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2 December 2022

Australian Academy of Science submission on the New International Development Policy

The Australian Academy of Science (the Academy) welcomes the opportunity to comment on the Department of Foreign Affairs and Trade consultation on the new International Development Policy.

The issues confronting humanity are local and transnational – and the solutions have science at their heart.

International development policy must reflect that developed nations have significant responsibility for supporting developing nations in their search for solutions to their problems. Transnational matters will be solved by nations working in close, free and substantially unrestrained partnerships. Science in general, and science targeting particular problems, works best when it heads where scientists take it.

A new international development policy allows Australia to identify how science can benefit both our regional neighbours and Australia's national interests.

The Academy submits that international development policy should:

- Recognise science engagement as a key capacity builder for developing nations
- Support science and capacity-building initiatives to develop the resilience, international presence, and sustainability of regional neighbours
- Leverage the partnership between the Australian Government and the Academy via its unique position as the host of the ISC Regional Presence, which will enable stronger regional connections across governments, academia, the Pacific community and Asia-Pacific Learned Academies.

The Australian Academy of Science

The Academy is experienced in promoting regional and international cooperation for mutual benefit through a range of strategic initiatives and is well-placed to assist with scientific engagement and capacity development across the globe. This is achieved through our 69-year membership of the International Science Council (ISC); via membership of the international scientific unions; and through its range of bilateral and multilateral relationships we nurture.

From 2023, the Academy will host a new initiative: the International Science Council Regional Presence for the Asia-Pacific region. The Asia-Pacific Regional Presence will strengthen the voice of scientists and social scientists from developing countries in the region and support targeted action to address regional needs and priorities.

Australia can build capacity as a science partner with the region

The Academy strongly supports the Australian Government's commitment to advance the self-sufficiency and self-determination of small island developing states by addressing shared challenges and assisting the implementation of the Pacific Island Forum 2050 Strategy for the Blue Pacific.

In addition to the areas of focus in the strategy, the Academy identifies the following avenues for improved international development-focussed scientific and diplomatic engagement in the region:

- Increasing access to Australian research and education opportunities for regional partners
- Minimising geographic and technological barriers to ensure equitable access to national and international scientific funding, opportunities and collaboration
- Enabling retention of scientific talent in their home countries, and opportunities for skilled people who have left to return
- Supporting implementation of the UNESCO Recommendation on Open Science in the region, which aims to make research and data more transparent, inclusive and democratic.

It will be important for Australia to partner regional neighbours with careful consideration of their needs and capabilities and built on mutual trust and respect.

Development *in partnership* with nations is the key to sustainable, long-term success.

Australia can promote scientific collaboration through funding, exchange and data sharing to build the capacity of regional entities, such as scientific bodies, rapid response systems, and research networks.

The Academy's science networks for Australia's international development policy

The Australian Academy of Science invites the Australian Government to leverage our existing global networks, scientific leadership and expertise in areas of concern such as but not limited to climate change, health systems, and the scientific research system. The Academy can support the government to co-design international development priorities with its partners around the world.

The Academy has a comprehensive strategic network for maximising international engagement, particularly through the ISC and its global reach. The ISC is a non-government organisation representing both natural and social sciences, with a global membership of 40 international scientific unions and interdisciplinary science bodies, as well as over 140 national and regional scientific bodies that convene scientists to coordinate research and address issues of global significance.

The convening power of the ISC is unparalleled. Its scope and activities include involvement in global science policy by providing high-level advice to UN bodies on the Sustainable Development Goals (SDGs), facilitating global fora on topics such as disaster risk and urban health, and championing the freedom of movement and association of scientists.

In October 2022, the Australian Government committed \$10.3 million towards the Australia hosting the ISC Regional Presence for the Asia-Pacific region at the Academy between 2023-2028.

Via the ISC Regional Presence for the Asia-Pacific Region, the Academy can assist Australia's development policy by supporting developing nations' engagement with the ISC and other international bodies.

The Academy is ideally positioned to convene expertise and facilitate dialogue to contribute to evidence-informed development initiatives and diplomacy through international collaboration. The Academy is equipped and experienced in bringing together diverse voices across sectors and nations to develop reports and recommendations based on evidence-backed science through:

1. Continuing in its role as Australia's representative on the International Science Council (ISC) and many of the International Scientific Unions (ISU), (**see Attachment 1**)
2. Administering numerous international programs, the Academy has run over several decades, many on behalf of the Australian Government; (**see Attachment 2**)
3. Establishing and maintaining a broad range of bilateral and multilateral relationships between the Academy and international bodies, including the Association of Academies and Societies of Science in Asia ([AASSA](#)) and the InterAcademy Partnership ([IAP](#)).

Australia's historic international scientific engagement provides the opportunity to implement a development policy based on the principles of sovereignty, mutual respect and knowledge exchange with the ultimate goal of supporting a developed, informed and internationally engaged region with its development partners.

Australia can support our neighbours through international scientific collaboration, science diplomacy and capacity building to facilitate new development opportunities and solutions to shared challenges. In doing so, Australia can cement its place as a leader in a developing economic and geopolitical region rich with economic, environmental and scientific potential.

To discuss or clarify any aspect of this submission, please contact Ms Nancy Pritchard, Director International Programs and Awards (Nancy.Pritchard@science.org.au).

Attachment One: International Scientific Unions under the umbrella of the International Science Council

- ISC, International Science Council
- IAU, International Astronomical Union
- IGU, International Geographical Union
- IMU, International Mathematical Union
- ICMI, International Commission on Mathematical Instruction
- INQUA, International Union for Quaternary Research
- IUBMB, International Union of Biochemistry and Molecular Biology
- IUBS, International Union of Biological Sciences
- IUCr, International Union of Crystallography
- IUGG, International Union of Geodesy and Geophysics
- IUGS, International Union of Geological Sciences
- IUHPST, The International Union for History and Philosophy of Science and Technology
- IUIS, International Union of Immunological Societies
- IUMRS, International Union of Materials Research Societies
- IUMS, International Union of Microbiological Societies
- IUNS, International Union of Nutritional Sciences
- IUPAB, International Union for Pure and Applied Biophysics
- IUPAC, International Union of Pure and Applied Chemistry
- IUPAP, International Union of Pure and Applied Physics
- ICO, International Commission for Optics
- IUPHAR, International Union of Basic and Clinical Pharmacology
- IUPS, International Union of Physiological Sciences
- IUTAM, International Union of Theoretical and Applied Mechanics
- IUTOX, International Union of Toxicology
- URSI, Union Radio Scientifique Internationale
- COSPAR, Committee on Space Research
- SCAR, Scientific Committee on Antarctic Research
- SCOR, Scientific Committee on Oceanic Research
- SCOSTEP, Scientific Committee on Solar-Terrestrial Physics
- WCRP, World Climate Research Programme
- CODATA, Committee on Data for Science and Technology
- IFToMM, International Federation for the Promotion of Mechanism and Machine Science

Attachment 2: Existing International Exchange, Research and Mobility Programs

The Academy builds scientific capacity regionally and globally. It contributes expertise by exploring collaboration opportunities and building and maintaining networking opportunities with national Academies of Science, Chief Scientists and senior science representatives across the globe.

[Regional Collaborations Programme and the Global Science and Technology Diplomacy Fund - Strategic Element](#)

The Academy currently administers the Regional Collaborations Programme, a four-year initiative worth \$3.2 million, as part of the Government's Global Innovation Strategy under the National Innovation and Science Agenda. The programme supports Australian research organisations and businesses to undertake multi-partner projects and workshops to collaborate with regional and international science, research and innovation partners on solutions to shared regional challenges within the Asia-Pacific region. This program will conclude at the end of 2022 and is being succeeded by the Global Science and Technology Diplomacy Fund - Strategic Element, administered jointly by the Australian Academy for Technology and Engineering (ATSE) and the Academy.

[Indonesia-Australia Science Collaboration Forum and the Australia-Indonesia Science Symposium](#)

With the support of DFAT in 2016, the Academy played an active role in supporting capacity building for the Indonesian Academy of Science, and the Young Academy of Sciences in Indonesia, hosting an Indonesia-Australia Science Collaboration Forum and the Australia-Indonesia Science Symposium. The symposium built on existing partnerships between Australian and Indonesian scientists, universities and public research institutions and provided an opportunity for bilateral scientific collaboration and exchange.

[Chinese Academy of Sciences](#)

Between 1980 and 2011, more than 600 scientists from Australia and China participated in scientific exchange programs run jointly by the Academy and the Chinese Academy of Sciences. These have led to the establishment of extensive relationships and collaborative activities and projects. Both academies continue to forge strong links through annual bilateral symposia going back to 2004, supported by the Government's Australia-China Research Fund.

[Japan Society for the Promotion of Science](#)

Since 1979 Academy and the Japan Society for the Promotion of Science (JSPS) have managed a series of exchange programs. Currently, JSPS fully funds on an annual basis, 14 young Australian researchers who take up JSPS Postdoctoral Fellowships in Japan for a period of 12-24 months. These fellowships are worth approximately \$ 1 million per year.

[Australia-India Strategic Research Fund Early- and Mid-Career Fellowships](#)

Since 2012 the Academy has assisted the Australian Government in administering the Australia-India Strategic Research Fund Early- and Mid-Career Fellowships that support Australian researchers to travel to India and work with leading researchers at major Indian science and technology organisations for a period of between 1 and 3 months.

[International delegates at Science at the Shine Dome](#)

Prior to the pandemic, the Academy sponsored up to four EMCRs from countries in the Asia-Pacific region to participate in Science at the Shine Dome. In this annual three-day event, Australia's most influential scientists gather in Canberra to celebrate science and to honour outstanding achievements in science. At this event, national awards are made, high achievers are admitted to the Australian Academy of Science Fellowship, and there is a symposium on an issue of national importance. In addition, the meeting aims to motivate and educate young researchers and allow these young researchers to build new networks and contacts with Australian scientists. Participants selected by the Academy were supported with travel to Australia, in-country accommodation, meals and insurance to attend the event in Canberra. The Academy also organised a one-day program of site visits for the international participants to provide opportunities for face-to-face interactions and network building with Australian researchers.