



Senate Inquiry: Supporting the development of sovereign capability in the Australian tech sector.

Submission from: Pathology Technology Australia Ltd

23/02/2024

Dear Senate Standing Committee on Finance and Public Administration Committees,

On behalf of Pathology Technology Australia, I am pleased to submit our response to the Senate inquiry to Support the Development of Sovereign Capability in the Australian tech sector.

Our response draws in information and data gathered from many adjunct and adjacent areas of work PTA has carried out in the health technology sector, including the [ADAPT Report](#) a report written in collaboration with MTPConnect, funded by the Department of Industry, Science, and Resources (DISR), addressing the critical issue of supporting the development of sovereign capability in the Australian tech sector.

This submission also draws on other data points and bodies of work completed by PTA in this space, including the response to the **House of Representatives Standing Committee on Industry, Science and Resources inquiry into Developing Advanced Manufacturing in Australia** chaired by Rob Mitchell and Michelle Landry et al.

Pathology Technology Australia is passionate about bolstering Australian sovereign capability and is therefore pleased to submit critical feedback, recommendations and solutions that are the culmination of various bodies of work completed in the high-tech manufacturing of healthcare technology in Australia. Our ADAPT Report, conducted in collaboration with MTPConnect and with the support of DISR, integrates insights from the broadest range of stakeholders to address the current challenges and opportunities in the Australian tech landscape.

Our commitment to a comprehensive understanding led us to integrate findings from various bodies of work, including the ADAPT study and responses to the inquiry into developing advanced manufacturing in Australia. In collaboration with MTPConnect, we conducted 84 interviews with 144 interviewees, drawing insights from stakeholders across the value chain, both within Australia and internationally. Our integrated study unveils a consensus on critical issues.

A meticulously stress-tested recommendation for an Action Plan emerged as a robust roadmap. This strategic blueprint addresses the need to invest in onshore technology manufacturing, closing the capability gap and fortifying our healthcare system. The proposed actions, including a dedicated Diagnostics Manufacturing Fund, promise a flourishing sovereign diagnostic manufacturing ecosystem. This transformative approach not only safeguards the health of Australians but also fuels economic growth and global competitiveness.

Our submission the Senate Committee meticulously addresses the eight questions or subject areas outlined by the inquiry, drawing on insights from the ADAPT Report, responses to the House of Representatives Committee enquiry, and other pertinent sources. Each section aims to provide insights backed by our extensive research and the valuable input of stakeholders.

Your attention to this matter is applauded and of vital importance to our nation's health security. We wish you success in reaching your conclusions and implementing any recommendations. We are happy to provide further information and to attend oral hearings if conducted.

Sincerely,

Justin Meredith

Head of Strategic Engagement

Pathology Technology Australia

(a) the adequacy of current procurement policy settings across the Australian Government for supporting Australian tech companies, including but not limited to policies in the Digital Sourcing Framework.

The adequacy of current procurement policy settings across the Australian Government for supporting Australian tech companies reflects a landscape fraught with challenges. This is particularly evident for tech companies engaged in sovereign manufacturing, as the existing policies, both at the federal and state levels, exhibit significant inadequacies, underscoring the pressing need for comprehensive reform.

The primary challenge stems from the misalignment between government incentive programs and procurement practices. Currently, the emphasis on product pricing outweighs incentives for local content and technology that delivers high-quality patient outcomes and improved sovereign capability. This misalignment creates formidable obstacles for local tech companies, particularly smaller enterprises, throughout the tender processes. Smaller Australian and startup companies are often less attuned to prevailing terms and conditions, losing a competitive edge and hindering the growth and sustainability of local businesses.

ADAPT highlights the urgency for sustainable procurement practices that prioritise local content, a critical step to stimulate domestic manufacturing and foster job opportunities. The prevalent consolidated purchasing practices, characterised by protracted contract cycles often exceeding five years, compound the challenges faced by tech companies, especially SMEs. The terms and conditions within these contracts frequently prove unworkable for smaller enterprises, creating an uneven playing field in the procurement landscape.

The inadequacies in the current procurement policies necessitate immediate reform. Streamlining processes, adopting shorter contract cycles, and introducing more flexible terms and conditions are pivotal steps to address these challenges. These adjustments not only support the growth of smaller tech companies but also contribute to the overall dynamism and competitiveness of the tech sector.

Australia's procurement policies, at both federal and state levels, demand critical reform to ensure the sustained growth of the tech sector, particularly in diagnostics manufacturing. These reforms extend beyond mere administrative adjustments; they represent strategic imperatives for fostering a competitive tech landscape aligned with Australia's economic goals.

The identified shortcomings in the procurement policies underline the outdated nature of the current framework. Tenders are excessively lengthy, hindering agility and responsiveness in an ever-evolving tech landscape. Procurement practices driven primarily by price undermine the significance of local content and innovative technology that could enhance patient outcomes.

Engagement with health technology companies and their peak bodies is insufficient, resulting in a lack of awareness about emerging products on the horizon. The current tenders are heavily skewed against suppliers, making it exceptionally challenging for companies to conduct business with government bodies. Many tech companies find themselves supplying products at a financial loss due to unfavourable procurement practices, creating an unsustainable business environment.

Furthermore, the study brings attention to the alarming trend where companies are contemplating ceasing the supply of products to Australia due to these procurement practices. This emphasises the urgency and critical nature of the needed reforms to retain and attract tech companies, safeguarding Australia's position in the global tech landscape.

b) the challenges faced by smaller Australian tech companies in accessing public sector procurement opportunities, including but not limited to through procurement panels.

Smaller Australian tech companies confront numerous challenges in accessing public sector procurement opportunities, a reality unveiled by the detailed study conducted by The ADAPT report. These challenges, rooted in complex dynamics, hinder the growth and participation of innovative smaller enterprises in the tech sector.

A fundamental challenge revolves around the misalignment between government incentive programs and procurement practices. The emphasis on product pricing over providing end users with a viable tech centric solution poses a significant obstacle for smaller tech companies, particularly during the tender process. The terms and conditions set during procurement exercises often favour more giant multinational corporations, placing smaller enterprises at a distinct disadvantage.

Long contract cycles further compound the challenges faced by smaller tech companies. Contracts extending over five years or more hinder agility and adaptability, which are crucial for the growth of smaller enterprises. Moreover, the terms and conditions within these contracts are often unsuitable for smaller companies, limiting their ability to compete effectively in the procurement landscape.

Reforming these challenges requires a multifaceted approach. Streamlining procurement processes, adopting shorter contract cycles, and ensuring more flexible terms and conditions are critical steps. These adjustments are not only conducive to the growth of small enterprises but also contribute to fostering a dynamic and competitive tech sector.

The impact of the COVID-19 pandemic on government procurement practices, as highlighted in the study, further exacerbates the challenges. The prioritisation of product pricing over sovereign capability during the pandemic created hurdles for local SMEs that were unable to compete on price with more giant multinational corporations. Addressing these imbalances is crucial for creating a supportive environment that considers the unique challenges faced by smaller tech enterprises.

Challenges faced by smaller Australian tech companies demand comprehensive reform in procurement practices. The study by Pathology Technology Australia provides critical insights, emphasising the need for streamlined processes, shorter contract cycles, and flexible terms and conditions to support the growth and competitiveness of smaller enterprises in the tech sector.

(c) opportunities for reform of government procurement policy settings to encourage the emergence and growth of more Australian tech companies.

Opportunities for reform of government procurement policy settings to encourage the emergence and growth of more Australian tech companies are pivotal for fostering innovation, economic growth, and sustainability. The current study by Pathology Technology Australia sheds light on the existing impediments and misalignments between government incentive programs and procurement practices, emphasising the need for substantial reform. Here are several impactful opportunities for reform, building upon these considerations:

Incorporating Innovation Sections in Tenders:

Integrate dedicated sections in tenders that specifically address innovation. This encourages companies to showcase their technological advancements, fostering a culture of creativity and cutting-edge solutions.

Joint Horizon Scanning Meetings:

Establish regular meetings between government officials and tech companies for joint horizon scanning. This proactive approach ensures that upcoming technological trends are discussed collaboratively, enabling the government to align its procurement needs with emerging innovations.

Shift from Transactional Perspectives:

Foster a shift in perspective regarding tech companies. Encourage a more collaborative view that acknowledges their valuable contribution as partners in addressing societal challenges. Recognise these enterprises not solely as profit-driven entities but as innovative contributors working towards positive social and economic impact.

Comprehensive Support Beyond R&D Grants:

Extend support beyond traditional research and development (R&D) grants. Assist tech companies in building commercial skills, understanding market dynamics, and navigating regulatory landscapes. This holistic support ensures that companies are well-equipped for innovation and successful commercialisation.

Economic Multiples in Tenders:

Encourage companies to provide economic impact assessments within tenders. By understanding and quantifying the economic multiples associated with local procurement, the government can make informed decisions that go beyond immediate costs, considering the broader economic benefits.

Higher Weighting for Australian Content:

Apply a higher weighting to Australian content in procurement evaluations. Prioritising local content enhances the competitiveness of Australian tech companies, encouraging the growth of domestic industries.

Aligning with Successful Models in Other Countries:

Study and adopt successful international models. Countries like the United States and the United Kingdom have implemented effective strategies to support local tech industries. Learn from their experiences and tailor policies to suit the Australian context.

Conducting Economic Evaluations:

Conduct economic evaluations to assess the broader benefits of Australian-made diagnostics. This includes understanding economic multiples within tenders and capturing the full economic and social benefits of early adoption of innovative diagnostic technologies.

Nationwide Diagnostics Policy:

Establish a coordinated Nationwide Diagnostics Policy to prioritise emerging diagnostic products based on clinical needs and sovereign risk. This policy should determine research priorities at national and state/territory levels, fostering collaboration to future-proof the healthcare system.

Building a Connected Diagnostics Ecosystem:

Build and embed a deeper and more connected diagnostics ecosystem in Australia, involving consumer advocacy groups, rural health, and peak bodies. This involves advising on and implementing a Nationwide Diagnostics Policy, developing awareness, and expediting the adoption of diagnostics into clinical workflow.

Initiating Industry Forums and Regular Communications:

Initiate industry forums to raise problems, remove barriers, and collaborate on solutions. Also, open discussions and build regular communications with the Australian Government to highlight the benefits of emerging diagnostic technologies and industry trends.

Reviewing Processes for Regulation and Reimbursement:

Review processes for regulation and reimbursement to ensure they are future-proofed and capable of capturing the full economic and social benefits of early adoption of future-focused and innovative diagnostic technologies.

In essence, recognising tech companies as valuable partners and implementing these reforms will not only foster a competitive and innovative tech sector but also contribute significantly to broader goals of sustainability and economic growth

(d) the use of non-sovereign-Australian tech across the Australian Public Service and the consequences of that usage on the strength of Australia's tech sector

The utilisation of non-sovereign-Australian tech across the Australian Public Service carries profound consequences beyond immediate procurement decisions. The study emphasises that during the COVID-19 pandemic, a focus on product pricing over high-quality locally sourced tech by both federal and state governments has significant repercussions for the strength of Australia's tech sector.

One significant consequence is the hindrance to supporting the hi-tech industry and manufacturing within the country. By prioritising pricing over enhancing sovereign capability, the government may inadvertently discourage the growth of a robust domestic tech sector. This misalignment in procurement practices contradicts the broader economic goals of driving economic and healthcare impact through the tech industry.

Moreover, relying almost exclusively on non-sovereign-Australian tech poses challenges to building sustainable strategic partnerships. To foster a competitive and resilient tech sector, the government should prioritise local content and partnerships with domestic tech companies. The global market for In Vitro Diagnostics (IVDs), projected to grow to approximately AU\$150 billion in 2024, presents a lucrative opportunity for Australia. By nurturing local talent and attracting global talent, the country can position itself as a key player in this thriving market.

The consequences are not limited to economic factors but also impact Australia's global competitiveness. To attract and retain global talent, policies should align with the goal of upskilling the workforce, contributing to an additional 5.9% of GDP potential. This alignment is crucial for the growth and support of Australian businesses, especially in the face of global instability, emerging health challenges, and changing patient preferences.

The return on investment in manufacturing, as highlighted by The US National Association of Manufacturers, states: 'With every US \$1.00 spent in manufacturing, an additional US \$2.74 is added to the economy.' Based on Grant Thornton Manufacturing Benchmarking report data: '... for every Government (federal, state, or local) dollar spent, 30 cents worth of additional revenue generated over that original dollar. So, if the Government spends \$1 on an Australian product, as opposed to importing a product, there's a 30% premium that can be paid because the benefit comes back to the community. In addition, our lower, more conservative multiplier says that the Government could spend \$1.90 locally, and it's the same as spending \$1 on offshore procurement.'

Drawing insights from the Kentucky Procurement Code Model, Australia can learn from successful examples of providing preferences to resident businesses. In Kentucky, such a preference law led to a 36% increase in manufacturing output. This model could inspire reforms in Australia's procurement policies to provide preferential treatment to local tech businesses, thereby contributing to the strength and growth of the domestic tech sector.

In conclusion, the consequences of using non-sovereign-Australian tech are far-reaching, affecting economic, strategic, and global dimensions. Aligning procurement practices with the goal of fostering a competitive and innovative tech sector is essential for Australia's long-term economic and technological resilience. The lessons from successful models like Kentucky's highlight the potential for positive outcomes through preferential treatment for local businesses.

PTA is seeking funding to conduct a thorough economic value add study in Australian conditions, for high tech medical manufacturing. This study will be conducted in partnership with a specialist health economist once funding is sourced. With an authoritative locally derived economic multiplier, it is our expectation that State and Commonwealth procurement authorities would apply this to all medical procurement going forward.

(e) the effectiveness of the Buy Australia Plan in supporting Australian tech companies

The Buy Australia Plan, intended to support Australian tech companies, has been marked by a stark lack of effectiveness, with a prevalent perception that there is minimal loyalty to sovereign-manufactured products. The Rhinomed case study from the ADAPT Report exemplifies the impact of this lack of commitment to local manufacturing.

Rhinomed, an Australian-founded company, pioneered a groundbreaking nasal swab for upper respiratory disease diagnosis, including COVID and Influenza. Despite creating a novel and anatomically inspired design that standardised sample collection, improved user experience, and reduced the burden on healthcare workers, the company faced challenges in gaining support from the Australian government.

The New South Wales and Victorian governments were early customers, incorporating the Rhinoswab into testing programs. Despite local success and global demand, Rhinomed invested in local manufacturing infrastructure in Keysborough, Victoria. The company scoped an \$8.9 million full-scale manufacturing plant, aiming to employ upwards of 70 people and strengthen Australia's health security. The Victorian government offered \$1.8 million in support (20% of the project). However, the project's success hinged on the government's commitment to purchasing locally manufactured swabs.

Notwithstanding the acknowledged benefits, superiority, and health economic savings of the Rhinoswab, federal and state governments displayed no appetite to buy or support locally-made products. Consequently, millions of nasal swabs continue to be procured from foreign companies manufacturing offshore. The disconnect between government investment in innovation, as evidenced by the R&D tax benefit and innovation grants, and actual procurement choices is glaring.

The Rhinomed case underscores the need for alignment between government policies promoting innovation and the procurement decisions that follow. If the government invests in innovative solutions to address unmet clinical needs, the logical and beneficial choice should be prioritising the Australian taxpayer as the first beneficiary. Unfortunately, the failure to do so has resulted in missed opportunities for onshoring manufacturing, building sovereign capability, and supporting local businesses.

This case study reflects a broader challenge – the Buy Australia Plan has fallen short in fostering a sense of commitment to local manufacturing. The economic incentives available offshore, coupled with the disconnection between innovation investment and procurement choices, have led companies like Rhinomed to resort to offshore outsourcing despite local capabilities and potential benefits. The Buy Australia Plan, in its current state, has not proven effective in securing and promoting local innovation and manufacturing.

(f) the level of engagement and consultation between the Australian Government and Australian tech companies, including, but not limited to, through the Future Made in Australia Office

The existing shortfall in engagement and consultation between the Australian Government and local tech companies, particularly within the diagnostic sector, emphasises the critical need for an enhanced collaborative approach. Action 5.3 from the ADAPT Report puts forth a compelling case, encouraging federal, state, and territory governments to actively participate in the product development process for diagnostics deemed national priorities and locally manufactured.

The structure of Australia's healthcare system positions government agencies at both federal and state/territory levels as prominent customers for local diagnostic technology companies. Stakeholders express a collective enthusiasm for increased involvement from these agencies across the entire product development life cycle. Establishing clear channels of communication with the ultimate buyers of diagnostic technologies is crucial. This approach enables manufacturers to comprehend the specific needs of their customers, facilitating the design of products tailored to these needs and being well-positioned to navigate regulatory and funding approval processes seamlessly during commercialisation.

To implement this, government agencies responsible for procuring diagnostic technologies should maintain ongoing and open dialogues with industry players. Such proactive engagement builds awareness and bridges the gap between available and emerging technology, aligning with the unique healthcare needs of the Australian population. This increased transparency significantly influences early-stage research and product development decisions. The result is a scenario where government departments receive more fit-for-purpose Australian-made products, and companies can avoid costly redesign and reapplication processes.

In essence, Action 5.3 calls for a paradigm shift towards closer collaboration between the Australian Government and tech companies throughout the product development life cycle. This transformative approach ensures that diagnostic technologies align precisely with national priorities, becoming more attractive for procurement while fostering innovation and responsiveness in the healthcare ecosystem.

(h) Supporting the Development of Sovereign Capability in the Australian Tech Sector:

Strategic Industry Collaboration for Sovereign Growth:

Foster strategic collaborations between Australian tech companies and industry bodies to enhance knowledge sharing, research collaboration, and joint initiatives, strengthening the sovereign capabilities of the tech sector.

Agile Regulatory Processes for Rapid Innovation:

Advocate for streamlined and agile regulatory processes that adapt to the fast-paced technological landscape. Efficient regulatory frameworks are crucial for enabling prompt market entry of innovative products, contributing to sovereign capabilities.

Global Integration with Export Support:

Promote policies facilitating global integration of Australian tech companies, providing support for international market entry, navigating trade barriers, and fostering an environment conducive to tech exports, contributing to a globally competitive sovereign tech capability.

Investment in R&D for Continuous Innovation:

Advocate sustained investment in research and development initiatives to ensure continuous innovation. A strong focus on R&D funding contributes directly to the enhancement of Australia's technological capabilities.

Education and Skills Development for Tech Workforce Readiness:

Invest in education and skills development programs tailored to the tech industry, ensuring a skilled workforce equipped with the latest technological expertise for the advancement of sovereign tech capabilities.