Australian Services
Roundtable

www.servicesaustralia.org.au

Submission to the Cutler Review of the National Innovation System

30 April 2008

Declaration of Interest

The Australian Services Roundtable (ASR) is a not-for-profit peak representational body for the services industries in Australia.

Our broad mission is to secure Australia's place in the global services economy.

Our members include individual organizations as well as business groupings and some State and Federal government agencies.

Sectors covered include financial services (banking, insurance, securities, funds management), technical and professional services (built environment services such as engineering and architecture, accounting, legal, consultancy, media, R&D and other business services), health services, education services, environmental services, manufacturing and other product-related services, energy and mining technology services, tourism, information technology and computer services, telecommunications, transport, distribution, logistics, standards and conformance services, audio-visual, arts, entertainment and cultural services.

A list of members is attached at Attachment 3.

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Preface

The Australian Services Roundtable endorses and supports the findings of the recent report of the Working Group, chaired by Geoff Garrett, Chief Executive of CSIRO, of the Prime Minister's Science, Engineering and Innovation Council (PMSEIC), "Science and Technology-Led Innovation in Services for Australian Industries" (April 2008) – referred to henceforth as the PMSEIC Working Group Report.

This ground-breaking work is located at:
http://www.innovation.gov.au/ScienceAndResearch/Documents/InnovationinServicesWGReport_1.pdf

The Australian Services Roundtable welcomes the PMSEIC Working Group Report as a milestone contribution to public policy formulation in Australia.

In respect of science and technology-led innovation in services, ASR's own submission is designed to complement and build on, rather than duplicate or repeat, the PMSEIC Working Group Report.

Despite having terms of reference focussed on science and technology, the PMSEIC Working Group Report did rightly stretch beyond that realm to explore many aspects of non-technological innovation, which is highly important in the services sector. In making this submission ASR is concerned to emphasise the scope for services innovation derived both inside and outside the laboratory. This latter process is not yet as well understood as science/technology-based innovation, nor has it been the subject of policy action. Yet it is also a large source of productivity growth in services throughout the developed economies and must become a major policy focus in the future.

Executive Summary

The services sector accounts for four fifths of Australia's economic activity and 85 percent of employment. These statistics say that Australia is fundamentally a services-based economy. However, this is out of step with popular perceptions and traditional analytical models of our economy which paint an economy dominated by agriculture, manufacturing and mining. The lack of understanding of the services sector has the unfortunate result that the sector tends to be treated in the public policy arena as too heterogeneous to exist as a coherent focus of policy attention.

This unwillingness to engage with the services sector as a whole is not helpful to understanding, and overlooks opportunities to guide the development and growth of the modern Australian economy.

The fact is that the services sector's strong productivity performance since the early 1990s has been the single most important driver of Australian economic growth. Innovation in the services sector, in turn, has been one of the key drivers of productivity improvement.

Encouragement of innovation is services is therefore one of the most critical priorities in our national quest for increased productivity. However, the services sector's performance has recently been weakening.

If left unattended, we will not secure the big opportunities at hand in the rapidly growing global services market. This will have significant negative consequences for inward foreign investment and for future employment opportunities for Australia.

As a nation, we must take advantage of the good fortune offered by our current mining boom and the windfall in our terms of trade to address our immediate needs on the services front to prepare for our future.

We recommend, commensurate with the economic and social weight of the services sector, that the Government should raise awareness of the importance of innovation in services as follows;

1. **Set Big Innovation Priorities**
   - **Elevate services to top status among the national innovation priorities**
   - **Establish a "Services Innovation and Competitiveness Council"**

2. **Consult, Measure and Raise Awareness**
   - **Create a coordinating cross-sectoral "National Research and Innovation Council"**
   - **Extend Innovation Awards across all sectors of the economy**

- **Require Government agencies to demonstrate innovation in all aspects of their operational behaviour and services delivery**

- **Undertake a review to update and modernise the ANZSIC categories for collection and compilation of statistics on services-related activities**

3. Collaborate to Solve Problems

- **Increase funding for collaborative research**

- **Provide "Services Innovation Collaboration Seed Funds" for services business groupings to kick-start initial research consultation and collaboration with R&D institutions**

- **Encompass TAFEs within the scope of the CRC programme**

4. Design Effective Incentives

- **Widen the criteria for research funding support to be more inclusive of cross-disciplinary work**

- **Set an ambitious target to increase investment in Research and Innovation to eg 2% of GDP by 2010 and 3% of GDP by 2020**

- **Give public funding rewards to Universities for obtaining business consultancy income**

- **Review the R&D tax concession rate and simplify the related compliance requirements**

- **Remove the fringe benefits tax on employer contributions to HECS HELP loan repayments**

- **Introduce an Education and Training tax concession**

- **Design a new outcomes-oriented "Innovate and Compete" taxation incentive specifically for non-laboratory innovation in services**

- **Task Industry Innovation Councils to voice concerns over regulatory policies which impede new innovative behaviour**

5. Draw an Innovation Dividend from Government Procurement

- **Accept a higher proportion of the risk associated with Innovation in government contracting**

- **Greater use of open standards in government IT procurement**

6. Invigorate Services Expertise

- **Increase recognition of and funding also for the humanities, arts, law, design and socio-economic sciences**

- **Help develop more educational programs that combine science and technology with non-technological disciplines to provide more appropriately skilled services graduates**

7. Build the Knowledge Infrastructure

We look forward to the forthcoming Green paper.

Our members are ready to work with Government and with our public education and R&D community to unlock – and keep unlocked – the drivers of innovation in services and, through services, in all our traditional industries.

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1 Securing our Place in the Global Services Economy

"....the shift to services represents the single largest labor force migration in human history."
(Jim Spohrer, IBM, 2007)

1.1 The importance of Services in the economy and the community

Services constitute the vast bulk of the global economy – two-thirds of world gross domestic product (GDP). In developed countries, services' share of the economy grew from 56 percent of GDP in 1971 to 72 percent in 2003. Services are intrinsically people-intensive industries and, despite rapid growth in labour productivity in services, are also the source of most global job growth over the last decade.

In Australia, services accounts for 78 percent of GDP and 60 percent of domestic investment. Services employs 85 of every 100 Australians, with all net job growth over the past two decades already taking place within the services sector. Austrade estimates 82 percent of Australian firms to be services firms, though only 3 percent of them appear to be exporting. Most are small and medium sized and don't appear on the policy radar. (See Box 1.)

Box 1: 2006 Services Sector Statistics

- The services sector accounts for 78% of GDP, 78% of gross industry value added and 60% of Investment — more than 3/4 of the economy
- Services industries employ 8.5 out of every 10 Australians
- 82% of Australian firms are services firms; most are small and medium and only 3% of them are exporting
- Services exports in 2005, as measured, were $37b (Tourism $11b, Passenger Transport $7.5b, Education $7b, Finance & Insurance $1.5b)
- Services exports, at 23% of total exports, are larger than rural exports and almost on a par with manufactures exports but this is known to be a significant under-statement of actual services exports
- Balance of Payments (BoP) data does not measure services exports delivered via offshore commercial presence (branches overseas) or franchises. Recent ABS surveys of Australian-owned foreign affiliates show the BoP is probably picking up less than 1/3 of the actual exports of services taking place. Recent EFIC data shows Australia's offshore investment flows now exceed inward investment flows, reinforcing the evidence of significant unmeasured services "export" activity.
- Embedded services account for on average 1/5 of the value of exported goods

The term “services” covers a broad range of industries that produce value by providing solutions to customers’ problems. But services industries, despite their great diversity, are less heterogeneous than is commonly understood. Services have many important common characteristics, interests and priorities that distinguish them sharply from the goods-producing sectors. These include:

- high labour-intensity
- high knowledge-intensity
- high ICT-intensity
- strong influence from cultural issues
- unique challenges in intellectual property
- difficulties in collecting statistics
- complex and unfamiliar barriers to trade, typically not applied “at the border”
- strong sensitivity to immigration issues
- deep political “sensitivities” with respect to national sovereignty
- comparatively heavy dependence on offshore investment in order to export
- prevalence of government ownership and monopolistic structure
- marked legacy of heavy regulatory intervention
- while this is changing, the strong historical legacy means that services generally are at an earlier phase of the cycle of market liberalisation and globalisation, compared to goods sectors
- special issues facing public/private partnerships in services infrastructure delivery
- quite different financial structures for services businesses, compared to goods-based sectors, and hence different sensitivities to tax and financial reporting regulation and to capital markets conditions
- rapidly changing business processes and methods of service delivery.

In addition, parts of the services industries typically provide the essential infrastructure and enabling networks for the goods-producing sectors. The sector plays a key enabling role in the economy which other sectors do not. Services industries essential to the productivity of the economy as a whole include education, health, energy, water, banking and financial services, telecommunications and transport.

Government policy on the services economy therefore needs to be constructed with an eye to the essential nature of many services and the presence of substantial economic externalities – that is, the failure of market prices to fully reflect the benefits of these sectors, leading potentially to under investment and misallocation of resources.

It is also worth noting that many goods have traditionally been “bundled up” with “product-related” services and many goods-producing processes contain “embedded” value-adding services. In a globalised environment, however, services can become increasingly “unbundled”. Lower value-add services, like goods, become “commoditised” and can and do enter global services supply chains, as well of course as goods-oriented supply chains. These and other characteristics of services industries tend to be poorly understood throughout the public policy community. This is hardly surprising given that the official statistics which inform policy thinking are collected via out-dated and analytically not very useful categories.[1] (See Attachment 1 on services innovation metrics.)

1.2 The role of Innovation in achieving global competitiveness

Business is currently operating in an economy at near full employment, up against serious capacity constraints of all kinds, especially skills and infrastructure shortages. In these conditions, business costs begin to rise, threatening our international competitiveness and associated trade performance. Australia is already beginning to lose global market share in services.

Market incentives to innovate in order to cut costs, boost productivity and/or improve service quality naturally intensify in such conditions. Does there currently exist, therefore, a public policy case for intervention to facilitate innovation? We believe that a compelling case does exist, with respect to the services sector.

The services sector has accounted, over the last decade and a half, for the bulk of the increase in Australia's rate of growth in productivity and has hence been the single biggest driver of economic growth in this country. The sector is worthy, as a result, of special policy observation. And right now, policy makers should be waving a red alert.

Because this very same set of industries, which has underpinned productivity growth since the early 1990s, is now a experiencing a decline in the rate of productivity growth. And Australia's share of the global services market has, as a consequence, registered a small but significant decline.

This evidence suggests that market incentives alone may not suffice. Add to the mix the fact that, although services firms clearly avail themselves of traditional policy instruments, such as the R & D tax incentive, they were not designed with modern services firms in mind and are likely to be relatively inefficient in targeting innovation in services.

This is because the process by which innovation takes place in services organisations, to the extent that anecdotal experience and academic literature to date assists us in understanding it, seems fundamentally different from the traditional goods industries. Innovation in services tends:

- To take place specifically at the point of interaction between services provider and the client.

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[1] ASR prefers to the extent possible to use the categories in the WTO General Agreement on Trade in Services: Business and professional services; Communication services; Construction and related services; Distribution services; Education services; Energy services; Environmental services; Financial services; Health and social services; Tourism services; Transport services.

- To be driven by client relations more than is the case for innovation in manufacturing. Service companies must maintain a flexible approach to innovation, constantly changing to solve client problems and meet new needs.
- To be people-driven as well as laboratory-driven ie to break the bounds of traditional hierarchy by requiring integrated input from all kinds of operational, organizational, technical and managerial staff as well as researchers.
- Not to offer necessary economies of scale, as in manufacturing.
- To involve a high level of interaction and interdependence between knowledge providers (such as research organizations) and knowledge users (such as service firms) – to the extent that the term co-innovation has relevance.
- To be focused not only on new suites of services but also on new modal delivery methods for those services and on new business models to reach new markets.
- Not to take place as a specialised and separately accounted activity located in a separately identified part of a firm but to be inextricably tangled up with everyday creativity and design.
- To show evidence of a strong responsiveness to both technological and non-technological inputs, including when provided jointly.
- To involve the social as well as the natural sciences.
- To involve the creative arts and humanities.
- To suffer from inadequate formal or informal access to collaboration opportunities between services providers and the education and R&D community.

These various factors suggest that for services organisations, market failures, system failures and bureaucratic institution failures may be combining to deliver markedly less than optimal innovation outcomes.

This has deep implications right across the economy. Innovation in services is what keeps Australian services providers internationally competitive. And that, in turn, renders a competitiveness advantage to Australia's traditional goods industries, all of which are themselves major consumers of services and all of which themselves find that their own innovation is largely enabled through the application of services value-add.

Policy focus on facilitating innovation, both in and through services, whether those services be infrastructural, enabling or consumer driven services, along with heightened efforts to reduce business costs associated with regulatory inefficiency, is therefore essential to delivering a sustained improvement in Australia's productivity performance.

It is worth adding a note of urgency. Australia is already behind other OECD[2] countries in capturing market share within the global services market. World Bank data suggests on a per capita basis this equates to US$1,398 for Australia, compared with the global average of US$1,876 and significantly lower than the OECD average of US$6,066. Australia's intensity of trade in services (the ratio of export and imports of services to total GDP) is also very low by OECD standards. The increases in trade intensity for Ireland, Korea, Sweden and the Netherlands have been greater than three times that of the Australian rate of increase.[3]

The Business Council of Australia[4] estimates that Australia's share of global services exports dropped from 1.45% in 1996 to 1.15% in 2005, equating to a $9.7 billion loss in export revenue. Clearly we are failing to capitalise on either our strong science and technology base or on our vibrant creative industries to grow our services market share.

1.3 Building on competitive strengths towards knowledge-based future prosperity

Much of the growth that has been witnessed in the Australian services sector has been at the knowledge-intensive, ICT-enabled end and particularly among knowledge-intensive business service activities. Knowledge-intensive business services are services provided into the business processes of other organizations based on technological or professional knowledge. They act as "force multipliers", in that they have the ability to dramatically increase the effectiveness of other industries or services they are linked with.

They include all kinds of professional and technical services (computer and IT services, telecommunications services, R&D services, legal services, accountancy services, financial services, management and consultancy services, architecture, engineering and related technical services, design services, advertising, market research, media, logistics). They also occur importantly in education and health.

Australia's reputation in the areas is very real. Our technical and professional services providers have tended, in neighbouring markets to be seen as more expert, less expensive and more flexible, adoptable innovators than other OECD country competitors.

Australia also has a track record of innovation coupled with a reputation for punching above our weight in science and technology R&D. We have strong science and technology skills and domain knowledge, particularly in the public sector, in a range of areas including ICT, mining technology, infrastructure,

[2] OECD, STAN Indicators, 2005. For analyses of OECD data and comparisons with Australia, see PMSEIC Working Group Report (April 2008), p. 3.
[3] A. Wolfl, "The Service Economy in OECD Countries", STI Working Paper 2005/3, "OECD Statistical Analysis of Science, Technology and Industry". In Business Council of Australia, "Underserviced: Why Australia's service economy deserves more attention", 2007.
[4] Business Council of Australia, "Underserviced: Why Australia's service economy deserves more attention", 2007.

environment, health, agriculture, and entertainment technology. The very rapid growth of global demand for these activities reflects growing demands for knowledge to deal with change — both technological and social. These services are often described as "enablers" or "change agents". They tend to be also the services mechanisms through which innovation takes place in other traditional industries. They are intrinsically connected to all the other sectors of the economy.

In the past, people employed in these activities have tended to be seen, therefore, as in fact belonging to their traditional client industries. In more recent years, however, many of these service activities have been out-sourced as their client firms focus increasingly, for reasons related to their own global competitiveness, on their own core strengths and unique offerings.

As a result these industries are becoming increasingly footloose. These industries tend to use all four modes of services export at once – i.e. fly-in/fly-out of both client and services provider, opening of an office offshore and internet enabled communication. The reality of the digital age is that work in the knowledge-intensive services sectors can quite rapidly flow to where it is performed best, i.e. wherever on the global stage there are pools of expertise available at the right price.

Innovation through these services activities, in which Australia has typically been strong, is relatively well understood, as a key way in which the services sector relates to and enables the traditional sectors. Those other sectors are our clients; the relationships are symbiotic.

Innovation in, as distinct from through, these services activities is also essential however to reducing costs and retaining local competitiveness in these activities — as well of course to keeping costs down and retaining local competitiveness in other traditional sectors.

But there has been insufficient focus to date on innovation in services.
If we can unlock innovation in these sectors of services activity, by focusing on them as a matter of priority, then we might also be better able to unlock innovation through services, right across the economy.

Our traditional goods-based industries also need world class services value-add to compete on global markets. But innovation in services is essential if Australian services firms are themselves to remain globally competitive. This matters, because services represent on average 20% of the value-add in Australia's manufacturing, rural and mining exports.

Australia's remote geography brings huge challenges in the delivery of all kinds of public and private services to our traditional strong extractive and rural industries. Solving the problems of remote service delivery brings new competitive edge and new export markets both for the services industries and traditional industries alike.

2 Innovation Policy Principles

"Innovation is ideas successfully applied."
(John Bessant, Innovation Summit, Melbourne, 2007)

2.1 Pre-conditions for services innovation

It is abundantly clear that innovation occurs in economies only where the conditions are right. Most economies, most of the time, are not generating sufficient innovation to achieve adequate productivity growth. The question then is: under what conditions does significant innovation occur?

ASR identifies six key pre-conditions necessary for innovation to flourish in the services sector. These requirements and the Government policy implications flowing from them are set out in the table below.

Table 1: Pre-Conditions for Services Innovation

	Pre-condition	**Potential Government Influence**
1	Community culture supportive of purposeful risk-taking	• Government can speak and act so as to encourage innovation across the whole community • Legal framework can protect decision-makers against penalties for failure of bona fide attempts to innovate (to assist in reducing "risk-averse agent" behaviour)
2	Consciousness of the potential benefits of services innovation amongst key decision-makers in private and public services sectors	• Services innovation can be given high and visible priority in Government policy including in structure of Innovation Councils • Government can actively raise consciousness amongst business and the wider community re services innovation • Baseline studies (eg ASR's "Services Stocktake" proposal) ensure we understand the starting position for new policy action in services innovation • Awards schemes can recognise services innovators • Government agencies can be required to report regularly on innovation strategies and outcomes achieved • Innovation capability can be an explicit criterion in selection for relevant positions in the public sector and in performance

		reviews • As a major information provider Government can facilitate information flow to public and private sector decision-makers about new developments relevant to innovation (eg ABS data) • In particular, Government can ensure that the unique aspects of services innovation become far better understood
3	People with adequate technical skills to innovate, who are accessible to services organisations	• Government has responsibility as the major provider of education and training in the community • As the major funder of research institutions Government can ensure they are effectively linked to business • Migration policy determines supply of many needed skills in the economy • Government can influence retention of local skill bases in specific occupations and in industry clusters through various policy mechanisms
4	Effective pressure for change and continuous improvement in private and public sector services organisations	• Government is responsible for maintenance of competitive markets in all services sectors, via competition and other policies • Government can act as a demanding customer, expecting innovative solutions to its own operational requirements • Government can pursue continual institutional and regulatory reform to prevent systemic failure through “lock-in” to established practices and arrangements which block innovation
5	Public funding for services innovation to ensure positive externalities are captured in decision-making	• Tax and grants schemes can be targeted to increasing innovation where significant externalities are present and private decisions alone would lead to insufficient innovation
6	Performance-based, rather than prescriptive, standards and regulation	• Government can regulate (including standards) to facilitate innovation, thus encouraging new and better ways of achieving desired services performance • “Innovation impact statements” can be required for all new regulatory proposals

2.2 The case for systemic intervention

The preceding section identifies areas of government policy that may potentially influence levels of innovation in the services economy. What is the case for government to act in these areas?

As we see it, the purpose of innovation policy is to contribute to growth in productivity within the broad Australian economy while helping meet societal and environmental goals. The specific objective is to improve the performance of business and public sector organisations in problem-solving and to facilitate the purposeful risk-taking behaviour needed to do this.

The case for innovation policy therefore rests in our view on:

- **capturing positive externalities** from private activity, including the creation of intellectual property and know-how
- **mitigating negative externalities**, especially environmental damage and adverse impacts on social structure, quality of life and employment conditions
- **addressing systemic failures in innovation** arising from, for example, biases to existing institutional and commercial arrangements, or from excessive IP protection.

2.3 Principles for policy effectiveness

In developing appropriate policy instruments, we consider that innovation policy should be designed around the following fundamental features. Policy should be:

- **pro-market and pro-competition** — these are unambiguously the best stimulants for innovation,
- **anti-protectionist** — private incumbent interests must not be protected in the name of innovation support at the expense of access by Australian businesses and consumers to better value products and services available in global markets,
- **supportive of flexibility in the economy** — innovation is closely linked to organisational flexibility and nimbleness.

We also consider that support for innovation should be provided across the whole economy and the full spectrum of public enquiry. Support should be provided for activities driven by science, technology, and R&D. It should equally be provided for the creative arts, social sciences and the frequently neglected but critically important humanities.

Experience in the knowledge-intensive services sector is that innovation often occurs precisely where these different disciplines and skill sets intersect. Employers in both the private and the public sectors have traditionally found, for example, that humanities graduates combine unique sensitivities to the creative and imaginative realm with strong analytic information-processing and problem-solving capabilities.

Building a genuinely inspirational culture of innovation across the full community requires us therefore to be as inclusive as possible in our national priority setting. Full realisation of our innovation potential will demand a holistic approach to encompass all aspects of creative practice.

We consider that to be effective, the structure of all public policy programmes should reflect and take into account the reality of Australia's contemporary economic structure; particularly so for innovation policy. This does not necessarily mean that the policy focus on any particular sector should be strictly commensurate with its economic or social significance – but there should be at least some a priori correlation between these two matters. Especially now, with growing community and political consciousness of the central role which services will evidently play in Australia's economic future, Government policy needs to be targeted more to services, so as to more fully reflect the true value of the services sector.

Consistent with this principle, services innovation should be given top priority within the national innovation system.

We also consider that to be effective, public policy, including innovation policy, should be evidence-based and developed in active on-going consultation with relevant stakeholders to "test" the emerging evidence. But the official data with respect to the services sector is currently poor. And there is minimal public effort underway to improve either the statistical base or the analytical literature. Moreover no official services sector-wide stakeholder mechanisms presently exist. We therefore urge the Government to redress these deficiencies in the national innovation system.

One way of doing this would be for the Government to interact and partner more closely with services sector champions in a high profile consultation process which will ensure that a stronger policy research base can be developed to better inform development of a national strategy for services innovation and competitiveness.

The Australian Services Roundtable invites the Government to enter into such a relationship with its members. ASR's principal role is to provide a focal point for high-level interaction between the Federal Government and its agencies, on the one hand, and services industries, on the other, in regard to *issues common to all our services industries*. The ASR plays an integral role in pulling the sector together and providing a concerted voice to Government on a wide range of such issues, including trade and investment negotiations, innovation, education and skills, technology infrastructure, private/public sector interaction and other high-level drivers of services productivity and competitiveness. As part of its role, the ASR is already an active member of the ABS's International Trade in Services User Group, contributing to the direction for official statistics.

In the following Section we set out our key policy recommendations derived from this analysis of the services innovation process and the potential impact of Government on the national innovation system.

3 Recommendations

Our future economic and social prosperity depends on how effectively Australia's services industries can globalise. The recent decline in Australia's share of the global services market is one marker of the challenge we face. There must be a major, properly managed, national focus on encouraging and rewarding innovation in the services industries. Our members are ready to work with Government and with our public education and R&D community to unlock – and keep unlocked – the drivers of innovation in services and, through services, in all our traditional industries.

We recommend the following action.

3.1 Set Big Innovation Priorities

> **The Government should raise awareness of the importance of innovation in services by elevating services to a status among the national Innovation priorities which is commensurate with analysis of the economic weight and social weight of the services sector.**

ASR proposes that the administration of innovation support activities be grouped within nine sectoral Industry Innovation Councils, as set out in Table 2 below. This holistic sectoral breakdown reflects, without "picking any winners", the current structure of Australian industry and at the same time separates industries in a pragmatic way according to the underlying economics of their production activities, as well as their manner of delivery.

Councils 1 and 2 are devoted to innovation *in* services, as distinct from innovation *through* services driven by the enabling services covered by Council 3.

> **The three Services Industry Innovation Councils should be pulled together under one joint supervising and whole-of-sector "Services Innovation and Competitiveness Council".**

With services industries constituting around 80% of economic activity in Australia, the aggregate gains from innovation in services are likely to be substantially greater than for other sectors.

Table 2: Setting Innovation Priorities

	Industry Innovation Councils	Covering
1	Consumer Services	Health Education Tourism Arts, Entertainment, Audio-visual Wholesale, Retail and Distribution
2	Infrastructural Services	Transport Telecommunications Financial services Environmental Services (Water, Waste) Energy Services
3	Enabling Technical and Professional Services	Information Technology and Computer services R&D services Logistics Legal services Accountancy services Consulting and Management services Energy and Mining technology services Built Environment services (Architectural and Engineering services, Construction services, Property and Design etc) Environmental consultancy services Standards and Conformance Services Advertising, market research and media
4	Natural Sciences and Technologies Social Sciences Humanities	Cross-sectoral bio- and physical sciences and technologies Pure, Applied and interdisciplinary efforts
5	Mining	All extractive industries
6	Manufacturing	All manufacturing industries
7	Agriculture	All agricultural activities
8	Industries in Transition	Any industry facing imminent, highly disruptive change where rapid innovation could play a role in viable adaptation to new market realities
9	Public Administration	Opportunities for innovation in any area of public administration which does not fit within another industry sector

3.2 Consult, Measure and Raise Awareness

A high-level coordinating body, which we call a "National Research and Innovation Council", must be created to oversight the work of all of the individual Industry Innovation Councils.

The National Research and Innovation Council would be tasked to:

- provide coordination between the Industry Councils
- ensure a diffusion of knowledge among them
- prevent unnecessary duplication of expenditure and effort, including at State level
- ensure that the national Innovation priorities remain consistent with and complementary to the National Research Priorities
- advertise the importance of outcomes-based innovation in business and government administration as the key to Australia's future socio-economic success
- ensure that Research and Innovation receive ongoing national priority attention.

The National Council would be structured so as to include representatives from the Industry Innovation Councils on a proportional basis. Services sector representatives would account for a third of the total number of members (based on the structure proposed above). ASR, as peak representative body for the services industries, would have a place on the National Council.

The importance of on-going Government awareness raising and leadership can not be underestimated. Innovation within firms is heavily dependent on the existence of a business and wider social culture that supports measured risk-taking and experimentation, including a degree of failure. Innovators need to attract the attention of business decision-makers and to win support from them for innovation projects they wish to pursue. The culture of innovation is based on judgment about the future and, hence, confidence. Confidence can be highly fragile and needs to be continually reinforced by those who shape community attitudes.

Government's role in this is to publicly validate innovative behaviour and draw attention to the broad impact innovation can have in delivering better outcomes for business, consumers and the community.

Awareness-raising programmes, such as Innovation Awards, should be extended across all sectors of the economy.

The Government should reinforce the message by requiring its own agencies to demonstrate innovation in all aspects of their operational behaviour and services delivery.

Raising awareness of the importance of innovation in services is closely tied to improving the metrics of innovation.

It is very difficult to measure the economic contribution of innovation in the services sector.[5] The impact of R&D is measurable; but the overall impact of innovation is not because the innovation statistics are strongly focused on tangible and technological innovation. Conventional metrics have difficulty in capturing improvements in factors such as quality, variety and choice.

But what is not measured has been too easily overlooked and for too long. Innovation in services will remain undervalued and under developed until the way the Australian Bureau of Statistics (ABS) collects and compiles the data is improved.

ASR agrees with the PMSEIC Working Group Report (April 2008) finding that there is room for expanded use of enhanced analytical tools, such as the ABS Business Longitudinal Database and Confidential Unit Record Files, to better analyse and measure industry trend data. As set out in our Stock-take proposal (Attachment 4), ASR is keen to partner with Government to support new research in this area.

ASR calls for a review to update and modernise the ANZSIC categories on services-related activities to provide a better basis for services-oriented research.

3.3 Collaborate to Solve Problems

The linkages between Australia's services industries and the public sector R&D base, although growing, are still not strong.[6] Much public sector research is still located in institutions too remote from where the economic action is. We need more diverse experiments in how we organise research. The Government can play a part by providing incentives to stimulate collaborative undertakings and by raising awareness of areas of common interest.

[5] See PMSEIC Working Group Report (April 2008), p. 24.
[6] See PMSEIC Working Group Report (April 2008), p. 29.

ASR recommends increased funding for collaborative undertakings, including through the Australian Research Council (ARC), Collaborative Research Centres (CRCs) and CSIRO.

As the PMSEIC Working Group Report (April 2008) recommends, funding should be targeted, interalia, at those projects which:

- stimulate more intensive engagement with all the service industries, small and large, and
- sit at the intersection of ICT and services industries in which Australia has competitive strength (such as environmental services, finance, health, tourism and all the professions).

ASR further recommends that the Government create a new, small fund from which "Services Innovation Collaboration Seed Funds" can be provided to services business groupings to enable them to kick-start, by facilitating initial contact, research collaboration between their members and the public education and R&D institutions.

ASR's experience suggests that peak services bodies can take a lead in encouraging their members to take time out to engage in initial joint industry dialogue to discuss their problems with the R&D community. This can be managed in small ways, such as seminars, workshops and business conferences, but it requires dedicated focus and attention to put such activities as day-to-day priorities. If this is not done consistently and regularly, R&D priorities will not reflect sufficient alignment with big joint industry needs. But business, especially small business, tends not to drink from the R&D pond until specifically and purposefully led to the water.

ASR plays a unique role already in this regard, as many R&D institutions with a services interest have been encouraged to join and become active participants and strategic partners. But there is so much more we and others could do if just small sums of seed funding were to become available. Business associations tend to focus on boosting competitiveness via the regulatory agenda. They need to focus also on facilitating collaborative innovation.

ASR also recommends a widening of the scope of the CRC program to encompass the full tertiary sector, including TAFEs.

We draw attention to the European tradition of firms across the skills sector being motivated toward investment in developing new technologies, resulting in centres of excellence in skills, especially in Germany and Scandinavia.

The value placed on research outside science and technology domains for innovation has also tended to be overlooked at Government level in Australia to date. Funding criteria are typically drawn too narrowly to enable innovation involving the arts and humanities to flourish. This is problematic given that "aesthetic value" is becoming a primary source of competitive advantage in the global economy. Many of our trading partners are consequently developing more design-led innovation policies. (See Attachment 2.)

ASR recommends that the scope of funding support be widened to be more inclusive of cross-disciplinary work and to allow more discretion for projects engaged with innovative thinking beyond the normal defines of a particular discipline but less likely to pass immediate tests of evident utility or application.

3.4 Design Effective Incentives

Many countries are allocating significantly greater proportions of their GDP than we do to Research and Innovation. The UK aims to increase R&D investment to 2.5% by 2014[7]; the EU has a goal of 3% of GDP by 2010; the US already spends 2.67% of GDP on R&D and Japan spends 3.06% of GDP on R&D.[8] Australia needs to catch up.

Australia should set an ambitious target to increase investment in Research and Innovation, for example, to 2% of GDP by 2010 and 3% of GDP by 2020.

Much of this funding will need to come from private resources. To this end, ASR recommends the following financial incentives:

(a) Reward Universities for obtaining business consultancy income

One reason public sector R&D remains largely focused on products rather than services is that the financial incentives offered to research institutions encourage longer-term research projects rather than shorter-term consultancy-type projects. This imbalance should be rectified in order to stimulate private sector

[7] Her Majesty's Treasury, *Science and Innovation Investment Framework 2004-2014*, available at http://www.hm-treasury.gov.uk/spending_review/spend_sr04/associated_documents/spending_sr04_science.cfm
[8] Alasdair Murray, *The Lisbon Scorecard IV*, Centre for European Reform, London (March, 2004).

expenditure on research and innovation. An incentive scheme could be devised along the lines of the UK's third stream funding model.

ASR recommends that Universities should receive public funding recognition for obtaining business consultancy income.

(b) Update the Tax-concessions

ASR considers that Government should:

- **increase the R&D tax concession rate to promote Australia as an international hub for R&D services**[9]
- **simplify the R&D tax concession compliance requirements**
- **remove the fringe benefits tax disincentive applying to employer contributions to HECS HELP loan repayments for postgraduate study**
- **introduce, as Finland has done, an Education and Training tax concession to encourage firms to upgrade their human capital**
- **accept that the R&D tax concession is an insufficient mechanism and design a modern outcomes-oriented "Innovate and Compete" taxation incentive including to facilitate retention of talent in Australia for services innovation**

(c) Remove inefficient regulatory disincentives

Too much red tape can inhibit innovation. Government needs to ensure, on the other hand, that regulation protects organisations and individuals taking measured risk for innovative purposes from inappropriate censure or penalty.

ASR recommends that Industry Innovation Councils should be tasked to voice concerns over regulatory policies with impact on incentives for innovative behaviour in services industries.

Services exports, and exports of products with a very high service content, must become a larger and larger part of our future. This includes exports of services delivered in Australia to in-bound clients (such as patients, students and tourists) or delivered via commercial presence offshore (such as insurance or legal services). Government regulation needs to be able to adapt to these new ways of exporting services and to foster rather than impede innovative export practices in services.

[9] The R&D tax concession rate was reduced from 150% to 125% in 1996.

As outlined in the PMSEIC Working Group Report (April 2008), Australia has a huge opportunity to build a raft of new export opportunities in health care services both in-bound and offshore. Realisation of these opportunities to capitalise on Australia's outstanding expertise in medicine will require substantial innovation in export service delivery, including the integration of complex IT solutions into healthcare systems. It will be crucial that government innovation and export support programmes are closely aligned with regulatory policies to support these and other emerging export opportunities.

3.5 Draw an Innovation Dividend from Government Procurement

Government procurement is of major economic significance due to its size and sometimes its monopsonistic market power. Contracting processes and procedures need to be considered carefully to ensure that opportunities for productivity or quality improvements through innovation are not overlooked.

In the services arena especially, given that so many services are infrastructural in nature, Government is always the "elephant in the room"; it cannot pretend that it is invisible, neutral or only concerned with efficiency. Government has to be a full partner in innovation. It has to be an innovator in its own right and a leading and innovative services user.

ASR agrees with the PMSEIC Working Group (April 2008) recommendation that Government procurement requirements should be formulated so as to create market pull for services innovation.

What ASR does *not* want is a reversion to a previously tried industry support policy based on conditional use of government purchasing policy as a way to drive local industry development and/or foreign investment. There is mixed opinion about this — and greater acceptance of it for small and medium sized firms for which transaction costs associated with government contracting can otherwise be prohibitive - but we would essentially be wary of moves to reintroduce significant new distortions of this kind into the market.

There is an identified need, however, to revise government procurement contracting requirements to prevent a disproportionate amount of the risk involved in a given project being passed on to the private sector via excessive and inappropriate insurance requirements. These risks can include onerous penalties imposed regardless of the level of the firm's involvement, fault, or financial capacity to bear the penalty involved. This, clearly, acts as a significant disincentive for innovation.

ASR therefore recommends a greater acceptance by Governments of part of the perceived risk associated with innovation in Government purchasing contracts, especially for small capital value contracts.

What we are looking for is a more balanced, proportionate and less prescriptive approach to risk. Unless we can achieve this, private suppliers to Government will remain reluctant to do anything “outside the box”.

ASR urges the Government to ensure that its agencies are required and effectively empowered to encourage innovation under services procurement contracts where appropriate.

This means that Government needs to take account of externalities in selecting between tenderers and to avoid precluding small and medium enterprises (local or foreign) - which may be the most innovative suppliers - from being excluded in practice from consideration.

ASR also calls for greater use of open standards in government IT procurement because they are more supportive of wide experimentation and innovation than are proprietary standards.

3.6 Invigorate Services Expertise

There is a need to revitalise Australia’s entire educational system, including the primary and secondary sectors, so that our core skills in English, Maths and Science are maintained, improved upon and integrated with our capabilities in the socio-economic and creative arts. Innovation is promoted by maintaining the rigour of the individual disciplines while at the same time encouraging the sort of thinking that combines or crosses disciplines.

We need to rethink the competencies that people will need in the future. The National Curriculum Board has a leading role to play in fostering thinking about our future workforce by ensuring that the best education practices from around the world are cultivated in Australian schools, and by making it a priority to recruit, retain and reward inspiring and highly-trained teachers at all levels of education.

In a very practical sense, careers advisors and classroom teachers can also assist in creating a more appropriately-skilled workforce by making students aware of the many new careers now available to them, particularly as a result of rapidly-changing markets and innovations in knowledge-intensive business services. The Vocational Education and Training (VET) system similarly needs to implement new training programs that are developed in collaboration with employers and aimed at providing an interdisciplinary focus on the services industries.

Public policy relating to the development of skills for innovation has rightfully focused on science and technology teaching and a number of programs have been implemented to that end. But there has been a prolonged tendency to virtually ignore the essential contributions of other disciplines to the fastest growing sector of the economy, the knowledge-intensive services sector.

ASR urges that there be increased recognition of and funding also for the humanities, arts, law and socio-economic sciences as well as for design methodology and tools.

Specifically, there is a growing need identified by business for people with cross-cutting skills that encompass ICT, social sciences, business management, and relevant, specific industry domain knowledge (for example, finance, mining, transport, and engineering).

While some universities have begun to address this challenge, for example by developing Services Science programs, there is a need for action to accelerate this process at each level of the tertiary education sector.

ASR recommends, in line with the PMSEIC Working Group Report (April 2008), that incentives be provided to Universities and to TAFEs to develop more educational programs that combine science and technology with non-technological disciplines to provide more appropriately skilled services graduates.

These incentives would include:

- allocating HECS HELP places for multi-discipline services science type programs
- making all postgraduate coursework programs in services science eligible for Student Income Support Payments
- giving recognition to services science projects via the ARC Linkage Australian Postgraduate Awards (Industry).

In the US this matter is taken very seriously and legislation has recently been introduced stating that "…in order to strengthen the competitiveness of United States enterprises and institutions and to prepare the people of the United States for high-wage, high-skill employment, the Federal Government should better understand and respond strategically to the emerging management and learning discipline known as service[s] science".[10]

[10] US House and Senate legislation August 2nd 2007 (President signed 9 August 2007): "Sec. 1005. Study of Services Science". Source: PMSEIC Working Group Report (April, 2008), p. 14.

3.7 Build the Knowledge Infrastructure

Last, but far from least, ASR takes this opportunity to emphasise the importance for innovation in services of the underpinning knowledge infrastructure.

High quality, internationally cost-competitive broadband network access is an essential ingredient in facilitating innovation in all of Australia's industries. Fast broadband access is an imperative for use of IPv6, the new Internet Protocol that allows a much greater number of internet addresses, and to make the most of the creative and collaborative possibilities available through interactive Web 2.0 applications and on-line syndication.

ASR endorses the PMSEIC Working Group Report (April 2008) recommendation that the Government should also develop an ambitious plan to integrate this with technologies such as satellite imaging, positioning systems, unmanned aerial vehicles, sensor networks and relevant modelling tools.

This will connect Australians better across the breadth of our massive island continent and enable improved services delivery to remote indigenous and rural and mining communities. This will boost innovation and competitiveness in agriculture and mining.

And the new know-how resulting from solving these problems will most certainly also lead us into new global services delivery.

We cant wait!

4 The Importance of Getting this Right

Let's imagine that Australia has first class knowledge economy infrastructure. We are plugged seamlessly into communications networks with the rest of the world. We have a plentiful pool of world class multi-disciplinary services expertise. People from around the world want to study, work and relax here because Australia has a clean natural and built environment and a reputation for outstanding innovation. Australians interact to think outside the box, generate solutions and manage change – and it shows. Innovation is accepted as part of everyday activity. High quality delivery of government services is implicit. This is a nation which has mastered the demands of the digital age and its services economy is second to none.

Our ICT services and ICT services-user industries, like architecture, engineering, financial services and audiovisual content attract world acclaim. Up-market health tourism is thriving. Australia excels in on-line distance education and our education and R&D institutions are unrivalled choices for regional clients. Inward foreign investment into all sectors of the economy is strong. Every multinational wants to base some regional headquarter functions here. R&D units are popular choices. But Australia also attracts financial services, legal and accounting and green IT services centres. Everyone prefers to buy Australian expertise. Services exports are on a strong evident growth path; no one points out any more how much better other countries are doing on the services export front.

This is the Australia we want to live in. This is the reward if we get this right.

But Australia's future could easily slip into some other kind of scenario. The mining sector might still be booming. But we might not all have broadband. And we might not be contributing solutions to the latest wave of global needs. We might have become complacent. The regulatory reform agenda could peter out and red tape re-emerge to strangle business transformation. We could content ourselves with old-fashioned policy instruments and fail to unlock innovation in services. Deterioration in the environment, acute inner-city congestion, high housing prices and poor quality social infrastructure could reduce Australia's attractiveness as a place to live and visit. High levels of compensation would have to be paid to attract expertise. Services export growth would stall further and inward investment into sectors other than mining would drop. Business surveys would reveal a growing level of uncertainty and lack of confidence. Firms would start to shift their knowledge-intensive services activities offshore. And call for protection. Australia's best and brightest will have already emigrated.

This is not the Australia we want to live in.

It is so important to get the Innovation agenda right.

Attachment 1: Services Innovation Metrics

"Measurement began our might"
(William Butler Yeats, in "Under Ben Bulben")

Measuring Services

The traditional classification of services is industry-based. The United Nations International Standard Industrial Classification of All Economic Activities (ISIC) forms the basis upon which most countries collect and publish economic data. In Australia's case, the industry classification adopted is the Australian and New Zealand Standard Industrial Classification (ANZSIC) which identifies 14 separate industries as services. These are:

- Electricity, Gas and Water
- Construction
- Wholesale trade
- Retail trade
- Accommodation, Cafes and Restaurants
- Transport and Storage
- Communications
- Finance and Insurance
- Property and Business
- Government Administration and Defence
- Education
- Health and Community Services
- Cultural and Recreational
- Personal and Other

Any researcher trying to work with these categories to understand what is going on in the services sector quickly runs into trouble. This is especially so with respect to international trade in services. "Tourism", for example, Australia's largest services export, is not an "industry" and does not appear in the classification.

Trade in Services Statistics

The ABS compiles the trade in services statistics, within the framework of the System of National Accounts 1993. Imports are defined as services delivered by non-residents to residents of Australia; exports are services delivered by residents to non-residents. The only types of services exports on which data are available are:

- passenger and freight transportation services
- travel services
- communication services

- a range of business services (specifically broken down into computer and information technology services, financial services, and personal, cultural and recreational services.)
- “Other” business service (presumably including eg architecture engineering, accountancy, legal, R&D, environmental consulting).

A key supplementary source of data is the ABS’s services industries program. Collections of selected services industries are undertaken in response to specifically identified user needs. Outputs for the 2003-04 reference year included collections focussed on public libraries, museums, accommodation, cafes and restaurants and travel agency services. Outputs for the 2004-05 reference year covered pubs, clubs sport and gambling services. Outputs for the 2005-06 reference year covered retail and wholesale industries.

The ABS is moving, but within serious indeed worsening budget constraints, to develop better measures of services industries and their outputs. One of the key barriers to improved measurement of services is that they are intangible and can change in quality and nature quite rapidly. Constant improvements in technology also add to the complexity, for example with the development of new products and services in areas such as finance and communication. From a trade perspective, the ability to provide services over the internet presents significant statistical challenges.

Clearly the overall data on Australia’s exports of services is very poor. On a State-by-State basis, however, even the ABS considers the data to be relatively unreliable. The recently revised ABS series nevertheless provides an improved initial basis from which to work.

Another problem is that the Balance of Payments (BoP) data does not measure services exports delivered via offshore commercial presence (of Australian firms overseas) nor franchises. Recent ABS surveys of Australian-owned foreign affiliates shows the BoP is probably picking up less than one-third of the actual exports of services which are (as defined by the WTO) taking place. Consequently recent EFIC data[11] shows Australia’s offshore investment flows now exceed inward investment flows, reinforcing the evidence of significant unmeasured services “export” activity via commercial presence offshore.

Services Innovation Statistics

Existing innovation metrics are likewise heavily biased towards manufacturing industries and towards technological innovation. The empirical basis for collecting and measuring innovation in services is unfortunately therefore still weak. Conventional metrics have difficulty in capturing improvements in factors such as quality, variety and choice.

[11] See EFIC Global Readiness Index, National Results Report, April 2008, p. 5.

Not all of the raw data collected by the ABS is complied into publicly available collections. The ABS Database needs to be made more available to researchers to conduct studies not only on how service innovations are happening in service-related business, but also, through longitudinal studies, how leading service and knowledge-based companies have been able to innovate and sustain their competitive positions over decades. There is room for expanded use by researchers of enhanced analytical tools, such as the ABS Business Longitudinal Database and Confidential Unit Record Files, to analyse services industry trends.

The need to improve Innovation Metrics

The case for metrical analyses to catch up with the reality of the modern services economy is now urgent and compelling.

The US Advisory Committee on Measuring Innovation in the 21st Century Economy recently released a report on the current state of innovation metrics, with suggestions on how they can be improved. The findings of this report ***"Innovation Measurement: Tracking the State of Innovation in the American Economy" (January 2008)*** are of significant interest. For, as the report states, "Innovation measurement is in its infancy — both here and around the world".

To improve innovation metrics, the US Advisory Committee recommended:

1. The government should create a stronger framework for identifying and measuring innovation in the national economy.
2. The government should better leverage existing data among the government statistical agencies to allow for the consistent estimation of the contributions of innovation in the GDP and productivity accounts and to develop greater understanding of innovation.
3. The government should increase access to data in order to facilitate more robust innovation research.
4. The government should convene one or more workshops or forums under the auspices of the Secretary of Commerce to discuss innovation drivers, impediments and enablers.
5. The government should continue participation in the international dialogue related to measuring and analyzing innovation and ensure that US efforts are internationally compatible to the extent possible.
6. The government should consider development of a national innovation index when more work has been done on both data collection and analysis of innovation drivers.
7. The government should support funding necessary to implement the above recommendations.

With respect specifically to Service Innovation Metrics, a special report ***"The Measure of a Nation: Quantifying Innovative Strength through Improved Service Sector Metrics" (February 2007)*** prepared by John M. Graham of the

US National Bureau of Asian Research, identifies a number of problems in the collection of data on the services industries that have caused analysis of the service sector to lag far behind the manufacturing sector.

The report notes that the acute lack of information on the structural makeup of the service sector, cross-border flow of services, and the usage and importance of services as inputs to manufacturing may be causing a severe understatement of the number and nature of service jobs being added to the economy.

The report recommends developing:

- a more nuanced classification system with finer granularity of data on activities
- improved survey detail in the tracking of service sector activity
- improved accounting for the transfer of intangible assets
- the development of more accurate service price indexes and input/output matrixes.

The Australian Services Roundtable supports these recommendations as fully applicable also to the case of Australia.

Attachment 2: Innovation Initiatives in Design[12]

As the review panel will be aware, the only Australian Government agency with a specific responsibility for design is the Australian Intellectual Property Organisation — which has responsibility for the administration of the Patents, Trade Marks and Designs Acts. The Organisation has been administering the *Designs Act* for 100 years. Among the Australian States, only the Victorian Government has developed a design strategy as part of its innovation agenda. Nevertheless, there are many examples of innovation initiatives overseas, particularly in the area of design, which Australia could learn from. A number are listed below.

In the United Kingdom (UK) there is a wide variety of schemes available to support businesses in the area of design innovation. The UK's nine Regional Development Agencies have identified more than 70 different initiatives which aim to link creativity, design and business in some way. Some of these are specialised, relating to particular local conditions and focusing on specific sectors. A new program, *Designing Demand*, has been recently initiated by the UK's Design Council.

The UK's National Endowment for Science Technology and the Arts, NESTA, exists as a catalyst to find the most effective ways of encouraging talent and innovation for national benefit. NESTA has recently:

- Established major partnerships with a diverse range of organisations, including The Young Foundation, the Royal College of Art and Imperial College, and the IP Group.
- Supported a variety of talented people, including Emily Cummins (Technology Woman of the Future 2006), Gavin Douglas (Fashion Fringe winner 2006), and Nicholas Harrigan (NESTA FameLab winner 2007).
- Invested in nearly 50 early-stage companies through the NESTA Investments portfolio. Over the past five years, every £1 invested has attracted £5 of private finance.

New Zealand has launched a design strategy and is looking to breed a cohort of design-led firms, brand builders based around ideas grown in New Zealand. The Design Taskforce report, "Success by Design", published in 2003, recommended a range of initiatives and programmes be implemented to help New Zealand businesses become more design-capable. A NZ$12.5 million budget over four years was approved by Cabinet, and early in 2004 a Better by Design team was established to deliver the programme and promote the strategy to export-

[12] This attachment is based on material presented in "Rigour and relevance: Extending the role of the social sciences and humanities in public policy research", by Dr John H. Howard (published by CHASS in its Occasional Paper series), April 2008. The attachment does not aim to cover overseas initiatives in innovation more generally, given that this information will be available elsewhere to the review panel. It focuses in particular on the neglected area of design, which is at the crossroads of technology and the creative arts and is especially relevant to innovation in the services industries, particularly knowledge-intensive business services.

focussed businesses and the design community. The programme was publicly kicked off in March 2005. The Better by Design team sits within the Creative Industries team of New Zealand Trade and Enterprise, New Zealand's National Economic Development Agency.[13]

The German Design Council (Rat für Formgebung) was founded as an initiative of the German Federal Parliament in 1953 to meet the growing need of the business world for information about design. Today, the German Design Council is one of the world's leading competence centres for communication and know-how transfer in the design field. With competitions, exhibitions, conferences, consulting, research and publications, it offers perspectives for representatives of business and design disciplines.

The Swedish Industrial Design Foundation (SVID) was established to improve the awareness within the private and public sectors of the importance of design as a competitive tool and to encourage the integration of design methodology into their activities. It was founded in 1989 by the Royal Swedish Academy of Engineering Sciences, the Swedish National Board for Industrial and Technical Development, and the Swedish Society of Crafts and Design.

Design Forum Finland promotes Finnish design. Its purpose is to reinforce the standing of design in the innovation system and to advance affluence and competitiveness in Finland. Its objective is to arouse the interest of the public, markets and consumers in design companies and the products they manufacture. Design Forum Finland promotes Finnish design worldwide and is an opinion leader. The Design Museum is Finland's national specialised museum that collects and records design. It carries out research, documents current issues in design, and organises exhibitions on the past and present of design.[14]

The Japan Design Foundation (JDF) is committed to International Design Business Promotion Projects with the aims of promoting design-related activities and industries, fostering public awareness of design values, presenting future visions through design works, and accelerating international understanding and cultural development through global exchange programs. Major Projects include the International Design Competitions and Business Matching at Workshops, the Corporate Design Strategy Forum, the International Design Management Study Group and Region-to-Region Initiatives for Industrial Development.[15]

India is seeking to become a global design hub. The Indian Government released a national design policy in 2006. The plan includes a "Mark of Good Design" that qualified companies can affix to the items they export. Only well-designed products that take the user, the environment, materials, and ergonomics into account would carry the mark. The Government seeks to ensure

[13] Source: http://www.betterbydesign.org.nz/aboutbbd/background/
[14] Source: http://www.finnishdesign.fi/aboutus
[15] Source: http://www.icograda.org/members/members/member_list64.htm

that the words "Designed in India" come to mean good value, just as Woolmark has done for the wool industry.[16]

China is shifting its manufacturing base from the use of components made elsewhere to original design manufacture and brand-manufacturing operations. In the last 20 years China has opened 400 specialist design schools to train up, develop and build the design capabilities. The objective is to build on the expertise China has established in manufacturing and technology and translate into new ideas and intellectual property that they can exploit through new design brands in China.

Hong Kong set up a design task force in 2001. Taiwan has a robust design policy, supported by a growing number of design schools. South Korean students outnumber every other nationality at the majority of graduate design programs in the United States and Samsung is being seen as an upcoming innovator. The Singapore Government has decided to create centres bringing business and design and creativity together.

The trend is self evident.

[16] The Design Policy Statement is at http://pib.nic.in/release/release.asp?relid=24647

Attachment 3: Australian Services Roundtable Members

ACILTasman
The Allen Consulting Group
Allens Arthur Robinson
ANZ Banking Group
Association of Consulting Engineers
.au Community Domaines
Australia and New Zealand Institute of Insurance and Finance
Australia/China Business Council
Australia/India Business Council
Australian Bankers Association
Australian Communications Alliance
Australian Computer Society
Australian Electrical and Electronic Manufacturers Association
Australian Film Commission
Australian Financial Markets Australia
Australian National University
Australian Tourism Export Council
Business Council of Australia
Cardno ACIL
Centre for International Economics
Commonwealth Bank of Australia
Conformance and Standards Services Pty Ltd
Connell Wagner
Corrs Chambers Westgarth
Council for International Trade and Commerce, South Australia
Council for the Humanities Arts and Social Sciences
The Cox Group, Architects
CPA Australia
The Creative Leadership Forum
Department of Innovation and Regional Development, Victoria
Design Inc.
Design Institute of Australia
Division of Humanities, Macquarie University
Division of Mathematics and Information Sciences, CSIRO
Education Adelaide
Engineers Australia
English Australia
Environment Business Australia
Gavin Anderson and Company
Graeme Thomson and Associates
Gray Perkins Lawyers
Hassell
Hawker Britton
Hunt and Hunt Lawyers
IBM Australia
IDP Education Australia
Institute for International Trade, University of Adelaide
Insurance Australia Group
Insurance Council of Australia
Interactive Entertainment Industry Association of Australia
Internet Society of Australia
Investment and Financial Services Association
JAS-ANZ
KPMG
Law Council of Australia
Law Institute of Victoria
Macquarie Graduate School of Management
Mallesons Stephen Jacques
Media, Entertainment and Arts Alliance
Minter Ellison
Moulis Legal
Music Council of Australia
News Limited
Northcote Management
Piper Alderman Lawyers
PricewaterhouseCoopers
Professions Australia
ProFox Pty Ltd
PTW Architects
Qantas Airways
Restaurant and Caterers Association
Riotinto
Royal Australian Institute of Architects
Sage Automation
SAI Global
Smart Internet CRC
South Australian Department of Trade and Economic Development
Stancert Pty Ltd
Standards Australia
Stanley Street Pty Ltd
TAFE Directors Australia
Telstra Corporation
Time Maker Pty Ltd
VIP Home Services
Woodhead
Universities Australia

Attachment 4: ASR Services Stocktake Proposal

The Australian Services Roundtable (ASR) is seeking assistance from the Rudd Government to undertake a sector-wide Stocktake of services industry perspectives on the opportunities and challenges facing Australian services exports.

The Services Stocktake will gather valuable, currently unavailable business data on services export activity together with new insights into the current state of Australia's services export culture and the drivers of Australia's competitiveness in services. It will supplement official statistics and aim to throw new light on the nature and extent of services.

The Stocktake will be facilitated by ASR's four Services Industry Focus Groups, each chaired by a services industry leader and by its new Services Association Forum. There will be important inputs from business via ASR's own work, and from university researchers working in the area.

The Stocktake process will consist of extensive business surveys and consultation, commissioned research from several academic specialists, integration and analysis by ASR, and broad dissemination of outcomes. The Stocktake results would be available to support government and business decision-making from 2008-09 and be widely disseminated in 2008- 09 and 2009-10 via high-level public/private dialogues.

The Stocktake will feed into the services industry's own strategic export planning.

The Stocktake results will feed through to Government in a variety of important ways, including via researched and coordinated industry input and submissions for trade negotiating and other trade policy purposes. The guiding motivation is to enhance Australian services export performance.

The Australian Services Roundtable invites the Minister for the Service Economy, to consider, along with other relevant Ministers, entering into a partnership with the services industries by offering a grant totalling $1.05 million, to be applied over three years commencing in 2007-08, which will leverage ASR's own resources and enable the peak industry body in the sector to achieve an early roll out of its proposed Services Stocktake project.

A. Why Services Matter

In Australia, the services sector accounts for 78 percent of GDP, 60 percent of domestic investment and employs 85 of every 100 Australians. 82 percent of Australian firms are services firms, yet only 3 percent of them are exporting. Most are small and medium sized enterprises.

In 2005, Australia recorded services exports of more than $37 billion or about 23 percent of total national exports. Services exports are growing by about 4 percent a year.

The services sector, in fact, makes a much larger contribution to exports than its direct share, as services are often integrated with other goods. On average the ABS data suggests that about one-fifth of the value of Australia's goods exports is composed of services.

ASR believes that these statistics under-represent the true value of the export market for the Australian services sector. Much more work needs to be done to determine the true value of the sector's share of exports.

Ensuring that Australia's services trade interests are taken fully into account in bilateral and multilateral trade negotiations is an important objective both for Government and for industry because the potential gains are so large.

According to one estimate, cutting global services trade barriers by half would be worth about US$250 billion in additional annual global services exports. Full services sector liberalisation could result in global welfare gains of US$1.7 trillion. That is more than double the potential gain from liberalisation of barriers to trade in industrial goods and 31 times the projected gains from liberalisation of global agricultural trade.

Looking at the potential gains specifically for Australia, earlier Productivity Commission estimates suggested that the gains from liberalisation of trade in services could amount to double or even triple the potential gains which DFAT estimates suggested might accrue from agriculture.

B. Services Trade Needs More Focus

With growing community and political consciousness of the central role which services will play in Australia's economic future, **Government policy** needs to fully reflect the value of the services sector.

The Board of ASR strongly urges the Government to interact more closely with representatives of the services sector by forming an industry partnership which will ensure that a stronger policy research base can be developed to better inform development of a national trade strategy for services, and policies on services competitiveness generally.

The Australian Services Roundtable's principal role is to provide a focal point for high-level interaction between the Federal Government and its agencies, on the one hand, and services industries, on the other, in regard to *issues common to all our services industries*. The ASR plays an integral role in pulling the sector together and providing one voice to Government on these issues, including trade negotiations, innovation, labour market structure, technology infrastructure, private/public sector interaction and other highlevel drivers of services productivity and competitiveness.

As part of its role, the ASR is an active member of the ABS' International Trade in Services User Group, contributing to the direction for official statistics. Through this forum, the ASR is aware of the developments and gaps in the official statistics, both for international trade in services and for measurement of domestic service flows.

The business case for Government support of any proposed ASR research activity lies partly in the Government's own increasing need for services related business information and partly in the Government's evident need for a more consistent, more high profile partnership and interaction with services industry champions.

Opportunities for services exports and the need for improved competitiveness in domestic markets also need more attention across the **private sector**. Increased consciousness within business of the impact of globalisation in an increasing percentage of services markets is essential.

ASR's Stocktake will be an important input to business strategic planning by helping draw attention to evolving market realities, changing business perceptions and attitudes, and providing hard data to which business can respond.

A number of leading businesses and services industry associations are already joining in this work through their participation in ASR. It is expected that many more will join the process over the course of the Stocktake project.

Australia needs a better developed, more robust understanding of what currently drives competitiveness in the services sector, and its consequent export-readiness and actual participation in trade. ASR's Stocktake will be a major step in filling this gap in understanding.

C. Proposed ASR Services Stocktake

The primary focus of official statistics is to provide data for compilation of Australia's Balance of Payments. As such, the official statistics could be considered to be constrained by the international standards governing this framework when trying to put them to other analytical uses. The ABS is aware of this constraint and has been actively seeking funding to improve the quality of the official statistics and to extend the statistics to cover the provision of services by Australian-controlled businesses resident in other economies(also referred to as 'Foreign Affiliates Statistics').

Other than these arrangements and the arrangements established by ASR itself, there are no institutional arrangements in place anywhere in Australia (including no appropriate government programmes) which are focussed on improving the range of information available on sector-wide 'whole-of-services' matters.

There exists, as a result, no national programme of policy research underway which would help determine the main directions of development in the services sector as a whole.

The Australian Services Roundtable has been doing what it can to draw on the resources of all of its members to address this missing piece in the public institutional landscape.

The time has come for the ASR's collaborative work to be taken to the next level via the Stocktake process, involving:

- **a landmark cross-sectoral business survey**
- **focussed research by academic specialists in the area and**
- **analysis by ASR to draw this research together into deliverables that will make a meaningful difference for both Government and for services industries.**

The Australian Services Roundtable aims to coordinate a concerted effort on the part of services firms and services organisations, assisted by academic research partners, to take stock of their current position in domestic and international markets and together analyse the challenges and opportunities ahead.

The proposed ASR Services Stocktake will focus on the factors affecting competitiveness of Australia's services industries and in particular the resulting outlook for Australia's services exports. The Services Stocktake will examine the factors influencing all four modes of export delivery.

The Stocktake will generate information which is needed for ongoing industry submissions to Government, especially for the purposes of trade policy formulation. It will build on the information available in the official statistics and be an important complement to the ABS intentions to measure foreign affiliates statistics. The Stocktake will offer an invaluable means of improving the regularity and depth of services industry input to Government for trade negotiation purposes. Services industry input to Government is much more fragmented and irregular than is the case for the other major sectors. The Stocktake results will enable services industry input to Government of a more consistent, more accurate and more policy relevant nature.

SERVICES STOCKTAKE DELIVERABLES

Business Stocktake Reports on the competitiveness of and outlook for Australia's services exports
Industry-based services trade and innovation data
High profile public/private services sector dialogue
Government access to ASR's Services Industry Focus Groups
New, better coordinated industry inputs to Government policy processes
Key inputs to business decision-making on export innovation and competitiveness strategies

The Australian Services Roundtable has drawn attention to the need in Australia for a coordinated "whole of services" approach to key issues affecting competitiveness of the sector. As the peak body advocating the common interests of the services sector, the ASR will establish four new Services Industry Focus Groups as mechanisms to enable closer business study of a variety of cross-sectoral policy issues which the membership has identified as of immediate policy priority. The work of these Focus Groups will be pulled together to culminate in an overall Stocktake of Australian services industry trends. Further details of the Stocktake process are provided in Section G below.

D. An invitation to partner with ASR

The Australian Services Roundtable's resources are not sufficient to ensure early commencement and timely completion of this important work.

The Australian Services Roundtable is therefore inviting the Minister for the Service Economy, along with other relevant Ministers, to partner with industry by making a 3 year grant commencing in 2007-08 to leverage ASR's own resources and ensure completion of the Services Stocktake project within this timeframe.

The Australian Services Roundtable would also welcome a temporary or rotating secondment to the ASR Services Stocktake Secretariat of an officer from the Trade, Innovation or Deregulation portfolios and is pleased to invite consideration of that initiative by the relevant Ministers.

E. Funding the Partnership

The overall budget for the 3-year Stocktake project is estimated at around $1.8 million. This will be applied to:

- ASR business survey
- Academic research partner projects (likely 3)
- ASR analysis
- Public/private sector dialogues
- Other activities to disseminate project outputs.

ASR members will be able to contribute an estimated $0.75 million of the total amount in cash and in-kind contributions, representing a significant proportion of ASR's own budget. To enable the full programme to be undertaken as soon as possible, ASR is therefore seeking a grant from Government of $350,000 per annum for three years totalling $1.05 million over 2007-10.

G. Implementing the Stocktake

The Stocktake will be undertaken through 4 main streams of activity:

- Australian Services Roundtable member and public events are already designed to facilitate policy networking and interactive sharing of perspectives across all of the services sub-sectors and between the small-and medium-sized and larger Australian firms. These events will provide important input to the Stocktake.

- ASR will survey business data, attitudes and perceptions in regard to globalisation of services industries, complementing official statistics and studies by government agencies.
- Some university-based expert research groups will be commissioned to commence planned studies of a small number of key issues including use of the various modes of services export delivery by Australian firms, services innovation processes and Australia's place in newly emerging services industries such as new media and the digital economy generally.
- The ASR Secretariat will synthesise research outputs to produce project deliverables.

These activities will be managed by the ASR Secretariat, in collaboration with Government sponsors and organised through four new ASR Focus Groups and a Services Associations Forum within ASR. Each Group will be chaired by a services industry 'champion' and relevant Government officials will be invited to participate. The issues covered by each group are outlined below.

EXPORT FOCUS GROUP
(Strategic Opportunities and Behind-the-Border Challenges)

This Group will identify barriers to Australian services exports, as experienced by firms in the potential export business, focussed on delivery via modes 1, 2 and 4, both on a country-by-country basis and globally. The Group will survey business perspectives on why and how identified barriers amount to 'barriers', how such barriers affect the outlook for services exports and how such barriers might best be addressed, including by the business community itself. The Focus Group findings will assist in preparing coordinated submissions to Government in the context of multilateral and bilateral agreements affecting trade and investment in services. This Group will act as a clearing house for export market intelligence, in collaboration with Government agencies and offer opportunities, especially for small- and medium-sized firms, for business networking including into offshore supply chains.

INVESTMENT FOCUS GROUP
This Focus Group will focus on all Mode 3 issues affecting market access and national treatment, including capital controls, foreign equity limits, investment screening, asset requirements and prudential controls, repatriation of profits and capital, performance requirements, discriminatory taxation arrangements, legal and documentary obstacles, licensing requirements, restrictions on management and staff transfers and government procurement practices. This Group will also co-ordinate ASR input into the work of the International Financial Services Working Group.

COMPETITIVENESS FOCUS GROUP
This Focus Group will focus on issues in the domestic regulatory environment affecting competitiveness, import competition and export readiness, including

competition policy, skills shortages, enabling infrastructure investment and transparency and harmonisation of regulation within the federal system. This Group will consider means of enhancing productivity across the services industries, including via education and training, ICT infrastructure and promotion of Public/Private Partnerships as a means of improving productivity in services delivery.

TRENDS IN SERVICES FOCUS GROUP

This Group will oversight and coordinate the complete Services Stocktake, including preparing the associated analytical and statistical outcomes. The Group will oversight management of outsourced research including any successful ARC Linkage project applications which enjoy Stocktake support. Identified business research priorities include three separate multi-year projects currently being developed with Macquarie University, the University of Adelaide and the Australian National University on topics relevant to each of the above Focus Groups, but which to date ASR has not had sufficient resources to “seed”. This Group will support ASR’s participation in the ABS User Group on Trade in Services Statistics.

SERVICES ASSOCIATION FORUM

At the membership’s request, ASR is simultaneously establishing an internal ASR Services Association Forum which will specifically provide opportunities for all services sector industry bodies (31 are already ASR members) to coordinate their views and jointly present them to Government on a regular basis. This Forum will provide a useful additional conduit through which to both gather information and disseminate Services Stocktake results.

F. Mutual Benefits

The Australian Services Roundtable is a 100 percent industry funded organisation. The proposed Federal Government grant will allow the Australian Services Roundtable to make an immediate start on the full proposed range of business stocktaking activities. The deliverables will be of enormous benefit to both services firms themselves and a wide variety of Federal and State government agencies.

Even in the OECD countries, services statistics are notoriously difficult to compile accurately. Australia is no exception in facing difficulties in compiling high quality services statistics. Even as the ABS works to improve and extend the scope of the official collections, it is essential, for good policy formulation, to supplement the official services export data with industry driven business survey work. ASR is already experienced in successfully partnering with the Office of Trade in the South Australian Department of Trade and Economic Development to undertake services exporter business survey analysis. Based on the survey results emerging in the State context, ASR is confident that the proposed Services Stocktake will deliver a key new national resource of services export-related information.

The Stocktake will also facilitate a better response rate to Government calls for coordinated services sector input and submissions across the full range of services trade-related issues.

This is of critical importance to a healthy ongoing process of trade policy formulation because Government evidently needs to understand better what the Australian services industries really need to meet the challenges of globalisation and to maximise the benefits of negotiated offshore market opening.

The fact is that services exports are “different”. The barriers they face behind-the-border are often extremely opaque. Services are also traded “differently”. Their delivery is deeply tied up with cross-border people movement and with international investment flows. The bilateral trade agreements Australia is negotiating on services frequently raise new conceptual issues for which there is no global precedent. The Department of Foreign Affairs and Trade is pushing the envelope in this area – but often without an adequate industry research base to draw upon.

Through this invitation to partner in the Services Stocktake, the Australian Services Roundtable is offering the Minister for Trade an important opportunity to interact with services sector champions to improve national understanding of all of these matters.

In responding positively to the efforts that industry itself has made to bring the services sector closer to the forefront of trade policy attention, the Government will be taking an important step forward in securing a place in the global economy for Australia’s most people intensive, most skills intensive, most knowledge-intensive modern emerging industries.

This would be widely recognised as a significant step to open up a new partnership with the services sector:

- A partnership to assist the business community continue to identify the drivers of competitiveness for the future and to deliver the results of its research to government attention.
- A partnership to facilitate more effective interaction between the bulk of the Australian business community and the Minister for Trade.
- A partnership for positive services outcomes in international trade and investment negotiations
- A partnership to deliver gains in services sector innovation, productivity and competitiveness
- A partnership to enhance Australia’s services export performance

Key Questions about the Stocktake

Question 1: Why does Government need the Stocktake?

The services industries have a unique identity and perspective, despite their diversity, and in many contexts need to be considered as a group for policymaking purposes. Government requires a "whole of services" position on today's key policy themes:

- Competitiveness
- Labour market – skills/education/training/Mode 4
- Innovation and Productivity
- Means of delivery of public services
- Access to enabling infrastructure eg broadband capacity
- Services exports
- Export barriers (Modes 1 & 2)
- Offshore investment (Mode 3)
- Positioning Australia as a services economy
- Improving the range of statistics
- Trade and Investment negotiating positions.

Industry data and perspectives on these issues need to be assembled to fulfill the needs of:

- government policy-making – government needs a consolidated sectoral view on these issues and better understanding of the potential impacts of policy
- industry strategic planning - services industries generally need a better understanding of how they will be affected by ongoing globalisation of the services sector and what they should be seeking from government policy to assist in their response to globalisation.

There needs to be a better ongoing process of policy coordination between the services sector and government.

Australia needs a coordinated national approach to services strategy, focussed on achieving and maintaining international competitiveness. National strategy needs to be formulated on the basis of detailed and accurate information and in close consultation not only with industry but also across every relevant portfolio and level of government.

In addition, community consciousness of services' current and future role in the economy needs to be raised through dissemination of the outputs from the proposed research work and as a consequence, increasing the profile of the official statistics which the Stocktake complements.

Question2: Why is ASR the right organisation to undertake it?

Over the past four years ASR has established a solid base of membership, a network of partnerships, including the media and international sister organisations, and effective working relationships with Federal and State policymakers. ASR increasingly makes a substantial contribution to public policy on key issues affecting the services sector and provides input to strategic decision-making for its members.

The Australian Services Roundtable offers a mechanism by which industry can partner with the Federal Government to improve the services policy research base and deepen and broaden industry stakeholder consultation on the factors driving innovation, productivity and international competitiveness in Australia's services sector. ASR has the required:

- organisational structure
- existing good coverage of the services sector,
- deep understanding of Government policy requirements
- ability to consolidate industry data and opinion
- ability to mobilize substantial inputs in-kind by companies and industry associations in parallel with Government funding.

Attitudinal and perception-based information is a useful complement to the official statistics to assist in the interpretation of those data for policy purposes, but does not fall naturally within the frameworks under which the official statistics are collected. The ASR is well-placed to conduct this research, and has a well-developed relationship with the ABS to ensure the maximum utility for understanding the official statistics as well as providing a rich information set in its own right.

Question 3: How will the Services Stocktake be undertaken?

The Stocktake will

- be driven by ASR Focus Groups coordinated by ASR Secretariat, liaising with Departmental sponsors (via a steering group)
- focus particularly on attitudes, perceptions, non-quantifiable issues not captured by official statistics
- source data from services businesses themselves, official statistics and from academic researchers
- undertake a major survey – a combination of quantitative questionnaires and qualitative interviews
- include input from a new Services Associations Forum within ASR operate under the guidance of each of ASR's member-driven Focus Groups (Exports, Investment, Competitiveness, Services Trends)
- provide comprehensive analysis and presentation of results,
- provide appropriate action recommendations for industry and government on future co-ordination of policy-making for the sector.

The key output will be a Stocktake Report for use by Government and industry. ASR will disseminate the results directly and through its member associations.

The strategic goal is enhancement of Australia's services export performance. An important by-product of the project will be a more visible high-level partnership with government that the sector has historically lacked.