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The Australian Institute for Commercialisation

Discussion Paper

‘Overcoming the Industry - Research Sector Divide’

Some anecdotal observations derived from the TechFast program

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1.0 Introduction

Through its unique market-driven TechFast program, the Australian Institute for Commercialisation (AIC) has achieved great success in working with technologically receptive Australian small-to-medium enterprises (SMEs) to identify, assess and transfer know-how and intellectual property (IP) from Australian research organisations (ROs). The goal of TechFast is the same as that of the AIC - to create high value jobs, exports, and economic growth for Australia by facilitating better outcomes from Australian research.

Unfortunately, such outcomes do not occur as naturally or as frequently as an outside observer might expect. In fact, there are numerous obstacles and difficulties that are common in trying to achieve commercialisation outcomes from the Australian research sector, whether it is through the formation of new spin-off companies or through knowledge transfer to existing companies. The latter commercialisation path is the focus of TechFast, as it utilises existing companies that have already achieved some success in understanding customer needs and developing distribution channels to reach their customers, and therefore face fewer barriers to commercialisation than would new spin-off companies or ROs in general.

However, many other obstacles still stand in the way of knowledge transfer from the research sector to industry. The purpose of this paper is not so much to reiterate well-recognised barriers but to highlight barriers that are less commonly recognised or have been overlooked elsewhere, and to recommend ways in which they can be overcome. The first part of the paper identifies these barriers as well as some operational learning's from the TechFast pilot, while the second part outlines AIC recommendations on how they can be mitigated.

The following comments and recommendations are not generated from a research study or a broad review of current industry-science collaboration in Australia. Rather, they result from the AIC's direct experience in working with approximately 30 Australian SMEs and more than 45 ROs to facilitate knowledge or technology transfer deals during 2005/6. An SME in this study refers to companies with less than $20 million in annual revenues.

2.0 Obstacles to Science – Industry Collaboration

2.1 No leading practice model for SME and research sector engagement exists

2.1.1 Lack of regular ongoing interaction

Compared to other higher performing innovation systems such as the USA or Finland, there are very few regular interactions between Australian SMEs and ROs. The advent of policies supporting technology transfer in the US, such as the Bayh-Dole Act, has gradually diffused across developed countries, to the extent that most established universities and government research agencies in these countries can boast a successful technology transfer office. In the absence of legislated demands for technology transfer to occur, both Australia and Sweden have progressed more slowly in their technology transfer endeavours. The different cultures, motivations and needs that exist, as well as a general lack of awareness of what each sector has to offer the other (complementary skills, assets, funding, infrastructure and relationships), have resulted in poor levels of collaboration in Australia. In 2001, the entire publicly-funded Australian research sector executed just 71 LOAs (licences, options, and assignment agreements) to small companies and in 2002 just 115 (DEST 2001/2002). Quite simply, both small companies and ROs have had little practice (or encouragement) in working together.

This lack of interaction has led to a situation of information asymmetry and fractured knowledge bases, which has caused limitations in outreach activities to prevent technology transfers from taking place (Lane, 2003). Interactions between firms and other institutions are a key element of the learning process associated with knowledge intensive activities, especially for small firms. Of particular importance to science and technology oriented small firms are the interactions between universities and industry.

The role of the intermediary in a market-pull technology transfer situation is reverse to that of technology-push. Its role is to find the technology or innovation which meets the current reeds of commercial entities.

2.1.2 No single entry point or methodology to engage each other

Australia does not currently have a single 'entry point' for technology hungry SMEs to interact with the research sector. Many of the 130 publicly-funded ROs have now set up commercialisation offices or subsidiaries to serve as 'shop fronts' for their people and technology assets. Unfortunately for SMEs, there is neither a single model for interaction with a particular institution, nor a single clearing house representing them all. Therefore, the task for SMEs in identifying, contacting, learning how to deal with and successfully negotiating collaboration or technology transfer deals with a particular RO is too time consuming for most to justify.

The AIC has experienced this first hand through TechFast. For example, we have engaged some ROs on multiple occasions looking for a variety of different technologies for different SMEs. The experiences illustrated that the nature of interaction the AIC had with different commercialisation officers or researchers from a single RO on behalf of an SME could vary considerably. Some would be highly engaging and others would not. Some seemed to insist on certain series of formal, bureaucratic procedures to progress discussions, while others took a more streamlined, customer friendly approach to the engagement. Ultimately, there seemed a real lack of uniformity in commercial interactions with a particular organisation or the sector in general.

Grainger McFarlane, Managing Director of TechFast participant National Poly Industries Pty Ltd said, "O*ur dedicated TechFast project manager has assisted us to develop a structured approach to identifying opportunities in three areas of our business and to access the know-how and technologies available from the research sector to take advantage of these opportunities. As a small, regionally based company, we would have otherwise had significant difficulty tapping into the RO networks and their technologies available through TechFast*."

The lack of a single entry point for ROs proactively searching for SME partners is equally an issue.

2.2 Different cultures exist within the two sectors

2.2.1 Vastly differing expectations regarding IP ownership

When a business engages another business to provide expertise in the form of 'paid services', it is customary that the business paying for the services ultimately owns any IP that is developed through the provision of such services. However, when businesses engage ROs to provide expertise in the form of 'paid services', they are often shocked to find the RO expects more than just a fee for service or provision of expertise. It has become the norm for ROs to demand either full or part ownership in any new IP developed through the provision of their 'paid services', as well as royalties or other forms of success fees. It is often at this point where collaborative discussions simply fail.

For example, the AIC has been working with a particular SME and RO to facilitate the transfer of expertise from the RO to the SME. The SME had agreed to pay the RO commercial consulting rates for its expertise. However, when the service contract was provided to the SME they were astonished to find clauses stating that any IP developed through the collaboration would be owned by the RO, with the SME having a royalty free, non-exclusive right to use the IP.

The AIC has found that many ROs have standard R&D contract templates, particularly when PhD students are used to work on industry projects. Whilst the industry partner generally provides funding to pay for the PhD students time, which is often further leveraged by the RO through an Australian Research Council (ARC) or National Health and Medical Research Council (NHMRC) grant, the contract templates usually state that all project IP developed will be the property of the RO. We have found that many ROs are actually willing to be flexible on such clauses if asked, however their initial position is automatically one of owning all IP. An intermediary can help to set expectations on both sides that encourage a

mutually agreeable engagement from the beginning and greatly reduce unnecessary tension during the commercial discussions.

2.2.2 Industry perception of a 'pay three times' system

Many SMEs would accept that to indirectly contribute to the development of research sector IP and expertise through taxes is a good investment. In general, most SMEs even accept the need to pay additional fees to access the IP or expertise created through this investment and customises it to suit their commercial needs. However, to then be required to make even further payments in the form of high royalties or face IP sharing demands for research they have initiated and paid for, leaves many SMEs feeling that the cost of doing business with ROs is significantly higher than it should be, and significantly higher than comparable business-to-business interactions. The TechFast program experience has demonstrated numerous examples where ROs immediately look for royalties or success fees, if it is believed that new IP is likely to be generated through provision of their expertise, even when the RO is acting as a paid provider of this specific expertise. Again, the limited number of LOAs or collaborative R&D between smaller sized companies and ROs could be attributed to both information asymmetry, as well as this industry perception of a 'paying three times' system.

2.3 Cultivating complex relationships requires a facilitator/project manager without vested interests

2.3.1 Three is a crowd – and technology transfer involves three distinct parties

As an independent facilitator of technology transfer from ROs to SMEs, the AIC has come to recognise that technology transfer involves agreement and cooperation among three distinct groups, not two as might be commonly thought. More often, SMEs need first to deal with the needs of the individual researchers and then deal separately with the needs of the commercial office, which are often disparate. There is also quite often a disconnect and tension within the RO itself, between the academics and commercial officers. It is not unusual for academics to speak poorly of their commercial officers to the SMEs. This simply adds to the complexity of building collaborative relationships and leaves the SME nervous and feeling like David in a 'David vs. Goliath' scenario.

2.3.2 Every potential relationship is a new relationship with unique challenges

The TechFast experience shows that each potential RO and SME relationship has its own unique set of challenges to overcome in addition to the other shared challenges we are documenting. For example, AIC TechFast Project Managers have had to carefully manage situations including perceived breaches of mutual confidentiality agreements by RO staff, personality clashes between key project individuals, and unrealistic royalty rate expectations from research commercial offices. Prior knowledge and previous experience in identifying and managing such situations can provide the greatest chance of successfully navigating these obstacles as they arise with each technology transfer opportunity. These unique challenges often require third party input and experience to identify innovative solutions that meet the needs of all parties. Again, the TechFast experience has shown that without an independent facilitator many discussions between ROs and SMEs would simply fail due to a lack of experience by either party to know how to successfully navigate such situations.

TechFast is an example of an institution (the AIC) playing a role in network governance of knowledge activities. Although the program is subsidised by government, it does not adopt bureaucratic modes of decision making. It is a decentralised program that directly engages with the key players, SMEs and universities and brings the players together creating the possibility for dialogue and mutual benefit, which is at the heart of networks. As such, TechFast sets up the possibility for the exchange of knowledge, rather than seeking to authoritatively control knowledge exchange through regulation. In this way, TechFast plays a critical role in network governance and facilitates the development of learning communities, thereby contributing to increased levels of innovation.

The founder and Managing Director of regional Queensland TechFast participant Russell Mineral Equipment Pty Ltd, John Russell said, "*The TechFast assistance from the AIC has provided services, but most importantly a perfectly positioned project management function. Situated in the 'divide' between ROs and SMEs, this project management role provides the perfect adaptor plate between two widely different organisational cultures and encourages both parties to meet their activity and timetable obligations.*"

2.4 The agendas in the commercialisation triangle are rarely aligned

2.4.1 Technology transfer challenges facing researchers

Researchers often feel they have limited time after teaching, researching and publishing to pursue SME collaboration, and often see no real financial or professional reward.

Through the TechFast program, the AIC approached a highly renowned researcher to work with an SME to help them utilise his expertise. Unfortunately, the response from the researcher was that unless the SME would engage him independently of his role within the university, he was simply not interested. He felt he would receive no personal reward for assisting the SME under the university banner, but as an independent consultant he could receive full financial benefit from the provision of his expertise.

Other TechFast experiences found researchers were often not highly motivated to collaborate unless they could see an opportunity to publish, which is not always appropriate from the SMEs perspective. Commercialisation of research is not part of a researcher's key performance indicators (KPIs). Instead, significant time must be devoted to securing future research and development (R&D) funding for their research interest from initiatives such as the ARC Grant Programs. This often leaves researchers with little real motivation or time to assist SMEs to adopt and apply their research and expertise.

Furthermore, IP is too often conceived to be sitting packaged, ready to go. The reality is that IP exists more frequently as know-how, expertise or as an embryonic technology. Therefore, while a researcher may not necessarily oppose commercial application of their work, they just may not be able to identify where their research has applicability in the commercial world.

For example, a TechFast Project Manager approached an RO regarding some innovative communications IP they had developed. The RO had not previously considered the use of this IP in the area of patient monitoring, needed by the SME. However, because this market was well understood by the SME the opportunity to adapt the IP was immediately apparent. This technology has now been transferred and is being trialled by the SME with several hospitals and aged care facilities with encouraging results. This demonstrates that ROs may not always recognise high value industry application for their IP or its true potential to generate economic and community benefits.

Many researchers have little idea on how to pursue commercialisation and often receive no real assistance in terms of commercialisation support from their particular organisation. The following are considered essential elements of entrepreneurship:

- Opportunity recognition
- Market knowledge
- Product knowledge
- The desire and ability to innovate
- The ability to assemble and effectively employ resources
- A propensity for calculated risk taking which is the most recognisable of all elements amongst entrepreneurs.

Most researchers would only display one or two of these characteristics: product knowledge and the desire and ability to innovate. They are not equipped to judge the commercial viability of their own IP. The AIC believes a demand-pull approach is critical to significantly increase the levels of research adopted by industry, in particular SMEs. Through the TechFast pilot, we have now facilitated a significant number of technology transfers into SMEs using IP or expertise from ROs in ways not previously identified by the researchers or commercialisation offices. As such, demand-pull has already proven its ability to generate

new collaborative opportunities and generate additional research commercialisation outcomes through SMEs. None of these could have occurred through a traditional technology-push approach.

2.4.2 Technology transfer challenges facing SMEs

The potential for learning and the generation of new knowledge is of central importance to SMEs that rely on knowledge as the basis of competitiveness. Traditionally, R&D has been regarded as critical for the generation of new knowledge. However, innovation studies have shown that innovation is a process of interactive learning between a firm and its environment, involving feedback mechanisms or loops, representing the complex interactions between a variety of institutions in the system as part of a continuous process involving incremental change, error and modification (Edquist 1997, p. 1-2).

Unfortunately, without a pressing external driver for both the SME and the researcher, it can often take more than 12 months of continuous focus and effort to lay the foundations for the relationships needed to successfully facilitate formal agreements for technology transfer or collaborative ventures with ROs. This assumes discussions don't disintegrate or simply fall off the radar of the SME. Such protracted time frames often result in a loss of focus by key individuals within the SME, due to other pressing issues that arise during this period. This is a key reason why many collaborative opportunities go nowhere and are simply described by the SMEs as 'too hard'.

An intermediary can help keep both parties focused, and can fast track the knowledge transfer process to ensure a transfer occurs. Upfront support services to SMEs to assist them to de-risk new technology opportunities has also proven successful in keeping them committed and focused on pursuing technology transfer opportunities that make sense. The extra resource can also assist innovative firms who might be resource deficient, due to the financial and time requirements of their R&D process.

The Chief Technology Officer of TechFast participant Biocenturion Systems Pty Ltd, Mr Tom Rosser said *"the TechFast assistance from the AIC has already enabled us to fast track the assessment and transfer of the latest hardware technology from two University research organisations. Being able to license and integrate breakthrough biometrics and Bluetooth technology into our wireless software platforms has enabled our firm to compete on the world stage. From a sheer economics standpoint this would not have been previously possible for us*".

2.4.3 Technology transfer challenges facing commercialisation offices

Many commercialisation offices are still very much in 'start-up' mode themselves and are significantly under-resourced for the massive tasks they face. Many also complain of unclear organisational goals and policies for commercialisation, and lack of real commitment from institutional leaders. Frequently, they have limited knowledge or understanding of what IP the organisation actually has because the research may be emergent and not conveniently packaged for specific applications. IP disclosures are rarely formalised, and maintaining in-faculty development managers to seek out and understand 'hidden' IP is expensive. As such, commercialisation offices are often inefficient at being able to market their goods.

They also may experience conflicted priorities, on the one hand being a 'Gatekeeper' of their IP (i.e. reluctant to expose ground-breaking technology for fear of poaching) and on the other being a 'Shop-front' in order to market it to possible customers. Like many start-up businesses, they often chase the big opportunities, not recognising that multiple quick SME deals can equal one big complex deal. Financial remuneration and professional prestige is seen to be greater when officers strike a deal with a multinational corporation, as opposed to a less significant domestic SME deal. This is particularly the case with SMEs that have not been pre-qualified, because the likelihood that an approach from such an SME will lead to any outcome is very low. In some ROs, contact with SMEs might even be avoided because of a lack of knowledge of industry needs, lack of experience in dealing with industry, the commercial risk, and the time taken to identify a good prospect.

The KPIs of commercialisation offices may also be a hindrance to SME – RO collaboration. Metrics such as revenue, the number of spin-offs, and patents drive behaviour and are still key measurements of commercialisation success, which are highly publicised by the media. Typically, officers are rewarded by their organisation based on size or revenue from deals, which reduces incentive to focus on SMEs. There

is rarely an Australian-based economic development metric used to assess commercialisation office performance.

2.5 People prefer the path of least resistance

2.5.1 Uncertainty over the best commercialisation route

The options most familiar to ROs to commercialise IP generally revolve around either creating a spin-off company or licensing the IP. Spin-offs are too often preferred because they infer control, equity, and potentially greater value, and also often satisfy a researcher's ego to create a small company "in their own image".

Spin-off companies frequently have a special status that perhaps they shouldn't have. The perils of properly understanding and sizing the market opportunity, and creating routes to that market involve very high risks, which are reduced by licensing to an industry partner that already has the ability to execute. Unfortunately, by simply using the traditional technology-push approach the options for licensing in Australia appear to be limited because appropriate industry partners are either not local, not interested, not easy to identify or simply do not exist.

This of course parallels the argument used by many existing industry bodies to justify their low level of business investment in R&D, and tends to maintain the status quo of existing industry. The challenge for the Australian research sector in many instances is to 'bootstrap' local industry through partnering with successful SMEs who have the flexibility and infrastructure in place to quickly take IP to market – the central role of TechFast. The trick is to ask SMEs what they actually need. Of course, this may turn up problems that cannot currently be answered by the research sector; however it will provide ROs with valuable information to assist in selection of industry relevant future research topics. This demand-pull approach has now been proven to identify a range of opportunities for existing IP that was simply not apparent using the historical technology-push approach.

2.6 Improving outcomes from other government programs

Programs to improve innovation and the utilisation of advanced technologies have been prioritised in many countries. In France, a network of technological development advisers exists to help SMEs identify their technological needs and to link them with providers of technology from ROs. There are also programs to encourage the recruitment of technological personnel in SMEs to help them identify and implement appropriate technologies for their organisation. A National Research Exploitation Agency (ANVAR) exists to encourage innovation in products or processes in SMEs by providing interest free loans which are refundable in the event of success (OSEO, 2006).

TechFast is concerned with the establishment of appropriate linkages between ROs and SMEs and it acknowledges and seeks to highlight the existing stock of knowledge and competence in the economy by focusing on high-performing SMEs. However, unlike most programs in support of technology transfer to SMEs, TechFast is a market-pull program. Existing analysis of recent programs in support of technology transfer to SMEs reveals a wide-range of technology push programs only (Tann, Platts and Stein 2002).

Technology transfer programs like TechFast offer a real opportunity to improve the outcomes of current innovation programs, such as AusIndustry's Commercial Ready program. Such programs are failing to encourage SME – RO collaboration, which TechFast directly facilitates. Many TechFast facilitated collaborations may need additional R&D and pre-commercialisation activity because of the raw state of much of the IP transferred. The Commercial Ready program could be the perfect vehicle in many situations to provide financial assistance in this regard. In fact, following the collaboration TechFast has established, several SMEs are now preparing Commercial Ready applications.

Importantly, the TechFast concept will not only increase the number of applications for such programs, but will also make a real difference in terms of the likely success of Commercial Ready funded projects. This

is largely due to the fact that TechFast SMEs have a designated project manager who facilitates vital pre-application planning activities such as:

- Undertaking independent market research
- Development of strong formal agreements between collaborators to ensure clear cut commitments and IP ownership
- Undertaking IP freedom to operate reviews to ensure no possible IP infringements
- Developing robust project plans and commercialisation strategies.

It is well acknowledged that it is often the failure to properly undertake these essential activities that leads to imperfect technical and commercial outcomes from many government-funded innovation projects.

3.0 Recommendations to Inform the 'Third Stream' Debate and Improve Industry – Researcher Collaboration

Investment in R&D is an investment in the products, innovations and development of the whole economy. Public investment in R&D is comparable to other OECD countries, although our ranking is falling. In 1996–97 Australia was ranked third among OECD countries for government expenditure on R&D and by 2002–03 this had slipped to seventh.

In many OECD countries, the bulk of R&D expenditure is carried out by the private sector. However, in this area Australia ranks 16th, well below competitive countries with similar living standards such as Singapore and Canada. The investment in R&D by leading Australian companies pales into insignificance against their leading international counterparts.

One way of encouraging a greater level of R&D by industry is to enable them to leverage of the public investment in Australia's research sector. SMEs are far more likely to risk capital and resources on R&D or new product, where some of the more risky, earlier stage R&D has been undertaken already. The challenge for Australia is to both encourage and assist SMEs to look to the research sector as a source of new ideas and technologies to grow their business, whilst at the same time generating a greater return on investment for the nation's public research investment.

The AIC's 'coal-face' experience gained from the successful piloting of its TechFast program, as well as its commercialisation-focused relationships with both industry and ROs, places it in a unique position to suggest practical recommendations for improving industry-research sector collaboration.

The following is a summary of the vital elements and infrastructure that the AIC believes is necessary to encourage and facilitate such collaboration and to achieve greater economic and social outcomes from public R&D investment.

1) Utilise a demand-pull approach

The common practice of 'technology-push' by ROs to commercialise research has its limits. Marketing a university invention is the process of finding the discrete business problem that fits the discrete university solution while overcoming the barriers of limited market knowledge, limited contacts, early stage of development, no patent protection, high expectation of inventors, and perceived risk of new business ventures. It generally means looking for a problem (application) after a solution has been created by researchers.

Through TechFast there is now real evidence that utilising a 'demand-pull' approach can identify additional opportunities that would not be uncovered by simple technology-push practices. Using a demand-pull approach turns the problem around. Firstly, a real business need or problem is articulated; then, a technological solution is sought from across the research sector (the process of IP farming). However, simply telling industry to approach ROs with their needs is problematic, as industry may lack the knowledge of where to look and how to deal with such organisations. An intermediary can help solve this problem.

2) Utilise arms-length independent intermediaries

Importantly, an independent intermediary does not represent either the SME or RO but works in the 'gap' between industry and the research sector. It is critical that they be seen by all parties to be independent and free from the bureaucratic and political environments found within government departments, as this appears to be unacceptable to SMEs and researchers alike. The intermediary role is to help identify and implement solutions to the common and unique relationship challenges that each technology transfer opportunity faces. The intermediary should provide links for SMEs into ROs around Australia that SMEs would not be able to generate for themselves. They can also provide pre-qualified SME commercialisation partners for ROs who are ready and able to quickly commercialise their research. Unlike a broker, intermediaries are not paid by either party and do not take a share from the deal proceeds. Independent intermediaries will truly have no vested interests with either party and are therefore trusted by both parties as a facilitator. It also ensures they do not become a captive resource of the paying party and become pulled into more urgent, but less important, duties.

3) Focus on SMEs

From an Australian economic development policy perspective, initiatives aimed at building new industry sectors should focus on Australian SMEs as the recipient of technology transfer. Australian knowledge-based SMEs are the key to creating new hi-tech jobs, exports, national wealth and building the 'Cochlears' of the future. Due to their small size and decentralised organisational structures they can radically change strategic direction in response to changes in markets, and respond more quickly to opportunities presented by new technologies from the research sector. Therefore, SMEs are better positioned to adopt and commercialise the outputs of publicly funded research. The challenge for Australia is to grow more of its successful SMEs into global sustainable businesses.

4) Provide dedicated project management resources

A designated project manager to work with both parties to drive the identification, assessment, negotiation and transfer process has proven its merits through the TechFast program. Participating SMEs have stated that this independent project management resource is as valuable to them as funding, since they are time and resource poor. This resource is also appreciated by the ROs, since they equally lack the resource to adequately focus on each and every commercialisation or collaboration opportunity. An independent project manager ensures a continuous focus by both parties and can ensure the collaboration opportunity remains visible and progresses.

5) Provide funding to reduce the risk to SMEs

The cost of identifying and assessing new opportunities from the research sector can be expensive and often yield no outcomes for SMEs, even with the help of an innovation network such as TechFast. The assessment process itself carries a reasonable level of risk. The provision of funding to help SMEs cover the costs of essential external services to undertake opportunity identification, assessment, negotiation and commercialisation planning can have two real benefits. Firstly, it encourages SMEs to look to the research sector as a catalyst for innovation and growth. If SMEs were left to fully fund this activity themselves it is likely many would just see this as an additional cost of research sector engagement and would simply avoid it. Given the significant investment in the public research sector, many SMEs rightly expect that appropriate mechanisms are also provided to help them engage with the entire research sector without employing experts to help them access this public asset.

Secondly, it can assist SMEs to follow best practice in undertaking due diligence and subsequent commercialisation, as the costs in doing so is more affordable. It is the failure to adequately undertake such due diligence and commercialisation planning that currently leads to sub-optimal technology transfer outcomes by SMEs.

6) Mandate local industry collaboration KPIs for the research sector

In line with the proposed Research Quality Framework and the associated Third Stream Funding concept, there is an increasingly strong argument that some areas of research sector funding should be tied directly to success in engaging with industry and the greater community. There is also a strong argument that metrics should be adopted by ROs to measure likely 'Australian economic and social benefits' when assessing potential commercialisation partners for publicly funded research outcomes. Similar metrics are already used by governments when assessing innovation grant funding applications, such as the 'National Benefits Criteria' used by AusIndustry. Such metrics can counter the perceived benefits to a RO in working with a multinational organisation, instead of a local SME.

7) Integrate technology transfer initiatives with existing innovation funding programs

As highlighted in section 2.6, knowledge transfer programs like TechFast can promote increased take-up and improved outcomes from other government innovation programs, such as Commercial Ready. The AIC recommends that a continued and increased focus is placed on utilising complementary government programs to move technology transfer opportunities through to commercial outcomes. The AIC also suggests that a greater emphasis is placed by governments on utilising knowledge transfer initiatives such as TechFast to assist them to achieve innovation program usage and the underlying policy objectives.

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