



Australian Government

**Australian Government Response to the
House of Representatives Standing
Committee on Industry, Science and
Innovation inquiry report:**

***Australia's International Research
Collaboration***

June 2011

House Standing Committee on Industry, Science and Innovation Inquiry into Australia's international research collaboration

Australian Government Response to Committee report:
Australia's International Research Collaboration

1. Overview

The Australian Government welcomes the opportunity to respond to the report of the House of Representatives Standing Committee on Industry, Science and Innovation (the Committee), *Australia's international research collaboration* (June 2010).

The recommendations made in this report will help to frame the Government's future policies and initiatives to support international research engagement, informed as they are by the valuable contributions of science policy makers and the Australian research community.

1.1. Background

An inquiry into Australia's international research collaboration was referred to the House of Representatives Standing Committee on Industry, Science and Innovation (the Committee) by Senator the Hon Kim Carr in November 2009. The Terms of Reference of the inquiry were for the Committee to consider Australia's international research engagement, with particular reference to:

- the nature and extent of existing international research collaborations;
- the benefits to Australia from engaging in international research collaborations;
- the key drivers of international research collaboration at the government, institutional and researcher levels;
- the impediments faced by Australian researchers when initiating and participating in international research collaborations and practical measures for addressing these; and
- principles and strategies for supporting international research engagement.

The Committee received 85 submissions, and three supplementary submissions drawn from a wide range of stakeholders, including individual universities, university and academic representative bodies, government agencies, publicly funded research agencies and individual academics.

In addition the Committee held 9 public hearings in Canberra, Sydney, Melbourne and Perth between February and June 2010.

The Committee tabled its report on 22 June 2010, making 18 recommendations aimed at improving Australia's international research collaboration.

1.2. Alignment with Australian Government Priorities

The Government's ten year agenda – *Powering Ideas: an Innovation Agenda for the 21st Century* – recognises that global connectedness in science and innovation is vital to Australia's future, affirming that international collaboration:

- builds capacity in Australia and beyond;
- facilitates access to new knowledge;
- attracts foreign investment; and
- extends Australia's global influence.

The innovation agenda recognises the importance of international collaborations involving research and development, and in particular, sets a National Innovation Priority (Priority 6) 'Australian researchers and businesses are involved in more international collaborations on research and development'.

The Government's innovation reform agenda will re-energise Australia's international research collaboration and build Australia's research capacity in order to secure our economic and environmental wellbeing into the future.

1.3. The Australian Government's response to the recommendations made in 'Australia's International Research Collaboration'

In line with the Committee's report the Government's response to *Australia's International Research Collaboration* is grouped around the following broad themes:

- researcher mobility; and
- access to funding, including support for international research collaboration.

Researcher mobility

The Australian Government is committed to removing impediments, real or perceived, to international research collaboration and exchange. Key actions proposed by the Government to address concerns identified in *Australia's International Research Collaboration* include:

- streamlining visa application processes for visiting researchers;
- enhancing communication between the Department of Immigration and Citizenship (DIAC) and Australian universities and research bodies to provide advice on selecting the most appropriate visa sub-class for international researchers visiting Australia; and
- enhancing opportunities for early career researchers as part of the development of the Government's Research Workforce Strategy.

Access to funding and support for international collaboration

The Australian Government supports a range of initiatives aimed at strengthening international research collaboration including:

International Science Linkages Program and the Australia-India Strategic Research Fund

For over 10 years the International Science Linkages (ISL) Program has provided an important platform for international collaboration. The Australia-India Strategic Research Fund (AISRF) and the recently announced Australia-China Science and Research Fund will provide a vital mechanism for advancing the Australia Government's science and research agenda with these countries.

In November 2009, the Australian and Indian Prime Ministers agreed to extend the AISRF and increase its level of funding. The Australian Government has committed \$10 million per annum for five years commencing 2009-10, with the Indian Government to provide matching funding.

The ISL program is scheduled to cease operations on 30 June 2011. Consistent with best practice for terminating programs, an independent evaluation of the program has been conducted. The Government has decided to let ISL lapse and not institute a replacement program at this point in time.

Internationalising research programs

The Australian Government's broader approach to supporting international science collaboration involves internationalisation of research programs. For example, changes have been made to the Australian Research Councils' (ARC) Discovery Projects, Linkage Projects and other National Competitive Grant Program (NCGP) schemes to enhance international collaboration.

Changes have also been made to other major Government programs to support international collaboration. For example, CSIRO's Flagship Collaboration Fund is now open to applications from overseas research organisations, and Cooperative Research Centres are now encouraged to engage globally and co-invest with international partners under new guidelines released in 2008.

Visiting Researcher Program

The Visiting Researcher Program is jointly funded by Austrade and Australian Education International and allows researchers from across Australia to visit research universities in Europe and develop collaborative ties between countries.

Research Infrastructure Block Grants

To assist researchers meet the costs associated with the conduct of research including international, the Department of Innovation, Industry, Science and Research (DIISR) administers the Research Infrastructure Block Grants (RIBG) scheme that provides funding to universities for the indirect costs of research associated with the Australian competitive grants that they win.

Sustainable Research Excellence in Universities Program

The Government's new Sustainable Research Excellence in Universities (SRE) program, administered by DIISR provides \$510 million over four years from 2009-10 to increase funding to help universities meet the indirect costs of competitive research including international.

National Health and Medical Research Council awards

NHMRC offers awards to support international collaboration and assist Australian researchers to build their international capacity and competitiveness and build international networks. These include the:

- NHMRC joint European Union (EU Grants) *Collaborative Research Grants* scheme;
- *International Collaborative Indigenous Health Research Partnership (ICIHRP)* Grants, which are a tripartite partnership between the NHMRC, the Canadian Institutes of Health Research (CIHR) and the Health Research Council of New Zealand (NZ HRC);
- NHMRC *Training (Postdoctoral) Fellowships* (which support training in basic research); *CJ Martin Fellowship*; *Neil Hamilton Fellowship*; *Sydney Sax Fellowship*; *INSERM Exchange Fellowship* – a collaboration with France; *Australia-China Exchange Fellowship* (now being extended to Asia);
- *Travelling Awards for Research Training* – which has been established to enable current holders of NHMRC Australian-based Fellowships and Scholarships to value-add to their research by providing funding for limited training periods at a temporary host institution;
- *Centres of Research Excellence (CRE) Scheme* – where centres are encouraged to collaborate with, and participate in, international research studies; and
- *International Cancer Genomics Consortium (ICGC)* which spans 24 countries, and is expected to deliver significant benefits in detecting, preventing and treating cancer.

2. Australian Government Response to Recommendations

Impediments to outbound researchers

Recommendation 1

The Committee recommends that the Department of Innovation, Industry, Science and Research investigate the viability of a small grants scheme to be established to support the travel expense of Australian early-career researchers who win time on foreign instruments and facilities that are unavailable in Australia.

Action: The Australian Government does not support this recommendation.

The Australian Government recognises that provision of enhanced opportunities for early-career researchers is vital in securing a high quality research workforce in Australia. This issue is being explored in the development of the Government's Research Workforce Strategy.

The Australian Government currently funds a small grants scheme through the International Science Linkages program, called the Access to Major Research Facilities Program (AMRFP) administered by the Australian Nuclear Science and Technology Organisation. The program provides support for Australian researchers, including early career researchers, from industry, private or public research organisations and universities, to access major international research facilities.

During the two year period from 2008-09 to 2009-10, over 16 per cent of travel funded through the AMRFP was undertaken by early career researchers who were successful in winning time on foreign instruments and facilities.

The recent evaluation of the International Science Linkages (ISL) program noted the importance of supporting early career researchers and recommended that the AMRFP be continued. The outcomes of the evaluation will inform future models of government support for Australian researcher access to major international research facilities, including mechanisms to support researchers at the early stages of their careers.

The Australian Research Council provides access to travel funding on a competitive basis through, for example, the Discovery Projects scheme, and there is a provision in the Linkage Infrastructure Equipment and Facilities scheme for support to gain access to international facilities and equipment. Within ARC Centres of Excellence there are opportunities for early-career researchers and postgraduate students to engage with international collaborators and visit international facilities.

NHMRC Early Career Fellowships that fund researchers to work overseas include availability of a travel costs component in the award. Additionally, research projects conducted through the NHMRC Project and Program funding schemes, which fund around 66 per cent of total NHMRC grants, are able to include travel costs for researchers conducting part of the research overseas. NHMRC also funds an Indigenous specific travel award for travel within Australia and overseas. The NHMRC peer review process also reviews the budgets submitted with each application and ensures that funding is made available to support and enable researchers to engage with overseas teams by providing appropriate funding for travel.

Impediments to inbound researchers

Recommendation 2

The Committee recommends that the Department of Immigration and Citizenship make formal contact with the human resources sections of all relevant universities and research institutions explaining the most appropriate visa that should be used for visiting researchers.

Action: The Australian Government supports this recommendation.

The Australian Government has met this recommendation. The Department of Immigration and Citizenship (DIAC) met with relevant representatives from Universities Australia, University of New South Wales, University of Melbourne, the Australian Defence Force Academy, the University of Western Sydney and ANSTO.

Discussions with these institutes focused on identifying and ensuring a clear understanding of all concerns and issues and agreeing on a way forward.

The Government, with Universities Australia, has prepared advice in the form of a 'Visa Pathways' document which sets out which type of visa is appropriate for each visit type by visiting academics or researchers. The document will be distributed by Universities Australia to universities and research institutions and will be made available on the DIAC website.

Recommendation 3

The Committee recommends that the Department of Immigration and Citizenship remain in close contact with the human resource departments of universities and research institutions that are responsible for visa applications, reporting to these bodies monthly on the progress of active visa applications.

Action: The Australian Government supports the recommendation to remain in close contact with the human resource departments of universities and research institutions responsible for visa applications. The Australian Government does not support the recommendation for the Department of Immigration and Citizenship to report to these bodies monthly on the progress of active visa applications due to resource implications.

The Government has made significant progress towards meeting this recommendation. The Department of Immigration and Citizenship (DIAC) met with a number of representatives from universities and research institutions. As a result of these discussions the Government, with Universities Australia, has prepared advice in the form of a 'Visa Pathways' document which sets out which type of visa is appropriate for each visit type by visiting academics or researchers. The document will be distributed by Universities Australia to universities and research institutions and will be made available on the DIAC website.

In terms of the recommendation for DIAC to report to monthly on the progress of active visa applications, this is not supported as the sponsoring universities already have the ability to obtain details of applications lodged. The *Migration Act 1958* allows for sponsors and nominators to provide immigration assistance as 'exempt persons'. This includes contacting DIAC to discuss the progress of specific applications.

Recommendation 4

The Committee recommends that the Department of Immigration and Citizenship streamline the visa application process for visiting researchers by replacing the section that requires applicants to detail the benefits to Australia of their planned visit with a simplified section consisting of check boxes containing common reasons for academic visits.

Action: The Australian Government supports this recommendation.

The Government would like to bring to the Committee's attention that the "benefit to Australia" question is included in the *nomination application* form (that is completed by the sponsoring university or research institution) and not the *visa application* form (that is completed by the visiting researcher).

In light of this, the Department of Immigration and Citizenship will implement this recommendation through changes to the nomination application form. This will include a single check box specific to the Visiting Academic (Subclass 419) visa, from 1 November 2010. The sponsoring institution will only be required to tick a check box which states the benefit to Australia as being a "Visiting academic contributing to Australian research". No further details will be required.

Additionally, the Government can advise that effective 1 November 2010 the requirement for Subclass 419 visa applications to provide a letter of support from their home institution has been removed, further streamlining the visa application process.

The Committee may also be aware of the initiative to simplify Australia's visa system as part of the Government's deregulation agenda. Issues raised in response to the Department of Immigration and Citizenship's discussion paper (and in other fora), related to streamlining visa processes, will be considered in the context of the deregulation changes.

Recommendation 5

The Committee recommends that the federal Minister for Education formulate a proposal for consideration through COAG recommending that visiting researchers that have an Australian tax file number and are contracted to work on research projects for more than six months be eligible to receive public education for all school age children.

Action: The Australian Government does not support this recommendation.

Australian Government funding for government schools is delivered through the intergovernmental funding framework under the National Education Agreement (NEA) with the states and territories. Under the NEA the states and territories have responsibility for developing policy, delivering services, monitoring and reviewing individual school performance and regulating schools so that work towards national objectives and achievement of outcomes is compatible with local circumstances and priorities.

State and territory governments are legislatively responsible for management of their schools, including setting their own enrolment policies and determining the level of any payments, contributions and fees including those applicable to students who are on certain visa classifications. For example, humanitarian entrants may be exempt from payment of schools fees. Payment of school fees do vary from state to state.

Recommendation 6

The Committee recommends that the Australian Government implement a quota of 10 per cent of ARC and NHMRC successful grants to be allocated to early-career researchers who are first-time awardees.

Action: The Australian Government does not support this recommendation.

The ARC currently provides for the development of early career researchers through a range of initiatives. Each year a portion (up to 15 per cent) of the budget allocation under the Discovery Projects scheme is used to support proposals that only involve researchers awarded their PhD within the five years prior to their proposal (early career researcher-only proposals).

In the Discovery Projects commencing in 2010, successful early career researcher-only proposals accounted for 10.6 per cent of all funded proposals. Approximately 23 per cent of grants were awarded to proposals on which at least one named Chief Investigator or Fellow applicant was an early career researcher who had not previously been awarded an ARC grant.

In November 2010 the ARC released a Consultation Paper seeking feedback on proposed changes to the Discovery Program, including changes aimed at increasing support for early-career researchers. One of the proposed changes is that a new, separately assessed, flexible award be established to support early-career researchers. The aims of the new award would be to improve the assessment and success rate of early-career researchers, improve gender equity at this important stage of researchers' careers and attract more international researchers at this career stage. The ARC proposes to establish the new early-career researcher award scheme in early 2011 for funding commencing in January 2012.

In the 2009 NHMRC funding round, over \$65 million was awarded to early career researchers, representing 9.5 per cent of total NHMRC funding. Of this funding, \$41 million was awarded through early career researcher specific funding schemes. Annually, 8-9 per cent of grants awarded through the NHMRC Project grants scheme are awarded to early career researchers winning their first grant from NHMRC as Chief Investigator.

Early career researchers are also supported through other ARC funding schemes, particularly the Super Science Fellowships scheme, which is providing 100 fellowships for early career researchers in areas of strategic national importance; the Australian Laureate Fellowships scheme, which provides funding for early career researchers to work under the supervision of outstanding researchers; and ARC Centres of Excellence which provide opportunities for early career researchers to work in teams with experienced researchers on structured research programs.

Given the above information, the Government does not believe it is necessary to set a quota for ARC and NHMRC grants as current peer review processes are already delivering strong early career support. The implementation of quotas, as suggested, would introduce unnecessary rigidity to a system that is already achieving this recommendation's goal within flexible and quality driven funding arrangements.

Recommendation 7

The Committee recommends that the Australian Government specify that competitive grants, in particular all National Health and Medical Research Council grants, fund the full cost of research in each program to which a grant has been awarded.

Action: The Australian Government does not support this recommendation within current program budgets.

In principle, the Australian Government supports the idea of competitive grants covering the full direct costs of successful research funding proposals, subject to budget items meeting the criteria for individual funding schemes and the budget being considered reasonable by peer reviewers. Funding indirect costs of research (for example general infrastructure) through competitive grants is not supported.

During the application assessment process, the NHMRC and ARC use panels of experts to assess applications' budgets and determine the level of funding provided to individual projects. In the context of current funding levels, it would not be possible for the NHMRC or ARC to fund the full amounts requested in applications without substantially lowering success rates.

NHMRC policy, which is compatible with government policy on indexation, funds the direct costs of research that are not funded by other sources where appropriate. Through the peer review process, grant review panels exercise their discretion to accept, increase or reduce submitted budgets to ensure the budgets align with Health and Medical Research sector norms and meet Commonwealth Grant Guidelines *value for public money* policy.

Indirect costs of research are funded through schemes or processes that are generally external to NHMRC.

NHMRC administers the Independent Research Institute Infrastructure Support Scheme (IRIISS), which provides 20 cents per dollar of NHMRC grants awarded to independent medical research institutes (MRI). Equipment costs not able to be included in the NHMRC grant awards, are provided to eligible Medical Research Institutes (MRIs) through the NHMRC Equipment Grants.

The Department of Innovation, Industry, Science and Research (DIISR) administers the Research Infrastructure Block Grants (RIBG) scheme, which provides funding to universities for the indirect costs of research associated with the Australian competitive grants awarded to them.

DIISR also administers the Sustainable Research Excellence (SRE) program, providing \$510 million over four years from 2009-10 to increase funding to help universities meet the indirect costs of their research.

It should be noted that this recommendation does not align with subsection 5.23 of the report.

Recommendation 8

The Committee recommends that the Department of Innovation, Industry, Science and Research announce a successor program to the International Science Linkages program as soon as practicable to address the concerns of the research community.

Action: The Australian Government notes this recommendation.

In line with the Labor Party's policy platform, the Government remains committed to increasing international research collaboration and Australian engagement in bilateral and multilateral research partnerships and networks, particularly in areas of significance to Australia's economic and social development.

The International Science Linkages (ISL) program has for ten years been the Australian Government's leading mechanism for increasing Australia's participation in international research, for strengthening strategic partnerships between the Australian and overseas research communities, and for facilitating access by Australian researchers to global technology and science facilities.

The recent evaluation of the ISL program found strong evidence that projects and activities funded by ISL have been highly effective in achieving the objectives of increasing the participation of Australian researchers in international research and strengthening collaborative relationships. There is also strong evidence that ISL funded projects result in flow-on benefits such as new research collaborations, and building of international research relationships that expand in scope over time.

The evaluation concluded that international science engagement is essential to maximise the economic, social and environmental impact of Australian research and to leverage Australia's investment in science and innovation. Collaboration with researchers in other countries provides access to additional expertise and infrastructure and significantly increases the scale and effectiveness of Australia's research effort.

The Committee's inquiry into Australia's international research collaboration also provided a wealth of evidence demonstrating the effectiveness and success of the ISL program. The Committee's report, along with the findings of the ISL evaluation, will help to frame future models of Government support for international science collaboration.

The ISL Program will cease on 30 June 2011 and in the current tight fiscal environment the Government has decided not to implement a successor program to ISL at this time.

Recommendation 9

The Committee recommends that the successor program to the International Science Linkages program has its budget increased and indexed, and, pending proven success of the new program, that the Department of Innovation, Industry, Science and Research seek to have funding increased further in future budgets.

Action: The Australian Government notes this recommendation.

The Australian Government will continue to pursue and, where possible, expand its support for international science and research collaboration. An increase in funding under a successor program to the International Science Linkages (ISL) program would facilitate this.

In light of the ISL program's demonstrated effectiveness and appropriateness, the ISL evaluation recommended that funding for the program should be renewed and increased.

The Government continues to pursue a fiscally responsible approach to supporting international research collaboration and any increase in funding for a successor program will be sought on the basis of the program's impact and value for money and in light of any fiscal constraints.

In line with Government policy, all on-going Government programs are indexed. Indexation involves the forward estimates being adjusted for changes in anticipated movements in prices and wages. Australian Government indexation policy does not seek to compensate for actual price movements, but rather to ensure that estimates broadly reflect the price basis of the year in which the expense is to be incurred.

Individual grants awarded under the ISL program are not subject to indexation. Given the streamlined assessment process adopted by the ISL program and the fact that the maximum project duration does not exceed three years, indexation of individual grants is not considered necessary. Any positive indexation of the ISL program's appropriation is directed towards funding further projects and increasing the program's success rate and impact.

Recommendation 10

The Committee recommends that the Department of Innovation, Industry, Science and Research investigate the operation of the Canadian small grant scheme and report on its effectiveness and the potential benefits to Australia of duplicating the scheme in its review of the International Science Linkages program.

Action: The Australian Government notes this recommendation.

The Department of Innovation, Industry, Science and Research (DIISR) gives consideration to comparable international funding models for international research collaboration in the context of developing future models of Australian Government support.

The Canadian Small Grants scheme, referred to in this recommendation, forms part of the Discovery Grants Program administered by the Natural Sciences and Engineering Research Council of Canada. The scheme has been designed to support discovery-driven research aimed at promoting and maintaining research capability in Canadian universities. In contrast, the International Science Linkages program has been designed to increase participation in leading edge international research, strengthen strategic relationships between Australian and overseas researchers and facilitate access to global science and technology.

Preliminary assessment undertaken by DIISR indicates the transferability of the Canadian small grants scheme model to models of Australian Government support for international collaborative research is limited, given divergent program objectives and research priorities.

Recommendation 11

The Committee recommends that the Australian Research Council and the National Health and Medical Research Council allocate a fixed percentage of research funding to 'blue-sky' research.

Action: The Australian Government does not support this recommendation.

A significant proportion of research currently funded under ARC and NHMRC funding schemes can be classified as 'blue-sky' research. The Government believes that fixing a percentage for this type of research, as suggested, is unnecessary and likely to result in an unacceptably high risk of supporting lower quality research ahead of higher quality research which does not fit the 'blue-sky' descriptor.

Much of the research supported under the ARC National Competitive Grants Program (NCGP) is curiosity-driven 'blue-sky' research that aims to advance knowledge. Around 50 per cent of the research currently funded by the NHMRC is classified as basic biomedical research which also qualifies as discovery driven or 'blue-sky' research.

Under both ARC and NHMRC funding schemes, assessors are asked to consider the significance and innovation of the proposed research projects in addition to quality of the researchers involved. This ensures that research is selected for funding because it is novel, innovative and globally competitive.

The NHMRC Program grants scheme specifically funds activities that allow researchers to pursue innovation and basic research that includes high risk, high yield, with low probability research projects.

Innovation is a key criterion for the NHMRC Project grants scheme (i.e. \$383,447,872 in 2009 and budgeted to be around \$411 million in 2010) and from 2010, Grant Review Panels will be asked to not only continue to score innovativeness as a criterion, but also to identify a small number of potentially transformative research ideas. These applications will then be considered by a sub-committee of Research Committee and one or a small number will be awarded a Marshall and Warren Award.

The ARC funding schemes, ARC Centres of Excellence and Australian Laureate Fellowships, accommodate levels of risk taking that are higher than in other ARC schemes. These schemes provide grants for high quality research programs and outstanding, highly esteemed researchers for longer durations than other ARC funding schemes, and offers flexibility for risk taking for potentially high returns. One of the objectives of the ARC Centres of Excellence scheme is 'to undertake highly innovative and potentially transformative research'.

Recommendation 12

The Committee recommends that the Australian Research Council and the National Health and Medical Research Council relax the restrictions on researchers spending funding overseas on a trial basis for the next two funding rounds, and that the organisations review the impacts of this policy to determine whether it should be a permanent feature of research funding.

Action: The Australian Government does not support this recommendation.

While all NHMRC and ARC funding is administered through Australian *Administering Institutions*¹ or *Eligible Organisations*² to ensure compliance with Commonwealth Grant Guidelines, researchers can and do use NHMRC and ARC funding to support their overseas work. Administering funding through accredited Australian institutions does not adversely affect international collaboration, and supports the development of broader networks.

The ARC is committed to building Australia's research capacity by investing in research conducted by Australian-based researchers and support staff, with support provided to facilitate international collaboration.

Under the funding schemes of the ARC's National Competitive Grants Program (NCGP), funding is available to cover domestic and international travel associated with research projects, including for investigators based in Australia to visit overseas and for partner investigators based overseas to visit Australia. Through the Discovery Projects scheme the ARC has also introduced International Collaboration Awards which are available to researchers to work closely together on research projects. The award provides for travel and subsistence costs.

The Government notes that the NHMRC encourages Australian researchers to develop collaborative international networks and partnerships and provides funding to support international collaboration. The NHMRC has for many years funded overseas travel activities as long as the grant is administered through an Australian Administering Institution. The NHMRC peer review process reviews the budgets submitted with each application and ensures that funding is made available to enable researchers to engage with overseas teams through appropriate funding for travel.

Since 2007, the NHMRC has implemented a higher level of flexibility through its funding schemes to specifically leverage additional funding from international research organisations, supporting international elements of collaboration activities. This provides greater value-for-money for the Australian Government, while building capacity of Australian researchers to enable them to work collaboratively with international teams.

The NHMRC provides further support for Australian researchers to engage internationally by supporting global health activities, where there are Australian Chief Investigators.

¹ An *Administering Institution* is an institution that has been approved by NHMRC as such, following demonstration of its ability to meet eligibility requirements of the *NHMRC Administering Institution Policy*, has executed a *Funding Agreement* with NHMRC, and is on the *NHMRC Register of Administering Institutions*.

² An *Eligible Organisation* is an organisation that is eligible to apply for and receive ARC funding. Eligible Organisations vary across individual ARC funding schemes.

Recommendation 13

The Committee recommends that the Department of Innovation, Industry, Science and Research propose to Australia's bilateral funding scheme partners a streamlined application process consisting of both countries setting aside a defined total amount of funds, with each country separately administering the granting process.

Action: The Australian Government does not support this recommendation.

The Department of Innovation, Industry, Science and Research's (DIISR) bilateral funding schemes for research collaboration are predicated on government-to-government level Science and Technology (S&T) agreements aimed at strengthening Australia's bilateral S&T relationships at the researcher, institutional and government level.

In accordance with these agreements, research supported under DIISR's bilateral funding schemes must be bilaterally agreed and supported, ensuring mutual benefit and policy alignment for both countries.

Bilateral application processes under the International Science Linkages (ISL) program and the Australia-India Strategic Research Fund (AISRF) are streamlined with each country separately administering the submission, independent assessment and short-listing of applications for funding. Successful projects are jointly agreed where countries mutually determine that a project is a high priority for funding.

The administration and management of successful projects, including conditions for funding, monitoring and reporting is subsequently managed separately by each country.

The Government remains committed to the continuous improvement and streamlining of application processes for bilateral funding schemes. The evaluation of the ISL program provides valuable feedback on application processes and will inform future models of bilateral support.

Any change to bilateral application processes should not impinge on the sovereign policy and regulatory frameworks of relevant bilateral partners. A single approach to application processes therefore can not easily be implemented for all bilateral funding schemes.

Recommendation 14

The Committee recommends that the Australia-China Science and Technology Program has its funding increased and indexed, and that the Department of Innovation, Industry, Science and Research seek to increase funding to the scheme as its budgetary situation improves.

Action: The Australian Government notes this recommendation.

The Australian Government acknowledges that China is a key player of growing importance in the international science and research arena. In the 30 years since Australia and China signed the bilateral treaty on science and technology cooperation, both sides have built a broad-based science relationship with strong people-to-people and institutional linkages.

China is a key partner for Australia on science and research, and is now ranked third in terms of Australia's joint publications. This has enhanced scientific outcomes for Australian researchers and enhanced Australia's international science reputation. It has also brought trade and economic benefits for Australia as commercial opportunities from joint research are realised.

Additional funding would allow Australia to make the most of these opportunities, against strong competition from other countries also seeking to take forward scientific research collaboration with China. It would also complement targeted government initiatives to leverage trade and investment benefits from Australian innovative strengths in the automotive, agribusiness, clean energy and green building sectors.

The evaluation of the ISL program found that, similar to other components of the ISL program, the Australia-China Special Fund has produced substantial impact and outcomes and has been consistently over-subscribed. The evaluation concluded that collaboration with China should form a major element of Australia's future science engagement activity and recommended that a larger and longer term Australia-China research fund should be given high priority.

The Government continues to pursue a fiscally responsible approach to supporting international research collaboration and any increase in funding for a successor program will be sought on the basis of the programs impact and value for money and in light of any fiscal constraints.

The Government announced that a new bilateral program, the Australia-China Science and Research Fund of \$9 million over three years, would be established from 1 July 2011.

In line with Government policy on indexation, all on-going Government programs are indexed. In this context, indexation is the process by which the forward estimates are updated to reflect the forecast economic conditions of the year in which they are expected to occur.

Access to overseas-based grant schemes

Recommendation 15

The Committee recommends that the Department of Innovation, Industry, Science and Research familiarise itself with the grant application requirements of the US National Institute of Health and the US National Science Foundation and make this information available to Australian universities and research institutions.

Action: The Australian Government does not support this recommendation.

The Government acknowledges the importance of its relationship with the US in the areas of science and health research. In recognition of this, the Government recently appointed a Minister-Counsellor for Science to the Australian Embassy in Washington. The Government and the Minister-Counsellor work with US agencies, including the National Science Foundation and National Institutes of Health, to promote and expand research collaboration and exchange.

The facilitation and communication of grant application requirements between Australian and US researchers and institutes is a key function of Research Offices within universities and research agencies. It is not appropriate for the Government to take over this role which is already core business of Australian universities and research institutions. Nevertheless, both the DIISR Minister-Counsellor and Austrade staff in the US are available to work with universities to help them improve their understanding of the way in which US agencies operate.

Recommendation 16

The Committee recommends that the science counsellor program be revitalised, initially on a smaller scale than the previous program, with full-time science counsellor positions for the European Union, United States, China, and India. Additionally, the Department of Innovation, Industry, Science and Research should seek to expand the program to other relevant areas of significance to Australian research as is necessary.

Action: The Australian Government notes this recommendation.

The current Innovation, Science and Research counsellor program was established by the Government on 1 July 2008 following the establishment of the new portfolio of Innovation, Industry, Science and Research. Prior to this, off-shore representation of Australian science and research was the responsibility of the former Department of Education, Science and Training.

Currently the Government has a full-time Counsellor in Brussels, supported by two locally engaged staff; a full-time Minister-Counsellor in Washington DC, supported by one locally engaged staff; and locally engaged staff in New Delhi and Beijing.

The Government continues to pursue a fiscally responsible approach to supporting international research collaboration. Any funding to support an expansion of DIISR's offshore representation will take account of assessed impact and value for money and in light of any fiscal constraints.

DIISR regularly reviews resourcing of all its activities, including overseas staffing, and the allocation of resources is adjusted in light of operational requirements and emerging opportunities.

Recommendation 17

The Committee recommends that the Minister for Innovation, Industry, Science and Research be given full ministerial responsibility for supporting international research collaboration.

Action: The Government notes this recommendation and, recognising the need for a national approach to international research collaboration, will establish a roundtable of stakeholders from government, business and the research community to update strategic priorities and review the nature and coordination of research collaboration activities relating to government programs.

The Government recognises the importance of supporting international research collaboration and undertakes extensive government-to-government consultation to promote and expand international research relationships.

The Australian Government acknowledges that increased coordination across Government is necessary to maximise knowledge flows. For example, the Coordination Committee on Innovation (CCI), established by this Government in September 2009, is an information sharing forum for innovation activities across Australian Government agencies and co-ordinates cross-portfolio advice on innovation system matters.

In the rapidly developing area of enabling technologies, the majority of innovative development is taking place internationally. The United States and European Union work in this area is highly coordinated and leveraged through both Government and industry funds. Improved Australian Government coordination of Australian international research activities is essential for Australia to benefit from international research and development, and to facilitate technology uptake by Australian industry.

The Government will achieve a national approach to international research collaboration across Government, and across the Australian research community, by establishing a roundtable comprising stakeholders from government, business and the research community.

A wide range of government portfolios and agencies have a strategic interest in international research collaboration. The roundtable will ensure that the views and needs of these agencies are reflected in a national approach to research collaboration and, where appropriate, that the activities of government agencies are coordinated.

Recommendation 18

The Committee recommends that the Department of Innovation, Industry, Science and Research seek the funding to establish an International Research Collaboration Office to consult with stakeholders in Australian research and to act as a conduit between Australian researchers and overseas research organisations and funding bodies.

Action: The Government notes this recommendation, and, in framing future models of Government support for international science collaboration, will examine if further intervention could enhance collaboration.

The Government recognises the importance of effective consultation with stakeholders including Australian researchers, research funding bodies, Research Offices, Universities Australia, the Deputy Vice-Chancellors (Research) as well as relevant overseas research organisations and funding bodies, and is continually developing ways to strengthen coordination and collaboration between these relevant bodies.

A key function of Research Offices within individual universities is to act as a conduit between Australian researchers and overseas research organisations and relevant funding bodies. Research Offices have undertaken this activity for many years and are highly effective in this role.

As the peak body representing Australian universities, Universities Australia is also involved in a wide range of international activities and plays a major role in several multilateral forums and programs through cooperative agreements with international counterpart organisations to support international engagement.

The Government acknowledges that it should be examined if the establishment of an International Research Collaboration Office would enhance the collaboration activities of the university Research Offices and other research organisations. However, the Government considers that other effective international models of information dissemination should also be explored, such as the European Commission's Network of National Contact Points (NCPs) which, among other things, connects small business with the European Union's 7th Research Framework Programme.

Subject to the availability of funding, the Government will seek to examine if further intervention would improve the connection of Australian researchers with overseas research organisations and funding bodies.

