

REASON

GROUP

# Reason Group submission to the Australian Data and Digital Government Strategy

INDUSTRY SUBMISSION

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Reason Group outlines a practical initiative to inform the Government's implementation plan, specifically within *Foundation Mission 5 Data and Digital Foundations*.

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## Introduction

Thank you for the opportunity to respond to the initial ***Data and Digital Government Strategy***.

Our submission provides some high-level observations and recommendations, along with providing a concept for an implementation plan initiative that could serve to drive the outcomes of the strategy, rather than debating the strategy itself in great detail.

Reason Group is an advisor and capability provider in business and digital transformation to the Australian government. We have always held the strong belief that a world-class public service that sparks innovation within the ecosystem and private sector is a crucial capability for the future of Australia. The Digital Economy Consultation 2017 and the Thodey Review of the APS 2018 both raised data and digital imperatives in which we provided this perspective as part of our submission.

*"We will only be able to do all this by having a world-class public sector enabling and stimulating private sector innovation. Government - at all levels - needs to be integrated and embedded in the digital service infrastructure, achieving most goals through partnerships, smart regulation and practical standards. This will position government service delivery to leverage evolving business, consumer and technology relationships within the natural systems of the economy."*

Since 2017 there have been global and local shocks that have shifted our priorities and tested our capabilities. Australia has coped and responded to the COVID-19 pandemic, cyber-attacks, advances in digital identity and uptake, open data, data rights, and data sharing legislation, and accessibility of Generative AI technologies.

There have also been significant advances in digital government services and engagement by State and Territory governments, which included new approaches to innovation procurement and advocacy for data, system and platform interoperability especially in areas of essential services, rapid response and health data.

**Therefore, it is very timely for the development of a new forward-looking strategy for the Australian Government. A strategy that hopefully serves to drive our ambition to position Australia as a leading digital economy and society by 2030.**

We wholeheartedly agree that to turn this vision into reality, our Australian Government systems themselves must be nothing short of world-leading, keeping pace with technological development and adoption. After all, these systems are an integral part of the enabling capability that will drive our domestic excellence and competitiveness on the global stage.

Our "GovTech" is, therefore, a critical enabling capability that requires a strategy and systematic investment across government and the private sector ecosystem.

## Observations & recommendations

We welcome the broad thrust of this new strategy and it is hard to argue against the broad scope, intent and inclusions. In that context, we make the following high-level observations and recommendations;

- ❖ **Set our sights high:** For this national strategy to truly succeed, we must surpass the scope of "greater access" and "omnichannel delivery." Our vision should strive for digitally enabled government services accessible to every citizen, everywhere, and at any time. We should draw inspiration from India's commendable efforts to extend critical digital services to even the most marginalised segments of society, ensuring inclusivity for those who need it most.
- ❖ **Tailor the story:** Recognising the diverse needs of people and businesses is crucial. To enhance clarity, we suggest conducting further work to illustrate segments in the strategy and/or implementation plan. These "use cases" will bring the benefits to life and guide the customisation of services needed to cater to individual requirements.
- ❖ **Empower Public Service engagement:** We fully agree that the APS must possess world-class digital capabilities to build direct services and effectively engage the entire ecosystem in delivering government regulation and services. This involves uplifting accountabilities, procurement, and innovation processes, with a special focus on supporting domestic and innovative firms.
- ❖ **Maintain action-orientation:** We firmly advocate the use of missions to shape the strategy, driving it towards tangible and focused outcomes. For greater effectiveness, enabling missions should be integrated across the strategy. It is vital to explicitly highlight the critical interdependencies between these missions and other government strategies and programs in the implementation plan.
- ❖ **Embrace 'natural' systems:** While the strategy rightly emphasises direct government service delivery, it should strike a better balance by fully integrating the concept of delivering via "natural systems." Apart from offering direct services, the strategy should focus on seamlessly incorporating government services and data into the systems people and businesses use daily. The Australian Taxation Office's "retail" and "wholesale" strategy for digital services stands as an exemplary model for this approach.
- ❖ **Invest in the ecosystem:** To effectively implement the strategy, we propose leveraging funding mechanisms such as the APS Modernisation Fund. Additionally, we wholeheartedly support establishing an out-of-budget cycle funding vehicle, like the proposed Digital Resilience Fund. In line with the broader vision of adopting an ecosystem approach to deliver government services, we advocate considering mechanisms like Industry grants programs and the National Reconstruction Fund in the government's investment strategy.

We hope these recommendations serve to make the national strategy will be more action-oriented, tailored to the needs of people and businesses, and ultimately succeed in delivering digitally enabled government services to all, while also driving innovation and collaboration across the ecosystem.

## Our argument: "what got us here will not take us there"

As we face into future technology disruption, and reflect on decades of government ICT investment, it is a good time to ask the question *"what do we need to do differently to deliver world-leading GovTech?"*

**Getting back to the 'source code of government'; the legislation.**

We regularly help government in legacy ICT modernisation and replacement programs in some of our nation's largest and most complex systems. These systems embody the law, regulations and policies and are critical infrastructure of government that manages entitlements, calculations, payments, benefits, and transactions at a very large system scale. These systems are not easily enhanced, replaced or simply modernised; we have to find new ways of managing and working with them.

Imagine the wealth of data locked within these systems, spanning decades of government operations. Through the power of AI/ML, we can unleash this potential, generating invaluable insights into the patterns of government business. We can trace directly back to a model of the law, regulations and/or policies providing much better assurance of outcomes.

Our groundbreaking "data-first" approach, backed by proofs-of-concept, informs system design, innovation opportunities, and investment decisions. With AI data analytics, we uncover hidden business rules that would be beyond the reach of armies of technical experts. This approach accelerates the description of our current state, paving the way to validate a future state strategy with greater detail and clarity.

**Using interoperability to drive reusable whole-of-government patterns, platforms, and ecosystems.**

Our government's data and digital ecosystem is an intricate patchwork of system-centric implementations. Decentralisation brings challenges, including fragmentation, sub-optimal practices, and needless duplication. Rather than trying to consolidate onto single mega-systems, or onboard onto large-scale "shared services" we should look to drive interoperability standards within and outside of government.

Better data and knowledge sharing, coupled with deliberate actions to implement service and data interoperability standards are required to overcome these hurdles. Combining open source, experimentation and standards processes will create an interoperable ecosystem that is more resilient and can be enhanced more quickly with smaller investments.

One example is knowing when to challenge the conventional data lifecycle paradigm of owning data, collecting, storing, processing, securing, disposing, managing, and authenticating access. This paradigm creates honey-pots for attack and only adds to cyber vulnerability when data might be negotiated for access.

**Bringing people and businesses together across the ecosystem**

New ways of working support diverse thinking. We all need an understanding of what drives future data and digital initiatives and world-leading Australian GovTech. We support upskilling and using AI to augment APS capability to explore and apply new approaches to data and digital.

Government procurement is a powerful engine, but current practices are not sophisticated to 'procure' innovation and deal with ecosystem interoperability. Our government's aspiration to be a world-leading digital government means we should aim to be a major buyer of startup technology. We would like to see more proofs of innovation in ICT business cases, option validation, resilience capability, and product management of government services.

## A case study: "APS-Labs" enable ecosystem co-development

This section offers an example from recent work we have undertaken with the Australian Government that we think illustrates how we can move the dial on the Australian Government's Data and Digital Strategy,

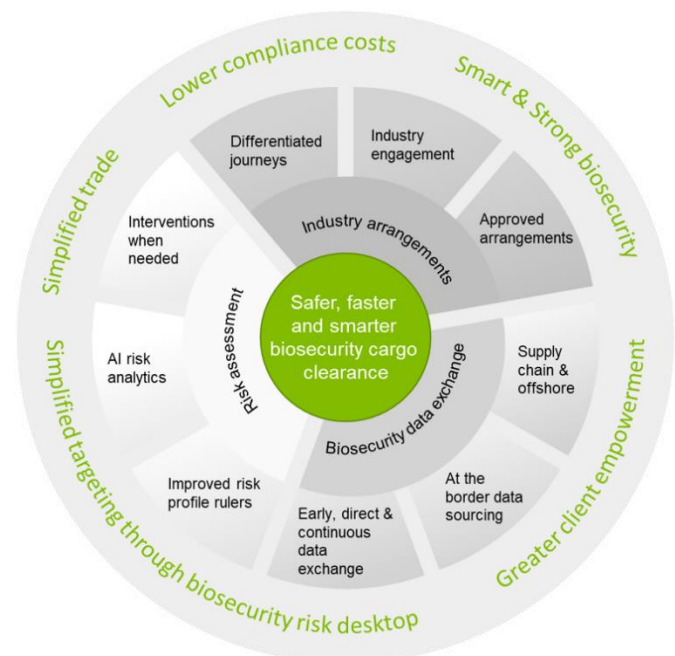
**Real-world whole-of-government problem tackled by government.**

We illustrate an approach for government to industry engagement using a case study that demonstrates the active practice of innovation, safe data sharing, and co-development. In 13 weeks, the approach delivered a breakthrough to trade data exchange between government departments and industry in the form of a working solution to alleviate supply chain bottlenecks that the economy suffered throughout the global pandemic.

The Simplified Targeting and Enhanced Processing System (STEPS) Program was initiated by government to improve the import continuum through safer, faster and smarter biosecurity cargo clearance. STEPS is a key capability for the Simplified Trading System (STS), Digital Economy strategy and the Deregulation agenda.

We used a proof-of-value to demonstrate solution definition, cost certainty, and feasibility of new and enhanced system capabilities to deliver business value, improve staff and client experience and remove business pain points in the ecosystem through:

- ❖ Continuous Biosecurity Risk Assessment to test the feasibility of integrating trade and biosecurity data continually as goods move through the system, moving to a model where we assess the risk at multiple points along the import supply chain.
- ❖ Supply Chain Data Exchange to develop a data exchange capability to provide a secure platform to integrate with external data providers across the supply chain continuum.
- ❖ Enhanced Business Partnerships that explored the business model drivers that enabled effective ecosystem integration and collaboration.



### The building blocks of an APS-Lab

Both federal and state governments are encouraging more use of proof-of-concepts in the procurement of ICT capability and solution innovation. We also believe this is the smart way to uplift APS capability.

The elements of the approach, the patterns and proof-of-concept framework we used in STEPS can be applied broadly across government to building our APS data and digital foundations, as follows:

- ❖ **Technical sandpit** - a pre-configured turn-key Microsoft Azure as-a-Service virtual environment that emulates operating environments that allow the agencies to work effectively with industry partners. The technical components include government foundation technology that reflect the Australian Whole-of-Government Architecture and capability model that includes emerging technology and AI-enabled tools. The sandpit is a safe sovereign environment that is PSPF and ISM compliant. This capability can be provided

as a standard managed service offering that eliminates the time and hassle of agencies trying to stand-up and manage temporary facilities, multi-vendors and licences.

- ❖ **Hyper agile development programs and methodology** and a cadre of people into small, medium, or large multi-disciplinary team configurations, working to a cadence to iterate working software and data software over 13 weeks – not months. The 13-week program orchestrates co-development cycles, ingests data mirrored from production systems that can be shared in a safe environment, real-time data visualisation of policy, rules, loads, and risks from use cases. The process compacts discovery and designs which speeds insights and proves feasibility within the fixed time and cost that would otherwise produce simplistic outputs from post-it note sessions.
- ❖ **Right people** from the ecosystem are essential to the MDTs. Participants from government included SMEs from the Department of Agriculture and Home Affairs, and over 20 industry participants including major retailers, logistics, and industry groups. The team must reflect a microcosm of the diversity of actors working with experts in policy, architecture, data science, solution design, platforms and complex integrations. Rapid expert feedback loops to sustain high-value iterative development.

### Broad applications and benefits

The APS-Labs approach is a viable turn-key approach for cross-agency, cross-jurisdiction and ecosystem co-development that can be easily replicated and beneficial at any stage of a data and digital initiative to help de-risk the implications of major commitment decisions. They are safe houses to incubate ideas in simulated environments, that can then be transferred in-house, and then used to substantiate potential for reuse.

Government ICT strategies and digital initiative roadmaps are looking into the future but are often unaware of what each other is doing or planning. APS-Labs are places to ideate government architecture of the future, and make the longer-term architectures visible as landing zones that government CIOs, CDOs, CISOs can inject into their data and digital plans. And in so doing improve the collective quality of our 10-year planning horizon.

Another valuable application is to assure delivery in business cases for large and complex ICT by testing the options and design approaches, costing models, extracting real risks and issues, and prioritising high-value business requirements. The APS-Labs approach is a vehicle for targeted knowledge transfer and rapid minimal viable understanding. An example is that general and Generative AI capability unfolds the APS-Labs are needed as safe places to test use cases with broad involvement and promulgate Responsible AI practice.

We see several scenarios for the APS-Labs approach using testbeds and sandbox environments:

- Green-fields – as a testing ground for proofs-of-concept for new models in an unintegrated mode (similar to the approach used by STEPS above)
- Blue-fields – hybrid testing of existing tech with new tech, testing solution viability to progress into business cases and full integration
- Brown-fields – replicating the whole of government architecture for proving reuse and integration of new solutions/products to show a "path to production" (particularly for legacy modernisation)
- Sandboxes – testing of live alpha/beta products and services (similar to the sandbox approach used by ASIC for fintech and regtech).

## About Reason Group

Reason Group is a homegrown Australian business and technology solutions firm that specialises in digital government.

Our purpose is to make government easier for those that deliver it and the people it serves. We partner with you to unlock opportunities within the unique complexity of our Australian government landscape.

Our team brings both hearts and smarts to the table. We are diverse and deeply experienced and to put it plainly, we care. We don't play around the edges; we get to the heart of the problem to ensure we're in it for the right reasons. We want to know what makes you tick and how we can make an impact.

Our approach is personal. We tailor our methodology to every client's individual needs, rather than fitting your needs to our approach. We embed ourselves seamlessly in your space, to see projects how you see them. Success is achieved through empathy, collaboration, and a commitment to delivering no matter what.

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