaction between scientists and parliamentarians.
- Developing a regional document with the Academies of Science of the LAC region, which
  advocates increased investment in the scientific systems of our countries and support for
  research in basic sciences.
- In coordination with the Ibero-American Young Academies and their members, working on planning leadership mentoring sessions for the young scientific community of the LAC region in collaboration with New Voices, TYAN, the GYA and other young academies in the region.
- Appointed member of the ISC-INGSA advisory group for science advice.

#### **Involvement in Working Groups**

- Steering Committee of the Latin America and the Caribbean Chapter of INGSA (International Network for Government Science Advice)
- Regional Scientific and Advisory Group within the Regional Office for the Americas and the Caribbean of the United Nations Office for Disaster Risk Reduction (UNDRR)
- Organization for Women in Science for the Developing World (OWSD) Colombian chapter
- Regional Environmental Information Network REIN from UNEP LAC
- Fourth meeting of the Conference on Science, Innovation and ICTs of United Nations Economic Commission for Latin America and the Caribbean-ECLAC (Colombia was appointed chair of the conference until 2026)
- LARAC (Latin American Research Advisory Council), Springer Nature
- Global Alliance for Circular Bioeconomy established during COP 16 in Cali, Colombia
- → About the Regional Focal Point for Latin America and the Caribbean

#### 3.3. Regional Focal Point for Asia and the Pacific

Based at the Australian Academy of Science, the Regional Focal Point for Asia and the Pacific (RFP-AP) convenes the scientific community in Asia and the Pacific and acts as a hub for ISC Members and activities in the region. The RFP-AP began operations in 2023, and is working to ensure that regional needs and priorities are adequately represented in the ISC's global agenda, that regional voices are actively engaged in the governance and management of the ISC's work, and that the region benefits from the results of that work.

Through the generous support of the Government of Australia and the Australian Academy of Science, the RFP benefits from a team of five: a director, a communications manager, three project/programme officers; and from an international Advisory Committee (see Appendix H).

#### **Highlights**

#### Supporting the establishment of a Pacific Academy of Sciences

Recognizing the need to assist science and scholarship in the Pacific and to support new academies of sciences in underserved regions, the ISC and the Regional Focal Point attracted support and initial funding from Sasakawa Peace Foundation and Richard Lounsbery Foundation to launch the process through a regional consultation with Pacific Islands scholars, funders and decision-makers. Following the success of the inaugural events in October 2023, the ISC and the RFP have continued to facilitate the process.

- October 2023: The inaugural <u>ISC Meeting of Pacific Scholars</u> brings over 60 scientists to Apia, Samoa.
- December 2023: As the first crucial step, the <u>Establishment Committee</u> is formed.
- February 2024: In Auckland, New Zealand, the Establishment Committee and advisors make progress on resolving foundational issues around the academy's legal status, location, membership and constitution.
- May 2024: A delegation from the Pacific region is sponsored to attend the 4th International Conference on Small Island Developing States (SIDS4).
- August 2024: <u>Call for nominations for Foundation Fellows</u>
- October 2024: The <u>launch of the Academy</u> is an official side-event at the <u>Commonwealth</u> Heads of Government Meeting in Samoa.

#### **Asia Science Mission**

The Regional Focal Point for Asia and the Pacific is working with <u>Future Earth Asia</u> to develop a Meta-Network Hub Asia that will address the critical challenge of optimizing the utilization of existing local resources for achieving the Sustainable Development Goals in Asia by harnessing the power of local science communities embedded within universities, colleges, and civil society organizations.

- July 2024: The Meta-Network Hub for SDGs in Asia (MHA) is shortlisted for the <u>International</u> Science Council Pilot Science Missions for Sustainability
- 19 September 2024: First of three inception workshops to officially commence co-design of the Meta-Network Hub Asia with consortium partners from across Asia (including Australia and Future Earth Asia)
- 21-23 October 2024: Second co-design workshop of the Meta-Network Hub Asia with consortium partners from across Asia to be held at Research Institute for Humanity and Nature.

 November 2024: Third co-design workshop of the Meta-Network Hub Asia with consortium partners from across Asia.

#### **Asia-Pacific Academic Mentoring Programme**

The Regional Focal Point for Asia and the Pacific is facilitating a mentoring programme to connect Early Career Researchers with senior science mentors to guide young scientists from low-income nations within the region to become future leaders in academia. The mentoring programme commenced in September 2024 and will run for one year.

- Successfully launched the program in September 2024, with 10 Pacific EMCRs as mentees and 10 mentors
- Mentees are from Fiji, PNG, Vanuatu, Samoa and New Caledonia
- Mentors are from Australia and New Zealand (two mentors are also ISC Fellows)
- In total there were 48 mentee applicants and 42 mentor applicants

#### **INGSA-Asia Science Advice Workshops**

The Regional Focal Point for Asia and the Pacific has partnered with the International Network for Governmental Science Advice-Asia to strengthen the institutional science advice capability in Asia through training opportunities, stronger engagement with policymakers, building regional and interregional networks, and strengthening the regional science-advice ecosystem.

- 23 proposals for the grass roots workshops INGSA Asia
- August 2024: Call for applications for INGSA-Asia grassroots science advice workshops.
- November 2024: Successful applicants notified
- Ongoing 2024-2025: INGSA-Asia grass roots workshops facilitated across countries in Asia

#### **ISC-UNEP Foresight Report**

The RFP facilitated collaboration between the Australian Academy of Science and the ISC on a joint International Science Council—United Nations Environment Program project. The AAS partners contributed notably to the literature review and interview of experts. The project's outcomes were published in <u>Navigating New Horizons – A Global Foresight Report on Planetary Health and Human Wellbeing</u> (UNEP, 2024).

#### **Media and Communications Training**

The Regional Focal Point for Asia and the Pacific is delivering a <u>programme of online workshops</u> for its members to build capability in science communication, understanding of the media landscape and to improve digital storytelling and use of social media platforms for scholars in the region throughout 2024-2026. Several workshops have already been held in 2024 with registrations over 600 to receive the recordings and attendance of more than 100.

- May 2024: Storytelling in Science: Science Communication and the Media online workshop
- July 2024: Social Media content briefing sessions with the RFP Asia-Pacific communications network
- September 2024: Social media training module 1 <u>Navigating the social media landscape as a scientist in 2024</u>
- October 2024: Social media training module 2 <u>Developing a social media strategy for scientists</u>
- November 2024: Social media training module 3 <u>Content creation for scientific research</u>

#### **New Zealand Science Media Centre collaboration**

- July 2024: A talanoa (sharing of ideas) session with journalists and media academics at the Pacific Media Conference 2024.
- October 2024: A session focusing specifically on training science journalists in Apia, Samoa during the Commonwealth Heads of Government Meeting (CHOGM) in October 2024
- Printed and online resource guide for workshop participants, which can be shared
- Pacific Academy of Sciences member institutions gain access to the Science Media Exchange newsfeed and platform (<u>Scimex.org</u>). Benefits to ISC member institutions include:
  - Access to Science Media Exchange portal to publicize new research publications and expertise, providing direct visibility to regional and global media.
  - Free advice and training sessions for media communications teams at member institutions.
  - Access to online resources and training modules.

#### **Communications and outreach**

The RFP benefits from dedicated communications capacity and has a busy communications plan. The team works with ISC Members to increase visibility of events and outputs.

The RFP has identified a point of contact for communications in each country, with 57 Members in the communications network and 46 Members in the Asia Pacific WhatsApp group.

The RFP has held three members' meetings in 2024, with excellent participation rates from members and participation of government and multilateral policy organizations as well as media organizations.

The RFP newsletter has 2513 subscribers.

→ About the Regional Focal Point for Asia and the Pacific

#### 3.4. Scoping in Africa

Towards the end of 2022, the ISC entrusted Future Africa, a pan-African organization based in South Africa, to conduct a two-year pan-African scoping and development process aimed at identifying the need for and possible functions and form of an ISC institutional presence on the African continent. Future Africa was tasked with convening a consortium of African partners to lead this scoping work. The FA-ISC agreement was signed in January 2023 and an 11-person steering committee was established, chaired by Professor Daya Reddy (see <u>Appendix F</u>).

The project conducted a <u>stakeholder mapping</u> from June 2023 to November 2024 to provide an overview of the state of African science, focusing on the stakeholders, their activities, and networks. Two consultative workshops were held in 2023, and finally Future Africa conducted a survey of the 41 ISC member organisations in Africa from November 2023 to July 2024. The conclusions of the scoping exercise will be presented to the Governing Board and discussed at the 2025 General Assembly.

## 4. CONVENING SCIENCE AND ENABLING INTERNATIONAL SCIENCE COLLABORATION

In a world of increasing complexity and uncertainty, the importance of science for humanity is greater than ever. As a universal language and as a logic-base for evidence-informed decision making, science has been and will continue to serve as a reliable compass for a sustainable inclusive future, but only if the practice of science is fair, accessible and aligned with the idea of science as a global public good. To respond to the trust placed in science by society, it is crucial that fundamental science continues to evolve in a healthy way, opening up new horizons of knowledge for humanity.

It has been my great pleasure to serve as Vice President for Science and Society to help the Council fulfil its mission, engaging in activities based on the Action Plan adopted by the General Assembly in 2022 in cooperation with the ISC members and various related organizations.

The Committee for Science Planning (CSP) has supported the projects under the Action Plan, and various science initiatives and programmes co-sponsored by the ISC, such as the Affiliated Bodies. The CSP is pleased to welcome the Affiliated Bodies as Category 4 members of the ISC in recognitions of their important contributions over the years.

I would like to express sincere gratitude to all those who have supported the ISC's science activities over the past three years, to enable it to fulfil its vision and mission.

Motoko Kotani, Vice-President Science and Society

#### 4.1. Introduction

The Council's 2022–2024 Action Plan, drawn up in the wake of a global pandemic, recognised the role of science in responding to global challenges, how the value of science could be amplified through innovation, and how science systems themselves will need to adjust to a changing world.

The ISC has responded to the shocks of a rapidly changing environment by establishing the Centre for Science Futures as a think tank to explore new fields, technologies and methodologies that have the potential to impact on science and science systems. However, the Council also invests in long-term support of structures for international scientific collaboration on issues of global relevance. This ensures a solid basis from which to address complex challenges, and for providing scientific input into policy and decision-making processes.

The Committee for Science Planning (CSP) has supported and guided these initiatives over the three year period by providing strategic scientific advice, horizon scanning exercises and fulfilling the governance mandates to ISC's affiliated bodies. The accelerating pace of technological change, and compounding of crises facing humanity, means that the CSP (which comprises a broad spectrum of the ISC membership) has acted as a compass for guiding the scientific trajectory of the ISC.

#### 4.2. International scientific coordination

Over the reporting period, the ISC has co-sponsored 15 Affiliated Bodies together with other international organizations and UN agencies. These include international research programmes, scientific committees, expert networks, observing systems and data bodies. The Affiliated Bodies advance international, inter- and trans-disciplinary science in areas such as: global sustainability, climate change, inequality, disaster risk reduction, urban health and wellbeing, land, atmospheric, oceanic and space research, data science and science advice. Following the revision of the Statutes and Rules of Procedure adopted in 2024 the Affiliated Bodies are also Category 4 members of the ISC.

The Affiliated Bodies contribute directly to the delivery of the Council's strategic objectives through:

- facilitating and coordinating international research collaboration on issues of global concern
- mobilizing, sustaining and providing access to global scientific communities and communities of
- practice
- generating or providing access to data and observations in various scientific fields
- building capacity and training the next generation of scientists
- linking the broader ISC membership
- developing principles, policies and methodologies that set the standards in various fields and contribute to the evolution of the science system itself
- producing data, knowledge and/or expertise that underpin global policy processes.

The Council's responsibilities to each Affiliated Body differ depending on the agreement with cosponsors. In general, the Council provides:

- access to member organizations (across the breadth of social and natural sciences) and their expertise
- participation of scientists from the Global South
- credibility, relevance and legitimacy of the bodies through co-sponsorship, governance and review processes
- access to UN processes
- the possibility of fostering collaboration across the Affiliated Bodies
- increased visibility through the ISC network and communication mechanisms.

The 15 Affiliated Bodies co-sponsored in the 2022–2024 period are:

#### **Research programmes**

- Future Earth
- Integrated Research on Disaster Risk (IRDR)
- Global Research Programme on Inequality (GRIP)
- Urban Health & Well-being (UHWB)
- World Climate Research Programme (WCRP)

#### **Scientific committees**

- Committee on Space Research (COSPAR)
- Scientific Committee on Antarctic Research (SCAR)
- Scientific Committee on Oceanic Research (SCOR)
- Scientific Committee on Solar-Terrestrial Physics (SCOSTEP)

Frequencies for Radio Astronomy and Space Science (IUCAF)

#### **Data bodies**

- Committee on Data (CODATA)
- World Data System (WDS)

#### **Observing systems**

- Global Climate Observing System (GCOS)
- Global Ocean Observing System (GOOS)

#### **Networks**

• International Network for Government Science Advice (INGSA)

#### 4.3. The Centre for Science Futures

'Changing practices in science and science systems' was one of the five priority areas for the ISC in the 2022-2024, and its centrality to everything the ISC does was cemented with the establishment of the ISC Centre for Science Futures. Launched at the ISC Midterm Membership meeting in Paris in May 2023 with its founding partner, Sciences Po, the mandate of the Centre is to help ISC Members and the broader scientific community anticipate and adapt to the emerging trends that will shape the global scientific landscape.

With an expert Advisory Council and a team of Research Associates, the Centre explores emerging trends, conducts foresight studies and shares insights that help the science community stay resilient and relevant in the face of global challenges. Through this work, the Centre aims to make science more responsive to the world's needs, building bridges that will support impactful research and policy well into the future.

Some of the outputs of the Centre result from projects originally under Priority Area 4 'Changing Practices in Science and Science Systems' and are reported on below. The new work of the Centre is presented here.

Key outputs of the Centre for Science Futures are listed below, and discussed in more detail throughout this report.

- Looking at the Future of Transdisciplinary Research (April 2023)
- The Future of Research Evaluation: A Synthesis of Current Debates and Eevelopments (May 2023)
- The Contextualization Deficit: Reframing Trust in Science for Multilateral Policy (November 2023)
- Protecting Science in Times of Crisis (February 2024)
- Preparing National Research Ecosystems for AI: Strategies and progress in 2024 (2024)

#### 4.3.1. Al for Science

The Centre for Science Futures launched the AI for Science project in October 2023 to examine AI's impact on global science and research, focusing on diverse national research landscapes. Addressing policy-makers, research institutions, universities and consultants, the project provides a framework to support AI adoption, spotlighting challenges and offering insights from case studies, especially for small and medium-sized nations. Developed with expert consultations and regional workshops in Asia, the Pacific, and Latin America, the project's objectives are to (1) establish a knowledge baseline

on Al's effects on science, (2) support Al integration roadmaps, (3) build global networks for Al adaptation, and (4) stimulate science-policy discussions on Al's societal impact.

Experts from or nominated by Members played an active role in the project, with notable contributions from the Academy of Sciences Malaysia, Academy of Science in Mongolia, the Australian Academy of Science, the Colombian Academy of Exact, Physical and Natural Sciences and the Ministry of Higher Education, Research and Innovation (MOHERI) of Oman.

#### Main outcomes

The project centres on ensuring AI serves the public good, backed by policies that encourage its responsible and positive use. Through case studies and regional insights, the project has uncovered advanced AI readiness in some unexpected regions, while also drawing attention to how the digital divide impacts AI development, and how to address these gaps to fully leverage AI's potential.

The ISC's expertise in AI for science gained recognition through inclusion in two European Commission events focused on AI's role in scientific advancement. UNESCO invited the ISC to present in a plenary session on AI and Open Science, highlighting the Council's insights on integrating AI into research frameworks to enhance global scientific collaboration and accessibility.

The ISC has forged new partnerships, notably with the Latin American Initiative for Open Data (ILDA) in partnership for the workshop held at the GKD-LAC in Santiago, Chile, and in the media landscape, with Nature and University World News, enhancing the visibility and impact of its work on science systems futures.

#### Main outputs

- Preparing National Research Ecosystems for Al: Strategies and progress in 2024, a working
  paper offering a comprehensive analysis of the integration of artificial intelligence in science
  and research across various countries, aimed at science leaders, policy-makers, Al
  professionals, and academics.
- <u>Critical Issues for the Uptake of AI in Science</u>, a result of a review of over 300 publications on the integration of AI in national research ecosystems.
- Two workshops, one in <u>Kuala Lumpur</u>, <u>Malaysia</u> at the GKD-AP and one in <u>Santiago</u>, <u>Chile</u>, at the GKD-LAC.

#### **Partners**

- International Development Research Centre (IDRC) of Canada
- Academy of Sciences in Malaysia (ASM)
- Australian Academy of Science
- Colombian Academy of Exact, Physical and Natural Sciences (ACCEFYN)
- Ministry of Higher Education, Research and Innovation
- Latin American Initiative for Open Data (ILDA)

#### → About AI for science

#### Key news items

- 1. The ISC's Centre for Science Futures secures a million-dollar grant to explore the impacts of AI on science in the Global South
- 2. Report highlights strategies to accelerate AI in research
- 3. Shared concerns and aspirations around AI in Latin America and the Caribbean

#### 4.3.2. Science Fiction and the Future of Science

In 2023, in partnership with *Nature's* Working Scientist podcast, the Centre for Science Futures explored the role of science fiction in anticipating future developments in science and technology. The podcast included six episodes with a diverse group of science fiction authors, including Chen Quifan, Fernanda Trías, Vandana Singh, Karen Lord, and Kim Stanley Robinson.

Hosted by Paul Shrivastava, Professor of Management and Organizations at Penn State University, the podcast delved into the creative processes of these authors, uncovering what inspires them to envision realistic future scenarios. They examined how science fiction shapes the perspectives of scientists and policymakers, offering insights into the interplay between science and society.

The podcast encouraged scientists to consider imaginative, unconventional approaches to contemporary scientific challenges, showed how speculative fiction can illuminate complex issues such as climate change, food security, and ethics in technology, and promoted the integration of long-term foresight in policy development and the alignment of policy with societal values and future needs.

#### Main outcomes

The collaboration with *Nature's* Working Scientist podcast increased ISC's visibility within the science and literary communities, garnering 17,800 listeners on *Nature's* podcast, creating connections with influential science fiction writers and thinkers. This initiative underscored ISC's commitment to exploring the intersections of science and society, positioning it as a leader in innovative approaches to science policy and public engagement.

For ISC Members, the podcast series provided an engaging platform to explore new perspectives on the future of science. By inviting Members to participate in these thought-provoking discussions, the series fostered a shared vision and sense of purpose within the ISC community.

#### **Main Outputs**

- Six podcast episodes with Nature Working Scientist
- Six full-length episodes on ISC Presents

#### **Partners**

- Nature Journal
- Arthur C. Clarke Center for Human Imagination
- → About the podcast series

#### **Key News Items**

- New science fiction podcast launched
- Extended versions of the science fiction podcast episodes

#### 4.3.3. Science System Futures

In 2024, the Centre <u>received a grant</u> from the International Development Research Centre (IDRC) to investigate the impact of AI and emerging technologies on Science, Technology & Innovation organizations in the Global South. The three-year project will run until mid-2027.

Through this grant, and in collaboration with its member organizations in the Global South, the ISC will:

- Expand the number of country cases studies explored through the 'Al for Science' project
- Extend the ISC's work on Science Organizations in a Digital Age to a second phase, which seeks to build on these lessons and create support mechanisms tailored specifically to science organizations in low- and middle-income countries (LMICs). As part of this, ten ISC Members will engage in a four-month digital journey in 2025, guided by experts and supported by a community of peer changemakers. Their experiences will inform the recommendations and the support mechanisms the ISC will produce for the wider community.
- Explore the interface between publicly-funded and private sector science in the context of emerging technologies, also with a focus on building participation and networks in the Global South.

#### 4.4. Global Sustainability

#### 4.4.1. Science Missions for Sustainability and the Global Forum of Funders

The Science Missions for Sustainability initiative, which has been running since 2020, is pioneering an ambitious, mission-driven approach to address complex sustainability challenges. The new model for science proposed in the <u>Unleashing Science Report</u> (ISC 2021) and detailed in the <u>Flipping the Science Model Report</u> (ISC 2023) will be operationalized in 'pilot missions'. This will be a unique learning opportunity to fine-tune and demonstrate the benefits of transdisciplinary mission-oriented science. By fostering deep collaboration between scientists, policy-makers, funders, and communities, the initiative seeks to make scientific knowledge actionable, impactful and integrated into societal solutions.

#### Main outcomes

The Science Missions initiative is aligned with the UN Decade of Science for Sustainable Development, involving high-profile figures on the Global Commission and Oversight and Selection Committees. Through the call for pilot missions, the ISC expanded its engagement in fostering effective science-policy interface and reinforced its role as a central convenor for interdisciplinary scientific communities and global networks in sustainability research.

ISC Members and Affiliated Bodies played an active role in co-designing proposals for pilot missions. Members contributed through representation on the Selection and Oversight Committees and collaborated with regional academies, gaining visibility and fostering partnerships with global institutions across science, policy, and funding sectors. These efforts further embedded ISC Members in the global sustainability dialogue, enhancing their impact and collaboration with key stakeholders.

The 250 proposals received in response to an open call for pilot missions show the high level of interest and readiness within the science community to undertake ambitious work that can respond to the big questions of our time. At the time of writing in late 2024, the 23 shortlisted pilot projects are being reviewed with the intention to match donors with consortia. The first set of pilot missions will be announced at the General Assembly in 2025 in Muscat, Oman.

#### Main outputs

 Global Commission co-chaired by Irina Bokova, former Bulgarian Foreign Minister and Director General of UNESCO, and Helen Clark, former Prime Minister of New Zealand and previous administrator of the United Nations Development Programme.

- Oversight and Selection Committees chaired by Macharia Kamau, Ambassador and Special Envoy, with the UNESCO leadership; and Matthias Kaiser, Professor Emeritus, University of Bergen respectively.
- Report: A synthesis of Research Gaps (2021)
- Report: Flipping the Science Model: A Roadmap to Science Missions for Sustainability (2023)
- Report: A Model for Implementing Mission Science for Sustainability (2023)
- Report: Looking at the future of transdisciplinary research (2023)
- Global Webinar on UN TV: <u>Launch event at the United Nations high-Level Political Forum</u>,
   2023
- Declaration: The importance of mission-led science and transdisciplinary science was recognized in the OECD <u>Declaration on Transformative Science</u>, <u>Technology and Innovation</u> <u>Policies for a Sustainable and Inclusive Future</u>
- **High engagement:** More than 250 consortia across the globe submitted applications to be part of the Science Missions for Sustainability programme.

#### **Partners**

- Sida provided seed funding in 2022 and the US National Science Foundation supports the work of the Global Commission since 2023 through its support for ISC's sustainability science activities.
- → About Science Missions for Sustainability

## Key news items

- 1. The ISC's Science Missions for Sustainability: A roadmap for delivering the UN Pact for the Future
- 2. <u>Big mission science and large infrastructure projects take a systems-based approach. Can we do the same for sustainability science?</u>
- 3. New Technical Advisory Group to support the Global Commission on Science Missions for Sustainability

# 4.4.2. The Transformations to Sustainability (T2S) programme

The Transformations to Sustainability programme (2014–2022) addressed the social dimensions of climate change and sustainability. The programme was pioneering in giving social scientists a platform to design and lead integrated, international science for sustainability, in interdisciplinary and transdisciplinary formations. In 2023-2024 the programme was wrapping up and producing synthesis products, which were supported by the NSF grant for sustainability activities. The T2S programme had two overlapping phases. In the first (T2S 1), which ran from 2014 to mid-2019, the ISC managed a research funding programme financed almost entirely by the Swedish International Development Cooperation Agency (Sida). In the second (T2S 2), from mid-2018 to the end of 2022, the ISC, still with funding from Sida, was one of several funders of a multilateral funding programme which generated 11.5m EUR for social science research for sustainability.

#### Main outcomes

The T2S programme established social scientists as leaders in sustainability research, driving forward transdisciplinary methods that incorporate the knowledge of non-academic stakeholders and have a social framing of sustainability problems. It generated more than 400 publications and three cross-project special issues, as well as many non-academic products. A major learning study in 2024 highlighted the transformative potential of transdisciplinary approaches and the importance of funding for Global South leadership in advancing international sustainability science.

T2S projects had demonstrable influence on policy in many sectors at local, national and even international levels. The three reports produced in 2024 provide recommendations on structural and institutional adjustments necessary to support transformative research, emphasizing the need for policies that enable and sustain transdisciplinary and inclusive research approaches, especially in Global South contexts.

The ISC's leadership of the T2S programme reinforced its role in promoting innovative, integrated and inclusive approaches. The legacy of the Transformations to Sustainability Programme endures as the community continues to produce numerous spin-off projects and initiatives.

## Main outputs

- Report: <u>Transformative Labour: The Hidden (and Not-So-Hidden) Work of Transformations to Sustainability. Integrative Insights from Three Transformative Knowledge Networks</u>
- Report: Social Transformations to Sustainability through a Critical Lens: Integrative insights
  from twelve research projects funded under the Transformations to Sustainability research
  programme
- Report: <u>Programme Design for Transformations to Sustainability Research: A Comparative Analysis of the Design of Two Research Programmes on Transformations to Sustainability</u>
- Special issue of Current Opinion in Environmental Sustainability
- Video series celebrating the T2S projects:
  - o Understanding transformations to sustainability (Summary film)
  - o <u>The transformative potential of localized land-registration in conflict-affected areas</u>
  - o The potential of intellectual property regimes to accelerate sustainability transitions
  - o Collectively imagining the future a key to governance for social transformations
  - Convivial Conservation: A transformative, whole-Earth approach to environmental conservation
  - o Local initiatives resisting powerful forces of change in the Amazon
  - o Transforming a destructive industry into a sustainable economic and human activity
- Final Evaluation Report

## **Partners**

- Belmont Forum
- NORFACE Network
- Swedish International Development Cooperation Agency (Sida)
- → About Transformations to Sustainability
- → Transformations to Sustainability website

#### **Key news items**

- 1. What we learned about social transformations to sustainability from a decade of transdisciplinary research
- 2. <u>Pivot and Leap: The urgent need to integrate research, policy and practice for transformations to sustainability</u>
- 3. Agents of change: Spotlight on place-based sustainability initiatives in the Amazon
- 4. The transformative potential of managed retreat in the face of rising sea levels

# 4.4.3. Leading Integrated Research for Agenda 2030 in Africa (LIRA 2030)

The LIRA programme was launched in January 2016 immediately after the adoption of the 2030 Agenda. LIRA focused on building the capacity of the next generation of African scientists to rethink urban futures on the continent in collaboration with local authorities, communities, government and industry. The programme supported 28 collaborative research projects in 22 African countries: Angola, Benin, Burkina Faso, Cameroon, Côte d'Ivoire, Democratic Republic of Congo, Ethiopia, Ghana, Kenya, Malawi, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, South Africa, Tanzania, Togo, Uganda, Zambia and Zimbabwe.

The programme made strides in fostering transdisciplinary research to address urban sustainability challenges across African cities. Over six years, it built a community of early-career African researchers who collaborated with local communities, policy makers, and diverse stakeholders to tackle SDG-related issues at a local level. The programme generated extensive knowledge, including over 70 academic articles and policy briefs, practical tools, and impactful media outputs, while also building strong partnerships that bridged science and society. The success of LIRA has led to plans for a new Africa-led phase to further support sustainable urban development through this powerful, context-specific approach.

Research finished in 2021. During this reporting period the LIRA programme was synthesizing learning and producing final reports.

#### Main outcomes

LIRA 2030 generated new, context-specific knowledge on sustainable urban development in African cities, publishing over 70 academic articles and creating critical policy-relevant insights into urban processes. The programme's transdisciplinary approach integrated scientific research with community-based action, producing valuable data on issues such as water security, informal housing, and air quality that directly address local and global sustainability challenges.

LIRA 2030 enabled collaborations that influenced policies on sustainable urbanization, health, and environment across multiple African nations. The programme's outputs included over 20 policy briefs, which helped bridge science-policy divides, enabling evidence-based policymaking in cities across Africa, including key contributions to air quality legislation in Kenya.

The ISC reinforced its role as a leading facilitator of sustainability science by driving the first large-scale African-led research programme aimed at achieving the SDGs. The programme exemplified ISC's commitment to equitable science leadership, with strong partnerships across African institutions and a shift in knowledge production from the Global North to Africa.

LIRA 2030 fostered deeper engagement for ISC members by supporting capacity-building and leadership opportunities for early-career African researchers, establishing a resilient network of scientists and stakeholders in sustainability research. The programme's collaborative model strengthened ties among regional academies, local authorities, and community organizations, enhancing Members' influence in the global sustainability agenda.

## Main outputs

- Report: LIRA 2030 Africa: Learning from Practicing Transdisciplinary Research for Sustainable Development in African Cities
- Report: LIRA 2030 Africa: Key achievements and learnings
- Report: Final Evaluation Report: LIRA 2030 Africa
- Event: LIRA webinars: Advancing the 2030 Agenda in African cities

#### **Partners**

Network of African Science Academies (NASAC) Swedish International Development Cooperation Agency (Sida)

# → About LIRA2030

# 4.4.4. Human Development, Inequality and Social Cohesion (ISC-UNDP Partnership)

The ISC and the UN Development Programme (UNDP) partnered on the project Rethinking Human Development from 2020 to 2023 aiming at a critical review and re-articulation of the human development paradigm. This partnership brought the insights of the global scientific community to the vital discussion on human development to feed in fresh perspectives and advances from various disciplines into this ongoing dialogue. Phase I of the project in 2020 focused on bringing varied insights to the conceptual understanding of human development. Building on this success, Phase II of the project in 2022-23 involved a similar consultation on metrics to measure human development and how to move toward experimental indices to reflect present and emerging dimensions of human development.

For this second phase, insights were gathered from experts representing a range of backgrounds into the options for enhancing multi-dimensional well-being measurement with regard to measuring human development. The targeted list included individual experts from the field that have been active in the debates surrounding the HDI, experts from organisations that have been working on multi-dimensional wellbeing indices, representatives of disciplinary associations and scientific programmes that work on related subjects (such as poverty, inequality, participatory research, data issues, sustainability, transdisciplinary science etc.) policy advisors and development practitioners. This was done through an online questionnaire and in-depth interviews.

The outcomes of these consultations were summarized in a working paper and discussed in an online workshop on 16 March 2023. This consultative workshop included an ISC expert group and the UNDP Human Development Report Office to ascertain strategic and clearly defined options to feed into the UNDP HDROs efforts to fashion a reinvigorated Human Development Index and/or complimentary measures

As a follow up to this work, a thematic workshop on 'Addressing affective polarization and protecting social cohesion in the face of rapid technological change' was hosted at the ISC Headquarters and organised in partnership with UNDP and the Koi Tū: the Centre for Informed Futures in November 2023. The workshop included 15 interdisciplinary scientists working at the science-policy interface The primary goal of the workshop was to review where we are in our collective thinking and whether there is active research and analysis to draw on to answer currently relevant questions such as 'how do we define social cohesion, social resilience and affective polarization?', 'how are these evolving in different contexts?', 'what are driving these?' and 'what ideas do we have for interventions to mitigate affective polarization and promote social cohesion?'

This workshop and the work preceding it highlighted the need for a collaborative research programme on inequality a key theme of development. An ISC Governing Board Working Group was therefore formed to report on the current research landscape relating to poverty and inequality, including the global experts and initiatives; and provide a recommendation to the Governing Board on needs and opportunities for an ISC Affiliated Body or other international coordinating initiative in this domain. The outcomes of the Working Group's deliberations will be presented at the end of 2024.

#### Main outcomes

The ISC has demonstrated the value of drawing on its diverse and global network of experts to weigh in on and enrich key concepts and debates in sustainable development through this partnership. The substantive contributions resulting from the consultative processes under various streams of the partnership with UNDP have been highly appreciated. As a result, ISC was invited to contribute to UNDP's work on the Future of Development and organized expert roundtables to provide feedback into the first and second UNDP Signals Spotlight reports in 2023 and 2024. The ISC network is also feeding into the UNDP's foundational Landscape Paper which will describe the global landscape of development over the next 4 years and beyond.

The work carried out under this partnership has also provided a basis for development of the Council's upcoming work in the area of inequality.

# Main outputs:

- Online expert workshop and background paper on Rethinking Human Development measurement
- **Workshop** on Addressing affective polarization and protecting social cohesion in the face of rapid technological change' with a targeted group of experts to review research in this area and propose a high-level outline of a research and analysis road map
- Consultative expert roundtables for the UNDP's Signal Spotlight reports in 2023 and 2024

## **Partners:**

UNDP

# 4.5. Converging Science and Technology in a Digital Era

# 4.5.1. Coalition for Digital Environmental Sustainability (CODES)

Founded in 2021, the <u>Coalition for Digital Environmental Sustainability</u> (CODES) is a global, multi-stakeholder coalition mandated by the UN Secretary-General to foster a sustainability-driven digital transformation. In close collaboration with the UN Office of the Secretary-General's Envoy on Technology, CODES is a member-based alliance that provides key resources and opportunities for global contributors to set priorities, take concerted action, and develop their capacities for an inclusive, sustainability-driven digital transformation.

Supported by founding co-champions such as the ISC, UNEP, UNDP, Future Earth, the German Environmental Agency, and Kenya's Ministry of Environment and Forests, CODES serves as a global hub for policy-makers, academics, technology companies, and NGOs working at the intersection of environment and digitalization. CODES has grown into a community of over a 2000 stakeholders working together towards a vision and set of priorities and priority initiatives.

Through co-developed resources like the CODES Action Plan and the Global Digital Compact, and active participation in global discussions—from Stockholm +50 to the Summit of the Future—CODES advances the agenda for sustainable digital transformation. Now in a collective action phase, CODES is mobilizing global support for nine impact initiatives, aiming to align stakeholders, reduce digitalization's environmental footprint, and drive innovation in digital tools to meet the Sustainable Development Goals (SDGs).

#### Main outcomes

As a global agenda-setter CODES has aimed to bring digital environmental sustainability to most relevant global policy discourses, mostly via CODES-initiated and organized high-level side events, often with CODES co-champions as speakers. This has led to ISC presence and visibility in high-level fora of global sustainability, environment and digital discourses, e.g. SDG Digital Day, SDG Summit, UN Environment Assembly -5 and 6, UNFCCC COP 28, IGF 2022, the High-level Debate of the UN General Assembly on Greening Digital Cooperation and Connectivity 2021 among others. In the global policy process, CODES aims to strengthen digital environmental sustainability along all three Shifts in the GDC. CODES was engaged from the beginning of the GDC process and had a regular speaker in almost all stakeholder consultations as group with two written submissions to GDC and further submissions to side-processes like the Al Advisory Body. There are explicit mention of CODES as an exemplary initiative in the UNSG Policy Brief proposing the development of a Global Digital Compact. CODES messaging on digital sustainability, co-developed in consultation with the CODES membership, is well reflected within the final version of the Global Digital Compact.

CODES hosts a rich ecosystem of knowledge and networks that is advancing digital sustainability globally. As digital sustainability becomes a priority for UN Member States, who have now signed on to the Global Digital Compact, they can leverage the resources and expertise at hand to inform and support new partnerships and collaborations to steer digital technologies towards sustainability.

The nine priority initiatives under CODES defined in the action plan are now underway with consortia of organisations working on a range of themes from data for environmental assessments to Digital Public Infrastructure

## Main outputs

- Action plan: Action Plan for Sustainability in the Digital Age
- **CODES Messaging** in the <u>Global Digital Compact</u>
- Website: codes.global
- **Event**: A series of <u>stakeholder roundtable consultations</u> between 2020 and 2022 to develop, finalise and socialise the CODES Action Plan
- Launch of the CODES Action Plan at Stockholm +50 in June 2022
- <u>Digital Environmental Sustainability and AI for the Global Digital Compact</u> at the UN Summit of the Future 2024
- Event: Recap of CODES' Engagements during the UN High-Level Week in New York City 2023

### **Partners**

- Future Earth
- German Environmental Agency
- Sustainability in a Digital Age
- ITU
- Ministry of Environment and Forests, Kenya
- UNDP
- UNEP
- → About CODES

# 4.5.2. WorldFAIR: making data work for cross-domain grand challenges

The WorldFAIR project, launched in 2021, is led by the ISC's Affiliated Body, CODATA and is jointly funded by the ISC and the European Commission. It aims to advance the FAIR (Findable, Accessible, Interoperable, and Reusable) principles across diverse research domains to improve data interoperability and foster cross-domain research on global challenges. Through 11 case studies spanning disciplines like chemistry, disaster risk reduction, and agricultural biodiversity, WorldFAIR has developed the Cross-Domain Interoperability Framework (CDIF) and issued policy recommendations for sustainable data management.

#### Main outcomes:

WorldFAIR deepened interdisciplinary research by creating frameworks for more effective data sharing, enabling faster progress on complex global challenges. The project's policy recommendations and CDIF have informed global standards on FAIR data, strengthening the foundation for evidence-based policy on sustainable development. WorldFAIR enhances the ISC's role, through CODATA, in leading international data-sharing initiatives, demonstrating the Council's capacity to support complex, multi-stakeholder projects with broad scientific impact. ISC Members benefit from participation in pioneering research on data standards, contributing to global initiatives and building expertise in FAIR data practices.

Building on the achievements of WorldFAIR, the follow-up WorldFAIR+ project will expand FAIR data practices through a collaborative federation of projects, each focused on practical, domain-specific FAIR data solutions. With CODATA at the helm and support from the ISC and the European Commission, WorldFAIR+ will drive initiatives like the "FAIR Data and Emergencies" project, focusing on earthquake and cascading hazards response data, and climate adaptation projects covering urban heat, coastal management, and agricultural resilience. WorldFAIR+ promises to deepen crossdomain data interoperability, further enabling scientists, policy-makers, and communities to tackle complex challenges such as climate change and public health risks with actionable data insights.

# Main outputs

- Case Studies: <u>Case studies</u> representing a wide range of sciences, communities and challenges highlighted the importance of effective data sharing in tackling global problems. Cases included Chemistry, Nanomaterials, Geochemistry, Social Surveys, Population health, Urban Health, Biodiversity, Agricultural biodiversity, Ocean science, Disaster Risk Reduction and Cultural Heritage sciences.
- Standardization tools: FAIR Implementation Profiles (FIPs) for each case study
- Framework: <u>Cross-Domain Interoperability Framework</u> (CDIF), which supports machine-actionable data sharing across scientific domains.
- Workshop: The WorldFair Project's cross-domain interoperability framework
- Report: WorldFAIR Training Package: FAIR Chemistry Cookbook
- Report: <u>Disaster Risk Reduction Case study report</u>
- Policy Brief: WorldFAIR Project First policy brief
- Webinar series: The WorldFair webinar series

#### **Partners**

- European Commission
- Data Science Without Borders
- International Union for Pure and Applied Chemistry
- UNDRR
- WMO
- ICoE Taipei

# → About WorldFAIR

#### **Key news items**

- 1. WorldFAIR: Global cooperation on FAIR data policy and practice Kick-Off Meeting introduces major new initiative to advance implementation of the FAIR data principles
- 2. From siloed data to shared knowledge: How WorldFAIR is shaping the future of research
- 3. WorldFAIR: Continuing to transform data to tackle complex challenges in a follow-up project

# 4.5.3. Science organizations in the digital age

Recognizing the transformational impact of digital technologies and the urgent need to adapt, the ISC embarked on a digital journey in 2022-2023 to better understand how science organizations can stay relevant in the digital age, navigate the constantly evolving landscape, and take advantage of emerging technologies. Through a series of interviews, surveys, workshops and discussions, the Secretariat collected learning from across the ISC Membership and consolidated them in a set of practical guidelines, published as a discussion paper in 2024.

44 Members responded to the survey, with several engaging in a post-survey in-depth interviews. Those participating in in-depth interviews included the Royal Society (UK), Global Young Academy (GYA), International Union of Pure and Applied Chemistry (IUPAC), World Anthropological Union (WAU), Organization for Women in Science for the Developing World (OWSD), the Nigerian Academy of Science, Scientific Committee on Oceanic Research (SCOR).

Phase II of the project seeks to build on these lessons and create support mechanisms tailored specifically to science organizations in low- and middle-income countries (LMICs).

As part of it, ten ISC Members will engage in a four-month digital journey in 2025, guided by experts and supported by a community of peer changemakers. Their experiences will inform the recommendations and the support mechanisms the ISC will produce for the wider community.

Phase II is funded through a grant from the Canadian International Development Research Centre (IDRC) to the ISC's Centre for Science Futures.

#### Main outcomes

The first phase of the project has created a valuable understanding of the digital landscape across the global scientific community, highlighting a range of insights and challenges faced by ISC Members.

Phase II will build on this knowledge, captured and synthesized in a discussion paper, to provide tailored support for science organizations in low- and middle-income countries (LMICs). By applying these insights, Phase II aims to equip these organizations with the expertise and peer connections essential for effective digital adaptation, while also developing foundational resources to guide other science organizations considering digital transformation.

### Main outputs

- Discussion paper, <u>Science organizations in the digital age (2024)</u>, synthesizing the findings from the survey and sharing case studies from detailed interviews by ISC Members.
- Knowledge sharing session: <u>Converging Science and Technology in a Digital Era an overview of ISC data-related activities</u>

- Knowledge sharing session: <u>Practical Deep-Dive on ChatGPT</u>
- Survey of Members
- → About Science organizations in the digital age

Evaluating Rapidly Developing Technologies Including AI, Large Language Models and Beyond In April 2024, as the global community gathered for the OECD Ministerial-level meeting on Science and Technology Policy, the ISC launched "A Guide for Policy-makers: Evaluating Rapidly Developing Technologies Including AI, Large Language Models and Beyond." This essential resource provides policy-makers with a structured framework to navigate the complex landscape of emerging technologies, bridging high-level principles with actionable guidance. The guide presents a validated taxonomy of issues, supporting the creation of national AI strategies that address not only immediate risks but also long-term societal, environmental, and geopolitical impacts. The framework is adaptable for horizon scanning, risk assessment, and ethical considerations, helping align technological advancement with societal values and regulatory requirements. As ISC President Peter Gluckman and other leaders emphasized at the meeting, this guide equips decision-makers to approach innovation responsibly, fostering collaboration across governments, industry, and civil society to shape a sustainable, value-driven future in technology.

**Report:** A guide for policy-makers: Evaluating rapidly developing technologies including AI, large language models and beyond

Key news item: Unlocking the future

# 4.6. Science in Policy and Public Discourse

#### 4.6.1. Public value of science

The Public Value of Science project, begun in 2020, promoted awareness of science as a global public good, focusing on policy-makers and the public. It addressed challenges to public trust in science in a polarized information landscape, where misinformation can drive harmful decision-making and science denialism. The project encompasses three key areas: "Understanding Scientific Engagement," which examined how perceptions of science shape policy; "Enabling Scientific Engagement," aimed at strengthening the role of scientific evidence in decision-making; and "Extending Scientific Engagement," involving projects like Unlocking Science and Global Science TV (completed 2021) to communicate science's value broadly. An expert panel provided strategic guidance to deepen the project's impact and the project's final report was launched under the Centre for Science Futures.

#### **Main outcomes**

The *Public Value of Science* project significantly bolstered science's position as a global public good, encouraging scientists, as well as journalists, to communicate the broader societal relevance of scientific evidence in policymaking. Through initiatives like *Unlocking Science*, scientists gained practical tools to convey complex ideas effectively to a wide audience. The project also introduced the *Contextualization Deficit* model, emphasizing the need to address diverse perspectives and socio-economic contexts to build trust in science, thereby ensuring that scientific engagement resonates with different communities.

The project promoted evidence-based policymaking by linking scientific insights with policy needs, especially in countering misinformation and fostering public trust. The *Contextualization Deficit* 

framework provided policy-makers with a nuanced approach to scientific communication, enabling them to better align policy initiatives with public expectations.

The ISC's role was strengthened as an advocate for science in the public sphere, showcasing its commitment to fostering trust in evidence-based decision-making. Through partnerships with media platforms like BBC StoryWorks on *Unlocking Science*, the ISC highlighted Members' research in addressing societal challenges. These initiatives can be leveraged for future partnerships, reinforcing its position as a leader in promoting science's value globally.

Through the ISC's efforts, Members were positioned to contribute their insights to international discussions, inviting policy-makers and the various publics to invite Members to contribute their insights in broader public and policy dialogues on global challenges.

The Public Value of Science Project was completed in mid-2024, however the ISC will continue to explore the issue of Trust in Science in a new project. A workshop, Rebuilding trust in science:

Challenges and responsibilities in a polarized world, was held in Ispra, Italy in September 2024 and the ISC is exploring a future partnership with the World Intellectual Property Organization (WIPO). The ISC also contributed to the statement on Trust in Science by the United Nations Secretary-General's Scientific Advisory Board (see section on Global Policy).

#### Main outputs

- Interactive website: The final stories on <u>Unlocking Science</u> were launched on the interactive website in 2022. Overall the campaign included seven stories from the ISC (six from ISC Members and one from the ISC on COVID outcomes).
- Award: In 2023 the Unlocking Science campaign was awarded the best in the 'Video Series' category at the prestigious <u>Digital Communications Awards</u> (DCA).
- Podcast: The podcast, <u>How do we talk about science and trust?</u> was launched on the Council's podcast channel as a result of Unlocking Science.
- Report: Public perceptions and understandings of science
- Report: The Contextualization Deficit: Reframing Trust in Science for Multilateral Policy led by the Centre for Science Futures and in partnership with the UNESCO Unitwin Chair in Science Communication for the Public Good and the Australian National University.
- **Webinar:** The Council acted as an official partner to the Science Journalism Forum (SJF) in October 2023, hosting a session to discuss trust in science and the role of science journalism, <u>Reframing Trust in Science: What Are the Lessons for Science Journalism?</u> in an age of mis- and disinformation.
- **Webinar:** Berlin Science Week, <u>Unlocking Science: Prioritizing Institutional Responses to the</u>
  Distrust in Science.
- **Webinar Series:** The objective of the <u>Talk Back Better</u> series was to use a mix of discursive analysis and practical tips to help research organizations explore the capacities that would serve them best when communicating in the current global context.
- High-Level Round Table: The ISC joined UNESCO on the World Science Day for Peace and
   <u>Development</u> as part of its high-level round table on <u>Building Trust in Science</u>. <u>See the recording</u>.
- **Workshop:** Twenty journalists from Asia and the Pacific took part in <u>a two-day training</u> course on disaster and risk reporting at the World News Congress in Taipei.

# **Partners**

- Australian Academy of Science
- Australian National University
- BBC Storyworks

- Global Development Network
- IRDR International Centre of Excellence Taipei
- Regional Focal Point for Asia and the Pacific
- Science Journalism Forum
- Science Media Centre, New Zealand
- UNESCO
- UNESCO Unitwin Chair in Science Communication for the Public Good
- Wikimedia Foundation

### **Member Partners (Unlocking Science)**

- Academy of the Social Sciences in Australia
- Global Young Academy
- International Astronomical Union, IAU and the Office for Astronomy for Development
- International Union for Physical and Engineering Sciences in Medicine, IUPESM
- Organization of Women Scientists in the Developing World, OWSD
- Transformations to Sustainability (TAPESTRY project)

### **Key news items**

- 1. The Contextualization Deficit: Reframing Trust in Science for Multilateral Policy
- 2. <u>Preparing for Crisis X: Can newsrooms and the scientific community overcome sceptical publics?</u>
- 3. Reframing Trust in Science for Multilateral Policy
- → About Public Value of Science
- → <u>About Unlocking Science</u> (for UK visitors, please go to <u>the mirror version</u>)

# 4.6.2. COVID-19 and implications for national and global policy

The COVID-19 Scenarios Project, initiated by the ISC in February 2021, aimed to offer evidence-based scenarios and insights to navigate the pandemic's long-term trajectory toward a fair and effective resolution. Led by an interdisciplinary oversight group with observers from WHO and UNDRR, the project provided global policy-makers and public health authorities with the *Unprecedented & Unfinished* report, released in May 2022. This report presented plausible scenarios and strategic guidance for addressing both immediate and long-term impacts of the pandemic, advocating a systems-based approach to enhance preparedness and resilience for future global health crises. A second edition was released in 2023 to update the report for policy-makers due to the ever-changing scenarios the pandemic presented.

#### Main outcomes

The COVID-19 Scenarios Project produced a comprehensive analysis of potential pandemic outcomes, integrating perspectives from multiple scientific disciplines. It expanded the discussion on pandemic management beyond public health to include social, economic, and governance considerations, emphasizing the need for a systems approach.

The *Unprecedented & Unfinished* reports offered guidance to policy-makers, aiming to help them navigate the pandemic's long-term impacts. The scenario-based approach aimed to allow governments to plan for future crises, with a focus on building resilient health systems and ensuring vaccine equity.

The project reinforced the ISC's leadership in providing interdisciplinary science advice on complex global crises, and led to the signing of a <u>Memorandum of Understanding</u> with the World Health

Organization in October 2022. The COVID-19 Scenarios Project demonstrated the ISC's capacity to convene global expertise and provide practical insights able to inform national and international policy-making.

ISC Members were actively engaged through regional workshops and consultations, ensuring that the project reflected diverse perspectives and regional challenges. The input from ISC Members was instrumental in shaping the final reports and recommendations.

## Main outputs

- First Edition of the Report: Launched on 17 May 2022 in Geneva via UN TV to a global audience, <u>Unprecedented & Unfinished: COVID-19 and Implications for National and Global Policy</u> outlined plausible scenarios for the pandemic and offered policy-makers tools for managing the pandemic's long-term effects. The report, which had included regional meetings to gather input from ISC Members and stakeholders, emphasized the need for global cooperation and systems thinking to address both the immediate and future challenges posed by the pandemic.
- High-Level meeting: Immediately following the launch, an ISC delegation held a spontaneous meeting with WHO Director-General Tedros Adhanom Ghebreyesus who had been monitoring the live launch. It was from this interaction that an MOU would follow between the two organizations.
- Webinar series: The <u>COVID-19 and the Social Sciences</u> webinar series, hosted by Craig
  Calhoun and in partnership with five ISC Members, explored the impact of the social
  sciences on the pandemic and the impact of the pandemic on the social sciences, covering
  Economics, Psychology, Sociology, Political Science, Anthropology, and Statistics.
- Webinar: The Rolling the dice or planning ahead with confidence? webinar was presented at the 2022 edition of the EuroScience Open Forum (ESOF). Speakers from the project's Oversight Panel discussed realistic, pessimistic, and optimistic scenarios for the pandemic's future.
- Unlocking Science: Released in late 2021, <u>The 'Clocks' COVID-19 Set Ticking</u> explored the key themes from the COVID-19 Scenarios Project, highlighting the long-term societal impacts of the pandemic.
- Second Edition of the Report: Released twelve months later, the second edition of
   <u>Unprecedented & Unfinished</u> updated the scenarios based on the evolving global situation.
   It highlighted the ongoing societal impacts of the pandemic and recommended actions for better preparedness for future crises, such as pandemics and climate-related disasters.

# **Partners**

- World Health Organization (WHO)
- UN Office for Disaster Risk Reduction (UNDRR)
- International Political Science Association
- International Sociological Association
- International Statistical Union
- International Union of Psychological Science
- World Anthropological Union

#### **Key news items**

- COVID-19 likely to worsen inequalities for at least five years without renewed global cooperation, warns International Science Council
- Covid-19 is fueling a pandemic of violence against women and girls
- → About the COVID-19 and implications for national and global policy

# 4.6.3. The Ethnografilm Festival

The ISC is a long-standing partner of the Ethnografilm festival, and helps to support its organization in Paris every year. The festival celebrates the art of non-fiction film-making and the field of video ethnography as a way of understanding the social world. It gives equal attention to all genres of academic and documentary filmmaking, and many of the films are filmed by active researchers and students.

## Key news items

- 2022: Profoundly entertaining: Ethnografilm festival returns to Paris
- 2023: <u>Scientific communication</u>: <u>Join the Ethnografilm festival for a filmmaking experience in Paris</u>
- 2024: Lights, camera, science: Ethnografilm Festival kicks off in Paris

# 4.7 Changing Practices in Science and Science Systems

# 4.7.1. Future of Scientific Publishing

The ISC has been leading an ongoing effort since 2020 to reform the scientific publishing system to support the vision of science as a global public good – accessible to all and beneficial to everyone, everywhere. To achieve this, publishing must meet two essential responsibilities: fostering global inclusivity to ensure diverse perspectives are heard and enabling the free, rapid, and open circulation of ideas, evidence, and data.

The current publishing system falls short of these ideals, prompting ISC Members at the 2021 General Assembly to endorse eight guiding principles for reform (see Resolution Two of the 2021 ISC General Assembly). These principles emphasize open access for authors and readers, concurrent publication of data, and maintaining governance of scientific information dissemination within the scientific community.

Aimed at ISC Members and key stakeholders in the science ecosystem, including funders, universities, researchers, and publishers, the project seeks to build a coalition to drive transformative change in line with the ISC's principles, making scientific publishing more inclusive, efficient, and accessible for all.

## Main outcomes:

Through this project, ISC has provided a platform for discussion for the scientific community on a complex topic. The eight principles on scientific publishing adopted by the ISC membership provide a solid foundation for building partnerships on shared goals.

The Council has now established itself as a global convenor and a voice to improve scientific publishing in a debate fractured by varied disciplinary and regional priorities.

ISC members have been engaged throughout, from adopting the eight principles to participating in the steering group, workshops and roundtables. For example, In 2022, the ISC launched a series of online knowledge-sharing events for ISC Members and Affiliated Bodies on open science and scientific publishing.

The ISC publications in this area provide a resource for the campaign for the reform on scientific publishing where there is a need for a global voice representing the science community. The shaping of this emerging paradigm of open science, including in publishing, has largely been achieved through decades of work by the national academies, international scientific unions and associations, and related bodies that are represented in the membership of the ISC with support from national and regional funders in recent years. ISC continues to argue for the science community to be represented in the evolving governance of open science and publication.

# Main outputs

- Principles: In 2021 Members of the International Science Council (ISC) committed to work towards reform of the publishing system, and adopted <u>eight fundamental principles</u> to guide it
- Knowledge-sharing: In 2022, the ISC launched a series of online knowledge-sharing events
  for ISC Members and Affiliated Bodies on open science and scientific publishing (<u>The</u>
  <u>transition to Open Access in scholarly publishing: the landscape for society publishers; The</u>
  <u>UNESCO Open Science Recommendation</u>).
- **Reports:** In 2023, the ISC released <u>The Key Principles for Scientific Publishing</u>, complemented by a second paper <u>The Case for Reform of Scientific Publishing</u>, which evaluates the extent to which the principles are attained and identifies opportunities for reform. Both papers were open to feedback from the ISC membership.
- The normalization of preprints This ISC Occasional Paper released in conjunction with the campaign to normalise pre-prints in 2022, addresses the history of the preprint, its advantages and potential disadvantages, and concludes with some recommendations for how the growing acceptance of preprint posting should be handled within academia, and the changes in cultural norms that this entails.
- <u>Strengthening research integrity: the role and responsibilities of publishing</u> This paper published in 2021, designed to spur discussion, suggests that focusing on two modest reforms while pursuing a more significant reform of scientific publishing would be beneficial.
- Network building: The Council has been deeply involved international and regional networks
  through supporting various interlinked efforts. ISC's <u>normalising preprints campaign</u> engaged
  with regional discussions in <u>Asia</u>, the <u>MENA</u> region participated in the setting up of the <u>APEC</u>
  Open Science Alliance.
- The monthly ISC Open Science Round-up has also built an engaged community that shares regular updates.
- → About The Future of Scientific Publishing

# 4.7.2. Evaluating science as a global public good

Over the course of 2022 to 2024 the ISC, in partnership with the Global Young Academy and the InterAcademy Partnership, addressed the critical need for reform in research evaluation systems. An international Scoping Group surveyed practices and issues in all major regions of the world. The resulting joint report *The Future of Research Evaluation* (May 2023) reviews research evaluation systems and cultures and discusses case studies from around the world. The goal of the report was to contribute to the ongoing debates and open questions on the future of research evaluation. Recommendations support a shift away from narrow metrics, fostering policies that recognize science's role in sustainable development and its value to society, especially through frameworks sensitive to regional needs and research environments.

Following this report, the partners in the initiative launched a follow-up survey of ISC, IAP and GYA members. The survey report highlights that the ISC and partner organizations can support

researcher evaluation reform by championing underrepresented voices, helping to put reform on the agenda, backing initiatives that have reached a tipping point, safeguarding researcher mobility within the global system, and encouraging the exchange of ideas and learning.

#### Main outcomes

The two reports provide a good basis to develop strategies for change by summarizing the current debates and efforts. This work will be continued intertwined with the work on the future of scientific publishing, given the existing feedback loops between publication and researcher assessment.

# Main outputs

- **Report:** ISC's Centre for Science Futures published a comprehensive report, "The future of research evaluation: A synthesis of current debates and developments" (May 2023).
- Report: Reflecting the practices and aspirations of science organizations, this report lays the
  groundwork for future actions. <u>Snapshots of reform: Researcher evaluation within science
  organizations</u> (May 2024).
- **Webinars:** Members from all organizations were invited to discuss the reports' findings in a series of <u>webinars</u>.

#### **Partners**

- Global Young Academy
- InterAcademy Partnership
- → About Evaluating science as a global public good

### 5. FREEDOM AND RESPONSIBILITY IN SCIENCE

Serving as chair for the Committee of Freedom and Responsibility in Science (CFRS) since 2022, I have been privileged to be a part of the important impact that our committee has made. While scientific freedoms continue to decline worldwide, particularly due to the deeply worrying increase of conflicts and social inequalities, climate change and the enduring impacts of the COVID-19 pandemic, CFRS has worked hard to raise awareness of these issues and mobilize the scientific community support threatened scientists and science systems.

CFRS has been instrumental in mobilizing assistance for displaced and at-risk scientists from Afghanistan, Ukraine, Sudan, and Palestine through the Science in Time of Crisis project, and has led outreach workshops and published articles and podcasts which have raised awareness of the importance of the free and responsible practice of science. CFRS has also, in my view, embodied the mission of the ISC of being a leading voice for science by truly advancing challenging normative frameworks which form the intersection between science and human rights, namely by updating the Principles of Freedom and Responsibility in Science (which are enshrined in the ISC's Statutes) and, most recently, by publishing the ISC's interpretation of 'the right to participate in and benefit from science'.

It was an honour to chair such a dedicated, passionate, and deeply knowledgeable committee, and I look forward to following CFRS as it continues to grow in influence and guide the scientific community through the challenges ahead.

Anne Husebekk, Vice-President for Freedom and Responsibility in Science

# 5.1 Introduction

The ISC's work on freedom and responsibility in science incorporates the work of the Committee for Freedom and Responsibility in Science (CFRS) as well as a portfolio of projects and events concerned with the free and responsible practice of science.

CFRS works at the intersection of science and human rights to protect and uphold the <u>ISC's Principles</u> of <u>Freedom and Responsibility in Science</u>, which lay out the freedoms that scientists should enjoy and the responsibilities they carry when engaging in scientific practice, and which the ISC holds as fundamental to scientific advancement and for human and environmental well-being.

CFRS acts as a guardian of these principles and engages in a diverse work portfolio aimed at promoting and upholding them. The Committee follows around 35 cases in which the free and responsible practice of science is threatened, ranging in focus from individual scientists to national-level events and broad trends. These cases are actively monitored and responded to. Responses aim to exert the ISC's influence, raise awareness, and provide direct support where possible, and include published statements and positions on behalf of the ISC, blogs, advocacy campaigns, and private letters. The target audience of CFRS activities is broad and typically includes members of the global scientific, higher education, human rights, diplomacy, and policy communities, as well as heads of state. Additionally, CFRS is involved in a number of ISC projects related to freedom and responsibility in science, such as the programme on Science in Time of Crisis, Science in Exile, and on gender equality and discrimination in science.

The CFRS' work and advocacy has significantly contributed to raising awareness of current threats against the free and responsible practice of science among the global science community and policy-makers alike. The ISC and its partners has run prominent advocacy campaigns to offer guidance and thought leadership on numerous critical issues, including statements on national-level crises in Afghanistan, Iran, Nicaragua and Sudan, and on issues such as boycotts, campus protests, and academy autonomy. The key outcome of this advocacy work has been a major boost to the international profile and standing of the Committee as a leader in this space, and a sustained increase in the Committee's published outputs and event invitations.

The Committee meets several times per year to review the CFRS portfolio, to discuss the uptake of new cases, and to offer strategic and focused advice on activities, positions and statements where needed. The profile and standing of the CFRS has risen significantly over the last three-year period as the Committee has taken a leading role in speaking out on the continuing trend of escalating and evolving threats against the free and responsible practice of science worldwide. Eleven statements, positions or letters have been published in the reporting period (see Annex E).

The work of the CFRS is generously supported by the New Zealand Ministry of Business, Innovation and Employment, which funds the position of the CFRS Special Advisor, hosted at the Royal Society of New Zealand Te Apārangi.

# 5.2 Contemporary perspectives on freedom and responsibility in science

The Principle of Freedom and Responsibility in Science, central to the ISC's mission and enshrined in its Statutes, advocates for scientists' right to pursue knowledge freely while upholding ethical and responsible conduct. Recognizing evolving global contexts, the ISC has revisited this principle, highlighting scientists' responsibilities in providing policy advice, communicating publicly, and promoting the value of science. This work has increased publications and event engagements, including the notable ISC discussion paper, 'A Contemporary Perspective on the Free and Responsible Practice of Science in the 21st Century'.

The ISC has fostered a global commitment to uphold scientific freedom and responsibility, emphasizing the role of scientists in ethical conduct, public communication, and policy engagement. Through the CFRS's guidance and advocacy, scientists are better equipped to navigate contemporary challenges to free inquiry, ensuring responsible and impactful scientific practice globally.

The ISC's latest normative development has been CFRS's interpretation of <u>'The right to participate in and benefit from science'</u>. This interpretation builds on Article 27 of the <u>Universal Declaration of Human Rights</u> (UDHR, 1948), and article 15 of the <u>International Covenant on Economic, Social and Cultural Rights</u> (ICESCR, 1966), providing a clear framework for understanding the right to science, emphasizing its application in research, policy, and global access to scientific knowledge. It clarifies the obligations, opportunities, and responsibilities in ensuring universal access to science, fostering global dialogue to shape a more inclusive and sustainable future.

The CFRS's work has aimed to influence policy by actively supporting the right to participate in and benefit from science, especially in contexts where academic freedom is under threat. Statements on crises in various countries and issues related to scientific freedom have reinforced the importance of science-informed policy and advocacy, leading to greater international awareness and policy engagement on these issues.

The ISC's reputation as a leader in defending scientific freedom has grown, with the CFRS gaining prominence through thought leadership, expanded publications, and partnerships. Collaboration with organizations such as Scholars At Risk and UNESCO have enhanced ISC's standing and reach within the global scientific and policy communities.

ISC Members have become more engaged with freedom and responsibility principles through CFRS-led workshops at major ISC events and regional dialogues. These engagements have allowed ISC members to participate in conversations on science ethics, share best practices, and advocate for science as a public good at local and global levels, strengthening the community's voice and unity on freedom and responsibility issues.

## Main outputs:

- Discussion paper: A contemporary perspective on the free and responsible practice of science in the 21st century
- Updating the core Principles of Freedom and Responsibility in Science <u>International Science</u>
   Council Statutes and Rules of Procedure
- An ISC interpretation of <u>The Right to participate in and benefit from science</u> (November 2024)
- Pre-event workshops at the ISC's Global Knowledge Dialogue series:
  - Africa (including the World Science Forum)
  - o Asia and the Pacific
  - o Latin America and the Caribbean
- In partnership with *Nature*, the ISC released the "<u>Freedom and Responsibility in Science in</u> the 21<sup>st</sup> century" podcast series.

## Partners:

- CODATA
- Inter-Academy Partnerships (IAP)
- Scholars at Risk (SAR)
- The World Academy of Sciences (TWAS)
- UNESCO
- Nature-Springer
- → About Contemporary perspectives on freedom and responsibility in science

# 5.3 Science in Times of Crisis

Science in Times of Crisis is an ISC-led initiative launched in 2020 and still ongoing, aimed at mobilizing ISC Members and partners to support scientists affected by crises worldwide. This project builds on the ISC's "Science in Exile Initiative," which provided a support network for displaced, exiled and refugee scientists, in collaboration with The World Academy of Sciences (TWAS) and the Inter-Academy Partnership (IAP). The Science in Exile project published a declaration and call to action, "Supporting at-risk, displaced and refugee scientists". The declaration outlined six key commitments to support and protect displaced scientists.

Responding to ongoing impacts of crises such as the COVID-19 pandemic, growing inequalities, and geopolitical instability, the initiative has addressed urgent needs for scientists in Afghanistan, Sudan, Ukraine and the Palestinian Territories. The initiative aims to raise awareness within the global science community about the vulnerabilities faced by scientists and institutions in crisis, while

advocating for the continuity of scientific research and knowledge production as a global public good.

#### Main outcomes

The project has advanced strategies for proactive crisis responses, highlighting the protection of scientists and science systems, and expanded access to knowledge resources for displaced scientists. It has influenced UN and EU bodies to strengthen the protection of scientists in crisis zones, shaping policy recommendations and programs in collaboration with UNESCO, CODATA and the All-European Academies (ALLEA). Work in this area has solidified ISC's role in advocating for the safety of scientists, increasing global visibility and demand for ISC's expertise in science-policy discussions during times of crisis.

# Main outputs

- Convened two conferences with the All-European Academies (ALLEA) on the international science community's response to the Ukraine crisis, producing influential reports that contributed to recommendations for entities like the European Research Council and UNESCO.
- Produced the ISC Working Paper <u>Protecting Science in Times of Crisis: How do we stop being reactive, and become more proactive?</u> which examines proactive strategies for safeguarding science in crises. It was accompanied by an infographic and a <u>video</u>. A major policy outcome related to the paper is the establishment of the The UNESCO-CODATA Data Policy for Times of Crisis Facilitated by Open Science (DPTC).
- Awareness and Advocacy: Issued statements supporting scientific freedom, including at UNESCO's SHS Commission and during the UNESCO General Conference. See a list of statements below.
- The ISC produced a podcast series in partnership with Nature on the theme 'Science in Times of Crisis', exploring how crises and geopolitical instability affect science and scientists, and a separate series 'Science in exile', featuring interviews with refugee and displaced scientists who share their science, their stories of displacement, and their hopes for the future
- A declaration in partnership with IAP and TWAS "<u>Supporting at-risk, displaced and refugee scientists: A call to action</u>" outlined key commitments necessary for immediate and long-term protection of scholars and scientists at risk.
- Working with STM, Research4Life, and Nature-Springer, the ISC arranged for displaced scientists in affected regions, including Palestine, Sudan and Ukraine, to have free access to online scientific journals and other resources.

# **Partners**

- All European Academies (ALLEA)
- Scholars At Risk (SAR)
- International Institute of Education Scholar Rescue Fund (SRF)
- UNESCO Social and Human Sciences (SHS) Division
- Research4Life
- Science for Ukraine (S4U)
- Kristiania University College (KUC)
- CODATA
- UNHCR
- US National Academy of Sciences (NAS)
- STM Academic Publishing Organization
- Nature-Springer
- → About Science in Exile

## → About Science in Times of Crisis

# 5.4 Gender equality in science: from awareness to transformation

This project, running since 2020, aims to improve gender equality in global science by encouraging the sharing and use of evidence for gender policies and programmes in scientific institutions and organizations at all levels, primarily withing the ISC membership. The ISC is fortunate to partner with the <a href="Standing Committee for Gender Equality in Science">Standing Committee for Gender Equality in Science</a> (SCGES), borne out of the project <a href="A Global Approach to the Gender Gap in Mathematical, Computing, and Natural Sciences: How to Measure It, How to Reduce It?">How to Reduce It?</a>, and encourages ISC Members to join this important initiative.

In partnership with Gender in science, innovation, technology and engineering (GenderInSITE) and the InterAcademy Partnership (IAP), the ISC conducted a survey of over 120 global science organizations, within its Members, to assess progress on gender equality, focusing on women's membership, participation, and the adoption of gender equality policies. With the first report of its kind released in 2015 to act as a baseline, the new report, published in October 2021, revealed persistent under-representation of women and recommended forming a coalition to drive coordinated gender equality efforts.

In follow-up, the ISC organized meetings with major international science organizations – including IAP, TWAS, OWSD, WFEO, and the Global Research Council – to identify further actions to advance gender equality in science.

In 2024, following a <u>pilot study</u> conducted in consultation with the Standing Committee for Gender Equality in Science (SCGES), the ISC and its partners, the IAP, SCGES and OWSD, have launched the new phase of the five-yearly baseline on gender equality in scientific organizations. The project's aims will continue to address the persistent underrepresentation of women in scientific academies, medical academies, academies of engineering, and international scientific unions. It will analyse the drivers and barriers to women's participation through both quantitative and qualitative data collection, building on previous surveys and recommendations from 2015 and 2020.

The pilot led to the production of a <u>blog series</u>, published in October 2024, entitled "Women Scientists Around the World: Strategies for Gender Equality" produced in collaboration with the SCGES.

# **Main outputs**

- Report: Gender Equality in Science: Inclusion and Participation of Women in Global Science
  Organizations
- Mid-term Meeting Parallel Session: Inclusion and Participation of Women in Science
- SCGES Webinar: Gender Equality and Beyond in the Polar Sciences
- **Event:** How to evaluate and reduce the gender gap in science?
- Event: Commission on the Status of Women 66<sup>th</sup> Session. Women Leading on Equitable and Inclusive Solutions to address the Climate Emergency
- Event: Addressing the challenges faced by women scientists, UNESCO, 2023.
- Blog series: Women scientists around the world: Strategies for gender equality

#### Partners:

- InterAcademy Partnership (IAP)
- Standing Committee for Gender Equality in Science (SCGES)
- Organization for Women in Science for the Developing World (OWSD)

• Gender InSite (2021)

# Key news items

- Achieving gender equality in Science, Technology and Engineering and Mathematics (STEM)— when will we get there
- → About Gender equality in science: from awareness to transformation

# 6. GLOBAL SCIENCE POLICY

#### 6.1 Introduction

The work of the ISC in global policy is guided by a <u>strategy</u> adopted by the ISC membership in 2021 with a <u>Resolution of the 2021 ISC General Assembly</u>. The strategy identified the core strengths of the ISC for operation in the multilateral system, including its global membership, the breadth of expertise it convenes across the natural and social sciences and its capacity to act independently as a non-governmental organization. The strategy also identified key requirements for the organization to increase its impact at the global science policy interface including the need to build its profile and visibility, to need to engage the scientific community broadly, the importance of partners to achieve influence in complex multi-actor policy processes and the need to better enhance and leverage the capacity of the ISC membership to deliver scientific advice at multiple levels.

The ISC has made major progress on all 13 recommendations (see Figure 1) resulting in the Council being increasingly well positioned as an authoritative organization convening a wide breadth and depth of scientific expertise on issues of global concern and a trusted partner to deliver timely and relevant contributions. A major focus of the ISC's work over the last three years has been to build the demand for scientific inputs as the contribution that science can make on particular issues is not always understood or sought. The Global Policy Unit was created within the Secretariat in 2023 to strengthen the ISC's capacity to work in the science-policy interface. Building the demand for scientific advice and an understanding of how science can usefully assist in global decision-making has required making the ISC better known in the multilateral system, establishing a presence in New York to monitor debates and create windows of opportunity to contribute, nurture existing relationships and build new ones. The ISC has also focused on creating new pathways for science to provide inputs or strengthening existing mechanisms where they exist. Achievements range from scientific advice and briefings to UN officials and diplomats on issues including sustainable development, open science, sea level rise, human development, water governance, plastic pollution, biological weapons and more. Other major contributions include technical guidance to support the implementation of global agreements by governments and other stakeholders, and foresight exercise to proactively identify issues on the horizon that need global attention. Many of the ISC's Member organizations have put forward experts to represent the ISC at multilateral meetings and forums, and as part of working groups contributing to written outputs for policy-makers.

Such foundational work is essential to support trusted and productive exchanges between scientists and actors working at the science-policy interface at national, regional and global levels. More remains to be done as effective scientific advice in decision-making require sustained relationship building, regular, formal and informal exchanges to identify issues and modalities to bring science to the table, and develop the capacity of the ISC as an organization, and of the scientific community more broadly, to deliver actionable knowledge. The ISC has built a robust foundation to stand on to strengthen scientific inputs in decision-making. The next steps are for the ISC to consolidate its engagement to support a more systematic inclusion of scientific evidence in global debates and diversify its engagement across a variety of fora within and beyond the multilateral system to enhance scientific inputs at different governance levels.

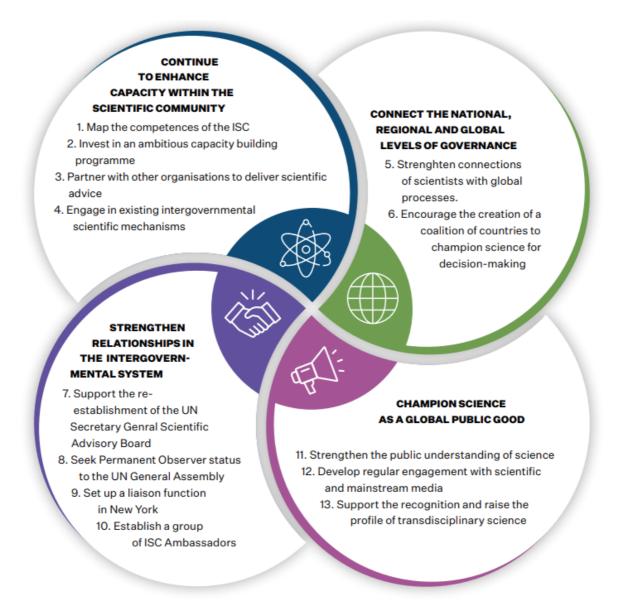


Figure 1: Recommendations of the Steering Group of the ISC Strategy in the Intergovernmental System (ISC 2021)

	2021 recommendation	Progress to 2024
1	Map the competences and expertise of the ISC membership, secretariat and affiliated bodies	Regular bilateral exchanges between the ISC secretariat and members individually and collectively.  Extensive mapping of ISC science advisory capacities undertaken to support training of ISC members and engagement in science policy processes.
2	Invest in an ambitious capacity building programme on communication and brokerage for ISC members	Capacity building implemented on an on-going basis through engagement of members in projects and or meetings.  Training programme in partnership with INGSA foreseen for 2024-2025
3	Partner with other organizations to perform the function of a trusted source of scientific advice	The ISC partners regularly with scientific organisations to deliver scientific advice. Examples include the initiative with IIASA on transformations within reach post-COVID, delivering an annual science day at the High-Level Political Forum on the SDGs, and more.
4	Engage in existing intergovernmental scientific mechanisms	The ISC engages routinely in many established intergovernmental scientific mechanisms including IPCC, IPBES, Global Environmental Outlook by nominating experts from its membership.

5	Strengthen connections of	Extensive engagement of scientists to participate in global processes
	scientists operating in their	(SDGs, water, STI policies, plastic pollution, etc.) and international
	national context with global	projects (foresight, COVID scenarios, etc.) through calls for experts,
	processes	curation of a roster of experts, and fostering direct engagement
	p. 6065565	between individual scientists policy-makers or diplomats at the
		international level.
6	Encourage the creation of a	The ISC inspired the creation of the Group of Friends on Science for
	coalition of countries to	Action in 2023 to strengthen evidence-informed decision-making and
	champion science for	serves as its joint secretariat together with UNESCO.
	decision-making	serves as its joint secretariat together with oneseo.
7	Support the re-establishment	The ISC has supported the re-establishment and early
	of the Scientific Advisory	operationalization of the UN Secretary-General's Scientific Advisory
	Board to the UN Secretary-	Board, and is providing on-going advice and scientific inputs as a
	General	network organization supporting the SAB.
8	Seek Permanent Observer	The ISC has been raising its profile with individual member states, has
	status to the UN General	commissioned research on the extent of scientific advice in the UN
	Assembly	General Assembly and is actively promoting a more systematic use of
		science in the work of UNGA. Seeking a permanent observer status is
		a potential long-term goal of the ISC.
9	Set up a liaison function in	An ISC liaison person was appointed in 2023 and has been developing
	New York	the ISC's profile and relationships with the permanent missions and
		UN organisations in New York. Such a function is enabling to build the
		demand and consolidate the reputation of the ISC to mobilise
		scientific expertise proactively.
10	Establish a group of ISC	The ISC Patron, Fellows and Standing Committee members act as
	Ambassadors	ambassadors, advisors and contributors to the realization of ISC's
		mission and vision.
11	Strengthen the public	The ISC has set up a dedicated programme on the public value of
	understanding of the	science, has produced podcasts series, and the Council has been
	scientific process	working on the factors affecting trust in science.
12	Develop regular engagement	The ISC has partnered with various kinds of scientific and mainstream
	with scientific and	media to promote evidence-based policy making. This includes letters
	mainstream media	and articles in scientific journals, including <i>Nature</i> , partnerships with
		University World News, Higher Education Times, Science Business
		and BBC Storyworks.
13	Support the recognition and	The ISC engages across a wide array of disciplines and with policy
	raise the profile of	actors to co-design knowledge and is supporting transformations in
	transdisciplinary science	how science is organised and funded to support transdisciplinarity.
		The ISC has also delivered programmes to build capacity in
		transdisciplinary research (including T2S and LIRA).

# 6.2 Strengthening science to support the Sustainable Development Goals

The ISC has been continuously pushing for a sound scientific basis and strong role of science in the implementation of the Sustainable Development Goals (SDGs). As coordinator of the Science and Technological Community (STC) Major Group for the 2030 Agenda for Sustainable Development, the ISC actively mobilizes the latest scientific evidence and thinking from its membership and research networks, notably through engagement in key gatherings such as the HLPF and preparatory meetings such as the ECOSOC Partnership Forum and the STI Forum, to support the implementation of the SDG agenda.

#### 6.2.1. STI Forum

The Multi-stakeholder Forum on Science, Technology and Innovation for the SDGs (STI Forum) meets once a year to discuss science, technology and innovation cooperation around the SDGs under review at the annual HLPF. The Forum results in a co-chairs' summary of discussions, which is submitted as an official contribution to the HLPF.

The ISC's contributions to the annual STI Forum include proactively submitting inputs for the development of the formal programme, providing speakers' suggestions, delivering statements, facilitating scientists' participation and organizing events as part of the official programme. For instance, at the **2022 STI Forum**, the ISC organized a <u>Special session of the STI forum: Lessons from national science-policy advice</u>, which discussed reflections on pandemic-related science advice to governments and implications for the future of the science-policy interface. Ms. Connie Nshemereirwe, ISC Foundational Fellow and former co-chair of GYA, was invited by the UN organizers to speak in a <u>special event on Global research cooperation</u>, funding and partnerships.

At the **2023 STI Forum**, the ISC co-convened a <u>plenary session</u> within the official programme of the STI Forum for the first time, supported by the UN Economic and Social Council (ECOSOC) President and the Permanent Missions of the United Kingdom and South Africa as co-chairs of the Forum. The event saw the active participation and intervention from the ECOSOC President, and several Permanent Representatives from Morocco, Namibia and the United Kingdom. The summary is available <u>here</u>. The ISC was invited to speak at a <u>plenary session</u> on *Strengthening trust in science and technology*, which it was represented by ISC's President, Peter Gluckman. In addition, the ISC delivered a <u>statement</u> in a formal plenary session on *Global research cooperation and funding-sharing knowledge through new partnerships*.

For the 2024 **STI Forum**, the ISC was represented by the ISC Vice-President Prof. Motoko Kotani, also member of the UN Secretary-General's <u>High-level Group to Champion Science</u>, <u>Technology</u>, <u>and Innovation for the Sustainable Development Goals</u>. The ISC also co-organized and partners in several side events including a wide range of partners and organizations:

- <u>Better leveraging Science, Technology, Innovation and Engineering</u> for accelerating progress on the SDGs, organized by the Scientific and Technological Community Major Group (co-led by the ISC and the World Federation of Engineering Organizations (WFEO).
- Harnessing the STI Coalitions for Africa a mechanism for stronger partnership to achieve the SDGs, organized by Future Africa in partnership with the United Nations Economic Commission for Africa (UNECA), United Nations Department of Economic and Social Affairs (UN DESA) and the Permanent Missions of South Africa, Ghana, Ethiopia, Cameroon and Morocco.
- <u>Science in Times of Crisis: Protecting Scientific Resources and Using the UNESCO Open</u>
   <u>Science Framework for Sharing Data and Knowledge in Times of Crisis</u>, organized by the
   UNESCO-CODATA Working Group on Data Policy for Times of Crisis Facilitated by Open

Science (DPTC), UNESCO, WMO, Pan American Health Organization, UK Health Security Agency, and the ISC.

Additionally, based on ISC's nominations, representatives of scientists from ISC members and networks such as the Organization for Women in Science for the Developing World and the African Open Science Platform were invited by the UN organizers to speak in formal sessions of the STI Forum.

# 6.2.2. High-Level Political Forum

The High-level Political Forum (HLPF) is the annual intergovernmental forum at which countries review and report on progress towards the achievement of the SDGs. As coordinator of the STC Major Group, the ISC has a formal role in this forum facilitating the inputs and participation of the scientific community into its preparatory process, deliberations and outcome document, e.g. political declaration, through the development of position papers, delivery of statements and expert nominations. The annual position papers the ISC develops as per its mandate of STC MG co-lead are contributions to the formal deliberations and the executive summaries are included in the official documentation of the meeting addressed to Permanent Missions and government officials.

At the 2022 HLPF, the ISC convened expert contributions through a call for inputs and prepared a position paper on the theme of the HLPF, 'Building back better from the coronavirus disease (COVID-19) while advancing the full implementation of the 2030 Agenda for Sustainable Development'. The paper includes inputs from the ISC membership and broader networks, including Future Earth, SCOR, the International Union for Physical and Engineering Sciences in Medicine (IUPESM) and the Brazilian Academy of Sciences. The ISC has furthermore facilitated the participation of ISC experts at the event, and following ISC nominations one expert was invited to contribute to the preparatory Expert Group meeting on SDG14 and to deliver a statement in the HLPF official session on SDG14.

Additionally in 2022, the ISC organized a <u>side event</u> focused on the SDG midterm review and identifying lessons from the launch of the SDG implementation programme to date, which has seen the participation of President Carlos Alvarado Quesada of Costa Rica, amongst other prominent speakers from the scientific community. The event highlighted a number of barriers currently hindering implementation of the SDGs, as well as the actions required to create change.

For the 2023 HLPF, the ISC was represented by a high-level delegation that addressed UN officials on the need to bridge actionable knowledge and policy to accelerate the SDGs, and met with the UN Secretary-General to discuss how science can better support multilateral cooperation. A special session was organised to launch the *Flipping the Science Model* report of the ISC Global Commission on mission-oriented science. The ISC co-organized a Science Day on the role of science in accelerating SDG implementation, in partnership with UNDESA, UNDP, the Sustainable Development Solutions Network (SDSN) and the Stockholm Environment Institute (SEI), and with high level representation from the UN secretariat, the PGA and member states. Experts from ISC members such as the Global Young Academy (GYA), Institute for Global Environmental Strategies (IGES) and the Academy of Sciences of the Dominican Republic attended the event and were involved in facilitating roundtable discussions. The outcome document calls for strengthening the science-policy interface and creating a "global transformation road map" to address interwoven crises.

Other engagements included the facilitation by the ISC CEO of a plenary discussion during the high-level segment of the HLPF on the 2023 Global Sustainable Development Report for which the ISC led the <u>scientific review</u>, the publication of a <u>position paper</u> from the ISC Fellows on "Rescuing and integrating the Global Agenda: Harnessing Science and Technology more effectively", the organization of a high-level event launching the *Flipping the Science Model* report of the ISC Global

Commission on mission-oriented science, and the delivery of a statement by a member of the GYA at the official session on SDG 9 on Industry, innovation and infrastructure. Additionally, following ISC nominations one member of the Governing Board was selected as lead discussant in the HLPF plenary session on <u>Science, technology and innovation: Triggering transformation and sustaining a science driven recovery</u>.

Additionally in 2023 the ISC led the <u>scientific review</u> of the 2023 Global Sustainable Development Report (GSDR) at the invitation of the United Nations Department of Economic and Social Affairs (UNDESA). Following an open call open to Members and partners, the ISC received nominations of more than 160 experts to review the first-order draft of the GSDR. The final version of the GSDR, which provides evidence-based guidance on the implementation of the 2030 Agenda for Sustainable Development, was published in September 2023 as the main instrument to inform the deliberations of the 2023 HLPF.

The ISC has equally facilitated the participation of scientists in regional workshops focused on the operationalization of the 2023 GSDR, and representatives from the Ivorian Science, Art and Culture Academy and the Cuban Academy of Sciences were selected to attend the workshops in their region.

The **2024 HLPF** saw the organization of the <u>second edition of the Science Day</u> convened by the ISC together with the Stockholm Environment Institute, the Sustainable Development Solutions Network, UNDP and UNDESA as for the previous edition. Representatives from four ISC Members, namely the University of Bergen, the International Association of Applied Psychology (IAAP), the Caribbean Academy of Sciences and the International Union for Physical and Engineering Sciences in Medicine (IUPESM) shared <u>insights</u> on innovative research and initiatives for advancing SDG implementation.

Additionally, the ISC organized a <u>High-level launch event</u> of the Global Foresight report together with the UN Environment Programme. The ISC equally contributed to a <u>side event on</u> *Measuring and monitoring community-level emissions: Scalable qualitative solutions toward SDGs 1 and 13*, organised by the University of Bergen, Global Programme on Inequality Research (GRIP) and the International Association of Universities (IAU).

Aligned with the focus of the 2024 HLPF, the ISC launched a <u>position paper</u> highlighting key messages and case studies of 'science in action' bringing together contributions ISC members such as the Science Council of Japan, the International Society for Ecological Economics and the Organization for Women in Science for the Developing World. The ISC has equally facilitated opportunities for delivering statement at official sessions, i.e. at the <u>official session on Science</u>, <u>technology and innovation</u> by a representative of IUPSEM and the one on 'Small Island Developing States: Implementing the outcomes of the fourth SIDS Conference' by a representative of the Caribbean Academy of Sciences.

# 6.2.3. ECOSOC Partnership Forum

The annual <u>ECOSOC Partnership Forum</u> serves as a key platform for engaging a wide range of actors in the work of ECOSOC and the High-Level Political Forum. For the first time, the ISC participated in the Forum in its role as co-lead at the United Nations Scientific and Technological Major Group, codesigning and participating in the <u>SDG Action Segment on SDG2</u> on *Zero Hunger* together with the Food and Agriculture Organization of the United Nations (FAO) and the Major Group for Children and Youth. Amongst the objectives the event were providing inputs to the review of SDG 2 for the Expert Group Meeting (EGM) and High-level Political Forum (HLPF) and build momentum for the Summit of the Future.

# 6.3 Strengthening science in intergovernmental policymaking

The ISC strives to embed scientific knowledge at the heart of international policy by fostering collaboration across a spectrum of global challenges, working closely with United Nations bodies. Key areas of impact during the three-year cycle included environmental foresight with UNEP, climate science at COP through the UNFCCC, disaster risk reduction in partnership with UNDRR, and sustainable development, especially for Small Island Developing States (SIDS). Through this engagement, the ISC ensured that science directly informed initiatives such as biodiversity with IPBES, the Intergovernmental Negotiating Committee on a plastic treaty, and thematic issues such as water and oceans, positioning itself as a vital scientific advisor in global decision-making.

The following themes highlight the achievements of the Policy Unit working within the multilateral system.

# 6.3.1. Sourcing expertise and involving members in UN Processes

As the ISC has grown its profile and relationships with actors in the multilateral system, it has become essential to strengthen and diversify the approaches of the ISC to identify relevant experts across a range of issues to meet a growing demand. The ISC regularly coordinates calls for expert nominations and inputs. Experts contribute to developing policy briefs, reviewing reports, and as as scientific advisers. The ISC has also piloted in 2024 a global <u>roster of experts</u> for timely engagement with UN and other intergovernmental processes.

As coordinator of the STC Major Group, the ISC serves as a formal convenor of the global scientific community in intergovernmental discussions on sustainable development, facilitating access to key meetings for dozens of scientists and experts from its network who would not typically participate in such forums. This support extends to ISC Members lacking accreditation for international meetings, including the High-Level Political Forum (HLPF), UN Water Conference, Ocean Conference, SIDS Conference, and ad-hoc gatherings like the 2024 ECOSOC Special Meeting on "The Future of Work."

With formal accreditation from UN entities such as UNEP, UNFCCC, and CBD, the ISC enables Members to contribute actively to meetings like the UN Environment Assembly, UNFCCC research dialogues, and COPs. Further, ISC's partnerships with the UN General Assembly's Office of the President (OPGA), Member States, and coalitions empower scientists to engage in diverse UN processes, addressing urgent topics like sea-level rise, El Niño, science-policy interfaces (via the Group of Friends on Science for Action), and artificial intelligence (via the African Group).

# Main outputs:

- Established a roster of 700+ experts for rapid response to UN requests.
- Published calls for scientific inputs and case studies and nominations of experts for specific UN-led assessments (e.g., IPCC, IPBES, GEO-7).
- ISC Members participating in global policy processes through the ISC's unique convening power

#### **Partners:**

- UN entities, including ECOSOC
- ISC Affiliated Bodies and Member Organizations

#### **Call to Action**

ISC Members are invited to join the roster, register for the dedicated Science and the <u>United Nations</u> newsletter, bookmark the ISC's <u>Open Calls and Opportunities</u> page and sign up for newsletters to

keep abreast of the many calls and opportunities that the ISC convenes for experts in global policy and scientific processes.

Below are some of the successful nominations from the ISC in global policy processes:

Process	Successful nominations
2023 GSDR regional workshops	<ul> <li>Ramon Pichs-Madruga, Cuban Academy of Sciences</li> <li>Monica Kerretts-Makau at Thunderbird School of Management @Arizona State University (Africa Centre of Excellence, Nairobi, Kenya)</li> <li>Bi Guimé Crépin PENE, ASCAD (Ivorian Science, Art and Culture Academy)</li> <li>Tonni Agustiono Kurniawan, Universiti Teknologi Malaysia</li> </ul>
GEO-7 authors/ reviewers/ fellows	<ul> <li>Tatendu Dalum, TYAN (TWAS Young Affiliates Network)</li> <li>K N Ninan, Centre for Economics, Environment and Society (CEES)</li> <li>Georges Martial Ndzana, Faculty of Agronomy and Agricultural Sciences (FASA), The University of Dschang/International Union of Soil Sciences (IUSS)</li> <li>Stella Tsani, Global Young Academy</li> </ul>
GEO-7 Multidisciplinary Expert Scientific Advisory Group (MESAG)	<ul> <li>Yonglong Lu, Chinese Academy of Sciences (CAS)</li> <li>Mónica Moraes, Academia Nacional de Ciencias de Bolivia</li> <li>Ervin Balázs, Research Professor at the Centre for Agricultural Research of the Hungarian Academy of Sciences</li> </ul>
IPBES 'Nexus assessment	<ul> <li>Ronald Twongyirwe, Senior Lecturer at Mbarara University of Science and Technology Uganda (nominated from the ISC Transformations to Sustainability Programme) for the Nexus Assessment</li> <li>Alex Godoy (nominated by ISC Member the Global Young Academy) for the Nexus Assessment</li> </ul>
IPBES 'Transformative Change' Assessment	Nick Roskruge, Professor at Massey University in New Zealand     (nominated by ISC Member the Royal Society Te Apārangi of New Zealand) for the Transformative Change Assessment
2022 UN Ocean Conference	<ul> <li>Funded participants on ISC recommendation:</li> <li>Leopoldo Cavalieri Gerhardinger, Oceanographic Institute, University of São Paulo / Brazilian Future Ocean Panel</li> <li>Corrine Almeida, University Techical Atlantico from Cabo Verde</li> <li>Malik Lopes, Institute de Mar in Cabo Verde</li> <li>Kwame Adu Agyekum, University of Ghana's Regional Marine Center /Future Earth Ocean KAN</li> <li>Dr. Maritza Cárdenas, University of Guayaquil in Ecuador</li> </ul>

<sup>→</sup> About the Roster

# 6.3.2. Plastic Pollution Treaty and Science-Policy Panel (SPP)

Since 2022 the ISC is deeply engaged with Member States in negotiations for a legally binding treaty on plastic pollution following the resolution adopted by the UN Environmental Assembly (UNEA). An ISC expert group, with key actors from ISC Affiliated Bodes, was established to advise on science-based measures, aligning treaty goals with the latest research. The ISC also contributed to ongoing discussions on a Science-Policy Panel on chemicals, waste and pollution (SPP) mandated by UNEAto build a strong science-policy interface for the management of chemicals, waste, and pollution prevention.

This work promotes a strong role for science in the global plastic policy negotiations as well as a strong science-policy interface to inform treaty implementation. The ISC has become a trusted partner and a key science advisor to UNEP and Member States on the global issue of plastic pollution. ISC Members and Affiliated Bodies have been connected with policy dialogues and contributed to regional workshops on plastic management.

### Main outputs:

- ISC <u>expert group on plastic pollution</u> drawing experts from ISC membership and affiliated bodies.
- Policy brief on creating an effective science-policy interface for plastic pollution.
- High-level commentary on the <u>Key Requirements for a science-based International Legally</u> <u>Binding Instrument to End Plastic Pollution</u>
- Co-organized thematic side events and science-policy roundtables at INC-2, INC-3 and INC-4
- Delivered statements at official negotiating meetings, e.g. <u>INC-1</u>, and <u>INC-2</u>
- Established a roster of 80+ experts on plastic-related challenges.
- ISC experts have advised diplomats and policy-makers in the ongoing plastic pollution negotiations and contributed to policy-relevant publications and regional dialogues led by UN agencies, including through peer review.
- I<u>SC written contribution</u> to the second Open-ended Working Group on the Science-Policy Panel on waste, chemicals and pollution.

# Partners:

- UN Environment Programme (UNEP)
- World Health Organization (WHO)
- United Nations office for Disaster Risk Reduction (UNDRR)
- Monterey Bay Aquarium
- ISC Members and affiliated bodies including the Scientific Committee on Oceanic Research (SCOR), Scientific Committee on Antarctic Research (SCAR), Estonian Academy of Sciences, International Union of Pure and Applied Chemistry (IUPAC), the National Research Council of the Philippines, the Russian Academy of Sciences, the Global Young Academy (GYA) and the US National Academy of Sciences (US NAS).

# → About the Plastic Pollution Treaty and Science-Policy Panel

## 6.3.3. United Nations 2023 Water Conference

The UN 2023 Water Conference, co-hosted by Tajikistan and the Netherlands, tackled water sustainability challenges across SDGs, adopting the Water Action Agenda. The ISC provided science-backed solutions, participating in dialogues and hosting side-events to showcase the scientific community's role in advancing SDG6 and related goals. This included a policy brief highlighting multiple water crises endangering broader SDGs due to water's central role across development and environmental goals. The brief advocated for science-driven, evidence-informed policy and

anticipative research to address diverse water challenges and support actionable solutions for sustainable water management. The ISC brought together 40 delegates nominated by Members, fostering strong ISC networks. An <a href="ISC Talent Book">ISC Talent Book</a> was provided to conference attendees, stakeholders and media organizations to highlight the depth and breadth of the convening power of the Council. The initiative established the ISC voice in the global water dialogue.

#### **Main Outputs:**

- UN 2023 Water Conference ISC Policy Brief
- Delivered statements in key conference dialogues and panels, including <u>Water for Sustainable Development</u>, <u>Water for Cooperation</u>, and a <u>Water Action Decade</u>.
- Co-organized side-events, including with partners WFEO on the <u>role of the Scientific and Technological Community</u> in accelerating progress and transformative actions on SDG6 and a special event on the <u>Economics of Water</u>. ISC Patron, Irina Bokova, also contributed to the report, <u>Turning the Tide A Call to Collective Action</u>. The ISC contributed to a UNESCO-convened high-level event discussing a potential new <u>science-policy mechanism</u> on water sustainability.

#### **Partners:**

- World Federation of Engineering Organizations (WFEO) (Co-lead) and its Committee on Water
- International Association for Hydro-Environment Engineering and Research (IAHR)
- International Water Management Institute (IWMI)
- OECD
- UNESCO

## → About the UN 2023 Water Conference

#### 6.3.4. Hazards and Risk

The ISC has been engaged for a long time in global processes to prevent and reduce risks, through its Affiliated Body the Integrated Research on Disaster Risk, its partnership with the UN Office for Disaster Risk Reduction (UNDRR) and its engagement in the Science and Technology Major Group for Sendai.

The Global Platform for Disaster Risk Reduction (DRR) is a multi-stakeholder forum that reviews progress on the Sendai Framework's implementation. Held in May 2022 in Bali, Indonesia, it brought together governments, the UN and other stakeholders to share knowledge and recommend actions to accelerate DRR efforts. As the United Nations Scientific and Technological Community Major Group (STC MG) co-coordinator, the ISC prepared two key policy briefs for the Platform.

At the Sendai Framework's midpoint in 2023, the ISC coordinated a multi-disciplinary expert group to author the scientific report for the Sendai Mid-Term Review (MTR), focusing on integrating disaster risk reduction with sustainability and climate goals and proposing a post-2030 resilience framework. The expert group engaged experts across climate, disaster risk, development, and finance to provide a strategic assessment of progress and opportunities to embed risk reduction across sectors and scales. The report contributed to the global stocktake of progress on the implementation of the 2015-2030 Sendai Framework for Disaster Risk Reduction.

The ISC has also been working hand-in-hand with UNDRR to convene multidisciplinary expertise on emerging issues to provide synthesis of current understandings and guidance including on <a href="mailto:systemic">systemic</a> risk and hazards with global escalation potential to enhance resilience and preparedness.

The Review of Hazard Definitions and Classification project aims to update the UNDRR/ISC Hazard Information Profiles (HIPs), initially released in July 2020 with a supplement in April 2021. Led jointly by the <u>UNDRR and the ISC and launched</u> in August 2023, this review integrates new scientific insights on specific hazards and multi-hazard contexts to maintain the HIPs' relevance and utility. Guided by a Steering Group of experts from UN agencies, academia, the private sector, and international organizations, and supported by eight technical teams and a User Group, the updated HIPs will be unveiled at the 8th Global Platform for Disaster Risk Reduction in Geneva in June 2025.

#### Main outcomes

The ISC's work has influenced the integration of disaster risk in the UN's broader sustainability agendas, including in the Sendai Mid-Term Review process, at the 2023 High-Level Political Forum and the High-Level Dialogue on Financing for Development at the 78<sup>th</sup> session of the UN General Assembly, and connected Members and Affiliated Bodies with key policy forums, including in Latin America, enhancing the impact of scientific insights.

## Main outputs:

- Report for the Mid-Term Review of the Sendai Framework for Disaster Risk Reduction
- Op-ed by the ISC Expert Group co-chair on leverage actions across biodiversity loss for risk reduction and resilience building
- Op-ed by an ISC Expert Group member on the need to increase investment in DRR to promote development co-benefits
- Two policy briefs for the Global Platform on Disaster Risk Reduction
  - Closing the Gap Between Science and Practice at Local Levels to Accelerate Disaster
     Risk Reduction
  - o <u>Using UNDRR/ISC Hazard Information Profiles to Manage Risk and implement the</u> Sendai Framework for Disaster Risk Reduction
- Presentation by the RFP-LAC at the <u>Mid-term Review of the Sendai Framework and progress</u> on the implementation of the Regional Action Plan, Uruguay 2023.
- ISC-led workshops and consultations with global disaster risk experts

#### Partners:

- United Nations Office for Disaster Risk Reduction (UNDRR)
- UK Heath Security Agency (UKHSA)
- Scientific and Technological Community Major Group (STC MG)
- Integrated Research on Disaster Risk Reduction
- IRDR International Center of Excellence (ICoE) Taipei

#### 6.3.5. UN Secretary General's Scientific Advisory Board

The ISC has actively contributed to the re-establishment of the <u>UN Secretary-General Scientific</u> <u>Advisory Board</u> (SG SAB), providing technical inputs and leveraging its global membership to support the board's operationalization. In 2023, the ISC was invited to become part of the SG SAB's global network of scientific institutions, also involving ISC Member organizations and Affiliated Bodies such as the Global Young Academy, The World Academy of Sciences and the Organization for Women in Science for the Developing World, and INGSA. The ISC has been contributing to the SG SAB work by providing advice on key issues of importance to science and society as well as on the need and practice of scientific brokerage and horizon scanning in the multilateral system.

#### Main outputs:

• Participation in SG SAB network meetings including the <u>Statement on Trust in Science</u> ahead of the Summit of the Future.

• Input on horizon scanning and strategic science-policy priorities for the UN Secretary-General Executive Office.

### Key news item:

• <u>The United Nations Secretary-General's Scientific Advisory Board (SAB): Mobilizing science</u> for a sustainable future

# 6.3.6. Group of Friends on Science for Action

The Group of Friends on Science for Action, co-chaired by the Permanent Representatives of Belgium, India, and South Africa to the United Nations, was established in 2023 to advocate for the integration of actionable scientific knowledge into evidence-informed decision-making in the multilateral context. The ISC, along with UNESCO, serves as the Group's Secretariat. As an informal platform, the Group emphasizes that achieving the SDGs and addressing societal, technological, and environmental changes requires open, interdisciplinary science at every stage of decision-making - from preparation to implementation. With a growing membership, the Group regularly convenes 2-3 experts to address key multilateral issues and has successfully advocated for science-informed decision-making to be included in the Pact for the Future adopted by UN Member States in September 2024.

# Main outputs:

- Hosted two official meetings focusing on science in multilateral action.
- Informal meetings with permanent missions to the UN and the UN SAB
- Science-policy briefings with ISC-facilitated speakers, engaging representatives from over 40 UN Member States.

#### **Partners:**

- UNESCO (Joint Secretariat)
- Co-Chair Countries: Belgium, India, South Africa

## Key news items:

- Launch of the Group of Friends
- Salvatore Aricò on science advice at the United Nations
- → About the Group of Friends

# 6.3.7. ISC-UNEP Strategic Foresight for the Environment

In response to increasing global uncertainties, the ISC and the United Nations Environment Programme collaborated from January 2023 to December 2024 to embed science-based strategic foresight and horizon scanning into environmental governance and decision-making frameworks. The initiative aligns with the UN Secretary-General's *Our Common Agenda*, emphasizing the need for foresight practices across the UN system to better anticipate and address emerging environmental risks. The project engaged UN agencies, policy-makers and interdisciplinary experts in a series of global foresight exercises – encompassing expert panels, surveys, and regional workshops – which led to the publication of the "Navigating New Horizons" report in July 2024 and a working paper on foresight tools in September 2024. These resources equip policy-makers with proactive insights and a comprehensive foresight framework to enhance evidence-based environmental policy and resilience.

#### Main outcomes

The project established a framework for anticipating global environmental shifts, empowering scientists and decision-makers to navigate complex future scenarios. The Working Paper, following a literature review of existing tools and methods for horizon scanning and foresight, promotes open discussion through a set of essays on key areas that remain frontiers in mainstream foresight.

ISC and UNEP's outputs shaped discussions at major forums like the UN Summit of the Future, initiative supports the UN's long-term environmental goals and anticipatory governance. The partnership has strengthened the ISC's role in global environmental governance, expanding its influence with UNEP and other UN agencies and fostering new opportunities for ISC Members to engage in forward-looking research and cross-sector collaboration. More than 1000 contributors were engaged, uniting a diverse expert community from the ISC's Member network, emphasizing youth, indigenous knowledge, and regional expertise, reinforcing ISC's role as a global platform for interdisciplinary, future-focused scientific engagement.

### Main outputs:

- <u>Navigating new horizons</u> A global foresight report on planetary health and human wellbeing report identifying key environmental shifts.
- A guide to anticipation: Tools and methods of horizon scanning and foresight A working paper on foresight tools, emphasizing scenario planning and indigenous knowledge.
- Regional workshops held in Europe, Africa, Asia-Pacific, North America, Latin America, and West Asia from October to December 2023.
- Surveys with global reach to validate foresight insights.

#### Partners:

- UN Environment Programme (UNEP) (Lead)
- Australian Academy of Science (Partner)

## Key news items

- The ISC and UNEP to cooperate on advancing the use of science in environmental policy and decision-making
- <u>Cultivating a proactive approach to crises: first meeting of the UNEP/ISC foresight expert panel</u>
- Broadening horizons: Local knowledge to strengthen foresight practices
- <u>Launch of the working paper on tools and methods of foresight and future directions for foresight</u>
- → About ISC-UNEP Strategic Foresight for the Environment

# 6.3.8. Summit of the Future (2024)

Culminating in September 2024 after many months of input, the <u>UN Summit of the Future</u> was a landmark event aimed at revitalizing multilateral cooperation to address critical global challenges and renew the UN's impact on people's lives. Bringing together world leaders, the Summit reaffirmed the UN Charter, advanced multilateralism, and culminated in the Pact for the Future—a framework for accelerating existing commitments and addressing new challenges. The ISC played an active role throughout the Summit and its preparations, supporting Member States with scientific insights to drive impactful, evidence-based outcomes for both people and the planet.

Through multiple policy submissions, the ISC ensured that science was recognized as essential to sustainable decision-making, with dedicated chapters in the Pact for the Future on science, technology, and digital cooperation. These inclusions reflect the ISC's advocacy for science as a cross-cutting tool to guide sustainable development and resilience planning.

The Pact's focus on science acknowledges ISC's role in steering policy dialogues towards forward-looking, science-led solutions despite a complex geopolitical landscape.

The Summit bolstered ISC's standing as a trusted scientific partner in high-stakes policy settings, establishing it as a key advisor at the UN level. Eight ISC expert speakers were engaged at the Summit, ISC Fellows were mobilized to support messaging on behalf of the scientific community and five scientists from ISC members were registered to participate in the Summit Action Days.

# Main outputs:

- <u>Submission to the Zero Draft of the Pact for the Future</u> summarizing key messages and calling for concrete actions reflecting the critical importance of science as a cross-cutting tool to enhance evidence-informed decision-making across the multilateral agenda.
- <u>Submission to the Declaration on Future Generations</u>, prepared jointly with the Global Young Academy.
- <u>Scientific and Technological Community Major Group statement</u> on the role of science and technology in a successful Summit, delivered at the informal multistakeholder consultations for the Summit of the Future in 2023.
- <u>Scientific and Technological Community Major Group statement</u> on final negotiations leading toward the Pact for the Future in 2024.
- <u>CODES Side Event</u> on Digital Environmental Sustainability and AI for the Global Digital Compact
- Co-organized <u>four science-policy events</u> with over 25 partners, including the <u>UN Building</u> Bridges through Science Diplomacy event.
- Statement by ISC President, Sir Peter Gluckman
- <u>Letter</u> from Terrence Forrester, chair of the ISC Fellows in *Nature* and reflections from ISC Fellows on the Summit.

# Partners:

- UN Department of Global Communications
- UNESCO (Joint Secretariat of the Group of Friends)
- Global Young Academy (GYA)
- CODES

## Key news items

- International Science Council Governing Board calls for science and scientists in Africa to be mobilized ahead of 2024 United Nations Summit of the Future
- The ISC's Science Missions for Sustainability: A roadmap for delivering the UN Pact for the Future
- → About the Summit of the Future

# 6.3.9. 4th International Conference on Small Island Developing States (SIDS4)

The 4th International Conference on Small Island Developing States (SIDS4), held in Antigua and Barbuda in May 2024, addressed sustainable development for SIDS with the theme "Charting the Course Towards Resilient Prosperity." The ISC, in collaboration with its SIDS Liaison Committee and Regional Focal Points, mobilized the scientific community, emphasizing SIDS' role in global environmental governance and sustainable development. This resulted in the <a href="Antigua and Barbuda Agenda">Antigua and Barbuda Agenda</a> for SIDS, outlining a decade-long vision for resilience with international support. The conference also served as a preparatory platform for SIDS engagement at the upcoming UN Ocean Conference and the World Social Development Summit, both in 2025.

#### Main outputs:

- Registered 40 SIDS scientists and experts across multiple ISC bodies.
- Published "From Shores to Horizons: Empowering Science for the Future of Large Ocean States," a declaration highlighting SIDS' scientific needs and capacities.
- Organized side-event "Amplifying Science in and from Small Island Developing States," in partnership with universities and UNDRR.
- Delivered <u>plenary statement</u> to Member States on digital opportunities for climate resilience in SIDS
- Published a <u>Talent Book</u> enabling media engagement with ISC delegates.

#### **Partners:**

- ISC SIDS Liaison Committee
- ISC Regional Focal Points for Asia-Pacific
- ISC Regional Focal Points for Latin America and the Caribbean
- Establishment Committee for the Pacific Academy of Sciences
- Caribbean Academy of Sciences (CAS)
- UNDRR

## → About SIDS4

# 6.3.10. Science-Policy Synergies for the Biological Weapons Convention

The ISC and the United Nations Office for Disarmament Affairs (UNODA), supported by a Geneva Science-Policy Interface (GSPI) grant for the period June 2024—January 2025, are providing scientific advice to strengthen the Biological Weapons Convention (BWC). The ISC has appointed 10 experts, following a call for nominations from Members, to advise diplomats on compliance, verification, cooperation, and science and technology as part of the <a href="BWC Working Group">BWC Working Group</a>. This initiative, stemming from the recent BWC Review Conference, addresses the need to integrate scientific advancements into the convention, particularly through scientific review and verification. By fostering collaboration between BWC delegates and scientific experts and creating tailored knowledge products, the project equips delegates to address evolving biological threats, enhancing global biosecurity amidst rapid scientific and technological developments.

This work is highlighting science's role in biosecurity and biosafety and in identifying new risks related to the weaponization of biological agents and how to build a science-policy interface mechanism for the Convention that is fit for purpose. The ISC's engagement supports a future-ready BWC framework to mitigate biological threats.

This project is expanding the ISC's reach into disarmament and biosecurity discussions for the first time, highlighting the role that science can play in diplomacy.

#### Main outputs (expected):

- Series of policy briefs and videos for BWC delegates.
- Upcoming event (December 2024) to discuss biosecurity advancements.

#### **Partners:**

- United Nations Office for Disarmament Affairs (UNODA)
- Geneva Science Policy Interface (GSPI)

#### Key news items:

- ISC and the United Nations Office for Disarmament Affairs awarded joint grant to support the Biological Weapons Convention
- ISC Expert Group for the BWC
- → About Science-Policy Synergies for the Biological Weapons Convention

#### 6.3.11.ISC-INGSA Science Advice Training Modules (Global)

The ISC and the International Network for Governmental Science Advice (INGSA) have partnered to develop various training modules to enhance science advice capacity among policy-makers. This initiative strengthens ISC Members' skills in evidence-informed policy-making, science diplomacy, and navigating global science advice ecosystems.

The global project was launched in July 2024 with a needs assessment and mapping of current capacities and is guided by an advisory group established in October 2024. The first online modules and webinars are foreseen for early 2025, targeting ISC members, science practitioners, and policy-makers. The training modules and associated activities will equip ISC members with the tools and knowledge to provide effective science advice, contributing to evidence-informed policy-making at national, regional, and global levels. The initiative will enhance ISC members' capacities to engage with policy processes and support decision-makers with robust scientific advice. The inclusion of real-world case studies and peer learning opportunities will provide practical insights into addressing complex policy challenges.

By partnering with INGSA, ISC is strengthening its leadership in science-policy engagement, helping members build skills that will support both national and international policy processes. The project also reinforces ISC's commitment to fostering science diplomacy and enhancing science-policy interfaces at different levels.

The needs assessment, mapping exercise, and advisory group ensure that the training modules are tailored to the specific needs of ISC members. The workshop planned for the ISC General Assembly in Oman in January 2025 will also provide an important forum for peer learning and exchanging insights on science advice in action.

#### **Partners:**

• International Network for Governmental Science Advice (INGSA)

#### Main outputs:

- Needs assessment survey completed, highlighting capacity gaps.
- Advisory group formed to shape training content.
- Modules and webinars planned for 2025, including a workshop at the ISC General Assembly in Oman.

## 7. FINANCE, COMPLIANCE AND RISK

It was an honour to be elected Vice-President for Finance of the International Science Council in October 2021. The full scope of this very important portfolio was reflected in the change of the title of the position to Vice-President for Finance, Compliance and Risk in the revised Statutes adopted in March 2024.

The responsibility of the Committee for Finance, Compliance and Risk is large, as the ISC is still a relatively young organization and had to weather the COVID pandemic in 2020–2022 as well as a transition in management at the Secretariat in 2022. With the support of the Secretariat, the Committee has finalized several new policies and procedures to bring the organization into line with good practice internationally, has overseen the budgets and financial reports of the organization, and, at the end of this first planning period, is launching a revision of the dues structure in the context of great geopolitical tensions and financial constraints among our Membership. I thank the members of the Committee for Finance, Compliance and Risk for their dedication and attention to detail.

Sawako Shirahase, Vice-President for Finance, Compliance and Risk

#### 7.1 Introduction

The Committee for Finance, Compliance and Risk (CFCR) studies the annual budgets, accounts and audit reports, considers requests for dues relief, and makes recommendations to the Governing Board. The Committee also oversees the development and application of organizational policies and procedures.

Detailed information on finances and the work of the CFCR is available in the Report of the Vice-President for Finance, Compliance and Risk to the General Assembly in January 2025.

#### 7.2 Finances

The 2022–2024 ISC budget was developed in 2021 against the background of the COVID-19 pandemic, which had dramatically reduced expenditure on activities for two consecutive years and led to a steep increase in general reserves. As a non-profit association, the ISC was advised to reduce its reserves. The 2022–2024 budget reflected this advice, presenting an ambitious activity and spending plan which would draw significantly on reserves.

Expenditure on all domains of activity began to pick up in 2022 with the return of in-person meetings. However, membership dues and returns on the ISC sustainable investment portfolio were lower than expected in 2022, largely as a result of the conflict in Ukraine.

In 2023, the ISC underwent significant strategic and operational changes. Key developments included establishing a UN liaison in New York, launching the Centre for Science Futures and creating a Unit for Global Science Policy. The Secretariat grew and evolved, in line with the new strategic priorities and programmatic goals of the organization. The Regional Focal Point in Asia-Pacific was inaugurated, and a scoping project for an ISC presence in Africa was launched. An unplanned Midterm Meeting of Members was organized in May 2023, in response to demand from the Members.

After the expansion in 2023, the budget for 2024 showed a need to consolidate. The risk of several Members not being able to pay their dues because of international conflict or structural financial problems was high. The Standing Committees and other advisory bodies conducted their work virtually and travel was contained. With these efforts, overall, the result at the end of the period is expected to be close to what was budgeted.

The general reserves should stand at ca. 275k EUR at the end of 2024 and the structural reserves of the ISC (1.5m EUR) remain intact.

The independent annual audits of the 2021, 2022 and 2023 ISC financial statements were successfully concluded with no remarks by the auditor. The 2024 exercise will begin in January 2025.

Table 1. Summary of ISC income and expenditure, 2021–2024

	2021	2022	2023	2024
Dues	€ 2,953,450	€ 2,754,936	€ 2,903,752	€ 2,973,564
Other	€ 166,137	€ 796,247	€ 654,363	€ 2,950,948
External	€ 2,711,906	€ 2,573,270	€ 2,755,796	€ 160,000
Income	€ 5,831,493	€ 6,124,453	€ 6,313,911	€ 6,084,512
Governance	€ 110,468	€ 234,084	€ 334,470	€ 217,794
Regional structures	€ 50,000	€ 87,067	€ 234,243	€ 227,172
Activities	€ 1,099,160	€ 1,170,569	€ 1,622,070	€ 1,113,280
Communications	€ 66,402	€ 182,182	€ 280,747	€ 135,278
Personnel	€ 2,306,668	€ 2,281,949	€ 3,035,919	€ 3,185,820
Operations	€ 345,567	€ 845,439	€ 466,711	€ 342,000
Dedicated funds	€ 1,801,020	€ 1,422,445	€ 1,518,310	€ 1,360,567
Expenditure	€ 5,779,285	€ 6,223,735	€ 7,492,469	€ 6,581,911
Result	€ 52,208	-€ 99,282	-€ 1,178,558	-€ 497,399

<sup>\*</sup>Data for 2024 are estimated at 29 November 2024

## 7.3 Grant income

The ISC has received grants for specific activities from the following organizations during the period:

- The <u>University of Bergen</u>, which provides a prize fund for the <u>Stein Rokkan Prize</u>, awarded annually.
- The US National Science Foundation, which supports ISC work on sustainability for five years (2023–2028).
- The International Development Research Centre (IDRC) of Canada, which funds a three-year project exploring the impacts of artificial intelligence (AI) and other emergent technologies on science systems in the Global South (2024–2027).
- The <u>China Association of Science and Technology (CAST)</u>, which provides a grant to support the participation of <u>Early and Mid-Career Researchers</u> in ISC activities (2024–2026).
- The Frontiers Research Foundation, which funds the ISC to promote Global South participation in the <u>Frontiers Planet Prize</u> (2022–2025).
- The Geneva Science—Policy Interface for a joint project with the United Nations Office for Disarmament Affairs (UNODA) to strengthen the Biological Weapons Convention (BWC) in 2024-2025.

- The New Zealand Government (Ministry for Business, Innovation and Employment), which
  has supported ISC work on <u>freedom and responsibility in science</u> since 2016, currently from
  2020 to 2025.
- The United Nations Environment Programme, which funds the ISC's contribution to a joint research effort on <u>foresight</u> in 2023–2024.
- The Sasakawa Peace Foundation and the Richard Lounsbery Foundation, to support a meeting to establish an academy of sciences in the Pacific Islands region in 2023.
- The United Nations Development Programme, in the framework of the Rethinking Human development project in 2022–2023.
- The International Development Research Centre Canada, for a three-year ISC and INGSA project on 'Generating Knowledge and Building Networks for Science Advice in Emergencies' (2020–2023).
- The Swedish International Development Cooperation Agency (Sida), which supported transdisciplinary research programmes, <u>Transformations to Sustainability (T2S)</u> and <u>LIRA</u> <u>2023</u>, from 2014 to 2022.

## 7.4 Hosting in France

The ISC is grateful for the support of the French State and the French Ministry of Higher Education and Research in particular which allowed the Council to use its building in Paris free of charge and provides a subsidy of €100k per year since its establishment (a continuation of an existing agreement with ICSU). The Governing Board and the CEO are working, with the assistance of its member in France, the Academie des Sciences, to secure a long-term hosting agreement with the French state which would secure its premises and cash subsidy into the future.

## 7.5 Membership dues

Many ISC Members, of all categories, are having difficulty paying membership dues. Over the course of 2022–2024, some 30 dues relief requests were received, and nearly all were granted in some way. Going forward, the ISC must find a solution for the dues of the many Members which have financial constraints.

The search for the solution must be part of the work to revise the ISC dues structure, which will happen under the supervision of the Committee for Finance, Compliance and Risk in 2024–2025. A special Working Group has been established to develop and propose a unified, fair and sustainable dues structure for the ISC that takes into account the challenge of affordable dues for Members of limited financial means. The revision of the dues structure could only start after the resolution of residual issues from the merger of ICSU and ISSC around membership, voting and dues. This was accomplished with the revision of the Statutes and Rules of Procedure in 2024. The revision of the dues structure will also benefit from sound analysis of the ISC dues structure done by the Ad Hoc Dues Committee in 2019–2021.

### 7.6 Policies, processes, systems

The ISC already had several policies and processes in place by 2021 that continued to serve well, including the Conflict of Interest policy for Governing Board and Committee members, the Anti-Corruption and Anti-Money-Laundering policy and an informal 'Language policy'.

In the 2022–2024 period, the Committee oversaw the development or updating of the following documents or policies:

- Sponsorship and Endorsement policy and process (2023), for organizations requesting ISC sponsorship or endorsement of their activities.
- ISC Sustainability principles (updated 2024), covering sustainable procurement.
- ISC Travel policy (updated 2023), specifying when business-class travel is allowed and clarifying the basis of reimbursement claims.
- Due Diligence policy (2024), setting out the basis on which the ISC will engage with or receive money from private sector or philanthropic bodies.
- Privacy policy (updated 2024), setting out the ISC's practices regarding the collection and protection of personal data in the era of Artificial Intelligence.
- Code of conduct (2024), detailing the expectations of behaviour of representatives of the ISC and the process for reporting suspected violations of the code.

The ISC Statutes and Rules of Procedure, which were revised in March 2024, were also subject to legal scrutiny to confirm their compliance with French law on associations.

→ ISC statutory documents and policies

#### 8. SECRETARIAT

In October 2021, in the middle of COVID-19 pandemic, the ISC Headquarters (HQ) in Paris comprised 20 members of staff. This grew to a high of 26 (and 3 interns) in the first half of 2024, and is at 24 at the end of 2024 (and one intern). See <u>Appendix I</u> for an overview of staff members.

At the end of 2024 the Secretariat comprises:

- A leadership team: the Chief Executive Officer and two Directors (Science and Operations)
- Two Heads or Acting Heads of Unit (Global Science Policy and Communications)
- Six Science or Senior Science Officers
- Two Communications Officers, one Membership Liaison Officer and one Membership Development Officer.
- Nine Administrative and General Support Officers covering finances, human resources, administration, IT and general services functions.

In addition, the New Zealand Government, through the Ministry of Business, Innovation and Employment, supports the work of the Committee on Freedom and Responsibility in Science through financing of the CFRS Special Adviser (Frances Vaughan until mid-2022, followed by Gustav Kessel) and the input of Roger Ridley, Director Expert Advice and Practice at the Royal Society Te Apārangi.

The capacity of the Secretariat is greatly strengthened by the teams at the Regional Focal Points in Latin America and the Caribbean and in Asia and the Pacific.

The main changes in the profile of Secretariat staff over three years concerned:

- Creating development opportunities through the promotion or redeployment of staff to roles which allowed them to grow.
- Establishing a presence in New York, through the appointment of a liaison officer.

The ISC takes a keen interest in building capacity and offering opportunities to budding professionals. Twelve interns have been hosted over three years and several of them have been able to move into short-term and even long-term employment at the ISC.

Building capacity is also about honing and developing skills and maintaining the health and safety of all staff. Since October 2022, and in addition to supporting individually requested training and development activities, the ISC has offered the following collective professional training:

- Facilitating, chairing and presenting in meetings, by Impact Factory (Sept 2021).
- Prince 2 Project Management training (Nov 2022, Jan/Feb 2023, Sept 2023)

The Secretariat staff enjoy a flexible teleworking policy that allows individuals to work from home normally 2-3 days a week.

#### **APPENDICES**

## A. Governing Board and advisory body members

### **Governing Board (October 2021–January 2025)**

- Peter Gluckman, ISC President; Koi Tū: The Centre for Informed Futures at the University of Auckland, New Zealand
- Sawako Shirahase, ISC Vice-President Finance, Compliance and Risk; University of Tokyo,
   Japan, and United Nations University (UNU)
- Anne Husebekk, ISC Vice-President Freedom and Responsibility in Science; Arctic University of Norway (UiT), Norway
- Salim Abdool Karim, ISC Vice-President Outreach and Engagement; Centre for the AIDS Program of Research in South Africa (CAPRISA), Columbia University, USA, and University of KwaZulu-Natal, South Africa
- Motoko Kotani, ISC Vice-President Science and Society; Tohoku University, Japan
- Karina Batthyany, CLACSO, Chile, and University of the Republic, Uruguay
- Francoise Baylis, Dalhousie University and Royal Society, Canada
- Geoffrey Boulton, Emeritus, University of Edinburgh, UK
- Melody Burkins, Institute of Arctic Studies and Dartmouth College, USA
- Mei-Hung Chiu, National Taiwan Normal University, China-Taipei
- Pamela Matson, Stanford University, USA
- Helena Nader, Federal University of São Paulo (UNIFESP), Brazil
- Walter Oyawa, National Commission for Science, Technology & Innovation (NACOSTI), Kenya
- Maria Paradiso, University of Naples, Italy
- Martin Visbeck, GEOMAR Helmholtz Centre for Ocean Research Kiel and professor at Kiel University, Germany

#### Committee for Finance, Compliance and Risk (June 2022–May 2025)

- Sawako Shirahase, ISC Vice-President Finance, Compliance and Risk (Chair)
- Salvatore Aricò, ISC CEO
- Peter Gluckman, ISC President
- Jisoon Lee, National Academy of Sciences, Republic of Korea
- Isabel Varela Nieto, Spanish National Research Council-CSIC, Spain
- Beatrice Weder di Mauro, Centre for Economic Policy Research, and Graduate Institute,
   Switzerland

#### Committee for Freedom and Responsibility in Science (June 2022–May 2025)

- Anne Husebekk, ISC Vice-President for Freedom and Responsibility in Science (Chair)
- Françoise Baylis, ISC Governing Board
- Melody Burkins, ISC Governing Board
- Saths Cooper, Pan-African Psychology Union and formerly IUPsyS
- Robert French, Former Chancellor, University of Western Australia
- Ke Gong, Chinese Institute of the New Generation Artificial Intelligence Development Strategies and formerly World Federation of Engineering Organizations
- Robin Grimes, Imperial College, UK
- S. Karly Kehoe, Saint Mary's University in Nova Scotia, Canada
- Staffan I. Lindberg, University of Gothenburg, Sweden
- Roy MacLeod, University College London and Science Museum, London
- Joyce Nyoni, Institute of Social Work, Tanzania

- Sayaka Oki, University of Tokyo, Japan
- Krushil Watene, University of Auckland, New Zealand

## Committee for Outreach and Engagement (June 2022–January 2025)

- Salim Abdool Karim, ISC Vice-President for Outreach and Engagement (Chair)
- Mei-Hung Chiu, ISC Governing Board
- Walter O. Oyawa, ISC Governing Board
- Maria Paradiso, ISC Governing Board
- John G. Hildebrand, National Academies of Science, USA
- María Estelí Jarquín, UK Centre for Ecology & Hydrology (UKCEH), UK
- Naim Akhtar Khan, International Union of Physiological Sciences (IUPS)
- Jahnavi Phalkey, Science Gallery, Bengaluru, India
- Magdalena Stoeva, International Union for Physical and Engineering Sciences in Medicine (IUPESM)

#### Committee for Science Planning (June 2022–January 2025)

- Motoko Kotani, ISC Vice-President Science and Society (Chair)
- Karina Batthyány, ISC Governing Board
- Geoffrey Boulton, ISC Governing Board
- Pamela Matson, ISC Governing Board
- Helena B. Nader, ISC Governing Board
- Martin Visbeck, ISC Governing Board
- Eva Alisic, Melbourne School of Population and Global Health, Australia
- Dieter Armbruster, Emeritus, Arizona State University, USA
- Alan Bernstein, University of Oxford, UK
- Naoko Ishii, University of Tokyo, Japan
- Asma Ismail, International Islamic University Malaysia
- Lluis M. Mir, Emeritus, Centre National de la Recherche Scientifique (CNRS)
- Sandra Mitchell, University of Pittsburgh, USA
- Barend Mons, Leiden University, Netherlands
- Adebayo Olukoshi, Wits School of Governance, South Africa
- Ekrem Tatoglu, Ibn Haldun University, Turkey and Gulf University for Science and Technology, Kuwait
- Waceke Wanjohi, Kenyatta University and Kenya National Academy Of Sciences, Kenya
- Yongguan Zhu, Chinese Academy of Sciences, China

#### Working Group on Constitutional Revision (December 2022 – March 2024)

- Julie Maxton, Royal Society, UK (Chair)
- Irina Bokova, formerly UNESCO
- Debra Elmegreen, Emeritus, Vassar College, USA; International Astronomical Union (IAU)
- Mark Ferguson, European Innovation Council (EIC); formerly Science Foundation Ireland
- Terence Forrester, University of the West Indies (UWI), Chair, ISC Foundation Fellowship Council
- Alik Ismail-Zadeh, Karlsruhe Institute of Technology, Germany; ISC Governing Board Secretary (2018–2021)
- Catherine Jami, French National Centre for Scientific Research (CNRS)
- Mike Meadows, Emeritus Professor, University of Cape Town; International Geographical Union (IGU)
- Khotso Mokhele, Advisory Council of the African Open Science Platform, South Africa
- Mobolaj Oladoyin Odubanjo, Nigerian Academy of Science, Nigeria

- Roger Pfister, Swiss Academies of Arts and Sciences, Switzerland
- Michael Saliba, University of Stuttgart, Germany and Global Young Academy
- Vaughan Turekian, US National Academies of Science, Engineering and Medicine

#### Science Education Consultative Group (July 2023-October 2024)

- Motoko Kotani, ISC Vice-President Science and Society and Tohoku University, Japan (Chair)
- Mei-Hung Chiu, ISC Governing Board (Co-Chair)
- Irasema Alcántara-Ayala, National Autonomous University of Mexico (UNAM)
- Karina Batthyány, ISC Governing Board, CLACSO, Chile, and University of the Republic, Uruguay
- Yuri Belfali, OECD
- Jacquie Bay, University of Auckland
- Mark Ferguson, European Innovation Council (EIC); formerly Science Foundation Ireland
- Peter Finegold, Royal Society UK
- Kevin Govender, IAU Office of Astronomy for Development
- Hiromichi Katayama, UNESCO
- Joseph Krajcik, Michigan State University, USA
- Chee-Kit Looi, Education University of Hong Kong, China
- Magdalena Skipper, Nature
- Jane Yau, DIPF Leibniz Institute for Research and Information in Education, Germany
- Akiyoshi Yonezawa, Tohoku University, Japan (Facilitator)

#### **General Assembly 2025 Programme Committee (January 2024 – January 2025)**

- Motoko Kotani, ISC Governing Board
- Karina Batthyany, ISC Governing Board
- Maria Paradiso, ISC Governing Board
- Martin Visbeck, ISC Governing Board
- Yousuf Al Bulushi, GU Tech, Oman

### Nominations and Elections Committee (May 2024 - May 2028)

- Irina Bokova, ISC Patron; formerly UNESCO (Chair)
- Salim Abdool Karim, ISC Vice-President Outreach and Engagement
- Mei-Hung Chiu, ISC Governing Board
- Maria Esteban, University of Paris-Dauphine, France, and International Council for Industrial and Applied Mathematical (ICIAM)
- Anderson Ho Cheung Shum, University of Hong Kong, China, and Global Young Academy
- Nathalie Lemarchand, University of Paris VIII, France, and International Geographical Union
- Narinder Mehra, Indian National Science Academy (INSA)
- Elina Moustaira, National & Kapodistrian University of Athens, International Association of Legal Science (IALS)
- Cheryl Praeger, University of Western Australia and International Mathematical Union (IMU)
- Vaughan Turekian, US National Academies of Science, Engineering and Medicine
- Albert van Jaarsveld, formerly IIASA

#### **Dues Revision Working Group (September 2024 – tbc)**

- Sawako Shirahase, ISC Vice-President for Finance, Compliance and Risk (Chair)
- Magdalena Stoeva, Secretary General, International Union for Physical and Engineering Sciences in Medicine (IUPESM)
- Ehud Keinan, International Union of Pure and Applied Chemistry (IUPAC)
- Irasema Coronado, International Political Science Association (IPSA)

- Ourania Kosti, US National Academies of Science, Engineering and Medicine and InterAcademy Partnership (IAP)
- Lai Meng Looi, Academy of Sciences of Malaysia
- Jones Fairfax Agwata, Kenya National Academy of Sciences
- Silvia L. Vilches, International Consortium of Research Staff Associations (ICoRSA)

## **Governing Board Working Group on Inequalities (2024–tbc)**

- Karina Batthyany, ISC Governing Board (Chair)
- Sawako Shirahase, ISC Vice-President for Finance, Compliance and Risk
- Nadya Araujo Guimarães, University of São Paulo, Brazil
- Haroon Bhorat, University of Cape Town, South Africa
- Joyeeta Gupta, University of Amsterdam, the Netherlands
- Don Kalb, GRIP, University of Bergen, Norway
- Joseph Stiglitz, formerly World Bank, USA
- Collin Tukuitonga, University of Auckland, New Zealand

## B. ISC Member movements since October 2021

## **New Members**

Member organization	Membership	Year
	category	
International Council for Industrial and Applied Mathematics	Category 1	2022
(ICIAM)	(prior Category 3)	
Kenya, National Commission for Science, Technology &	Category 2	2022
Innovation (NACOSTI)	Catagon, 1	2022
International Commission for Optics (ICO)	Category 1 (prior Category 3)	2022
Congo, Congolese Academy of Sciences (ACCOS)	Category 1	2022
International Consortium of Research Staff Associations	Category 3	2022
(ICORSA)	category 5	
nternational Commission on Illumination (CIE)	Category 1	2022
• •	(prior Category 3)	
UK Academy of Medical Sciences	Category 2	2023
Australia, Australian Early- and Mid-Career Researchers Forum	Category 3	2023
(EMCR Forum)		
Bangladesh, National Young Academy of Bangladesh (NYAB)	Category 3	2023
Belgium, Young Academy of Belgium (Flanders)	Category 3	2023
Canada, Royal Society of Canada's College of News Scholars,	Category 3	2023
Artists and Scientists (RSC College)		
Colombia, Young Academy of Colombia	Category 3	2023
Denmark, Danish Young Academy	Category 3	2023
Ghana, Ghana Young Academy (GhYA)	Category 3	2023
India, Young Academy of India	Category 3	2023
Indonesia, Indonesian Young Academy of Sciences (ALMI)	Category 3	2023
TWAS Young Affiliates Network (TYAN)	Category 3	2023
Nigeria, Nigerian Young Academy (NYA)	Category 3	2023
Pakistan, National Academy of Young Scientists Pakistan (NAYS)	Category 3	2023
Spain, Young Academy of Spain	Category 3	2023
Young Academy of Europe	Category 3	2023
International Association of Physics Students (IAPS)	Category 3	2023
Ethiopia, Ethiopian Academy of Science (EAS)	Category 2	2023
Sudan, Sudanese National Academy of Sciences (SNAS)	Category 2	2023
Inter-American Institute for Global Change Research (IAI)	Category 3	2023
Botswana, Botswana Academy of Science (BAS)	Category 2	2023
Poland, Polish Young Academy	Category 3	2023
India, Indian National Young Academy of Sciences (INYAS)	Category 3	2023
International Union of Speleology (UIS)	Category 1	2024
	(prior Category 3)	
Ecuador, Academy of Sciences of Ecuador (ACE)	Category 4	2024
Cyprus, Cyprus Academy of Sciences, Letters and Arts	Category 2	2024
Rwanda, Rwanda Academy of Sciences (RAS)	Category 2	2024

## **Departing Members**

## Category 1

- International Society for Ecological Economics
- International Economic Association

## Category 2

- Czech Academy of Sciences
- Economic and Social Research Council (ESRC)
- Scientific and Technological Research Council (TUBITAK)
- Social Science and Humanities Research Council of Canada (SSHRC)

#### Category 3

- Association of Science and Technology Centers
- International Association for Hydro-Environment Engineering and Research
- International Federation for Information Processing
- International Federation of Data Organisations (no longer exists)
- International Studies Association
- International Water Association
- Social Science Research Council

## C. ISC Affiliated Bodies

The international research programmes, observing systems, data bodies, committees and networks that the ISC (co-)sponsors and/or that operate under the auspices of the Council are listed below. The list provides information on other organizations involved as co-sponsors and/or partners, and the ISC's representation in these initiatives.

#### → More about Affiliated Bodies

#### Thematic bodies

Committee on Space Research (COSPAR) The Committee on Space Research (COSPAR) is an interdisciplinary scientific body concerned with the progress on an international scale of all kinds of scientific investigations carried out with space vehicles, rockets and balloons.

The membership of COSPAR is composed of national academies of science (or the equivalent) and International Scientific Unions.

**Future Earth** 

Future Earth is a global network of scientists, researchers, and innovators collaborating for a more sustainable planet.

The 'Custodian Organisations' are the International Science Council, Belmont Forum, UNESCO, and the United Nations Environment Programme.

Global Research on Inequality (GRIP)

The Global Research Programme on Inequality (GRIP) is an interdisciplinary research programme on inequality.

GRIP is a partnership between the ISC and the University of Bergen

Integrated Research on Disaster Risk (IRDR) Integrated Research on Disaster Risk (IRDR) is a decade-long, interdisciplinary research programme seeking to address the challenges brought by natural hazard events, mitigate their impacts, and improve related policy-making mechanisms.

Co-sponsors: International Science Council, United Nations Office for Disaster Risk Reduction.

International Network
for Government
Science Advice
(INGSA)

As a legacy of the first global conference in 2014 on science advice to governments co-organised by our predecessor organization, the International Council for Science (ICSU) in Auckland, New Zealand, the International Network for Government Science Advice (INGSA) was formed.

INGSA is a New Zealand-based international organization hosted at the University of Auckland by <a href="https://www.informedfutures.org">www.informedfutures.org</a>, operating under the auspices of the International Science Council. INGSA became an Incorporated Society under the New Zealand Charities Services in 2021.

Scientific Committee on Antarctic Research (SCAR) The vision of the Scientific Committee on Antarctic Research (SCAR) is to establish through scientific research and international cooperation a broad understanding of the nature of Antarctica, the role of Antarctica in the Earth System, and the effects of global change on Antarctica.

SCAR currently includes 46 member countries (comprising 35 full and 11 associate members) and 9 ISC unions.

Scientific Committee on Oceanic Research (SCOR) The Scientific Committee on Oceanic Research (SCOR) works to further international scientific activity in all branches of oceanic research.

SCOR has Representative Members that are elected representatives of Affiliated Organizations (ex-officio), active SCOR Subsidiary Bodies (ex-officio), the SCOR

Scientific Rapporteurs (ex-officio), and the nominees of ISC, its Scientific Unions and its Scientific Committees (those willing to participate and agreed by SCOR).

Scientific Committee on Solar-terrestrial Physics (SCOSTEP) SCOSTEP runs international interdisciplinary scientific programs and promotes solar-terrestrial physics research by providing the necessary scientific framework for international collaboration and dissemination of the derived scientific knowledge in collaboration with other ISC bodies.

The Council of SCOSTEP is comprised of Adherent Representatives, meaning unions and other ISC bodies that express an interest in some aspect of solar-terrestrial physics.

Urban Health and Wellbeing (UHW)

The Urban Health & Wellbeing programme proposes a new conceptual framework for considering the multi-factorial nature of both the determinants and the manifestations of health and wellbeing in urban populations.

The co-sponsors are International Science Council, International Society of Urban Health, InterAcademy Partnership, Institute of Urban Environment of the Chinese Academy of Sciences.

World Climate
Research Programme
(WCRP)

The World Climate Research Programme (WCRP) facilitates analysis and prediction of Earth system change for use in a range of practical applications of direct relevance, benefit and value to society. WCRP aims to determine the predictability of climate and the effect of human activities on climate.

The co-sponsors are the International Science Council, the World Meteorological Organization, and UNESCO's Intergovernmental Oceanographic Commission (IOC).

#### Data and information bodies

Committee on Data (CODATA)

CODATA is the Committee on Data of the International Science Council. The mission of CODATA is to strengthen international science for the benefit of society by promoting improved scientific and technical data management and use.

CODATA is a membership organization with three principal membership categories: National Members; ISC Bodies; and Institutional Members (both research/not-for-profit and commercial).

Scientific Committee on Frequency Allocations and Radio astronomy and Space Science (IUCAF) The Scientific Committee on Frequency Allocations for Radio Astronomy and Space Science (IUCAF) is an international committee that works in the field of spectrum management on behalf of the passive radio sciences, like radio astronomy, remote sensing, space research, and meteorological remote sensing.

The following ISC entities are represented: International Astronomical Union (IAU), Union Radio Scientifique Internationale (URSI) and Committee on Space Research (COSPAR).

World Data System (WDS)

The mission of WDS is to promote long-term stewardship of, and universal and equitable access to, quality-assured scientific data and data services, products, and information across all disciplines in the Natural and Social Sciences, and the Humanities.

The co-sponsors are the International Science Council, the Oak Ridge Institute and the University of Victoria, Canada.

#### **Observing systems**

Global Climate
Observing System
(GCOS)

The Global Climate Observing System (GCOS) is based upon the coordination of existing and planned operational observing systems and research programmes for observing global climate.

The Global Climate Observing System (GCOS) is co-sponsored by the World Meteorological Organization (WMO), the Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organization (IOC-UNESCO), the United Nations Environment Programme (UN Environment), and the International Science Council (ISC).

Global Ocean
Observing System
(GOOS)

The purpose of the Global Ocean Observing System (GOOS) is to enable the state of the ocean to be described, its changing conditions to be forecast, and its effects on climate change to be predicted, and to facilitate sustainable development by ocean users and managers.

The Global Ocean Observing System (GCOS) is co-sponsored by the World Meteorological Organization (WMO), the Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organization (IOC-UNESCO), the United Nations Environment Programme (UN Environment), and the International Science Council (ISC).

# D. Activities endorsed or sponsored by the ISC

Activities and initiatives endorsed or sponsored by the ISC from October 2021 to December 2024

Activity	Lead or partner organizations	Time period of activity
Ethnografilm Festival Paris	Ethnografilm Festival Paris, Society for Social Studies of Science (4S)	Annual
ISC-Geo Unions Distinguished Lecture Series	International Geographical Union	2023-2025
COVID Educational Alliance (COVIDEA)	Platform for Tech for SDGs (P4TT), Foundation for Global Governance and Sustainability (FOGGS)	Launched 2020
International Decade of Soils 2015-2024	International Union of Soil Sciences (IUSS)	2015-2024
UN Decade of Ocean Science for Sustainable Development 2021-2030	IOC-UNESCO (lead), European Commission, Japan, Sweden, Canada.	2021-2030
International Year of Caves and Karst 2021–2022)	International Union of Speleology (UIS)	2021–2022
International Year of Glass 2022	International Union of Crystallography (IUCr), International Union of Pure and Applied Physics (IUPAP), International Union of Pure and Applied Chemistry (IUPAC)	2022
International Year of Basic Science for Sustainable Development 2022	International Union of Pure and Applied Physics (IUPAP), Union of Crystallography (IUCr), IAU, IMU, IUPAC, IUGG, IUBS, IIASA, IUHPST, IUVSTA, CERN, ICTP	2022
Planning for International Polar Year 2032–2033	International Arctic Science Committee (IASC) and SCAR, World Meteorological Organization (WMO), International Science Council (ISC), University of the Arctic, International Arctic Social Sciences Association (IASSA), the Association of Polar Early Career Scientists (APECS)	2023–2033
Sustainability, Research & Innovation Congress 2023, Panama	Future Earth, Belmont Forum	June 2023
Rencontres Recherche et Création 10e Edition 2023	Agence nationale de la recherche (ANR) and Festival international de théâtre d'Avignon	10–11 July 2023
World Science & Technology Development Forum 2023	China Association for Science and Technology (CAST)	24 November 2023
18th Global Forum on Human Settlements, Dubai, UAE	Global Human Settlements Foundation	2–3 December 2023
INGSA2024 Biennial Global Conference, Kigali, Rwanda	International Network for Government Science Advice (INGSA)	30 April-03 May 2024

Activity	Lead or partner organizations	Time period of activity
Rencontres Recherche et Création 11 <sup>e</sup> Edition 2024	Agence nationale de la recherche (ANR) and Festival international de théâtre d'Avignon	08-09 July 2024
COSPAR 45th Scientific Assembly, Busan, South Korea	Committee on Space Research (COSPAR)	13-21 July 2024
SCAR Open Science Conference 2024 - "Antarctic Science: Crossroads for a New Hope"	Scientific Committee on Antarctic Research (SCAR)	19-23 August 2024
GLOBALGOALS2024, Utrecht	Utrecht University and Earth System Governance Project	29-30 Aug 2024
Sustainability, Research & Innovation Congress 2024, Helsinki	Future Earth, Belmont Forum	10-14 June 2024
World Science & Technology Development Forum 2024	Chinese Association for Science and Technology (CAST)	22-24 October 2024

## E. Main ISC publications October 2021 – December 2024

Note: The following list includes outputs which were either published by the ISC or where ISC staff or representatives were authors or editors of the output. The date is the date of publication on the ISC website.

## Corporate

Action Plan 2021-2024: Science and Society in Transition	Strategy	08-Dec-2021
ISC Activity and Achievement Report: July 2018 to June 2021	Strategy	20-Dec-2021
International Science Council Introductory Brochure 2022	Report	04-May-2022
Annual Report 2021	Report	20-Jul-2022
ISC Annual Report 2022	Report	05-Jun-2023
Annual Report 2023	Report	10-Jul-2024

## Global

Report on the ISC Meeting of Pacific Scholars	Report	13-Dec-2023
Fact sheet: Pacific Academy of Sciences	Fact sheet	17-May-2024
From Shores to Horizons: Empowering Science for the Future of	Policy brief /	07-Jun-2024
<u>Large Ocean States</u>	advisory note	07-3011-2024

## **Action Plan Priority 1: Global Sustainability**

Hazard Information Profiles: Supplement to UNDRR-ISC Hazard <u>Definition &amp; Classification Review</u>	Technical report	04-Oct-2021
A Framework for Global Science. In Support of Risk-informed Sustainable Development and Planetary Health	Report	02-Dec-2021
Global Risks Perceptions Report 2021	Report	13-Dec-2021
The transformative potential of managed retreat in the face of rising sea levels	Knowledge brief	31-Jan-2022
Briefing Note on Systemic Risk	Policy brief /advisory note	10-Mar-2022
Policy Brief: Using UNDRR/ISC Hazard Information Profiles to manage risk and implement the Sendai Framework for Disaster Risk Reduction	Policy brief / advisory note	18-May-2022
Policy Brief: Closing the gap between science and practice at local levels to accelerate disaster risk reduction	Policy brief / advisory note	18-May-2022
Policy Brief: Harnessing data to accelerate the transition from disaster response to recovery	Policy brief / advisory note	24-May-2022
Science for Stockholm +50	Position paper	01-Jun-2022
Position paper of the Scientific and Technological Community Major Group for the 2022 High-level Political Forum	Position paper	17-Jun-2022
Report for the Mid-Term Review of the Sendai Framework for Disaster Risk Reduction	Report	28-Feb-2023

UN 2023 Water Conference: ISC Policy Brief	Policy brief / advisory note	15-Mar-2023
LIRA 2030 Africa: Learning from Practising Transdisciplinary Research for Sustainable Development in African Cities	Report	03-Apr-2023
LIRA 2030 Africa: Key achievements and learnings	Report	03-Apr-2023
Advancing transdisciplinary research in the Global South	Book chapter	12-May-2023
Position paper for the 2023 High-Level Political Forum	Position paper	06-Jul-2023
A Model for Implementing Mission Science for Sustainability:		
proposed by the Technical Advisory Group to the Global Commission	Report	11-Jul-2023
on Science Missions for Sustainability		
Flipping the Science Model: A Roadmap to Science Missions for Sustainability	Report	17-Jul-2023
Hazards with escalation potential: Governing the drivers of global and existential catastrophes	Report	24-Aug-2023
Harnessing scientific evidence and decision-making to accelerate progress on the SDGs	Report	14-Sep-2023
Policy Brief: Creating a Strong Interface between Science, Policy and Society to Tackle Global Plastic Pollution	Policy brief	09-Nov-2023
Final Evaluation Report: LIRA 2030 Africa	Report	16-Nov-2023
Policy Brief: Global Sea-Level Rise	Policy Brief	17-Nov-2023
Key Requirements for a Science-based International Legally Binding	,	02-May-2024
Instrument to End Plastic Pollution	Advisory note	
From science to action: Leveraging scientific knowledge and	Poport	04-Jul-2024
solutions for advancing sustainable and resilient development	Report	04-Jui-2024
Moser, S. 2024.Transformative Labour: The Hidden (and Not-So-Hidden) Work of Transformations to Sustainability. DOI: 10.24948/2024.04	Report	12-Jul-2024
Moser, S. 2024. Social Transformations to Sustainability through a Critical Lens: Integrative insights from twelve research projects funded under the Transformations to Sustainability research programme. Belmont Forum, International Science Council, NORFACE. DOI: 10.24948/2024.03	Report	12-Jul-2024
Mukute, M., Colvin, J., Burt, J. 2024. Programme Design for Transformations to Sustainability Research: A Comparative Analysis of the Design of Two Research Programmes on Transformations to Sustainability. Belmont Forum, International Science Council, NORFACE. DOI: 10.24948/2024.02	Report	12-Jul-2024
Navigating new horizons – A global foresight report on planetary health and human wellbeing	Report	15-Jul-2024

## **Action Plan Priority 2: Converging Science and Technology in the Digital Era**

A framework for evaluating rapidly developing digital and related technologies: Al, large language models and beyond	Position paper	23-Oct-2023
Preparing National Research Ecosystems for AI: Strategies and progress in 2024	Working paper	27-Mar-2024
Science organizations in the digital age	Working paper	02-Apr-2024
A guide for policy-makers: Evaluating rapidly developing technologies including AI, large language models and beyond	Report	17-Apr-2024

## **Action Plan Priority 3: Science in Policy and Public Discourse**

Science as a Global Public Good	Position paper	01-Oct-2021
Public perceptions and understandings of science	Position paper	27-Oct-2021
ISC strategy in the intergovernmental system	Report	02-Dec-2021
Principles and Structures of Science Advice: An outline	Report	07-Mar-2022
<u>Unprecedented &amp; Unfinished: COVID-19 and Implications for</u>	Poport	16-May-2022
National and Global Policy	Report	10-1VIAY-2022
Unprecedented and Unfinished, Second Edition	Report	13-May-2023
A guide to anticipation: Tools and methods of horizon scanning and	Working paper	09-Sep-2024
<u>foresight</u>	working paper	03-3ep-2024

## **Action Plan Priority 4: Changing Practices in Science and Science Systems**

Strengthening research integrity: The role and responsibilities of publishing	Position paper	03-Nov-2021
The normalization of preprints	Position paper	09-Mar-2022
Looking at the future of transdisciplinary research	Working paper	25-Apr-2023
The future of research evaluation: A synthesis of current debates and developments	Report	11-May-2023
The Contextualization Deficit: Reframing Trust in Science for Multilateral Policy	Position paper	07-Nov-2023
The Case for Reform of Scientific Publishing	Working paper	17-Nov-2023
The Key Principles for Scientific Publishing	Report	17-Nov-2023
Snapshots of reform: Researcher evaluation within science organizations	Report	25-May-2024

## Action Plan Priority 5: Freedom and Responsibility in Science

A contemporary perspective on the free and responsible practice of science in the 21st century	Report	10-Dec-2021
Conference on the Ukraine Crisis: Responses from the European higher education and research sectors	Report	31-Aug-2022
One year of war in Ukraine: exploring the impact on the science sector and supporting initiatives	Report	04-Aug-2023
<u>Protecting Science in Times of Crisis – How do we stop being</u> <u>reactive, and become proactive?</u>	Working paper	19-Feb-2024

## **Normative Development:**

- Updated Principles of Freedom and Responsibility in Science (Jun 2024)
- The Right to participate in and benefit from science (Nov 2024)

## **CFRS statements and Governing Board positions:**

- International Science Council Statement on Ukraine (Feb 2022)
- Statement on concerns for scientists in Iran (Mar 2022)
- Statement against exclusion of women from higher education in Afghanistan (Dec 2022)

- <u>Science in Exile Declaration</u> (Jun 2022)
- Statement on concerns over escalation of extreme violence in Sudan (Apr 2023)
- Statement on concerns over regressing scientific freedoms in Nicaragua (May 2023)
- Joint statement with IAP: Statement on Protecting the Autonomy of National Academies of Science (Dec 2023)
- ISC statement on protecting science in times of crisis (Nov 2023)
- Open Letter: Support for the integrity of Argentina's science system (Feb 2024)
- ISC updated position on academic boycotts (Jul 2024)
- ISC position on the role of universities in enabling responsible discussion and upholding rational debate in times of crisis (Jul 2024)

## F. Composition of project steering groups and expert bodies

- 1. Centre for Science Futures Advisory Council
- 2. CODES Steering Group
- 3. Future Africa Scoping Project Steering Committee
- 4. Future of Scientific Publishing Steering Group
- 5. Hazard Information Profiles Review Steering Group
- 6. ISC-UNEP Strategic Foresight for the Environment Expert Panel
- 7. ISC-UNDP Rethinking Human Development (Phase II)
- 8. Pacific Academy Establishment Group
- 9. Plastic Pollution Expert Group
- 10. Public Value of Science Expert Panel
- 11. Science Missions for Sustainability: Global Commission
- 12. Science Missions for Sustainability: Technical Advisory Group
- 13. Science-policy synergies for the Biological Weapons Convention Expert Group
- 14. Sendai Mid-Term Review Expert Group
- 15. SIDS Liaison Committee
- 16. UN 2023 Water Conference Policy Brief Expert Group
- 17. 2023 Global Sustainable Development Report Review Working Group

1. Centre for Science Futures Advisory Council		
Jinghai	Li	National Natural Science Foundation of China
Sarah	De Rijcke	Leiden University
Maria	Fernanda Espinosa	Former President of the United Nations General Assembly
Derrick	Swartz	Nelson Mandela University
Christina	Yan Zhang	Metaverse Institute
Sudip	Parikh	American Association for the Advancement of Science

2. CODES S	2. CODES Steering Group		
Dirk	Messner	German Environment Agency	
Catalin	Marinescu	ITU	
Golestan	Radwan	UNEP	
Micheline	Ayoub	Future Earth	
Philip	Thigo	Office of the Deputy President of Kenya	
Reina	Otsuka	UNDP	
Vanessa	McBride	ISC	

3. Future Af	3. Future Africa Scoping Project Steering Committee		
Daya	Reddy	University of Cape Town, South Africa (Chair)	
Isabella	Aboderin	Perivoli Africa Research Centre (PARC), University of Bristol, UK	
Christian	Acemah	Uganda National Academy of Sciences, Uganda	
Ahmed	Bawa	University of Johannesburg, South Africa	
Jackie	Kado	Network of African Academies, Kenya	
Lisa	Korsten	African Academy of Sciences, South Africa	
Priscilla	Kolibea Mante	Global Young Academy and KNUST, Ghana	
Nokuthula	Mchunu	African Open Science Platform	

Dorothy	Ngila	National Research Foundation, South Africa
Oladoyin	Odubanjo	Nigerian Academy of Sciences/INGSA, Nigeria
Mavoarilala	Ramiarison	Madagascar Ministère de l'Enseignement Superieur et de la Recherche
Claudine		Scientifique, Madagascar

4. Future of Scientific Publishing Steering Group		
Abrizah	Abdullah	University of Malaya
Subbiah	Arunachalam	IISc
Dominique	Babini	CLACSO
Michael	Barbour	Australian Academy of Science
Ahmed	Bawa	University of Johannesburg
Geoffrey	Boulton	University of Edinburg
Amy	Brand	MIT Press
Luke	Drury	All-European Academies (ALLEA)
Rupert	Gatti	Trinity College, Cambridge
Heather	Joseph	SPARC
Joy	Owango	Training Centre in Communication
Wang	Qinglin	China Association for Science and Technology (CAST)

5. Hazard Information Profiles Review Steering Group (2023-2025)		
Virginia	Murray	(Chair) UK Health Security Agency, ISC Fellow, Committee on Data for Science and Technology (CODATA)
Andrea	Hinwood	United Nations Environment Program
Jim	Douris	World Meteorological Organization
John	Rees	British Geological Survey, University College London
Richard	Hartshorn	University of Canterbury, International Union of Pure and Applied Chemistry (IUPAC), CODATA
Urbano	Fra Paleo	UNDRR European STAG / University of Extremadura, Spain
Qudsia	Huda	World Health Organization
Julia	Crummy	British Geological Survey
Jenty	Kirsch-Wood	UN Office for Disaster Risk Reduction
Bapon	Fakhruddin	Green Climate Fund
Justin	Ginnetti	International Federation of Red Cross and Red Crescent Societies
Katie	Peters	Cambridge University, Overseas Development Institute
Michael	Nagy	United Nations Economic Commission for Europe
Nicholas	Bishop	International Organization for Migration
Nick	Moody	Insurance Development Forum Risk Modelling Steering Group
Ed	Pope	Insurance Development Forum, MS Amlin
Ohran	Osmani	International Telecommunication Union
Osvaldo	Luis Leal de Moraes	Federal University of Brazil; Ministry of Science and Technology of Brazil
Kingsley	Lezor Bieh	World Health Organization
Simon	Hodson	Committee on Data for Science and Technology (CODATA)
Tom	De Groeve	European Union – Joint Research Centre
Wirya	Kim	Food and Agriculture Organization of the United Nations
Tamara	Van't Wout	Food and Agriculture Organization of the United Nations

Dina	Abdelhakim	United Nations Environment Program
Viktoria	Hollertz	UK Health Security Agency

6. ISC-UN	6. ISC-UNEP Strategic Foresight for the Environment		
Henrik	Carlsen	Stockholm Environment Institute	
Ranjan	Datta	Mount Royal University	
Peter	Gluckman	International Science Council	
Gensuo	Jiang	Chinese Academy of Sciences	
Nadejda	Komendantova	International Institute for Applied Systems Analysis	
Wilfred	Lunga	Human Sciences Research Council	
Diana	Mangalagiu	University of Oxford	
Felix	Moronta Barrios	International Centre for Genetic Engineering and Biotechnology ICGEB	
Wibool	Piyawattanametha	King Mongkut's Institute of Technology Ladkrabang	
Diana	Ürge-Vorsatz	Department of Environmental Sciences and Policy, Central European University	
Fang	Lee Cooke	Monash University	
Debra	Davidson	University of Alberta	
Edgar E.	Gutierrez-Espeleta	University of Costa Rica, Former Minister of Environment and Energy for Costa Rica	
Nicholas	King	Wilderness Foundation Africa	
Simone	Lucatello	Mexican National Agency for Science and Technology (CONACYT)	
Nyovani	Madise	African Institute for Development Policy	
Elham Ali	Mohamed	The National Authority for Remote Sensing and Space Sciences (NARSS)	
Michelle	Мусоо	The University of the West Indies	
Soumya	Swaminathan	M S Swaminathan Research Foundation	
Ljubisa	Bojic	University of Belgrade	
Salvatore	Aricò	International Science Council	
Andrea	Hinwood	United Nations Environment Programme	

7. ISC-UNDP Rethinking Human Development (Phase II)		
Melissa	Leach	Institute of Development Studies
Elisa	Reis	Professor of Political Sociology at the Federal University of Rio de Janeiro (UFRJ)
Binyam	Sisay Mendisu	Associate Professor of African Languages and Linguistics at The Africa Institute, Sharjah, UAE
Marc	Fleurbaey	Professor at the Paris School of Economics
Koen	Decancq	
Pedro	Conceição	Director of the Human Development Report Office, UNDP
Yanchun	Zhang	

8. Pacific Academy Establishment Committee		
Collin	Tukuitonga	(Co-chair) University of Auckland
Teatulohi	Matainaho	Pacific Adventist University
Vomaranda Joy	Botleng	Janessa's Research and Consultancy Services
Robert	Karoro	Kiribati Climate Action Network
Eric	Katovai	Solomon Islands National University

Sushil	Kumar	University of the South Pacific
Peseta Su'a		
Desmond	Lee Hang	National University of Samoa
Mene		
Salot	Nasalo	University of the South Pacific
Steven	Ratuva	University of Canterbury
Ora	Renagi OL	Papua New Guinea University of Technology
Catherine	Ris	University of New Caledonia
Merita	Tuari'i	Puna Vai Mārama

9. Plastic I	9. Plastic Pollution Expert Group		
Ilaria	Corsi	SCAR Plastic-AG and University of Siena	
Adetoun	Mustapha	Nigerian Institute of Medical Research; Lead City University, Nigeria	
Alex	Godoy	Global Young Academy / Universidad del Desarrollo	
Anne	Kahru	Estonian Academy of Sciences	
Christine	Luscombe	Okinawa Institute of Science and Technology	
Kishore	Boodhoo	University of Mauritius	
Stefano	Aliani	SCOR /Institute Marine Science of National Research Council of Italy	
Fani	Sakellariadou	University of Piraeus	
Judith	Gobin	The University of the West Indies, Dept. of Life Sciences	
Margaret	Spring	US NAS committee chair and Monterey Bay Aquarium	
Noreen	O'Meara	University of Surrey, UK	
Patrick	Schröder	Chatham House	
Peng	Wang	Institute of Urban Environment, Chinese Academy of Sciences	
Ramia	Al Bakain	The University of Jordan, Department of Chemistry	
Sarva	Mangala Praveena	Universiti Putra Malaysia	

10. Public \	10. Public Value of Science Expert Panel				
Jennifer	Metcalfe	Econnect Communication			
Courtney	Radsch	Center for Journalism and Liberty			
Paul	Richards	Australian Academy of Science			
Tawana	Kupe	University of Pretoria			
Marta	Entradas	University Institute of Lisbon			
Daniel	Williams	Corpus Christi College, University of Cambridge			
Elodie	Chabrol	Pint of Science			
Felix	Bast	Central University of Punjab			
Kamila	Navarr	National University of Singapore			
Andrew	Revkin	Columbia University's Climate School			
Genner	Llanes-Ortiz	Bishop's University			
Yvette	d'Entremont	Influencer			
Robert	Leopenies	Karlshochschule International University			

11. Science Missions for Sustainability – Global Commission				
Helen Clark Former Prime Minister of New Zealand				
Irina Bokova Former Director-General of UNESCO, Bulgaria				

Abdulsalam	Al-Murshidi	President of Oman Investment Authority (OIA)	
Albert	Van Jaarsveld	Former Director-General of the International Institute for Applied Systems Analysis (IIASA)	
Beatrice	Weder di Mauro	President of Centre for Economic Policy Research (CEPR)	
Bernard	Sabrier	Chairman of Unigestion, Switzerland	
Huadong	Guo	Director-General of the International Research Center of Big Data for Sustainable Development Goals (CBAS)	
Heide	Hackmann	Director of Future Africa	
Hiroshi	Komiyama	Chairman of the Science and Technology in Society (STS forum), Japan	
Ismail	Serageldin	Founding Director of Bibliotheca Alexandrina	
Izabella	Teixeira	Co-Chair of the International Resource Panel, Brazil	
James	Cameron	Film director, producer, philanthropist, sea explorer	
Jeremy	Farrar	Director of Wellcome, UK	
Julie	Wrigley	Founding Benefactor and founding co-chair of Global Futures Laboratory, USA	
Johan	Rockström	Director of the Potsdam Institute for Climate Impact Research	
Macharia	Kamau	Ambassador and Special Envoy, East Africa Community Facilitator on DRC	
Magdalena	Skipper	Editor in Chief of Nature and Chief Editorial Advisor for the Nature portfolio	
Maria	Leptin	President of the European Research Council, Germany	
Martin	Rees	Astronomer Royal, UK	
Naledi	Pandor	Minister of International Relations and Cooperation, South Africa	
Pamela	Matson	Dean emerita of Stanford University's School of Earth, Energy and Environmental Sciences	
Peter	Gluckman	President of the International Science Council	
Thomas	Hughes-Hallet	Chair of John Innes Centre and Founder Marshall Institute for Philanthropy, London School of Economics, UK	
Yuan Tseh	Lee	President Emeritus at the Institute of Atomic and Molecular Sciences, Academy of Sciences located in Taipei, China	
Salvatore	Aricò	Chief Executive Officer of the International Science Council	

12. Science Missions for Sustainability – Technical Advisory Group				
Pamela	Matson	Dean emerita of Stanford University's School of Earth, Energy and Environmental Sciences		
Albert	Van Jaarsveld	Former Director-General of the International Institute for Applied Systems Analysis (IIASA)		
Alan	Bernstein	Professor of Global Health at the University of Oxford		
Connie	Nshemereirwe	Director of the Africa Science Leadership Programme		
lan	Goldin	Professor of Globalisation and Development at the University of Oxford		
Ingrin	Petersson	Chairperson, Lund University		
Lorrae	Van Kerkhoff	Director of Institute for Water Futures		
Maria	Ivanova	Director of the School of Public Policy and Urban Affairs at Northeastern University in Boston		
William	Clark	Harvey Brooks Research Professor, John F. Kennedy School of Government, Harvard University		
Zakri	Abdul Hamid	Chairman for INGSA Science Advice Network for the ASEAN Region		
Barend	Mons	Molecular biologist and a FAIR data specialist		

13. Science-policy synergies for the Biological Weapons Convention Expert Group						
Irma	Makalinao	University of the Philippines				
Laura	Cochrane	Global Medical Affairs, Emergent BioSolutions				
Otim	Maxwell Onapa	Public Health, Busitema University				
Ali	Asy	Animal Health Research Institute, Affiliated with the Academy of Scientific Research and Technology (ASRT)				
Zabta	Khan Shinwari	Federal Urdu University of Arts, Science & Technology				
Levent	Kenar	CBRN Department, University of Health Sciences				
Jonathan	Forman	Pacific Northwest National Laboratory				
Sana	Zakaria	RAND Europe				
Shambhavi	Naik	Takshashila Institution				
Sandra	Lopez-Verges	Department Head, Gorgas Memorial Research Institute for Health Studies				

14. Sendai	14. Sendai Mid-Term Review Expert Group			
Albert	Salamanca	Stockholm Environment Institute Asia Center		
Alonso	Brenes	Network for Social Studies on Disaster Risk Prevention in Latin America and the Caribbean (LA RED)		
Angela	Bednarek	the Pew Charitable Trusts		
Aromar	Revi	Indian Institute for Human Settlements		
Bapon	Fakhruddin	Division of Mitigation and Adaptation, Green Climate Fund		
Charlotte	Benson	Asian Development Bank		
Franziska	Gaupp	Food Systems Economics Commission		
Kristiann	Allen	International Network for Government Science Advice		
Maria	Pilar Cornejo	the Pacific International Center for Disaster Risk Reduction		
Oliver	Costello	Traditional Knowledge (Conservation Futures), Bush Heritage Australia, Team Leader – Indigenous Cultural Intellectual Property (ICIP) Aboriging Strategy and Outcomes, NSW Department of Planning and Environmen		
Pauline	Scheelbeek	London School of Hygiene and Tropical Medicine, Director – WHO Collaborating Centre		
Rathana	Peou Norbert- Munns	(co-chair) Climate Foresight and Scenarios Development Expert at FAO and former Southeast Asia Scenarios Coordinator at CCAFS		
Renato	Solidum	Disaster Risk Reduction – Climate Change Adaptation, Department of Science and Technology and Officer-In-Charge, Philippine Institute of Volcanology and Seismology		
Roger	Pulwarty	(co-chair) US National Oceanic and Atmospheric Administration (NOAA)		
Satoru	Nishikawa	Disaster Mitigation Research Center, Nagoya University		
Susan	Cutter	University of South Carolina and Co-Director, Hazards Vulnerability & Resilience Institute Director, IRDR International Center of Excellence (ICoE-VaRM)		
Victor	Galaz	Stockholm Resilience Center		

15. SIDS Liaison Committee						
Peter	Gluckman	International Science Council				
Terrence	Forrester	University of the West Indies, Chair, ISC Foundation Fellowship Council				
Dania	Bacardí Fernández	University of Medical Sciences in Havana				
Xavier	Estico	National Institute of Science Technology and Innovation (NISTI)				

Eric	Katovai	Solomon Islands National University		
Michelle	Мусоо	University of the West Indies		
Teatulohi	Matainaho	Pacific Adventist University		
Vidushi	Neergheen	University of Mauritius		
Salome	Taufa	Pacific Islands Forum Secretariat		
Adelle	Thomas	Natural Resources Defense Council, Intergovernmental Panel on Climate Change		
Mark	Wuddivira	Caribbean Academy of Sciences / University of the West Indies		

16. UN 2023	Water Conference	Policy Brief Expert Group		
Antonio	Lo Porto	National Research Council – Water Research Institute (CNR-IRSA)		
Apostolos	Apostolou	Institute for Biodiversity and Ecosystem Research		
Christophe	Cudennec	IAHS – International Association of Hydrological Sciences		
Daniel	Olago	Institute of Climate Changer and Adaptation		
Eduardo	Planos Gutierrez	Institute of Meteorology		
Euloge	Kossi Agbossou	Institut National de l'Eau de l'Université d'Abomey-Calavi / Partenariat National de l'Eau		
Frank	Winde	International Geographical Union (IGU) Water Sustainability Commission		
Heather	O'Leary	Council of Scientific Commissions and Chair of the Scientific Commission for Anthropology and Environment of the IUAES		
Hugo	Hidalgo León	School of Physics and Director of the Center for Geophysical Research at the University of Costa Rica.		
Ismail	Koyuncu	International Telecommunication Union		
Jan	Polcher	WCRP GEWEX Co-Chair and Director of Research in CNRS		
Joao	Porto de Alburquerque Albuquerque	Urban Analytics and Deputy Director of the Urban Big Data Centre		
Jonathan	Tonkin	University of Canterbury. Associate Professor and Rutherford Discovery Fellow		
Lahcen	El Youssfi	National Higher School of Chemistry of Kenitra		
Mahesh	W. Jayaweera	University of Moratuwa		
Mehmet	Emin Aydin	Necmettin Erbakan University / Faculty Member		
Ovie	Augustine Edegbene	Federal University of Health Sciences		
Paweł	Rowiński	Polish Academy of Sciences		
Piet	Kenabatho	Professor of Hydrology		
Pulane	Mswela	Botswana Academy of Science		
Ramia	Al Bakain	The University of Jordan		
Samia	Benabbas Kaghouche	Académie Algérienne des Sciences et des Technologies		
Shabana	Khan	Indian Research Academy		
Shameen	Jinadasa	Department of Civil Engineering, University of Peradeniya		
Shreya	Chakraborty	Researcher – Climate Change Policy and Adaptation		
Stella	Tsani	University of Ioannina		
Suad	Sulaiman	Sudanese National Academy of Sciences		
Suzanne	Hulscher	University of Twente		
Yunzhong	Jiang	Director of Department of Water Resources Research		

17. 2023 Global Sustainable Development Report Working Group					
Julius	Atlhopheng	University of Botswana			
Kathryn	Bowen	University of Melbourne			
Susan	Clayton	College of Wooster			
Nicolas	Duvoux	Université Paris 8			
Quentin	Grafton	The Australian National University			
Sherilee	Herper	(chair) University of Alberta and ISC Early Career Scientist Award			
Gensuo	Jia	Institute of Atmospheric Physics, Chinese Academy of Sciences (CAS)			
Raphael	Kaplinsky	Institute of Development Studies			
Monica	Kerretts-Makau	Thunderbird's Center for Excellence for Africa			
Tonni A.	Kurniawan	Xiamen University			
Shunsuke	Managi	Urban Institute, Kyushu University			
Michele	Мусоо	University of the West Indies			
Ramón	Pichs–Madruga	Center for World Economy Studies, Cuban Academy of Sciences, IPCC			
Nico	Schrijver	Leiden University			
Caroline	Gevaert	University of Twente			
Laura	Zimmermann	University of Georgia and GYA			

# G. Formal agreements and Memoranda of Understanding

Object of agreement	Parties	Scope	Entry into effect	Duration/ end year
Global Research Programme on Inequality (GRIP)	ISC, University of Bergen	Agreement between the International Science Council and the University of Bergen about the Global Research Programme on Inequality (GRIP) (formerly "The Comparative Research Programme on Poverty [CROP]") for the period October 2019 to December 2021.	15-Sep-19	2021
IAP-ISC cooperation framework	ISC, InterAcademy Partnership	Memorandum of Understanding: Working towards strengthening cooperation and collaboration. To be reviewed every two years.	01-Nov-20	2022
ISC-UNDRR partnership	ISC, UNDRR	UNDRR-ISC partnership agreement. Signed in 2019 for two years; renewed March 2021 until end of 2023.	03-Jun-19	2023
World Data System International Technology Office	ISC, University of Victoria, Ocean Networks Canada Society	Non-binding Memorandum of Understanding concerning collaboration to host the ISCU World Data System International Technology Office and its director and staff. Renewal in 2021 until 2024.	01-Apr-18	2024
Urban Health and Wellbeing (UHWB)	ISC, International Society for urban Health (ISUH), Institute of Urban Environment at the Chinese Academy of Sciences	MoU concerning the operation of the International Programme Office of UHWB.	June 2023	Under renewal
Collaboration on 'Implementing urban and territorial planning and policy for improved health and wellbeing'	ISC, UN Human Settlements Programme and the Institute of Urban Environment of the Chinese Academy of Sciences	Framework for collaboration between UN-Habitat, ISC and IUE on 'Implementing urban and territorial planning and policy for improved health and wellbeing'.	01-Jun-19	2024
Regional Focal Point Latin-America & the Caribbean (RFP-LAC)	ISC, Columbian Academy of Exact, Physical and Natural Sciences	Agreement setting out the terms and conditions for the establishment and support of the RFP-LAC, which will be hosted by the Columbian Academy of Exact, Physical and Natural Sciences.	2021	Dec-2024
UN Decade of Ocean Science for Sustainable Development (2021- 2030)	ISC, the Intergovernmental Oceanographic Commission (IOC) of UNESCO	Cooperation in the framework of the UN Decade of Ocean Science for Sustainable Development (2021–2030). Initial period of five years, renewed automatically.	11-Feb-20	Indefinite
SciencesPo	ISC, SciencesPo	MoU to facilitate and strengthen collaboration between the ISC and SciencesPo, particularly in relation	May 2023	May 2025

Object of agreement	Parties	Scope	Entry into effect	Duration/ end year
		to science diplomacy and academic freedom.		
Committee on Freedom and Responsibility in Science	ISC, Ministry of Business, Innovation and Employment of New Zealand	Support to the International Science Council's work on freedom and responsibility in research through financial support for the Committee on Freedom and Responsibility in Research. Five- year duration.	01-Jun-20	2025
Sustainability in the Digital Age partnership	ISC, Sustainability in the Digital Age	Non-binding agreement between Sustainability in the Digital Age (SDA) and ISC on cooperation at the intersection of digital technologies and sustainability.	29-Oct-20	2025
Food and Agriculture Organization of the UN (FAO)	ISC, FAO	Letter of Intent to work together to strengthen science-policy interfaces in agri-food systems with the aim of supporting global progress towards the SDGs.	Oct-2023	2025
African Open Science Platform	ISC, National Research Foundation South Africa	Memorandum of Agreement for the African Open Science Platform. Five-year duration.	01-Dec-20	2025
World Data System International Programme Office	ISC, Oak Ridge Institute at the University of Tennessee	Memorandum of Understanding on the hosting of the WDS International Programme Office at the Oak Ridge Institute. Five-year duration.	Apr-21	Apr-26
World Federation of Engineering Organizations (WFEO)	ISC, WFEO	Strengthen the partnership between ISC and WFEO for the advancement of the Sustainable Development Goals (SDGs) and to seek enhanced impact through specific activities and deliverables in areas of mutual interest.	April 2022	April 2026
IRDR International Centre of Excellence (ICoE) in Taipei	ISC, Academy of Sciences in Taipei	Agreement on the Management of an Integrated Research on Disaster Risk (IRDR) International Centre of Excellence.	Jul 2024	2026
United Nations University	ISC, United Nations University	Memorandum of Understanding on academic collaboration between the United Nations University and the International Science Council. Five-year duration.	15 Sep 2023	2028
Regional Focal Point Asia-Pacific (RFP-AP)	ISC, Australian Academy of Science (AAS)	Agreement setting out the terms and conditions for the establishment and support of the RFP-AP, hosted by the AAS.	July 2023	2028
World Health Organization	ISC, WHO	Memorandum of Understanding to strengthen collaboration on research, development, and innovation in health	14 October 2022	2032

Object of agreement	Parties	Scope	Entry into effect	Duration/ end year
United Nations Environment Programme	ISC, UNEP	Memorandum of Understanding to mobilize scientific expertise, strengthen science policy interfaces and transdisciplinary approaches to solving environmental problems.	2022	Indefinite
Integrated Research on Disaster Risk (IRDR)	ISC, IRDR, UNDRR, CAS (AIR), CAST	Letter of Co-operation: IRDR Phase	May 2023	2033
Scholars at Risk (SAR)	ISC, SAR	Partnership agreement for ISC to join SAR as a Partner Network	July 2021	Indefinite
World Climate Research Programme (WCRP)	ISC (ICSU), World Meteorological Organization and Intergovernmental Oceanographic Commission	Agreement on co-sponsorship of World Climate Research Programme. (Replaces agreement from 1980).	Jan-1993	Indefinite

## H. Regional Focal Point staff and governing bodies

### **Regional Focal Point for Asia and the Pacific**

#### **Secretariat**

- Petra Lundgren, Director (departing November 2024)
- Aleta Johnston, Communications Manager
- Salote Austin, Oceania Programme Manager
- Nina Maher, Projects Officer
- Kunzang Choden, Asia Programme Manager

#### **Advisory Council**

- Chennupati Jagadish (co-chair), Australian Academy of Science
- Pal Ahluwalia, University of the South Pacific
- Felix Bast, Central University of Punjab
- Gisela Concepcion, The Marine Science Institute, University of the Philippines
- Jia Gensuo, Global Change Research Center for East Asia (START-TEA)
- Yukio Himiyama, Emeritus Professor, Hokkaido University of Education
- Kathryn Robinson, Emeritus Professor, Australian National University

#### Regional Focal Point for Latin America and the Caribbean

#### **Secretariat**

- Helena Groot, Director, President,
- Carolina Santacruz-Perez, Senior Science Officer

## **Liaison Committee**

- Ana Rada (co-chair), Universidad Mayor de San Andrés
- Luis Sobrevia (co-chair), Pontificia Universidad Católica de Chile
- Maria del Carmen Samayoa
- Graciela Díaz de Delgado, International Union of Crystallography (IUCr)
- Luisa Fernanda Echeverría-King, Universidad Simón Bolívar in Barranquilla, Colombia
- Dora-Luz Flores, Universidad Autónoma de Baja California (UABC)
- Germán Antonio Gutiérrez Dominguez, Universidad Nacional de Colombia (UNC)
- R. Daniel Peluffo, Universidad de la República, Uruguay
- Silvina Ponce Dawson, University of Barcelona, CONICET Argentina, IUPAP
- Elisa Reis, Federal University of Rio de Janeiro
- Adelle Thomas, Climate Analytics

#### I. Secretariat staff

The following staff and consultants have worked for the ISC during the period 2022–2024.

#### Current staff

- 1. AHN Yun-Kang, IT Officer
- 2. ARICÒ Salvatore, CEO
- 3. BAREKZAI Sarajuddin, Administrative Officer
- 4. DE MARCHI Natacha, Senior Financial Officer
- 5. GERONIMO Mayette, Financial Officer
- 6. GUENNEC Alexandra, Senior Human Resources Officer
- 7. GUILLIER Jane, Administrative Officer
- 8. IVAN Gabriela, Communications Officer, Partnership and Membership Development
- 9. JACOT DES COMBES Hélène, Science Officer
- 10. LEPARMENTIER Eric, General Services Manager
- 11. MCBRIDE Vanessa, Science Director
- 12. MOORE Sarah, Operations Director
- 13. NACACHE Léa, Communications Officer
- 14. POPOVICI Anda, Science Officer
- 15. SAMANDAR EWEIS Dureen, Science Officer
- 16. STAVROU Vivi, Senior Science Officer, Executive Secretary Committee for Freedom and Responsibility in Science
- 17. STEVANCE Anne-Sophie, Senior Science Officer, Head of the Global Policy Unit
- 18. SUD Megha, Senior Science Officer
- 19. THIEME Anne, Communications Officer, Membership Liaison
- 20. TIGHE Olivia, Administrative Officer
- 21. TSOY Zhenya, Senior Communications Officer & Acting Head of Communications
- 22. WADDELL James, Science Officer, Political Affairs Liaison
- 23. YLOSTALO-JOUBERT Miia, Senior Administrative Officer, PA to CEO

#### Staff departing during reporting period

- 1. DE MARCHI Arno, Administrative Officer
- 2. DENIS Mathieu, Senior Director, Head Centre for Science Futures
- 3. HACKMANN Heide, CEO
- 4. MESTON Alison, Communications Director
- 5. PAULAVETS Katsia, Senior Science Officer
- 6. SAYER Lizzie

#### Interns

- 1. AGDESTEIN Elise
- 2. AMREIN Alayna
- 3. CLAUSEN Sarah
- 4. FLORES ARICÒ Berta
- 5. GALLOWAY Kathryn
- 6. LIU Dong
- 7. MEUNIER Marine
- 8. RAWSHANGAR Bahram
- 9. SCANLAN Genevieve
- 10. SOMMERS Holly
- 11. TURRISI Alessandra

#### 12. WADDELL James

## Committee for Freedom and Responsibility Special Advisor

- 1. VAUGHAN Frances
- 2. KESSEL Gustav (current)

## Special Appointments

- 1. BRIDGEWATER Peter
- 2. CASTLE David

#### Consultants

- 1. BIXLER Jane, Midterm Meeting of Members in May 2023
- 2. BUISSE Erin, Science in Times of Crisis
- 3. ELLIOTT Tracey, Research Assessment and ISF Fellowship
- 4. GILLIGAN Aidan, public relations
- 5. GOVEAS Jenice, The Future of Scientific Publishing
- 6. HASSAN Ines, COVID19 Outcome Scenarios project
- 7. KAPLAN David, COVID19 Outcome Scenarios project, Open Science project
- 8. KOLEY Moumita, The Future of Scientific Publishing
- 9. KLUPPELBERG Raina, COVID19 Outcome Scenarios project
- 10. MOSER Susi, Transformations to Sustainability Programme, Science Missions
- 11. PERKINS Nick, Public Value of Science, Unlocking Science, COVID-19 and implications for national and global policy and the Centre for Science Futures
- 12. ROCK Anthony, ISC Representative to the UN System
- 13. SCOTT Nicholas, Senior Digital Consultant
- 14. SEAG Morgan, Senior ISC Representative to the UN System
- 15. SPARKS Riley, Journalist and Science Writer
- 16. TALON SAMPIERI Sarah, COVID19 Outcome Scenarios project
- 17. TWADDLE Graham, Knowledge Management Consultant