APPENDIX A: SCOPING GROUP MEMBERS

Name	Position	Region
<u>Sarah de Rijcke</u>	Chair of Scoping Group and Director, Centre for S&T Studies (CWTS), Leiden University	Netherlands
<u>Clemencia</u> <u>Cosentino</u>	Director of Food and Agriculture Organization (FAO) Office of Evaluation (OED), and formerly Chief Evaluation Officer and Evaluation and Assessment Capability Section Head, US National Science Foundation	USA
Robin Crewe	Senior Research Fellow, Centre for the Advancement of Scholarship, University of Pretoria	South Africa
<u>Carlo D'Ippoliti</u>	Associate Professor of Political Economy, Department of Statistical Sciences, Sapiensa University of Rome	Italy
<u>Shaheen Motala-</u> <u>Timol</u>	Acting Head, Regulatory Affairs and Accreditation Division, Higher Education Commission	Mauritius
<u>Noorsaadah Binti</u> <u>A. Rahman</u>	Professor, Deputy Vice-Chancellor (Research and Innovation, University of Malaya	Malaysia
Laura Rovelli	Coordinator of the Latin American Forum for <u>Research Assessment (FOLEC-CLACSO)</u> and member of the DORA Advisory Board, researcher at CONICET	Argentina
<u>David Vaux</u>	Laboratory Head; Deputy Director, Science Integrity and Ethics, WEHI Institute of Medical Research, University of Melbourne	Australia
YAO Yupeng	Director of Policy Department, National Natural Science Foundation of China (NSFC)	China

Additional support from Dr Alex Rushforth, Assistant Professor at CWTS, Leiden University

Secretariat support:

- Tracey Elliott, International Science Council (ISC), Senior Consultant
- Anna-Maria Grammatte, Global Young Academy (GYA), Senior Project Officer
- Rania Kosti, InterAcademy Partnership (IAP), Executive Director (US Office)
- Sarah Moore, ISC, Director of Operations
- Beate Wagner, GYA, Managing Director

APPENDIX B: STAKEHOLDERS CONSULTED FOR THIS PAPER

Region	Experts	Affiliation/position
Global	Geoffrey Boulton Masresha Fetene Peter Gluckman Peggy Hamburg Priscilla Mante Prosper Ngabonziza Haley Hazlett Hannah Flewitt	ISC Governing Board Member (UK) IAP Co-Chair (Ethiopia) ISC President (New Zealand) IAP Co-Chair (US) GYA Co-Chair (Ghana) GYA Co-Chair (US) Acting Program Director, Declaration on Research Assessment (DORA) IARU, International Projects Coordinator, IARU
		Secretariat
Asia-Pacific	Michael Barber	Member of the Steering Committee for the International Science Council's project <u>the Future of</u> <u>Scientific Publishing</u> .
	Ginny Barbour	Co-Lead, Office for Scholarly Communications, Queensland University of Technology; Director of <u>Open Access Australasia;</u> Past President COPE
	Chai Lay Ching	Associate Professor Biological Sciences, University of Malaya, Chairperson Young Scientists Network – Academy of Sciences Malaysia
	Fiona Fidler	Professor School of BioSciences and School of Historical and Philosophical Studies, University of Melbourne; leader of the <u>Interdisciplinary</u> <u>Meta-Research Group (IMeRG)</u> ; Association for Interdisciplinary Meta-Research and Open Science_ <u>https://aimos.community/</u>)
	Moumita Koley	STI Policy Researcher, Department of Science and Technology's Centre for Policy Research (DST-CPR), Indian Institute of Science, India
	John Mattick	Professor RNA Biology, University of New South Wales, Australia
	Orakanoke Phanraksa	Senior Intellectual Property Consultant at Technology Licensing Office, Technology Management Center, National Science and Technology Development Agency (NSTDA), Thailand, past Co-Chair of the Global Young Academy, Interim Co-Chair of the ASEAN Young Scientists Network

China	GUO, Zhengtang	Professor, Director of Department of Earth Science, National Natural Science Foundation; Academician of Chinese Academy of Sciences; Former Vice-President, University of Chinese Academy of Sciences
	LI, Jinghai	President of the National Natural Science Foundation of China (NSFC)
	LI, Xiaoxuan	Professor, Institute of Policy and Management, Chinese Academy of Sciences; Director, Management Innovation and Evaluation Research Center, Chinese Academy of Sciences
	REN, Shengli	Professor; Executive Editor, Science China Press
Africa	Julie Makani	Wellcome Trust Research Fellow and Associate Professor, Muhimbili University of Health and Allied Sciences, Tanzania
	Zenda Ofir	Independent evaluator, South Africa
	Emmanuel Unuabonah	Fellow of the Nigerian Academy of Science and former President of Nigerian Young Academy
Europe	Priya Bondre-Beil	Internationale Zusammenarbeit, Europäische Wissenschaftspolitik, Deutsche Forschungsgemeinschaft (DFG)
	Stephen Curry	Chair of DORA; Professor of Structural Biology, Faculty of Natural Sciences, Department of Life Sciences, Imperial College London, UK; Assistant Provost for Equality, Diversity and Inclusion, Imperial College London
	Elisabeth (Lizzie) Gadd	Head of Research Operations, University of Glasgow, UK
	Karen Stroobants	Policy Adviser, Royal Society of Chemistry, UK
	James Wilsdon	Director, Research on Research Institute (RoRI) UK; Professor of Research Policy, UCL-STEaPP, Department of Science, Technology, Engineering and Public Policy (STEaPP), University College London
North America	Amy Brand	Director, The MIT Press, USA
AIIICIICă	Thomas Ferguson	Research Director, Institute for New Economic Thinking, USA
	David Phipps	Assistant Vice-President, Research Strategy & Impact, Office of the Vice-President Research & Innovation at York University and director of Research Impact Canada (RIC)

Latin America	Graciela Díaz de Delgado	IUCr Executive Committee, Universidad de Los Andes
	Judith Sutz	Researcher, University of the Republic, Uruguay; Coordinator of the Academic Unit of the Scientific Research Sector Commission (CSIC); member of the National Academy of Sciences of Uruguay
	Hebe Vessuri	Centro de Investigaciones en Geografía Ambiental (<u>CIGA-UNAM</u> , Mexico)

APPENDIX C: GYA, IAP AND ISC MEMBERSHIP AND MISSIONS

PARTNER	MEMBERSHIP	MISSION STATEMENTS
GYA and the National Young Academies	200 young scientists from all disciplines, typically 3–10 years after their PhD, aged 30–40 years and in the early stages of their independent academic careers. Selected for their scientific excellence and commitment to engage with society, they serve five-year terms before joining an alumnus of 327 alumni (as of 2021). Members and alumni together hail from 94 countries. The GYA is also a conduit to (presently) 54 National Young Academies plus additional young researcher networks. The GYA is a full member of the IAP and affiliate member of the ISC, and has numerous partnerships with other research, funding, publishing and development agencies. It also sits on the Advisory Board of the UN Major Group for Children and Youth.	To promote science for all, science for the future and giving a voice to young scientists around the world. To lead international, interdisciplinary and intergenerational dialogue for evidence-informed and inclusive global, regional and national decision-making. Four thematic areas: <u>Science</u> <u>and Society; GYA & the SDGs;</u> <u>Research Environment;</u> and <u>Science Education & Outreach</u> .
IAP	 150 national, regional and global member academies who represent leading scientists, engineers and health professionals in over 100 countries. Academicians are nominated by their peers, based on their demonstrable excellence in science. IAP has four regional networks – in Africa, Asia, the Americas and Europe. Academies can apply for IAP membership if they meet the eligibility criteria. The IAP is an observer organization to the Intergovernmental Panel on Climate Change, the Belmont Forum and the ISC, and works closely with the WHO. 	To play a vital role in ensuring that science serves society inclusively and equitably and underpins global sustainable development. To work collaboratively to address issues of global, regional and national importance: to advance sound <u>policies</u> , improve <u>public health</u> , promote excellence in <u>science</u> <u>education</u> and achieve other critical <u>development goals</u> .

o a a ir a n ir (s h I I n a a p I S I I T C g a n n	An institutionally diverse network of over 200 international scientific unions and associations, as well as national and regional scientific organizations ncluding academies, research institutes and foundations. Its members cover both natural and social sciences. ISC has an office n New York, Colombia (to cover LAC), and soon) Australia (to cover Asia-Pacific) and has plans to set up an office in Africa. Institutions can apply to become ISC nembers if they meet the eligibility criteria, adhere to ISC principles and values, and pay a membership fee. The GYA is a full (non- baying) member and the IAP an observer of SC. The ISC is the co-convenor for the S&T Community Major Group, representing the global science community in the UN system, and as such has privileged access to UN neetings. It has an MOU with the WHO and works closely with UNEP and UNDP.	To act as the global voice for science in the UN system. Three principal areas of work: (i) wide-ranging science-for- policy issues: to stimulate, support and communicate policy-relevant science; (ii) policy-for-science issues: to enable science to contribute more effectively to the global public good; and (iii) scientific freedom and responsibility to defend the free and responsible practice of science. ISC leads a broad range of co-sponsored international research programmes, networks and committees, well-being and disaster risk.

APPENDIX D: LIST OF ACRONYMS

ACRONYM	MEANING
AAU	African Association of Universities
AGENCIA I+D+i	Agencia Nacional de Promoción de la Investigación, el Desarrollo Tecnológico y la Innovavión (Argentina)
AGORRA	A Global Observatory of Responsible Research Assessment
AI	Artificial intelligence
AIS	Article Influence Score
ALLEA	All European Academies (the European Federation of Academies of Sciences and Humanities)
APC	Author processing charge
ASSAf	Academy of Science of South Africa
ChatGPT	Chat Generative Pre-Trained Transformer
CLACSO-FOLEC	The Latin American Council of Social Sciences – Latin American Forum on Research Assessment
CoARA	Coalition on Reforming Research Assessment
CONICET	Consejo Nacional de Investigaciones Científicas y Técnicas (Argentina)
DOI	Digital Object Identifier
DORA	Declaration on Research Assessment
DST-CPR	Department of Science and Technology - Centre for Policy Research (India)
ECR	Early career researcher
ERC	European Research Council
GraspOS	Open science assessment dataspace
GRC	Global Research Council
GYA	Global Young Academy
HEI	Higher education institution
IAP	InterAcademy Partnership
IARU	International Alliance of Research Universities

IAU	International Association of Universities
IDRC	International Development Research Centre (Canada)
IISc	Indian Institute of Science
INORMS	International Network of Research Management Societies
ISC	International Science Council
JIF	Journal Impact Factor
KNAW	Royal Netherlands Academy of Arts and Sciences
LAC	Latin America and the Caribbean
LERU	League of Research-Intensive Universities
MEXT	Ministry of Education, Culture, Sports, Science and Technology (Japan)
NSFC	National Natural Science Foundation of China
NGO	Nongovernment Organization
NOR-CAM	Norwegian Career Assessment Matrix
NRF	National Research Foundation (South Africa)
OPUS	Open and Universal Science
ORCID	Open Researcher and Contributor ID
PASRES	Programme Appui Stratégique à la Recherche Scientifique (Côte d'Ivoire)
REF	Research Evaluation Framework
R&D	Research and development
RoRI	Research on Research Institute
RRA	Responsible Research Assessment
SA	South Africa
SGCI	Science Granting Councils Initiative
SCOPE	Start-Context-Options-Probe-Evaluate
SDGs	Sustainable Development Goals
STI	Science, technology and innovation

TARA	Tools to Advance Research Assessment
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization