Australian Government

Department of Innovation
Industry, Science and Research

INNOVATION POLICY REPORT

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CONTENTS

DEPARTMENTAL DEVELOPMENTS

NEW: Release of Biotech Business Indicators (Q1 2011)

Using publicly available industry and market data, the Department of Innovation, Industry, Science and Research produces Biotech Business Indicators (BBI), a quarterly summary of key statistics about the commercial and investment activities of Australian biotechnology companies listed on the Australian Securities Exchange (ASX).

Australian biotechs have recovered strongly from the global financial crisis to achieve their highest ever market capitalisation of $25.77 billion (Q1 2011). The biotech sector continues to perform better than the broader health care industry.

Bioniche Life Sciences Inc. was listed on the ASX on 21 January 2011 with a market capitalisation of $12.5 million. This is the first new listing since February 2010. Bioniche is a research-based, technology-driven company focused on the discovery, development, manufacture and marketing of proprietary products for human and animal health markets worldwide.

During Q1 2011, ASX-listed biotechs continued to be successful in establishing global partnerships. Several biotechs completed clinical trials and others were awarded patents by authorities in Australia, the United Kingdom, the European Union, the United States of America and India.

NEW: 2011 Strategic Roadmap for Australian Research Infrastructure

During 2011, a Strategic Roadmap for Australian Research Infrastructure (2011 Roadmap) is being developed to inform future decisions on where Australia should make strategic infrastructure investments to further develop its research capacity and improve research and innovation outcomes over the next five to ten years.

206 submissions were received in response to the Discussion Paper released in March. Following analysis of the submissions, an Exposure Draft of the roadmap has been prepared and released for further public consultation.

Responses to the Exposure Draft are due in mid-July. It is anticipated the final 2011 Roadmap will be presented to the Minister for Innovation, Industry, Science and Research at the end of August.

NEW: Tertiary Education Quality and Standards Agency

The Tertiary Education Quality and Standards Agency (TEQSA) has been established in response to a recommendation in the Bradley Review of Australian Higher Education and was allocated $57 million over four years in the 2009-10 Budget.

The TEQSA will have powers to regulate university and non-university higher education providers, register providers and carry out evaluations of standards and performance. It is intended to protect and assure the quality of international education and to streamline current regulatory arrangements.

Consistent with the shared arrangements that exist in higher education, responsibility for TEQSA will be shared by the Minister for Tertiary Education, Skills, Jobs and Workplace Relations, Senator the Hon Chris Evans, and the Minister for Innovation, Industry, Science and Research, Senator the Hon Kim Carr, in line with their portfolio responsibilities. The Minister for Innovation is the 'Research Minister' referred to in the TEQSA bills.

The bills provide that the Research Minister develops the research standards after consulting with the Education Minister. They also provide that the Research Minister is consulted before the Education Minister makes any other standards or appoints the chief commissioner, other commissioners, standards panel members or panel chair.

The TEQSA bills were introduced on 23 March 2011 and then referred to the Senate Standing Committee on Education, Employment and Workplace Relations. The committee tabled its report in the Senate on 10 May 2011. The government has accepted all the recommendations made by the committee, including its primary recommendation on self-accreditation.

The final bills are expected to be debated by Parliament during the winter 2011 sittings.

NEW: The Australian Public Sector Innovation Indicators Project

The Australian Public Sector Innovation Indicators (APSII) Project seeks to improve the measurement of innovation in the Australian Public Service (APS), and eventually throughout the wider public sector. The Project arose as a specific initiative of the APS 200 Project on Public Sector Innovation and now reports to the Secretaries Board.

By providing organisations with relevant data and indicators, the Project will play a key role in assisting agencies in understanding their innovation performance and capability and inform decision making to achieve better agency outcomes. The Project also seeks to generate innovation data to allow for the benchmarking of the Australian public sector against other international public sectors, especially those of other OECD countries.

Two Project reference groups have been established: a Technical Reference Group (TRG) comprised of individuals with specific expertise on innovation measurement; and a Stakeholder Reference Group (SRG), with representatives from portfolio departments and academic and key public policy forums. The TRG, which met in March and June 2011, has endorsed a conceptual and methodological framework for measuring public sector innovation in Australia. The SRG, whose inaugural meeting was in June 2011, will have a continuing role in providing a user perspective on the data, indicators and measurement tools.

During the first half of 2011, the APSII Project contributed to the development of innovation questions for the employee and agency components of the APSC's 2010-11 State of the Service Survey. These surveys, conducted in May and July 2011, respectively, will result in new, higher quality data-sets on innovation in the APS.

It is envisaged that by the end of 2012, the Project will have delivered a measurement framework paper for public sector innovation in Australia, conducted and reported on a pilot innovation survey of all Commonwealth departments and prepared pilot analytical reports on innovation for individual agencies.

At a later stage, the Project may also investigate expanding the survey beyond the Australian Government.

NEW: Australian Government's 2011-12 Science, Research and Innovation Budget Tables

In May 2011, the Australian Government released the annual budget tables of its expenditure on research and development.

The tables provide an overview of whole-of-Government support for science, research and innovation over a 10 year period up to and including 2011-2012. Data are provided by the responsible departments and agencies following OECD reporting guidelines and according to standard OECD classifications. The tables also include the costs of tax incentives, such as for R&D, which the OECD does not include.

As well as the consolidated data, the tables also provide breakdowns by sector, program, expenditure type, and by socio-economic objective.

In brief, Government support for science, research and innovation is forecast to have grown by 43%, from $6.5 billion in 2007-08 to $9.4 billion in 2011-12 and 3.4% from 2010-11 to 2011-12.

NEW: Review of Industry and Other Income (Category 3), and Joint Research Engagement scheme.

From July, the Department of Innovation, Industry, Science and Research will commence a review of Industry and Other income (Category 3), and Joint Research Engagement (JRE) scheme within the Higher Education Research Data Collection (HERDC). The Minister has recently endorsed the terms of reference.

The department will undertake the review with the assistance of a working group of the HERDC which comprises representatives from the Australian higher education research sector. Nominations are currently being sought for the working group.

In the third quarter of 2011, the department will release a consultation paper, with appropriate framing questions, to the higher education sector for comment. The department will prepare advice to the Minister on outcomes from the review by the end of October 2011.

NEW: Australia-China Science and Research Fund

On 27 April 2011, the Science Ministers of the Commonwealth of Australia and the People's Republic of China reaffirmed both countries' commitment to continue to expand collaboration on strategic science and research initiatives of mutual interest.

The Australian and Chinese Governments will each commit $9 million over three years to a new Australia-China Science and Research Fund from 2011-12. The fund will build on the strong partnership built through 30 years of cooperation on science and technology between Australia and China.

During May 2011, Commonwealth agencies, the Australian research community and state governments provided the Department of Innovation, Industry, Science and Research with information about the scale and focus of current and future research collaboration with China.

The Australian Government will work with the Chinese Government in the coming months to determine the arrangements for the new fund, which are expected to be finalised at the Joint Science and Technology meeting in Shanghai in August 2011. More information about the new fund will be made available on the Department of Innovation, Industry, Science and Research website after this time.

R&D Tax Credit

The Research and Development Tax Credit Bills were introduced into the House of Representatives on 30 September 2010, debated and passed in the House on 22 November 2010 and read into the Senate on 23 November 2010. The R&D Tax Credit Bills are awaiting debate in the Senate.

The Bill currently contains a commencement date for the R&D Tax Credit of 1 July 2010. Minister Carr recently announced that the government would be amenable to a revised start date, potentially 1 July 2011; which will be considered as part of the Senate debate.

Regulations and Decision Making Principles pertaining to the administration of the new R&D Tax Credit have been drafted and public consultation will commence shortly.

Commercialisation Australia

At the 2011 AusBiotech CEO Forum on May 17, the Minister announced an additional $13 million of support for 29 projects. The latest announcements highlight the range and depth of support offered by Commercialisation Australia (CA) to companies and individuals, including support for an influenza test kit for pandemics, a bioherbicide to counter an invasive weed and a livestock pest control system

As of April 2011, CA has invested $45 million in 115 projects. The next CA Board meeting to assess applications is scheduled for 28th June.

CA is now accepting applications for the Pilot Programs component of CA that is designed to investigate and trial new methods of commercialisation policy.

Two new Perth-based Case Managers have been inducted into the Case Manager network. This brings the overall number to 22 and a total of three in WA.

The database of Volunteer Business Mentors is complete and was launched in late May. It aims to help Case Managers match potential mentors with participants.

Venture Capital

Innovation Investment Fund - the third funding tranche of Round 3

On 8 June 2011 Senator the Hon Kim Carr announced that three fund mangers were licensed under the third licensing tranche of IIF Round 3:

- Carnegie Venture Capital Pty Ltd.,
- The Medical Research Commercialisation Fund (MRCF), and
- Southern Cross Ventures Pty Ltd.

Each fund is a $40 million fund ($20 million government capital per fund). Seven funds have been licensed since September 2007, with a total of $290 million of government and private capital being committed to venture capital in Australia under IIF Round 3.

Econometric Analysis of the Innovation Investment Fund Program

Professor Gordon Murray visited Canberra at the invitation of the department in late May and early June 2011. Professor Murray is an international expert in Entrepreneurship and Venture Capital and has worked extensively for the United Kingdom and other European governments. He is Emeritus Professor of Management (Entrepreneurship) at the University of Exeter Business School (having retired in 2011).

While in Canberra Professor Murray presented his report: *An Independent Econometric Analysis of the Innovation Investment Fund Programme (IIF) of the Australian Commonwealth Government: Findings and Implications*, to an audience which included representatives of the venture capital industry. Professor Murray undertook the econometric analysis on behalf of the department as part of a broader progress review of the IIF program.

The report identifies:

- Strengths of the program;
- Achievements of the program;
- Comparison with international programs;
- Progress towards achieving the stated program objectives; and
- Issues which should be considered in any future iterations of the program.

Professor Murray also delivered a presentation covering international activities in venture capital and entrepreneurship and highlighted the vital role of venture capital in the innovation ecosystem. Implications for Australia included the importance of long term government support for the venture capital industry; utilising world's best practice in program design; that Australia will largely need to fund its own venture capital industry and, to focus on specialisms where Australia displays strength and is able to be internationally competitive.

Industry Innovation Councils

The eight Industry Innovation Councils (Councils) contribute to building an innovation culture in Australian industry. They have a leadership role in transforming industry and cover: Automotive; Built Environment; Future Manufacturing; Information Technology (IT); Pulp and Paper; Space; Steel; and Textile, Clothing and Footwear industries. The Councils provide strategic advice on innovation priorities to the Minister, champion innovation in industry, and build connections and collaborate with other innovation initiatives and organisations.

On 14 July 2011 the Chairs of Councils, together with Chairs of other Department of Innovation, Industry, Science and Research advisory bodies, will participate in a day's workshop focussing on climate change, the national broadband network and future manufacturing.

Space Council

The Space Council facilitated a stakeholder forum to increase its engagement with industry and academic stakeholders in the space sector. The forum gave stakeholders the opportunity to engage directly with the Space Council, where it was highlighted that Australia relies heavily on space based applications covering Earth observation, satellite telecommunications and position, navigation and timing. The value of space science was also highlighted as was the Australian Space Research Program which has contributed to the sector by encouraging collaboration by industry, public sector research organisations and universities. The Space Council is looking at facilitating more forums in other capital cities in the coming months.

Members of the Space Council attended the official launch of a successful Round 1 Australian Space Research Program project—*Pathways to Space* at the Powerhouse Museum, Sydney. This project showcases the value of collaboration by universities, public sector research organisations and industry in delivering an interactive educational program. The program is designed to encourage students from Year 10–12 to consider studying and taking up careers in space-related science and engineering. At the Powerhouse Museum students participate in simulated space missions that are focused on the planning and execution of robotic explorations (ie: a Rover) on Mars, searching for evidence of life. The program also caters for students in regional areas who are able to control the Rover virtually via the internet and experience learning activities via video conference.

The Space Council made a submission to the House of Representatives Committee's inquiry into the role and potential of the National Broadband

Network (NBN). This submission highlighted the importance of Australian industry involvement, the benefits of secondary payloads on new satellites and the significance of improving satellite and ground infrastructure for Earth observation. The Chair of the Council appeared before the committee and gave evidence.

Information Technology Council

The IT Council made a submission to the NBN inquiry and the Chair of the Council appeared before the committee and gave evidence. The IT Council's submission focussed on the significance that ubiquitous high speed, high capacity telecommunications, such as that delivered by the NBN, has for Australia's future. The IT Council identifies high quality broadband services as a crucial element in Australia's successful transformation to a digital economy and its subsequent global economic performance.

The IT Council is also developing advice for the Minister on the benefits of cloud computing which address a range of issues facing the wider adoption of cloud computing.

Automotive Council

The Automotive Council discussed the potential impact of a carbon price mechanism on the Australian automotive industry. To assist Government in developing the mechanism, industry members have consequently calculated the carbon emissions generated across the automotive value chain in Australia and provided advice to Government on the possible impact of a carbon price on the industry. The Automotive Council members are also scheduled to meet Professor Julia King, author of the UK King Review of Low-Carbon Cars, in early July 2011, to discuss her finding that reductions of 50 per cent of road transport emissions are achievable by 2030.

Textile, Clothing and Footwear Council

The Chair of the Textile, Clothing and Footwear (TCF) Council invited key stakeholders to contribute to the development of advice for Government on the impact on the TCF and leather industries of the proposed carbon pricing mechanism. The TCF Council, in conjunction with Ethical Clothing Australia, held industry stakeholder workshops, small group meetings, and conducted an online survey to investigate the feasibility of introducing a voluntary Ethical Quality Mark for the TCF industries. A report from Ethical Clothing Australia is due in mid 2011.

Built Environment Council

The Built Environment Council, together with the Department of Innovation, Industry, Science and Research hosted a built environment research forum to discuss the themes of research excellence and collaboration in the built environment. Participants included researchers and academics from nine universities, the Chair and members of the Council. The forum also addressed the theme of cooperative research in the built environment from Council's 2010 *Recommendations Report*.

The *Building a culture of innovation: stakeholder feedback* report is available on the department's web site. It highlights the views of 102 stakeholders on innovation performance in eight sectors in Australian industry.

Collaborative Research Networks program

The Collaborative Research Networks Program (CRN) is part of a broad suite of reforms to university research intended to encourage a greater focus on excellence, sustainability and collaboration.

The CRN Program will provide up to $61.5 million from mid 2011 to mid 2014 to assist less research-intensive, smaller and regional universities develop their research capabilities by working in partnership with more research-intensive institutions. The program was developed in consultation with the higher education sector.

The Minister announced the successful projects on 31 May 2011. Twelve projects will be funded in the initial round.

Sustainable Research Excellence in Universities

The Department of Innovation, Industry, Science and Research is working with the Higher Education Research Data Advisory Committee and its technical working group to progress development of the 2012 Sustainable Research Excellence (SRE) funding methodology. For the first time, this will include a performance moderator derived from the results of Excellence in Research for Australia (ERA).

A consultation paper on options for the inclusion of ERA in the SRE funding model (developed with the assistance of the Australian Research Council) will be the focus of consultation with higher education providers in mid-2011.

Research Workforce Strategy

The Australian Government indicated in *Powering Ideas: An Innovation Agenda for the 21st Century* that it would develop a research workforce strategy, to "address expected shortfalls in the supply of research-qualified people".

The final strategy document, *Research Skills for an Innovative Future*, was launched on 19 April 2011.

The strategy identifies five key priority areas for focus:

- Meeting the need for research skills in Australia;
- Strengthening the quality of supply through Australia's research training system;
- Enhancing the attractiveness of research careers in Australia;
- Facilitating research workforce mobility; and
- Increasing participation in Australia's research workforce.

A Research Workforce Strategic Advisory Group (RWSAG) has been established to act as an advisory group to assist in the strategy implementation process. The

RWSAG had its inaugural meeting on 9 June 2011.

Commonwealth State and Territory Advisory Council on Innovation

Innovation and Procurement Working Group:

The Commonwealth, State, and Territory Advisory Council on Innovation (CSTACI) Innovation and Procurement Working Group held its second teleconference on 1 June 2011.

At this teleconference members gave an update on innovation and procurement in their respective jurisdictions. There was also discussion regarding the direction and key outcomes of the group, which will include mapping the procurement regimes of each jurisdiction and collecting relevant domestic and international case studies of procurement driven innovation outcomes.

Innovation Indicators Working Group:

A teleconference of the Commonwealth, State and Territory Advisory Council on Innovation (CSTACI) Innovation Indicators Working Group was held on 17 May 2011.

Prior to the meeting the Australian Bureau of Statistics (ABS) circulated options for the provision of innovation statistics at a state and territory level. The options were based on the need for additional sample requirements to be added to the Business Characteristics Survey beyond what is included for the standard ABS outputs.

The options provided the following output scenarios:

- State/territory level only
- State/territory by business size (based on employment)
- State/territory by industry division

These were discussed and the options clarified. State and Territory members of the working group will advise the ABS by the end of June 2011 if they wish the ABS to undertake the additional data collection on their behalf.

An overview of the National Survey of Research Commercialisation was presented to the working group, along with its most recent findings (see May Policy Report – page 10 http://www.innovation.gov.au/Innovation/ReportsandStudies/Documents/InnovationPolicyReportMay11.pdf). Working group members were provided with data from this survey on a state and territory level.

The working group was given an update on the progress of the Australian Public Sector Innovation Indicators project. The next Working Group teleconference is scheduled for 19 July 2011.

Cooperative Research Centres Program

The Cooperative Research Centres (CRC) program supports end-user driven research collaborations to address major challenges facing Australia, many of which are global challenges.

Applications for the 14th selection round closed on 1 July 2011. It is anticipated that outcomes will be announced in December 2011. The priorities for the 14th round are social innovation, sustainable regional communities and clean manufacturing (as part of the Government's Clean 21 initiative).

Australia-India Strategic Research Fund

On 17 May Innovation Minister Senator Kim Carr announced that 18 collaborative projects involving Australian and Indian scientists have been awarded $5 million of Australian Government funding under the Australia-India Strategic Research Fund (AISRF), with matching funding provided by the Government of India.

Grants have been awarded to 12 Australian universities and research institutes for projects that include:

- The development of a novel class of anti-cancer agents targeting the immune system;
- The design of malaria vaccines;
- Developing methods for the production of omega-3 concentrates for functional foods;
- Development of protocols for a new methodology for assessing seismic cycles associated with high risk great earthquakes;
- Optimizing highwall mining design to extend the life of opencast mines by making them safer and more economic; and
- Investigating physical and chemical changes associated with catalytic reactions directly relevant to energy conversion in fuel cells.

On 6 June full applications under the first round of the Grand Challenge (GC) Fund component of the AISRF closed. The applications will be assessed by a joint Australian-Indian peer review panel with the outcomes expected to be announced in August. The GC Fund will support large collaborative research projects that demonstrate a clear path to end use and address practical problems in the areas of food and water security and the environment. Successful projects will receive up to $3 million from the Australian Government, with the Government of India providing matching funding.

The Secretary of the Department of Innovation, Industry, Science and Research Mr Mark Paterson co-chaired the annual Joint Science and Technology Committee meeting and Joint Biotechnology Committee meeting with India's departments of Science and Technology and Biotechnology respectively in Delhi on 28 and 29 April. The meetings agreed an ambitious program of activities over the coming 12 months including the conduct of an impact evaluation of the Fund.

NATIONAL DEVELOPMENTS

Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People

On 14 May 2011 Senator the Hon Chris Evans and Senator the Hon Kim Carr announced the Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander people to be chaired by Larissa Behrendt, Professor of Law and Indigenous Studies at the University of Technology, Sydney. Other members of the Panel conducting the Review include the current Chair of the Indigenous Higher Education Advisory Council Professor Steve Larkin, Deputy Secretary of the Department of Innovation, Industry, Science and Research, Ms Patricia Kelly, and Associate Secretary of the Department of Education, Employment and Workplace Relations, Mr Robert Griew.

According to its terms of reference, the review will make recommendations in relation to:

- achieving parity for Aboriginal and Torres Strait Islander students, researchers, academic and non-academic staff;
- best practice and opportunities for change inside universities and other higher education providers (spanning both Indigenous specific units and whole-of-university culture, policies, activities, and programs);
- the effectiveness of existing Australian Government programs that aim to encourage better outcomes for Indigenous Australians in higher education; and
- the recognition and equivalence of Indigenous knowledge in the higher education sector.

The review will propose a strategic framework to enable the Government and the higher education sector to collectively address higher education access and outcomes for Aboriginal and Torres Strait Islander people to ensure parity in the sector.

The review panel held its first meeting in Canberra on 26 May. It is due to deliver its report to Government by April 2012.

The department is providing support and advice to the review panel on issues related to research and research training.

University Commercialisation in Australia

This report was independently commissioned by Murdoch University and produced by a consultancy group with a view towards investigating the current commercialisation practices and typical outcomes within Australia's universities.

Key observations from the report include:

- University commercialisation activities are mostly an exercise in cost recovery with insufficient deal flow to support large Technology Transfer Offices (TTOs);
- Successful commcercialisation requires a large pool of high quality, commercially relevant research;
- Public sector intervention in research direction and commercialisation is a blessing and a curse;
- There is a university spin-out culture in Australia because of companies being created to optimise the commercial return of university generated intellectual property and grant programs requiring a project to be owned by a corporation rather than a university;
- The primary long term goal of all commercialisation functions should be financial self-sufficiency; and
- Creating and maintaining an effective relationship between the research community and the commercialisation office is key to an effective commercialisation function, TTO officers should have appropriate commercial backgrounds, empathy towards university systems and formulate a client service culture for the benefit of the researcher.

The report is not yet online but is publicly available. Please email Secretariat.InnovationSystems@innovation.gov.au to request a copy.

Indigenous Higher Education Advisory Council

Senator the Hon Chris Evans, Minister for Tertiary Education, Skills, Jobs and Workplace Relations and Senator the Hon Kim Carr, Minister for Innovation, Industry, Science and Research have recently appointed three new members to the Indigenous Higher Education Advisory Council (IHEAC); Dr Irene Watson, Ms Geraldine Atkinson and Professor Ian Anderson, expanding the size of IHEAC to 10 members. Recent outgoing members are Professors Lynette Russell and Russell Taylor, who resigned from IHEAC after the February 2011 meeting.

IHEAC will next meet on 28-29 June 2011.

Recent IHEAC submissions are published on the DEEWR website at: http://www.deewr.gov.au/Indigenous/HigherEducation/Programs/IHEAC/Pages/Home.aspx

The BERD in the Hand: Supporting Business Investment in Research and Development

The Australian Business Foundation (ABF) engaged Dr Nicholas Gruen of Lateral Economics to conduct a study into the proposed reform of the tax treatment of business research and development (R&D Tax Credit). The aim of the study was

to analyse the draft legislative provisions and their effectiveness in fostering greater investment in business R&D and innovation and the report was produced in April 2011.

The report discusses issues surrounding the existing R&D Tax Concession, changes made to the scheme over time, its effectiveness in encouraging additional R&D and the rationale for and design of the new R&D Tax Credit. The ABF report strongly supports the legislative changes, including the higher rates of support, changes in definition of R&D and the introduction of the dominant purpose test for certain supporting activities. The ABF report made four recommendations:

- That the legislation is passed into law;
- That the threshold amount used to define small firms and the minimum expenditure threshold for the program be indexed for inflation every three years;
- That tax confidentiality requirements be relaxed to permit public scrutiny of claims; and
- That refundable payments should be brought forward for low risk firms.

The National Digital Economy Strategy

The National Digital Economy Strategy, released on 31 May 2011, states goals and outlines the government's vision for Australia's digital economy. The strategy outlines eight Digital Economy Goals and explains why they are important, where Australia is now and what initial steps the government will take to reach the stated goals. The goals focus on key areas such as online participation, health, education, teleworking, regional Australia, government services and smart technology.

The government is committed to ensuring that, by 2020, Australia is one of the world's leading digital economies, but to maximise the benefit of the digital economy there needs to be action by all levels of governments, industry and the community as a whole. By setting these eight goals the government has shown where its focus will be.

INTERNATIONAL DEVELOPMENTS

Digital Opportunity, A Review of Intellectual Property and Growth

Released on 18 May 2011 Professor Hargreaves' report, *'Digital Opportunity: A Review of Intellectual Property and Growth',* makes ten key recommendations for reform:

1. Evidence – Government should ensure that development f the IP System is driven by objective evidence.
2. International priorities – The United Kingdom (UK) should resolutely pursue its international interests in IP, particularly with respect to emerging economies such as China and India.
3. Copyright licensing – The UK should establish a cross sectoral Digital Copyright Exchange and the UK should support the European Commission in establishing a framework for cross border copyright licensing.
4. Orphan works – The Government should legislate to enable licensing of orphan works.
5. Limits to copyright – Government should firmly resist over regulation of activities which do not prejudice the central objective of copyright, namely the provision of incentives to creators.
6. Patent tickets and other obstructs to innovation – These barriers to innovation should be reduced by the Government: taking a lead role in promoting international efforts to manage the boom in patent applications, working to ensure that patents are not extended into sectors which they do not currently cover without clear evidence of benefit and investigating ways of limiting adverse consequences of patent thickets.
7. The design industry – The IPO should conduct an evidence based assessment of the relationship between design rights and innovation.
8. Enforcement of IP rights – The Government should pursue an integrated approach based upon enforcement, education and measures to strengthen and grow legitimate markets in copyright and other IP protected fields.
9. Small firm access to IP advice – The IPO should improve the accessibility of the IP system to smaller companies.
10. An IP system responsive to change – The IPO should be given the necessary powers and mandate in law to ensure that the UK's IP system promotes innovation and growth through efficient, contestable markets.

Also included in the report is a review of the digital revolution, with the final outcome being that the UK's current Intellectual Property (IP) system is falling behind its potential, especially in the area of copyright.

An economic impact assessment conducted by the Review team estimates that adopting the 10 suggestions would add between 0.3 per cent and 0.6 per cent to annual gross domestic product growth in the UK by making it a hub for IP in the European Uunion zone.

While some of the recommendations are specific to the UK or the European Union, others may present solutions for problems in the Australian system.

UK-US Increased Higher Education, Science and Innovation Collaboration

In May, British Prime Minister David Cameron and President of the United States, Barack Obama, jointly announced a long term commitment between the United States (US) and the United Kingdom (UK) to collaboration in science, higher education and the development of cyberspace. The UK and the US are already world-leading knowledge economies and enjoy one of the most productive bilateral higher education relationships in the world, with each country being the other's top destination for overseas study — a partnership worth more than $1 billion annually.

In particular the US and UK will increase their collaboration in the areas of Space Science and Exploration, Clean Energy and Climate Science, Food Security, Health and Wellbeing, and Innovation and Growth. To do this there will be increased links between their higher education institutions through increased post-graduate student and researcher exchange programs, collaboration on a number of significant research projects and they will embark on a joint program to create the world's first combined space weather model.

European companies turn to eco-innovation to tackle rising material costs

The competitiveness of European businesses is increasingly vulnerable to growing materials scarcity, causing price volatility in products. A recent Eurobarometer found that 75% of European businesses have experienced an increase in material costs in the past five years, while 90% expect price increases in the future. More than half of the small and medium-sized businesses surveyed said they had turned to eco-innovation to address this challenge, with scarcity being viewed by these firms as a key incentive to develop innovative less material-intensive substitutes.

European Research Council's 'Proof of Concept' funding scheme

The European Research Council (ERC) launched a new 'Proof of Concept' funding scheme to help researchers already holding ERC grants to bridge the gap between their research and the earliest stage of a marketable innovation. The grant provides funding of up to € EUR 150,000 per grant. The scheme aims to support grant-holders during the pre-demonstration phase to prepare a "package" to be presented to venture capitalists or companies that might invest in the new technology and take it through the early commercialisation phase.

European Union Space Policy

In April, the European Commission released a communication on the European Union's new space policy, "Towards a space strategy for the European Union that benefits its citizens". The communication sets out the main priorities for the EU

including reinforcing Europe's space infrastructure, increasing support for research to maintain European technological non-dependence, fostering cross-fertilisation between the space sector and other industry sectors, and boosting innovation as a driver of European competitiveness. It is a first step of an integrated Space Policy to be developed under the Lisbon Treaty.

Vital Growth: The importance of high-growth businesses to the recovery – NESTA

NESTA (UK) has released their latest research paper "Vital Growth: The importance of high growth businesses to the recovery", which focuses on the importance of high-growth businesses in the economy. It asserts that their continued survival is vital in leading recovery and that the UK Government's policy for fostering economic growth needs to have high-growth businesses and their particular needs at its heart.

As illustrated in a previous research paper, "The Vital 6 percent", high growth businesses account for a disproportionate share of new job growth in the UK. This coupled with the finding that a higher percentage of high growth businesses remained solvent during the recent recession, leads to an in-depth investigation of the particular features that construe these businesses. The news is not all good, as the summary outlines a number of challenges faced, involving their higher risk capital needs and their characteristics that make them often assessed as having a lower credit rating by lenders and credit providing institutions.

An investigation is also made into what an economic policy geared to the needs of high-growth businesses would look like, supported by case studies and wider economic research. The summary identifies several conditions associated with innovation and growth that should be priorities for economic policymakers, including the removal of obstacles to growth and allowing freer access to capital.

Creating Innovation in Small and Medium-sized Enterprises – NESTA

This working paper investigates and evaluates the short-term effects of the United Kingdom based Creative Credits pilot. The Creative Credits program is aimed at supporting innovation in small and medium-sized enterprises. It creates business to business networks in order to address barriers to innovation. The implementation of the voucher scheme emphasises fostering cooperation between businesses that may otherwise stagnate and not invest in creative co-operation.

Three hundred "creative" businesses (usually within the marketing or information technology sectors) from Manchester were used in the pilot with vouchers for credit being awarded to applicants in random selection. A large number of these credits were used to develop websites, marketing and video production activities. 80 percent of the credits were used to support business to business relationships that may not otherwise have developed in the 4-5 months covered by the projects time frame by fostering local but unusual business to business networks.

Early data suggests that there may have been a short term sale increase for credit, as a result of this program. Further, many recipients of the credits believe the benefits of this pilot will increase in the long run, though the studies also suggest that in the longer term a number of the projects would have gone ahead in any case.

Research and Innovation Policy Guidelines for 2011-2015 – Research and Innovation Council of Finland

This paper, released in early 2011, sets the research and innovation policy goals for Finland for the period to 2015. Finland has decided to invest in knowledge and expertise as its strategy for success. The guideline broadly involves:

- Restructuring the investment in higher educational institutions and research institutes, along with the creation of incentives for business cooperation with higher education institutes
- The creation of a Research & Development tax incentive program
- A review of venture capital opportunities available to innovators
- An increase in bi-lateral international cooperation
- Public sector led innovation, especially in procurement

Some of the programs suggested by the policy guidelines will last until 2020.