

Innovation Policy Report

September 2013

Table of Contents

Australian Developments	3
Business Council of Australia - Action Plan for Enduring Prosperity	3
Position paper: “STEM in the National Interest: A Strategic Approach”	3
NSW: Business Leadership Forum.....	4
\$175 million New Horizons Centre for Monash.....	4
The Cooperative Research Centres program’s new website	5
Support for Australia-India research collaboration	5
Strengthening education links with India.....	6
Supporting education collaboration with Sri Lanka	7
Australian-European Science and Innovation Excellence initiative.....	7
Australia-China Science and Research Fund Fully Subscribed.....	8
Establishment of the National Centre for Asia Capability.....	9
Australian Key Innovation and R&D Indicators Data Card Update	9
World Academic Summit Innovation Index	10
Australian Public Service engages with Academics.....	10
Support for Research Infrastructure.....	10
2011-12 Business Use of Information Technology data released.....	11
Digital Canberra Challenge.....	11
Public Sector Innovation Month 2013	12
World record for Australian solar cells	13
National Sea Simulator open for business.....	13
Tasmania: Sense-T Aquaculture Decision Support System	14
International Developments	15
Asia-Pacific.....	15
US-China Innovation Dialogue	17
Europe	18
North America.....	23
South America	25

Australian Developments

Business Council of Australia - Action Plan for Enduring Prosperity

The Business Council of Australia's [Action Plan for Enduring Prosperity](#), was released on 31 July 2013.

The Action Plan highlights nine areas for action, including fiscal and budget policy, infrastructure, skills and education, regulation, international engagement, energy, and innovation policy.

The report suggests that Australia's performance on innovation currently falls short of the aim to have an innovation system with a top 10 ranking globally; and recommends improving innovation performance at a business level. It recommends shifting away from the dominance of supply-side innovation programs towards a mix of supply-and demand-side innovation programs.

The Action Plan also advises that government reaffirm areas of existing or potential comparative advantage for Australia, such as the Mining Equipment, Technology and Services sector, and use these to foster national innovation priorities.

To help bolster Australia's relatively low levels of collaboration between industry and research, it recommends that government's competitive research grant schemes place greater weight on collaboration and engagement with industry as part of the criteria for their assessment.

Position paper: “Science, Technology, Engineering and Mathematics in the National Interest: A Strategic Approach”

The Chief Scientist, Professor Ian Chubb, has released a position paper: [“Science, Technology, Engineering and Mathematics \(STEM\) in the National Interest: A Strategic Approach.”](#)

The paper describes a need to strengthen four elements – education, new knowledge, innovation and influence – which are underpinned by the enabling sciences and mathematics, engineering and the technological sciences. It says that for STEM to be most effective, it must be conducted through a renewed social compact between practitioners and the public.

“We must continue to build trust so that the community can make informed decisions based on evidence not decibels,” Professor Chubb said.

The position paper has already drawn strong support from industry and been cited as the most important action to create the right environment and systems for innovation.

The Business Council of Australia's Action Plan for Enduring Prosperity also calls for a national STEM strategy to be implemented.

NSW: Business Leadership Forum

The inaugural NSW [Business Leadership Forum](#) was held on 3 September 2013, with a focus on global competitiveness. The purpose of this flagship event was to showcase the progress of the NSW Government's reform agenda and engage industry participants regarding the best ways to raise business confidence and NSW economic performance.

The forum focused on how industry and government can work together to make Sydney and New South Wales more internationally competitive and improve the overall economic position of NSW and Australia.

The forum brought together a highly influential group of private and public sector leaders including top tier company executives and NSW government ministers to discuss the latest opportunities and challenges for the State's economy.

It also provided an opportunity for the NSW Government to report on the progress of the 2013 priority actions and the implementation of the [NSW Economic Development Framework](#), which was launched in December 2012. This annual forum is part of the Government's ongoing commitment to accountability and engagement with industry.

Key themes discussed at the 2013 Business Leadership Forum included global competitiveness, the importance of collaboration to drive innovation, entrepreneurship and raising the global profile of Sydney and NSW. Approximately 250 - 300 highly influential business, industry and government leaders attended the Forum.

\$175 million New Horizons Centre for Monash

On 30 July 2013, Monash University launched its [New Horizons Centre](#). The Centre is a \$175 million research hub, which will bring more than 400 researchers together to tackle four key areas of research on an unprecedented scale.

The Australian Government has invested nearly \$90 million in the Centre, where researchers will use two hectares of new teaching and research laboratories to work on problems in future manufacturing, modelling and simulation, biological engineering and renewable energy.

The Centre represents a new approach - bringing university and CSIRO researchers together on a global scale to work in large teams on both blue sky and applied research, which is expected to lead to rapid product development, including new forms of drug delivery, new materials and micro-engineered robots.

The Cooperative Research Centres program's new website

The Australian Government's Cooperative Research Centres (CRC) program supports medium to long-term, end-user driven collaborations to address clearly articulated, major challenges facing Australia, many of which are global challenges.

The CRC program launched its new and improved [website](#) in May 2013, making it easier for CRCs and stakeholders to access information on the program and stay up to date with the latest developments.

The site features improved search functionality, enhanced navigation, dynamic menus and quick links to the latest news, events and strategic partners' sites.

The site is a useful resource for existing CRCs, offering access to guidelines, templates and news. The site also assists new CRC program applicants in the selection process.

Stakeholders can register their interest to receive regular email updates on the program.

16th CRC selection round

The CRC program's 16th selection round is currently underway, with the outcomes expected to be announced towards the end of 2013.

The priority areas for the 16th CRC selection round are innovative manufacturing, sustainable regional communities and social innovation. The Government announced up to \$240 million for the current round, of which up to \$50 million is being set aside for the priority area of innovative manufacturing.

More information on this and other selection rounds can be found on the CRC program [website](#).

Support for Australia-India research collaboration

A senior Department of Industry and Innovation delegation, led by Deputy Secretary Sue Weston, attended the annual meetings of the Indo-Australian Joint Science and Technology Committee (JSTC) and Joint Biotechnology Committee (JBC) in New Delhi on 6 and 7 August 2013.

Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education

The JSTC and JBC formally agreed to support 23 collaborative research projects and workshops in Round 7 of the [Australia-India Strategic Research Fund](#) (AISRF), covering fields such as earth and marine sciences, information and communication technology, vaccines and biotechnological interventions for improved agricultural productivity. Australia's commitment in this round will be more than \$5 million spread across a dozen universities and research institutions. India will support the Indian partners' costs.

Since it started in 2006, the AISRF has supported over 200 joint projects and other collaborative activities, involving 90 top universities and research institutes in Australia and India, in key areas of priority to both nations. With a total Australian commitment of \$64 million over 10 years, it is by far Australia's largest bilateral science and research fund.

Strengthening education links with India

From 10 to 12 July 2013, a delegation led by the Indian Education Minister the Hon Dr Pallam Raju, Minister of Human Resource Development, visited Australia to participate in the Annual Education Ministers' Dialogue on Education Cooperation and co-chair the second Australia India Education Council (AIEC) meeting with Senator the Hon Kim Carr, Minister for Higher Education.

Minister Raju was accompanied by a delegation of senior officials from the Ministry of Human Resource Development, Vice Chancellors of Indian universities, and representatives from India's sector skills councils.

The visit provided an opportunity to continue to strengthen collaboration between both countries in the areas of vocational education and training and higher education. Minister Carr and Minister Raju issued a [Joint Communique](#) outlining some of the outcomes of the visit including:

- a commitment to provide further funding for the AIEC;
- the second Australia India Skills Conference to be held in New Delhi in November 2013;
- support to send 300 students to India for a study experience under the AsiaBound program;
- new AIEC knowledge partnership grants in key thematic areas including support to universities to develop credit transfer arrangements between Australian and Indian institutions;
- the establishment of an AIEC Qualification Recognition Taskforce to enhance qualifications recognition between the two countries;

- an Australia India Education Leaders' Exchange to be run by the Australia India Institute in 2013–14; and
- an Australia India Vocational Education Leadership Training program to be run by TAFE Directors Australia in 2013–14.

Education is regarded as a central pillar in the bilateral relationship with India, which is the second largest source country for international student enrolments in Australia.

Supporting education collaboration with Sri Lanka

The Department's International Education and Science Division hosted a Sri Lankan Technical Assistance Tour, from 3 to 6 June 2013. Minister Mohan Lal Grero, the Monitoring MP for the Ministry of Youth Affairs and Skills Development, led the delegation which also included representatives from the Ministry of Higher Education and a number of other key vocational education and training and higher education institutions.

The delegation met with government officials and education stakeholders in both Canberra and Melbourne. The tour was an opportunity to learn about Australia's quality systems to support Sri Lanka's education sector development. This included gaining a deeper understanding of Australia's vocational education and training and higher education systems, national regulation and quality assurance and national qualifications frameworks.

Education is central to the relationship between Sri Lanka and Australia. Australia is the most popular tertiary study destination for Sri Lankan students, of whom 4,071 were enrolled in Australia as of June 2013. The tour provided an opportunity to further strengthen links between the Australia and Sri Lankan governments and education stakeholders and to exchange experiences regarding education reform.

Connecting Australian-European Science and Innovation Excellence initiative

Stage One Priming Grant launch

The [Connecting Australian-European Science and Innovation Excellence Initiative](#), aimed at enhancing science and technology collaborations between small and medium-sized enterprises (SMEs) and researchers in Europe and Australia, opened a call in July for applications for Stage One [Priming Grants](#). The call, which will be open until 11 October 2013, is designed to facilitate initial meetings between SMEs and researchers and research organisations by offering \$5,000 to eligible SMEs.

Australia-China Science and Research Fund Fully Subscribed

The [Australia-China Science and Research Fund](#) (ACSRF), has awarded all of its AUD\$9 million funding. Announced in 2011, the ACSRf provides support for strategic science and research collaboration of mutual benefit to Australia and China with a particular emphasis on research and research driven innovation. The ACSRf will also strengthen knowledge exchange on Australia-China science and research collaboration.

Support has been provided to over 40 Australian research organisations under the Joint Research Centres and Group Missions components of the fund (establishment of six Joint Research Centres and 87 Australian Group Missions to China).

In addition, the ACSRf has provided continued support to the successful Australia-China Young Researchers Exchange Program and the Australia China Science Academies Symposium, and measures to increase the exchange of knowledge on Australia-China science and research collaboration.

Australia-China research program on market mechanisms for climate change policy

The Australia-China research program on market mechanisms for climate change policy [was announced](#) on 11 July 2013 at the [ANU China Update 2013](#). The Australian partners of the \$305,000 program include the [Crawford School of Public Policy](#) in the [ANU College of Asia and the Pacific](#), The University of New South Wales and The University of Melbourne.

The program will attract researchers from leading Chinese institutions including Tsinghua, Fudan and Wuhan universities, as well as Beijing Institute of Technology.

The collaboration between Australian and Chinese institutions will see Australian researchers and their Chinese colleagues working with Chinese data, and Chinese researchers coming to Australia to analyse Australia's experiences. The research project is expected to offer new insights into how China can design its policies to be more effective in reducing emissions while maintaining fast economic growth.

Support for business in the Asian Century: Establishment of the National Centre for Asia Capability

On 8 July 2013, the Australian Government announced a \$36 million national investment to support small to medium sized businesses take up new opportunities in Asian markets.

The [National Centre for Asia Capability](#), to be established by the University of Melbourne, will help Australian industry capitalise on opportunities emerging from the Asian Century and build on competitive advantage, business confidence and employment opportunities that will result.

Through capability development, knowledge building and awareness raising/networking activities, the Centre will ensure that decision makers in Australia are supported by deeper expertise relating to countries in our region; and help Australia's businesses to be recognised globally for their excellence and ability to operate successfully in Asian markets.

Lowy Institute – Engaging Asia Project

The Australian Government has granted \$10 million to the Lowy Institute to support its Engaging Asia Project, which aims to deliver ongoing policy research to increase Australia's presence and footprint in Asia by funding new research, new dialogues and new partnerships. A key element of the project will be to establish a Lowy Institute presence in Indonesia through a strategic partnership with one or more Indonesian institutions working on international policy issues.

Australian Key Innovation and R&D Indicators Data Card Update

The latest "[Australian Key Innovation and R&D Indicators Data Card](#)" was released by the Department on 9 August 2013. The Data Card is updated on a regular and continual basis. This latest update follows recent major data releases:

- Summary of IT Use & Innovation in Australian Businesses and Research & Experimental Development Expenditure by Government and Private Non-profit Organisations by the Australian Bureau of Statistics (ABS);
- Main Science & Technology Indicators by the Organisation for Economic Co-operation and Development (OECD); and
- the Science, Research and Innovation Budget Tables.

This publication contains key statistical information on R&D and other innovation indicators. R&D statistics focus on Gross R&D expenditure by

Businesses, Government, Higher Education and Private Non-profit organisation and compares against latest available data from the OECD. The innovation indicators present statistics on business innovation at the industry level, business collaboration for innovation and Australian Government's support for science, research and innovation.

World Academic Summit Innovation Index - Australian Universities 15th in attracting research funding from business

Australian universities perform below the world's best in attracting research money from business, according to a new innovation index, the [World Academic Summit Innovation Index](#).

The Index, produced by Times Higher Education from its world university rankings data, says Australia places 15th out of 30 countries and is outranked by key Asian nations in the amount of research money its universities get from industry. The top country is South Korea, followed by Singapore.

The Index divides the total research funding from business by the number of academics in the universities involved and adjusts for purchasing power parity.

Future Prospectives Forum: Australian Public Service engages with Academics

The Department is working with the Australian Public Service Commission (APSC) and the HC Coombs Policy Forum to trial the Future Perspectives policy foresight forums. These forums bring together senior members of the Public Service and senior research academics from the Australian National University to consider long-term strategic challenges to Australia.

Two trial of concept forums were held, in April and July 2013, with the aim of building networks, and gaining an appreciation and insight into the strengths and expertise of policy makers and research academics to inform, anticipate and address the public challenges of the future.

The Future Perspectives Forums complement strategic foresight activities being conducted by the APSC as part of the [APS 200 Project: The Place of Science in Policy Development in the Public Service](#), as well as extending the work of the department to link the APS with academic researchers.

Support for Research Infrastructure

To further support Australia's advanced science and research capability, the Government announced renewed funding of \$185.9 million for the National

Collaborative Research Infrastructure Strategy (NCRIS) in the 2013 budget. The funding will support existing critical national research infrastructure over 2013-14 and 2014-15.

The purpose of the renewed NCRIS is:

- to ensure the availability for the Australian researchers of research infrastructure established and operated under NCRIS and the Super Science Initiative prior Budget 2013; and
- to position the Australian Government for making long-term national, collaborative research infrastructure investment decisions based on the National Research Investment Plan and the Strategic Research Priorities.

On 2 August 2013, the [approved guidelines](#) were released, and the Department has now executed funding agreements.

2011-12 Business Use of Information Technology data released

On 22 August 2013, the Australian Bureau of Statistics released their second publication in relation to the 2011-12 Business Characteristics Survey (BCS). This release is [Business Use of Information Technology, 2011-12](#) (cat no. 8129.0) and presents information about the incidence of use of information technology in Australian businesses.

Between 2010-11 and 2011-12, most key indicators of business use of information technology show increases. The greatest change was in the proportion of businesses that placed orders via the internet. This increased four percentage points to 55 percent between 2010-11 and 11-12.

While the proportion of businesses that reported receiving orders via the internet was steady between 2010-11 and 11-12 (28 percent), the value of income derived from the sale of goods or services via the internet increased by 25 percent, from \$189 billion to \$237 billion between 2010-11 and 11-12.

The BCS is collected every second year. The first publication this year, a [Summary of IT Use and Innovation in Australian Business, 2011-12](#) (cat no. 8166.0), was released in June.

Digital Canberra Challenge

How to provide practical support for public sector innovation?

How to provide practical support so that the Australian ICT industry can get a greater share of the large government ICT spend?

On 19 August 2013, a digital innovation competition was launched that seeks to achieve both these outcomes. It's called the '[Digital Canberra Challenge](#)'.

The Digital Canberra Challenge is an ACT Government initiative, managed by the eGov Cluster at NICTA, and with the support of CollabIT and the Canberra Business Council.

ACT public servants and the general public are asked to identify unresolved business challenges, particularly those related to the delivery of government services. Local innovators submit conceptual solutions. The best two of which are chosen. They then have around 6 months to develop their ideas into a proof-of-concept with associated case study report. The best of these wins the competition and the prize-money.

Benefits to participants will include opportunities for government to evaluate new thinking in a low-cost, low risk way; and opportunities for innovators to rapidly develop their solutions with real customers hopefully enhancing their commercial prospects.

Public Sector Innovation Month 2013

[Innovation Month](#) this year ran from 20 May to 14 June 2013. The month, which grew from last year's Innovation Week, was a whole of government series of events exploring the multiple facets of innovation in the public sector. Key events included *GovHack*, *GovCamp*, *GovJam*, *the Big Science Communications Summit*, in partnership with the Inspiring Australia initiative, and *Towards a Unified Theory of Shiny Things*, a panellist discussion and workshop event from DesignGov.

GovCamp was held on 6 June 2013 in Canberra, it featured a day long series of talks and panel discussions on innovation and leadership. Speakers included Minister Assisting Industry and Innovation, Senator Kate Lundy, Chief Executive Officer of DesignGov, Jane Treadwell, Chief Technology Officer for AGIMO, John Sheridan, and Chief Human Capital Officer for APSC, Ian Fitzgerald.

[GovHack](#) was a weekend workshop and competition running 31 May – 2 June in Sydney, Canberra, Melbourne, Adelaide, Hobart, Perth, Brisbane and the Gold Coast. Participants were given government data sets and challenged to develop new and useful visualisations and apps from the material. There were over 900 attendees involved in the program, producing 130 competition entries. GovHack is the largest competition of its kind in Australia, with participants coming from local, state, and federal government agencies and publicly funded associations.

GovHack provides an important opportunity for experimentation and co-creation between government and the community, offering the chance to develop new tools to improve and build on government data and services. It is volunteer run with sponsorship from both the public and private sectors.

GovJam is a policy workshop in which small teams work towards building solutions to challenges face by the public sector. It is a global program which was held this year over 5 to 6 June. Australian GovJams were based in Canberra, Melbourne and Perth.

The Big Science Communications Summit was held in Sydney over 6 to 7 June. Hosted through a partnership with Inspiring Australia, techNyou and ScienceRewired, the event attracted 250 science communicators, journalists and educators. The focus of the conference was to develop solutions to the challenges science communication faces in Australia. The event was live streamed to over 200 participants outside the conference event.

The DesignGov event, *Towards a Unified Theory of Shiny Things* was held in Canberra on 14 June. The event consisted of a panel discussion followed by a world café and rapid prototyping discussion on how the various tools available to public servants for program and policy development may fit together to assist the delivery of better outcomes.

Panel members provided a range of perspectives from various levels of government and the private sector. Speakers included Chief Executive Officer of DesignGov, Jane Treadwell, Assistant Statistician at the Australian Bureau of Statistics, Merry Branson, Executive Director of the ACT Government Information Office, Michael Chisnall, and Kate Delaney of Delaney Foresight. The event had 66 attendees from 12 different government agencies.

World record for Australian solar cells

Cells fabricated using a new deposition technique have established a new world record efficiency of 15 percent for a solid-state Dye Solar Cell (DSC) for Australian company Dyesol. The technology is currently at the developmental stage and the results have been published in [Nature](#).

Compared to traditional silicon solar panels, DSC have consistent energy output in low-light, dawn, dusk, cloudy, indoor/ artificial, and shaded or indirect-light conditions. Thus the cumulative seasonal energy output over a whole year has the potential to be much greater than silicon solar panels. As such, DSC do not need perfect sunlight conditions to effectively produce energy.

National Sea Simulator open for business

The [National Sea Simulator](#) (SeaSim), a new \$37 million dollar experimental marine research facility was officially opened on 1 August at the [Australian Institute of Marine Science](#) Townsville headquarters.

SeaSim represents a significant expansion of Australia's capacity to understand the cumulative effect of complex local, regional and global

pressures on tropical marine environments. These include climate change, ocean acidification, declining water quality, pollutants, sedimentation and marine pests such as the Crown-of-Thorns starfish.

This cutting edge facility will encourage collaborative, multi-disciplinary research nationally and internationally and generate knowledge to assist multiple stakeholders, including government, industry and communities, predict, plan and manage the likely changes to the marine environment for its ongoing sustainable use and protection.

The National Sea Simulator was funded by the Australian Government's Education Investment Fund, as part of the Super Science Marine and Climate Initiative.

Tasmania: Sense-T Aquaculture Decision Support System

A web application for the oyster industry developed as part of [Sense-T's Aquaculture Optimisation Project](#) has won a [2013 Tasmanian iAward](#) and a national 2013 Merit iAward. The application gives a digital overview of oyster farms across Tasmania, overlaying geographical, historical and real-time sensor data, including data from the Bureau of Meteorology and sensors on oyster farms. The Tasmanian Shellfish Quality Assurance Program (part of Department of Health and Human Services) uses the app to survey environmental conditions in real-time and support decisions to close oyster harvesting temporarily. Sense-T, University of Tasmania, Department of Health and Human Services and CSIRO Intelligent Sensing and Systems Laboratory partnered to develop the application.

International Developments

Asia-Pacific

APEC Start-Up Accelerator Leadership Summit

[The Asia-Pacific Economic Cooperation \(APEC\) Start-up Accelerator Leadership Summit](#) was held on 13 August 2013 in Taipei. The summit brought together APEC commerce officials, industry thought leaders, venture capitalists and researchers seeking to support young entrepreneurs and small businesses in the Asia-Pacific, and help encourage innovation. Participants explored funding prospects and management strategies for cross-border development.

The participants agreed that it is important for policymakers to break down barriers to innovation and ensure that emerging business leaders have access to the knowledge, resources and tools they need to succeed in today's globalised economy.

Small and medium-sized enterprises (SMEs) account for around 90 percent of businesses in the APEC region and employ as much as 60 percent of its work force. But they only generate around 30 percent of the region's exports and less than ten percent survive beyond the founder's lifetime.

One of the biggest challenges start-ups face is insufficient capital. The Summit participants acknowledged that it is important for the APEC economies to work on cutting red tape and improving transparency to make it easier for investors to pursue funding opportunities across borders.

Start-ups and SMEs can be supported in building their management capabilities through one-on-one consulting and group mentoring initiatives that include private sector involvement. This can help to open the door to new markets and boost their participation in global supply chains.

Other issues raised by delegates included talent and business model development, international branding and funding body engagement.

Japan aims to be number one with the three arrows policy mix

Japan aims to become the No. 1 global innovator within the next five years as a target of the "[Japan Revitalization Strategy](#)" announced by Prime Minister Abe on 14 June 2013.

The Strategy comprises the "three arrows" policy mix for reviving the Japanese economy: (1) aggressive monetary policy; (2) flexible fiscal policy; and (3) a growth strategy that encourages private sector investment.

The third arrow will comprise a series of initiatives to propel Japan towards sustainable economic growth through stimulating industrial development, expanded human resource initiatives to draw women and young people into the labour force, and support for technology and innovation.

Specific targets of the Strategy include becoming the No. 1 global innovator within the next five years from its current 5th position in World Economic Forum rankings. To help achieve this Japan aims to strengthen the functions of its Council for Science and Technology Policy as the lead agency for identifying strategic sectors, focusing on results, and facilitate collaboration among the Government, universities, and the private sector.

The Strategy will also identify core strength technologies across the Japanese economy and facilitate cross-ministry initiatives to create markets in strategically important sectors. It would establish a Strategic Innovation Creation Program to provide priority allocations of resources for these initiatives over several years.

Singapore: Development of new Design and R&D Centre announced by Seagate

On 30 July 2013 Seagate [launched its newest R&D facility](#) in Singapore. Seagate, a recognised manufacturer of hard disk drives and storage solutions, first established a sub-assembly plant for disk drive components in Singapore in 1982. Today, it has transformed its activities by expanding its R&D team and investing in hard disk media manufacturing, becoming one of the largest electronics company in Singapore, with 6,500 employees.

Seagate's newest facility, 'The Shugart', is designed to provide world-class R&D facilities for the mobile storage R&D team in Singapore. The Shugart, named after the Company's founder, Alan Shugart, can house up to 900 employees. It will focus on the development of 2.5-inch small form-factor products for notebooks, ultra-books, convertibles and tablets and will allow all R&D personnel to be housed together, thus fostering greater collaboration and innovation. It is expected to be completed in early 2015.

Besides being the sole site conceptualising and developing next generation storage devices, Singapore will be manufacturing high value added hard disk media for these devices, and also managing the supply chain for the production of these devices.

Singapore: MOU signed for collaboration on development of a Retail Centre of Excellence

[DFS Venture Singapore](#), a luxury travel retailer, [signed a Memorandum of Understanding](#) (MOU) with [Economic Development Board](#) (EDB) of Singapore and [SPRING Singapore](#), an agency under the Ministry of Trade and Industry,

Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education

on 16 August 2013. The MOU marks DFS', EDB and SPRING Singapore's collaboration on the development of a Retail Centre of Excellence (CoE).

The Retail CoE will be the first of its kind established by a retailer in Singapore. Through the Retail CoE, DFS will strengthen their capabilities in consumer insights and analytics, and partner with educational institutions to design a specialised retail management programme. DFS will also undertake research collaborations, and provide internship opportunities to develop the industry's talents. EDB and SPRING Singapore will facilitate the identification and introduction of partners to develop the capabilities and initiatives for DFS to scale this to a national level across Singapore.

Singapore: \$10 Million to Help Medical and Clean Technology SMEs Commercialise Intellectual Property

On 15 August 2013, [SPRING Singapore](#) (the Government's enterprise development agency) announced setting aside \$10 million to help small and medium-sized enterprises (SMEs) in the medical and clean technology sectors develop technology ideas into products and services through the appointment of three private sector providers or translators (PSTs).

Two PSTs, AITbiotech and Sys-Mac Automation Engineering, will identify, develop and commercialise Intellectual Property (IP) for the medical technology industry; while a collaboration between 360ip and Nanyang Technological University will be servicing the clean technology sector.

The three PSTs will complement the efforts of six Centres of Innovation by contributing to the pool of IP available and accelerating the commercialisation of these ideas. The PSTs will offer SMEs a pay-per-use model so the latter will have access to their services without having to set up their own in-house research facility or to spend on manpower or equipment.

Besides the translation of IP, the PSTs will provide R&D services such as validation and feasibility studies. A total of 40 IP translation projects and 200 R&D services will be undertaken by the PSTs over the next three years.

US-China Innovation Dialogue

The 2013 [US-China Innovation Dialogue meeting](#) was hosted on 9 July 2013 in Washington, DC, by the US Office of Science and Technology Policy and the Chinese Ministry of Science and Technology.

The Innovation Dialogue was initially launched in 2010 under the framework of the US-China Joint Commission on Science and Technology Cooperation.

Through the Innovation Dialogue, the United States and China have engaged on a number of issues related to innovation and intellectual property (IP) protection – most notably for High- and New-Technology Enterprises (HNTE).

Innovative companies generally prefer to manage their IP according to commercial considerations.

The Chinese side committed to review and revise HNTE policies during the Dialogue. Other topics discussed included service invention regulations, patent concerns related to pharmaceuticals and medical devices, strategic and emerging industries, and technology licensing and market access issues.

Europe

Third European Union – Australia Research Infrastructure Workshop

The Third European Union-Australia Workshop on Research Infrastructure will be held for the first time in Australia, on 5 and 6 November 2013. Themes for the Third Workshop are healthy ageing, sustainable cities and clean energy, with a cross-cutting theme on industry linkages. The workshop will bring together around 80 facility managers and operators representing a wide cross section of disciplines and facilities.

The workshop aims to provide:

- ongoing co-operation between Australia and the EU in research infrastructure;
- an opportunity for informal discussions with representatives of EU facilities on matters relating to the management and use of major research infrastructure and explore options for cooperation;
- an opportunity for Australian research infrastructure representatives to build new links with partners from the EU or reinforce existing ones, bringing benefit to the broader research community; and
- opportunities for attendees to develop links with Asian research infrastructure representatives.

Previous workshops held in Brussels in 2011 and 2012 resulted in organisational MoUs to promote staff exchanges and training, harmonisation of protocols and approaches to data management, and exchange of information on governance matters. For example, the University of Western Australia node of the Australian Microscopy and Microanalysis Research Facility has become the first university-based laboratory of the International Atomic Energy Agency network. Continued dialogue on data management by the Australian National Data Service with the EU and USA has led to the establishment of the Research Data Alliance.

These workshops are a response to an agreement made by Australia and the EU at the 2010 Australia-EU Joint Science and Technology Cooperation Committee) meeting. It was agreed that Australia and the EU would work together to increase cooperation in the management and use of research

Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education

infrastructure. Australia and the EU share a common approach to investing in research infrastructure and there are opportunities to collaborate in the management and operation of facilities where priorities and projects align.

Australia is well placed to contribute to the future development of global infrastructure through linkages into international networks. This is important for underpinning multidisciplinary international research collaboration, and contributes to long-term sustainability of research infrastructure through shared building, knowledge and access.

Other associated activities are being planned for the visit by the EU delegation including an event focussing on data at Monash University on 7 November, and a visit to nearby research infrastructure facilities.

EU: European Parliament agrees on new open data rules

The European Parliament has formally agreed on [new rules](#) regulating public sector data in the European Union. The rules will see member states release public data on government services and spending, as well as geographical and cultural information. The rules also regulate costs for accessing the data (if not free) and standards in delivery formats for ease of access.

EU: Agreement on “Horizon 2020”: the EU’s research and innovation program for the years 2014 to 2020

On 17 July 2013, the EU Committee of Permanent Representatives endorsed the agreement on the [Horizon 2020 programme for research and innovation](#) beginning in 2014. Horizon 2020 will replace the EU’s 7th Research Framework Programme, and has a budget of around €70 billion euros. Horizon 2020 will focus on three priorities: (1) generating excellent science, (2) fostering industrial leadership and (3) tackling societal challenges. The European Commission has announced that, as part of the programme, five public/private partnerships will receive €6.5 billion, generating a further €9.9 billion from industry.

EU: The EU SME Centre helps European businesses to get into the Chinese market

The [EU SME Centre](#) is a Support Service Provider for European small and medium-sized enterprises (SMEs) facilitating market access in China. The Centre provides free of charge, practical information, advice and business tools to better equip SMEs to develop their business and tackle challenges faced in the Chinese market. Boasting a strong team of in-house market access advisors and specialists, the Centre provides relevant, hands-on support services to EU SMEs wishing to export to or invest in China, covering the areas of business development, standards and conformity, legal issues,

human resources and training. Moreover, the Centre acts as a platform facilitating coordination amongst Member State services and directs SMEs to other specialised European public and private sector service providers.

EU: Helping businesses to access EU finance: single portal now includes Structural Funds

Launched in June 2013, a new [single portal on EU finance](#) provides information on how entrepreneurs and small and medium-sized enterprises (SMEs) can access over €100 billion of EU financing. The portal provides detailed information on how SMEs can apply for finance supported by the EU, via one of approximately 1,000 banks and other financial institutions. The portal is accessible in various EU languages and for all EU and candidate countries.

Poland: Innovation in Poland

Poland has highlighted that [Innovation is a key component for its growth](#), and is utilizing €10 billion in structural funds from the European Union to stimulate commercially oriented research, particularly in the private sector.

Poland has engaged experts from around the globe – including Chile, Israel, and Denmark – to help develop strategies and design programs that would best leverage these funds. Poland is also deploying financial instruments, upgrading its research infrastructure, and building strategic international partnerships. According to the Polish government, its past public expenditure in supporting private sector innovation was not as efficient as expected, and officials in Poland are now exploring new avenues for such funds. As part of this process, its Ministry of Regional Development engaged the World Bank to develop a policy review to guide its innovation policy until 2020, based on the [EU smart specialisation](#) concept.

Growth in Poland over the last decade has relied more on technology absorption rather than generating any new to world innovations. As the Polish economy begins to slow, its aiming to transition to new areas that can allow for further growth.

UK: Budget increase for the Technology Strategy Board as part of the Government's Spending Round for 2015-16

The UK [increased spending for the Technology Strategy Board](#) in its 2015-16 Budget by £185m. The move will enable the Board to enhance the role it plays in supporting UK economic growth by building on existing programs for innovative UK businesses, and by developing new programs. The areas set to benefit include the Biomedical Catalyst and the network of Catapult centres, with additional support for innovations in energy and biotechnology.

Programs such as Smart, the Biomedical Catalyst and Catapult centres are keeping the UK at the front of the global race to commercialise new technologies, driving the growth agenda and playing an important role in the industrial strategy.

Since its establishment six years ago, the Board has delivered a wide range of innovation programs that support the commercialisation of technologies to generate UK business growth, and at the same time have the potential to improve the quality of life for millions of people. These include more efficient, affordable and well-designed low carbon vehicles, transformative cell therapy and stratified medicine treatments for cancer and other severe health conditions, innovative solutions to help older adults live independently for longer and radical new designs and products that promise to transform the homes of the near future.

Over half of the funding goes to small and medium-sized enterprises and this financial boost will allow the Board to continue to bridge the gap between concept and commercialisation.

UK Government commits further investment in Catapult Centres

On 13 August 2013, the UK Government, outlined an expansion in the Catapult centres. Established by the Technology Strategy Board, the Catapults are a network of seven technology and innovation centres covering a range of sectors: High Value Manufacturing, Satellite Applications, Cell Therapy, Offshore Renewable Energy, Future Cities, Transport Systems (see below) and the Connected Digital Economy. The Catapults aim to bridge the gap between business, academia, research and government to promote and nurture technology innovation.

Following the success of the centres, a commitment has been made to invest in two new Catapults in 2015/16. An Energy Systems Catapult will be established to help innovative UK businesses to tackle the big challenge of creating energy systems that meet future supply and demand, both in the UK markets and overseas. A Diagnostics for Stratified Medicine Catapult will be established to help identify and provide the right care for individual patients, allowing businesses to develop new treatments and reducing the cost of healthcare. An extra £7 million is also being invested in the High Value Manufacturing Catapult.

The total public and private sector investment in the Catapults so far is £1.4 billion, with further investment to follow. Catapults aim to investment in new technologies, and lay the foundations for the high-growth businesses of the future. The Technology Strategy Board published the [annual review of the Catapult centres](#) highlighting their success so far. It details that the Satellite

Applications Catapult has played an important role in the development of firms like WeatherSafe. The company has developed an application which allows Rwandan farmers to access weather information and improve the management of their coffee crop and to fight pests.

UK: A \$235m Transport Systems Catapult Centre Announced

On 9 July 2013, the UK Universities & Science Minister David Willetts [announced](#) a [Transport Systems Catapult Centre](#) to help UK businesses develop solutions to public transport and freight needs. The new centre is intended to be a national hub for transport modelling and monitoring and will be funded by up to \$80 million over five years through the [Technology Strategy Board \(TSB\)](#) to exploit growth opportunities in a sector estimated to be worth about \$1.5 billion by 2025. With private-sector business and collaborative R&D projects, total funding for the centre over five years is expected to be \$235 million.

UK: Nesta Launches Innovation Map

Nesta recently launched an [interactive online map](#) providing a snapshot of innovation across the UK.

The innovation map shows hotspots for creative clusters, broadband speed, patent applications and high growth firms. Users can explore and compare activities across different UK regions, and locate Nesta-supported projects.

UK: Nesta Report on Assessing Digital Innovations in Education

Nesta's July 2013 report, [Alive in the Swamp](#), is an educational tool which provides guidance to teaching information technology in school.

The report identifies gaps in digital innovation education, and points to what needs to be done to ensure more efficient use of technology to transform learning. It offers practical suggestions on how entrepreneurs and systems leaders can evaluate innovations and identify those with the most potential for transformation.

In particular, it describes how a specific tool – namely the Innovation Index - can be used to analyse and evaluate innovations on the basis of technology, pedagogy and system change. The Innovation Index puts the focus on evidence of what works for the learner, and ensures that change is embedded in the entire system - not just niche projects in a handful of schools.

Nesta hopes that the Innovation Index will help drive the UK forward to an education 2.0 world that allows students to progress at their own pace and which focuses on an activity based assessment of a large suite of skills.

UK: Nesta Report on the power of co-design and co-delivery

[By Us, For Us: The power of co-design and co-delivery](#) is one in a series of publications from Nesta that explain why People Powered Health works. Released in July 2013, it draws on the experience of the six teams who took part in People Powered Health - an initiative led by Nesta and its Innovation Unit in 2011- 2012.

People Powered Health is a concept used to describe a health system driven by the people within it, rather than the institutions that provide the care. It focuses on the interactions between people and providers at all stages in designing, delivering, using, and evaluating services. It extends beyond traditional methods of engagement and consultation and moves towards real co-design and co-delivery at every level of the health service.

Co-design and co-delivery involves rethinking who, when and how services are designed – moving from a top-down, one-off, ‘professional experts’ approach that may or may not include wider consultation - towards an iterative, structured process that includes a broad range of people and is built on a community of relationships and trust. These approaches are features of ‘service design’, a process more traditionally used in the private and corporate sectors but many components of which are applicable to public services.

The report highlights the importance of fostering a collaborative working culture that not only enables patients to identify their own goals and aspirations, but also helps them to navigate the services that will help to achieve those goals. It also advocates prototyping as a way of developing and testing ideas at an early stage before large-scale resources are committed to implementation.

North America

US: Science and Technology Priorities in the FY 2015 Budget

On 26 July 2013, The US Federal government [outlined science and technology priorities](#) for the FY 2015 Budget. The priorities require investments in research and development (R&D); support for activities, such as STEM education, technology transfer, R&D facilities, and scientific data collection and management that enable a robust science and technology enterprise; and cooperation among multiple Federal agencies for success. They build on priorities reflected in the US Administration's past budgets and documents, such as the [President's Strategy for American Innovation](#).

US: Evidence and Innovation Agenda Memorandum Signed

On 26 July 2013, the US President asked his Cabinet to carry out a [New Management Agenda](#) for his second term that delivers a smarter, more

Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education

innovative, and more accountable government for citizens. An important component of that effort is strengthening agencies' abilities to continually improve program performance by applying existing evidence about what works, generating new knowledge, and using experimentation and innovation to test new approaches to program delivery.

US: Bipartisan Manufacturing Legislation Introduced

In early August 2013, US Senators introduced bipartisan Legislation, the [Revitalize American Manufacturing and Innovation Act of 2013](#), which would establish a Network for Manufacturing Innovation and seek to position the US once again as the global leader in advanced manufacturing.

The Act is designed to bring together industry, universities and community colleges, federal agencies and government at all levels to accelerate manufacturing innovation in technologies with commercial applications. It would establish public-private institutes to leverage resources to bridge the gap between basic research and product development, while creating high-paying, high-tech manufacturing jobs.

The bipartisan amendment passed to the Senate Budget for FY 2014 aims at supporting the creation of a network of manufacturing innovation hubs modelled on the National Additive Manufacturing Innovation Institute, a public-private manufacturing hub in Youngstown, Ohio. The bill aims to improve US competitiveness in manufacturing, and is expected to bring together public and private agencies, businesses, universities, and other organisations to establish a dynamic National Network for Manufacturing Innovation.

US: Economic Cluster Policy Begins to Work

The US Small Business Administration (SBA) released the Year Two Report '[The Evaluation of the U.S. Small Business Administration's Regional Clusters Initiative](#)' in June 2013. [The study](#), of which the Report is an outcome, looks closely at the first two years' experience of the SBA's 10 cluster pilots (out of the total number of more than 50 clusters funded around the US) focused on regional industries and advanced defence technologies. In each of these instances the SBA invested \$1 million to bolster a regionally designed initiative for advancing a strategic local cluster.

The evaluation found that the SBA's support of this extremely varied array of local and regional initiatives has gone very well in its earliest stages. Importantly, this long-term strategy for promoting regional growth has also delivered near-term impacts, including on growth.

South America

First Latin American Innovation Summit

[The first pan Latin American Innovation Summit](#) was held in Santiago, Chile on 30 to 31 July 2013. This milestone event is a collaboration between the [Institute for Large-Scale Innovation](#) and the Government of Chile.

It was an invitational Summit involving policymakers, educators, entrepreneurs and thought leaders.

The main object of the meeting – held in the context of Chile’s “Innovation Year” – was to define Chile’s future as a region for innovation, and as an entrepreneurial hub for technology and start-ups.

President of Chile, Sebastian Pinera, opened the Summit and stated that Chile’s goal was to make it easier for innovators from around the world to do business in Chile. The Ministry for Economy’s agenda includes Imagina Chile, a campaign to build public engagement with Chile’s national innovation agenda. It has also developed a program called [Start-up Chile](#), which aims to attract innovators and entrepreneurs from around the world to launch their ventures in Chile.

Topics of the Summit included economic opportunity, reinvention of education, policy, cities and other key innovation agendas.