

# Barriers to Services Exports: Productivity Commission Issues Paper

AIIA response

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# 1. Introduction

## 1.1 About AIIA

The Australian Information Industry Association (AIIA) is the peak national body representing Australia's information and communications technology (ICT) industry. Since establishing 36 years ago, the AIIA has pursued activities aimed to stimulate and grow the ICT industry, to create a favourable business environment for our members and to contribute to the economic imperatives of our nation. Our goal is to "create a world class information, communications and technology industry delivering productivity, innovation and leadership for Australia".

We represent over 400 member organisations nationally including hardware, software, telecommunications, ICT service and professional services companies. Our membership includes global brands such as Apple, Avanade, EMC, Google, HP, IBM, Intel, Lenovo, Microsoft, PWC, Deloitte, and Oracle; international companies including Telstra and Optus; national companies including Data#3, SMS Management and Technology, Hills Limited, Technology One and Oakton Limited; and a large number of ICT SME's.

## 1.2 Overview

AIIA is pleased to have the opportunity to respond to the Productivity Commission's review into Barriers to Services Exports.

In the context of this review services include; cloud services, IT support and maintenance services, onsite services, managed services, professional services, telecommunications services, broadcasting and audio-visual services, web design and development services, data analytics services - to name a few.

AIIA's overarching position is that the basis for an effective and prosperous export market - across any industry - is a robust domestic business environment that drives productivity, competitiveness and innovation. This Submission argues that this is essential to Australia's export capability and the extent to which there are weaknesses in our current system, reflects in our export performance, particularly as this relates to the information and Communications and Technology (ICT) industry.

AIIA's submission notes five specific issues identified as barriers to Australia's performance in the area of ICT service exports. These are:

1. A preference trend for ICT companies to move overseas rather than export their services
2. Issues related to the ICT skills market in Australia
3. Language and cultural barriers
4. Reduced Government support provided through Austrade
5. Lack of clarity regarding trade agreements

These are discussed below.

We conclude with additional generic suggestions for improving Australia's services export capability.



## 2. Barriers to Services Exports

### 2.1 Services Industry

The Australian economy is entering a critical phase, with a number of ‘disruptive’ trends and pressures which provide both opportunities and risks for Australian business. The resources boom has had a significant impact on the structure of the Australian economy. The rapid increase in global demand for commodities, and the corresponding strong growth in commodity prices, placed the Australian resources sector in an enviable position. However with the decline in mining sector growth and the slowing of productivity in recent years, the challenge is for other sectors and industries to drive productivity growth in the Australian economy, and competitiveness abroad.

Ubiquitous high speed broadband, with connection rates continuing to improve, allows an increasingly diverse range of services to be provided in a digital format. Increasing sophistication and convergence of communication and computing capability is further shifting the balance to service oriented economies: we ‘buy’ technology services through the cloud and use the cloud to deliver new types of services (e.g. business services, retail services, data services, financial services etc.).

With digitisation comes an opportunity for our services industries to access international customers through digital delivery methods and for new types of high value services to be developed and exported.

While Australia has enjoyed a reputation as one of the most resilient OECD economies, long term prosperity will depend on our ability to remain globally competitive and productive in a hyper-connected and hyper-competitive international marketplace. Success will depend on how well we adapt to changing circumstances; a focussed response to demographic and economic challenges; and an ability to harness opportunities presented by advanced technology.

Over the long term innovation supported by an effective business ecosystem will be the primary driver of sustained higher economic growth and living standards. According to PwC “... an ecosystem based on innovation and digital technologies has the potential to increase Australia’s productivity and raise GDP by \$37 billion in 2024. Longer term, the contribution to GDP could be as high as 3/.5 per cent, or \$136 billion in 2034”.<sup>1</sup>

With this in mind, AIIA’s starting position is that a prosperous and effective domestic market is both a pre-condition and a dependency for a successful national export capability. If Australia does not have a strong business ecosystem - one cognisant of broader global trends and competitive forces, we have no foundation for a strong export market. While not the focus of this Review, such an ecosystem requires, at a minimum:

- balanced regulatory and taxation systems;
- a culture of and support for innovation; and
- an appropriately skilled workforce, and in the case of Australia, a small and medium enterprise (SME) business sector with the skills and knowledge to compete in a globally competitive marketplace.

<sup>1</sup> PwC Consulting, (2013) The Startup economy. How to support tech starts and accelerate Australian innovation <https://www.digitalpulse.pwc.com.au/wp-content/uploads/2013/04/PwC-Google-The-startup-economy-2013.pdf>



In discussing the barriers to services exports for the ICT industry, this submission also identifies domestic issues which in our view, undermine the ICT sector's export capacity and performance. These are the:

- (in)adequacy of Australia's business and innovation system; and
- deficit of STEM (science, technology, engineering and maths) skills.

## 2.2 Australia's business and innovation system

In forums discussing export development, the interest of AIIA members is not export opportunities but opportunities to re-locate their business offshore. Reasons for this include:

- perceived more favourable treatment of innovative start-up businesses overseas;
- more generous R&D opportunities overseas;
- better access to relevant skills;
- perceived access to funding, including venture capital funding;
- higher tolerance for business risk and innovation overseas.

These issues, detailed by AIIA in a number of previous submissions<sup>2</sup> to government reflect a perception by parts of the industry that the government is not committed to nurturing and growing Australia's domestic ICT/digital technology capability and that innovation in this area are better understood and valued by a range of overseas partners and competitors.

The US, UK, South Korea, Singapore and the European Union for example, all have a well-articulated growth agenda focussed explicitly on ensuring the existence of a robust and sustainable business ecosystem in which innovation thrives and from which productivity and economic benefits can be derived.

This is not currently the case in Australia. In fact according to the report *Entrepreneurial Ecosystems around the Globe and Early-Stage Company Growth Dynamics*, released at the Davos conference in 2014, the conditions necessary to foster a robust ecosystem are, in Australia, below par.<sup>3</sup> The lack of effective links between start-ups and larger companies to connect start-ups with global value and supply chains<sup>4</sup>, limited access to capital, unsupportive tax arrangements, overly burdensome government regulations and poor cultural support are, especially for early stage companies identified as impediments.

While innovation is not an end in itself it is the means to achieve higher order outcomes - the growth, productivity and competitiveness that underpins national prosperity. It is because innovation is so critical to achieving these outcomes that a more informed and systematic approach to building innovation capacity in Australia is necessary.

In our view, a successful ICT service export capability depends on the existence of a strong domestic ICT services market. This fundamentally requires a more systematic, joined-up approach to innovation and needs to encompass key elements such as:

- underpinning research infrastructure;
- mechanisms to encourage and support government, industry and academic collaboration;
- a strong focus on education and skills - relevant to a globally hyper-connected world and marketplace;
- appropriate funding mechanisms, including access to private funding and venture capital;
- appropriately balanced regulatory frameworks; and

<sup>2</sup> SmartICT 2014'; AIIA's response to the [Enquiry into Australia's Innovation System](#)' AIIA's response to the Issues paper Boosting the Commercial Returns from Research

<sup>3</sup> <http://reports.weforum.org/entrepreneurial-ecosystems-around-the-globe-and-early-stage-company-growth-dynamics/wp-content/blogs.dir/34/mp/files/pages/files/nme-entrepreneurship-report-jan-8-2014.pdf>

<sup>4</sup> Ibid.



- a culture that supports innovation.

In the first instance, the priority must focus on strengthening our domestic business capability and stimulating a more attractive and effective business ecosystem that incentivises innovation and business activity to be retained and grown in Australia.

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## Recommendation 2.2

*To ensure Australia has an attractive and effective business ecosystem that incentivises businesses to remain and grow in Australia and develop their export capability it is recommended that:*

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- More emphasis is placed on nurturing a supportive, national innovation culture that is tolerant of business risk.*
- A whole of government approach to innovation policy, with a focus on mechanisms that coordinate policies and activities across agencies is developed.*
  - This is necessary to leverage scarce resources and ensure a focused national innovation effort aimed to incentivise Australian business to operate from Australia rather than relocate to other jurisdictions/countries that are perceived as more attractive.*
- Innovative funding platforms such as crowdfunding and microfinance are supported as a mechanism to open up funding options for innovative initiatives. This includes a review of existing legislative arrangements such as prospectus requirements, ability to advertise fund/investment raising activities and support for p2p debt crowd funding from non-sophisticated investors.*
- Australia review current policies and programs related to R&D tax arrangements; venture capital; and business regulation and compliance to ensure Australian businesses are incentivised to operate from Australia rather than move their business off shore.*

## 2.3 Skills Deficit

The ability of Australian ICT businesses to build their domestic capability in order to develop and sustain an export (including an export services) capacity is undermined by the deficit of STEM, and specifically ICT skills.

Some 75% of the fastest growing occupations today require science, technology, engineering and math (STEM) skills and knowledge<sup>5</sup>. Releasing his *Science, Technology, Engineering and Mathematics: Australia's Future*<sup>6</sup> Report last year, Professor Ian Chubb made the point that Australia is the only OECD country without a science or technology strategy. He went on to say “ . . . other countries have realised that such an approach is essential to remaining competitive in a world reliant on science and science-trained people”.

While countries such as the US, UK, Singapore, China, Brazil and India are investing heavily in building their STEM capability precisely because they regard these disciplines necessary to future economic and social wellbeing, Australia's performance is lagging behind many of our comparable peers.<sup>7</sup>

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5 Becker, K. and Park, K. effects of integrative approaches among STEM subjects on students' learning. Journal of STEM Education 12, July - September 2011

6 [http://www.chiefscientist.gov.au/wp-content/uploads/STEM\\_AustraliasFuture\\_Sept2014\\_Web.pdf](http://www.chiefscientist.gov.au/wp-content/uploads/STEM_AustraliasFuture_Sept2014_Web.pdf)

7 AiGroup, Progressing STEM Skills in Australia, March 2015

[http://www.aigroup.com.au/portal/binary/com.epicentric.contentmanagement.servlet.ContentDeliveryServlet/LIVE\\_CONTENT/Publications/Reports/2015/14571\\_STEM%2520Skills%2520Report%2520Final%2520-.pdf](http://www.aigroup.com.au/portal/binary/com.epicentric.contentmanagement.servlet.ContentDeliveryServlet/LIVE_CONTENT/Publications/Reports/2015/14571_STEM%2520Skills%2520Report%2520Final%2520-.pdf)



Recent research conducted by the AIIA found that less than 30 per cent of respondents thought that the current school curriculum is adequate in preparing students with the skills they need for the future.<sup>8</sup>

In their 2015 World in 2050 report, PwC predicts that Australia's economy will drop 10 places in world rankings by 2050 from its current rank of 19. This will take Australia out of the G20 and behind countries such as Bangladesh, Egypt, Iran, Pakistan, Philippines and Thailand. In PwC's opinion, this slump in performance is based on an assessment that Australia has under invested in non-resources areas of the economy, with STEM education identified as a key example of under investment.<sup>9</sup>

In ICT, despite increased industry demand for specific ICT skills, the take-up of ICT tertiary courses over the last decade has halved.<sup>10</sup> A 2014 analysis by the Australian Financial Review<sup>11</sup> of university course take-up by domestic undergraduate students since 2001 shows a 36% decline in students starting IT degrees, and a 41% decline in students graduating from those degrees in the same timeframe. Although there has been a slight recovery in commencement numbers since 2009, when Australian universities uncapped the number of students they enrolled in each course, the number of IT students still lags significantly behind an overall 39% increase in new undergraduate students since 2001.

While ABS labour force data shows that employment of ICT professionals has grown strongly over the 10 years to May 2014 (notwithstanding the decline in student numbers taking up ICT courses), the feedback from employers is that the vast majority of graduating students were not suitable to the advertised position.<sup>12</sup> Australian Industry Group's (AIG) 2015 Progressing STEM Skills in Australia report reinforced this gap - with 36% of business surveyed identifying the lack of tertiary qualifications relevant to the business and 34% the lack of employability skills and workplace experience a major barrier to ICT graduate employment.<sup>13</sup>

The mismatch between the needs of industry and tertiary graduate qualifications is a general one impacting the whole of the ICT industry but it is particularly playing out in new and dynamic areas of technology capability where course pedagogy is not keeping pace with rapid technology developments.

In our recent (February, 2015) Digital Skills and Careers paper, the AIIA highlighted the need for increased Industry support and targeted youth engagement programs that harness and encourage young people to develop STEM based skills and specifically, pursue ICT based careers. While parents saw the value of their children pursuing a digital career few felt that this was a career of interest to them.<sup>14</sup>

Program investment, Industry engagement and education agility are necessary to strengthen the pipeline of STEM and specifically ICT skilled graduates.

<sup>8</sup> [http://c.ymcdn.com/sites/www.aiaa.com.au/resource/collection/5329A1F4-E501-46C9-BBD9-327A9572A30B/A-Digital\\_Skills\\_and\\_Careers\\_Report.pdf](http://c.ymcdn.com/sites/www.aiaa.com.au/resource/collection/5329A1F4-E501-46C9-BBD9-327A9572A30B/A-Digital_Skills_and_Careers_Report.pdf)

<sup>9</sup> <http://www.pwc.com.au/consulting/assets/publications/World-in-2050-Feb15.pdf>

<sup>10</sup> Australian Computer Society, 2012 Australian ICT Statistical Compendium, 2012, [http://www.acs.org.au/\\_data/assets/pdf\\_file/0014/13541/2012\\_Statcompendium\\_final\\_web.pdf](http://www.acs.org.au/_data/assets/pdf_file/0014/13541/2012_Statcompendium_final_web.pdf)

<sup>11</sup> The Financial Review, Shortage of IT graduates a critical threat, 7 Feb 2014, <http://www.afr.com/news/policy/industrial-relations/shortage-of-it-graduates-a-critical-threat-20140206-iv4lx>

<sup>12</sup> Australian Government, Department of Employment, Labour Market Research - Information and Telecommunications (ICT) Professions, <http://docs.employment.gov.au/system/files/doc/other/ictclusterreportaus.pdf>

<sup>13</sup> The Australian Industry Group, Progressing STEM Skills in Australia, 2015, [http://www.aigroup.com.au/portal/binary/com.epicentric.contentmanagement.servlet.ContentDeliveryServlet/LIVE\\_CONTENT/Publications/Reports/2015/14571\\_STEM%2520Skills%2520Report%2520Final%2520-.pdf](http://www.aigroup.com.au/portal/binary/com.epicentric.contentmanagement.servlet.ContentDeliveryServlet/LIVE_CONTENT/Publications/Reports/2015/14571_STEM%2520Skills%2520Report%2520Final%2520-.pdf)





In the meantime the efforts of Australian ICT companies remains on retaining the skills they need to be competitive; retraining graduates to meet their requirements; and where all else fails, recruiting skills from overseas. Lack of skills translates to lack of capacity and capability which invariably impacts the ability of companies to focus efforts and resources on developing export capability.

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### **Recommendation 2.3**

*To ensure Australia has the skills and expertise to build and support a robust ICT services export market it is recommended that:*

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- a. *The Government commit, as a priority, to developing Australia's workforce of the future based on a foundation of increased STEM capability and to this end, make a concerted investment in incorporating STEM into the pre-primary, primary and secondary year curriculum.*
- b. *In consultation with the Department of Communications, this Review seek to expand the Government's Digital Careers program aimed to encourage young people to develop careers in ICT.*
- c. *The Government support industry efforts to increase engagement with the Australian tertiary sector to identify gaps, barriers and solutions to obtain job-ready graduates, including the development of best practice pedagogy and industry input into educational course and curriculum design.*

## **2.4 Language and Culture**

Alla supports the finding of Australia's International Business Survey (AIBS) 2014 that found language and culture remain barriers to Australian companies exporting their services overseas. Some 59% of survey recipients identified lack of information on local culture, business practices, language and consumers as impediments to doing their business in overseas markets. In the case of ICT, the Survey reports that some 56% of businesses identified this as a barrier to export activities.

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### **Recommendation 2.4**

*To address language and cultural issues that are a barrier to Australian services companies exporting overseas it is recommended that:*

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- a. *Investment is allocated to training and skills development of service companies looking to expand into global markets. This could include an emphasis on information about local culture, business practices, local regulations, payment arrangements and local support services. It could also include the development of online information tools/products. Government could also simulate the private sector to provide similar services.*

## **2.5 Austrade Funding**

Amongst other things, the Australian Trade Commission - Austrade - supports Australian businesses develop their international markets. They provide market information and insights, promote Australian business capability, make connections through their extensive network of global contacts and provide a range of business advice services. While they do this across a range of industry sectors, a major concern of the ICT industry is that since the mid-2000s Austrade investment in supporting the ICT industry, including ICT export services has declined. Alla acknowledges competing budgetary priorities but is concerned that this withdrawal of support and investment in developing





ICT export capability is at odds with the global phenomena that is the online digital economy.

Digital technology is a key driver of productivity, value add and competitiveness. Increasing digitisation means that Australia's services industries - in particular financial services, health and business services - need to embrace ICT in order to deliver innovative digital services solutions to the region. With the increasing 'commoditisation' of service delivery innovation, coupled with entrepreneurship, is critical to ensure Australia's global competitiveness.

With the changing nature of the services industry and its increasing trade exposure, this is exactly the area the Australian government should be focusing its export development efforts.

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### *Recommendation 2.5*

*Austrade provides a range of services to support the export capacity and capability of Australian businesses. To optimise the export opportunities derived from our ICT /ICT services industry it is recommended that:*

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- a. Austrade is provided appropriate funding to build and support the export capability of Australia's ICT services sector. This includes the reappointment of trade focussed staff in key export markets such as the US and Europe to drive ICT services in those markets.*
- b. Government, through Austrade, promote the development of high value, exportable digital services by promoting the role of digital technology in building an internationally competitive, digitally driven service sector.*

## 2.6 Trade Agreements

Research conducted by the Economist Intelligence Unit for the HSBC Bank shows that less than 20% of Australian companies are currently taking advantage of the Free trade Agreements (FTAs) that Australia has in place. This is despite the fact that those that do leverage FTAs report strong improvements in export growth.<sup>15</sup>

These figures endorse the sentiments of the B20 Policy Recommendations to the G20 that preferential trade agreements are not fully utilised and typically not widely understood by the business sector. Key barriers to their use include the complexity of agreement terms; the limited nature of some agreements - with a focus primarily on tariff reduction rather than issues such as e-commerce, intellectual property, trade in services etc.<sup>16</sup>

While we understand that a level of investment has been committed to promoting business understanding of the recently concluded Free Trade Agreements in North Asia this needs to extend to all such trade agreements.

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### *Recommendation 2.6*

*To ensure Australia leverages the benefits from Free Trade Agreements with trading partners it is recommended that:*

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- a. The Government sponsor appropriate information and awareness raising activities related to the implementation of all Free Trade Agreements.*

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<sup>15</sup> FTAs in south-east ASIA: THE Next Generation, The Economist Intelligence Unit, 2014  
<https://globalconnections.hsbc.com/australia/en/special-features/fta/ftas-in-south-east-asia-towards-the-next-generation>

<sup>16</sup> Ibid.



- *The purpose of such activity is to improve understanding of the scope of benefits that can be derived; the impacts of a particular FTA; and how the Agreement can be leveraged by business.*
  - *To support export growth, particularly where there is unrealised or under-utilised potential, educating SMEs should be a priority.*
  - *Online education tools/information and information provided through existing programs such as the Entrepreneur Infrastructure Program should be considered as a cost effective way to address the current gap in awareness.*
- b. *Technology services representation capability is developed in DFAT/Austrade to address the current lack of focus in both FTAs, trade missions and other advancement activities, where other industries are supported at the expense of the technology services industry.*
  - c. *Noting the sensitivity of FTA negotiations, DFAT engage in consultations with specific industry sectors to ensure there is a clear understanding of the outcomes industry is seeking from FTAs with a particular country/region.*

## 2.7 Additional Suggestions

AIIA believes there are two additional opportunities to improve Australia's services export capability.

First, Australia does not have a well-articulated strategy for advancing our trade development. While one of the stated aims of the new Industry Growth Centres is to improve "the capability of the key growth sectors to engage with international markets and access global supply chains"<sup>17</sup> such statements are rarely supported by clear plans of action. To ensure this objective is achieved, and to ensure Australia improves its trade performance across the broad range of industry sectors such a strategy will be imperative.

Second, conclusion of the plurilateral Trade in Services Agreement (TiSA) and support for Australia's accession to the WTO Government Procurement Agreement (GPA) remain outstanding. Execution of these Agreements will assist Australian services exporters' access international markets. They also offer a range of non-tariff benefits.

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### **Recommendation 2.7**

*To help strengthen Australia's services export capability it is recommended that:*

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- a. *A clear strategy in support of Australia's trade performance is developed and that this specifically include strategies to support improvement of Australia's services export capability.*
- b. *Negotiations relating to the Trade in Services Agreement (TiSA) and Australia's accession to the WTO Government Procurement Agreement (GPA) are swiftly concluded, with implementation arrangements developed to ensure these opportunities are optimised by services exporters.*

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<sup>17</sup> <http://www.business.gov.au/advice-and-support/IndustryGrowthCentres/Pages/default.aspx>



### 3. Conclusion

Alla strongly recommends actions aimed to improve Australia's performance in the area of services exports. With the globalisation of the economy and ubiquity of online infrastructure, Australia's services industries are increasingly trade exposed. It is imperative that Australia act swiftly to ensure our services industries leverage this opportunity rather than be undermined by it.

In considering how to build Australia's service export strength we have offered a range of recommendations which we believe will benefit all service companies, including ICT service based businesses. We would be pleased to discuss these recommendations further with the Productivity Commission.

