Australian Government

Department of the Prime Minister and Cabinet

Australian Data Strategy

Discussion Paper

The Australian Data Strategy

The Australian Government has committed to deliver Australia's first Data Strategy, setting out the Government's vision for enhancing effective, safe and secure data use by all Australians over the period to 2025.

The Strategy, announced as part of the Digital Economy Strategy, will be one of several Government's plans impacting the data and digital landscape going forward, including the Artificial Intelligence (AI) Action Plan, the National Data Security Action Plan, the Consumer Data Right expansion and the *Privacy Act 1988* review (Appendix 1). We will ensure these speak the same language and present a consistent message on how these government initiatives work together to provide transparency, improve security and service delivery, and help Australians make more evidence-based decisions to improve their lives..

The signing of the Intergovernmental Agreement on data sharing between the Commonwealth, state and territory governments on 9 July 2021 also offers good momentum in the data sharing space that the Data Strategy will continue.

What is the data opportunity?

Data is an important national asset, and its value increases over time and as it is used for different purposes. Data will be a key driver of the future economy, with proven value in solving human and industry problems. The expanding opportunity in data is likely to be more important than any other single commodity in history.

In recent decades there has been a step-change in the economic relevance of data. Digital technologies have significantly reduced the costs of data collection and storage, and supported advances in analytics that increase its value.

The effective use of data is already helping businesses as they streamline processes and optimise value chains. Access to high quality, real-time data, as we have in Australia, has become critical to making good, fast decisions and delivering services quickly in both the public and private sectors.

Data availability and use is also helping everyday Australians do more of their daily activities online: shopping, banking, staying in touch with loved ones and the community and now, through the COVID-19 pandemic, working and staying healthy.

COVID-19 accelerated many of the trends that were already underway in the global economy, particularly the shift to the digital economy. Over the past year, Australian businesses have accelerated their adoption of technology and transformation at a rate of ten times what they would have done pre-pandemic.

At the same time, the Australian Government's own response during the crisis was heavily reliant on data sharing within and between governments, establishing pathways for sharing critical data to support COVID-19 response and recovery, including navigating stringent legislative and privacy requirements.

This exercise supported the Australian Government and state and territory governments to respond to health emergencies, design and deliver services for vulnerable cohorts, and target advice for Australians and businesses impacted by the virus and policy responses.

Good use of data has already helped us in our efforts to suppress the virus. By treating data as a public good for the benefit of all Australians, we can cement our economic recovery to create jobs, and care for our country by providing better and more targeted services that will benefit every Australian.

Aside from our efforts to combat the pandemic, there are many examples of Australian Government initiatives that are leveraging data to benefit the public (see Appendix 1). The Data Strategy and these initiatives build on the Government's work in this space to date, including the 2015 Public Data Policy Statement, the whole-of-government Hosting Strategy and the Consumer Data Right.

What are some of the potential benefits of an Australian Data Strategy?

Many Australian firms, and state and territory governments have plans to improve their data management and analytics. An Australian Data Strategy will enable government and non-government sectors to advance together to harness the potential of a data-driven economy. A data-driven digital economy will help to drive growth and boost the prosperity of all Australians.

- It will drive jobs and wage growth, providing skills, capabilities and resources for our 21st century workers - complementing our increasingly skilled workforce.

- It will speed up and spread the transfer of innovation, allowing the Government and non-government sectors to more easily remain at the data and technology frontier, and ensure Australians can access important information and technologies at low cost.

- It will lower transportation and communication costs by providing insights with accurate, real-time shared data, reducing the "cost" of our geography, and open our economy to new markets.

- It will drive competition – providing consumers with more choice, support business innovation and stimulating productivity growth.

- Lastly, it will allow us to better tailor, target and deliver government services by streamlining interactions and harnessing new information that will provide insights to policy challenges and drive improved outcomes for all Australians.

Australia must build on its baseline data policies and settings to further grow the economy, deliver better services, programs and outcomes for Australians, conduct quality research and ensure data is used in Australia and overseas securely and safely. An Australian Data Strategy will set the conditions to provide the raw input required to power the digital economy, empower consumers and business, and position Australia as a leading digital economy and society by 2030. It will also provide distinct benefits for the public and non-government sectors.

Improving Government leadership and partnering with industry and non-government sectors will enable greater participation to use data at scale across organisations and sectors and achieve government policy objectives. The success of future initiatives is reliant on the Government putting its data to work for citizens and for communities, and working with the private sector and other non-government entities to drive better policies and outcomes for Australians.

Using data effectively within the public sector will enable the Government to provide faster, more secure and more convenient policies and services that better target Australian citizens. Delivery of an Australian Data Strategy will improve the way the Australian Public Service (APS) treats data as an asset;

improve data skills and capabilities for the Australian workforce; and improve the safeguards of public data (for example, legislative, ethical privacy and cyber). This is particularly important given the expected growth of the artificial intelligence and machine learning technologies both within and outside the public sector.

Private Sector

The private sector is already leveraging the value of data and analytics to drive operations. Much of the work we will be seeking to do within government is to align deliverables, and meet the expectations of Australians so that the Government can deliver services in as convenient and nimble manner as the market.

The Government will seek to support the private sector's efforts. As more non-sensitive government data is shared or released as open data, the private sector can reap the benefits of additional information to create new, data driven businesses.

How businesses and consumers share data among themselves is also important. Initiatives like the CDR are making it easier for consumers to control where their data goes, and simplifies their interactions with business. Similarly, it is important for businesses to be able to safely and securely access data held by other organisations. Our focus on policies that encourage enhanced data sharing and use could also help companies to share data with each other for the benefit of their clients.

Through the outcomes of an effective Australian Data Strategy, businesses will have additional opportunities to harness the value of data. They will also help build more effective data use in the private sector to help drive economic growth through increased productivity and innovation. Effective data use will make doing business easier, improve service delivery, identify new insights and develop innovative solutions to societal, economic and environmental challenges.

NGOs/Research

NGOs and the research sector will be better supported by a data strategy that ensures public sector data on areas of need is made available to organisations either as open data where it is non-sensitive, or through data sharing agreements. The not for profit sector delivers billions of dollars of key services every year for governments at all levels in Australia and will be able to conduct this work in a more targeted way through better access to data.

How will the Australian Data Strategy be framed?

The Australian Data Strategy is anticipated to address three broad themes, reflecting:

- The opportunity in data, and the Government's vision to 2025

- A description of the current whole-of-economy data landscape

- Creating value for the future

By examining the *opportunity in data* we anticipate the Strategy will describe the importance of both government and private data as a national asset to non-technical readers, and how it could be used to grow the economy and deliver outcomes for all Australians. The Strategy will also outline actions to build and maintain public trust in data activities in Australia.

It will also explain the economic value of data, especially government data, and reconfirm the Government's commitment to make non-sensitive government data available by default to contribute to both economic and social outcomes for Australians, and describe potential future data uses, including with tools like artificial intelligence and machine learning, using data to respond to priority issues, and key measures that will help governments, businesses and consumers unlock the value of their data in the years to 2025.

A *description of the data landscape* will explain how the Government thinks about data today, beginning with the Government's 2015 public data policy and the 2017 Productivity Commission Inquiry into data availability and use and moving through to the improvements the Government has made since then and the landscape in data today.

It will describe data use within the public sector. It will build an understanding of how data is managed within agencies, and the physical (for example, web domains) and non-physical (for example, collaboration) infrastructure used to support this work.

It will also describe how the Government will work to set the right conditions to create additional value to the economy through data.

In considering how to *create value for the future* we expect to explain ways the government plans to manage and use data to add value, including by responding to priority issues, creating jobs, improving service delivery, responding to crises and keeping Australians secure. It will also describe how the Government intends to share and integrate data, and what the opportunity is for increased and consistent international engagements on data through multilateral forums like the Organisation for Economic Co-operation and Development (OECD) and bilateral opportunities with other nations.

Finally, the Australian Data Strategy will present an action plan with actions looking forward to 2025, commit to further consultation and outline the measurements against which the achievements of the Australian Data Strategy can be measured.

What are the challenges?

Australians must feel comfortable their Government respects and secures their data appropriately. The Strategy will address those areas where government has not met the expectations of the public. Instances of data and privacy breaches are particularly damaging to the public's faith that their data is safe and used appropriately. This highlights the need to strike an appropriate balance between broad based sharing and access to maximise the social and economic benefits, with the need to maintain proper safeguards and security protections.

The Strategy will identify ways to improve the robustness of the Government's data handling to model best practice data privacy and security processes.

What are we asking?

We request that you read the proposed principles and Strategy shell in Appendix 2 and respond to the questions in Appendix 3. This will help us to ensure that the Government is taking your views into consideration through the initial drafting period. There may be areas for further targeted consultation throughout drafting or through an open consultation period after the initial Strategy has been published.

Appendix 1

Sample Australian Government Data Initiatives

Data governance

Data Availability and Transparency Bill, Office of the National Data Commissioner

Provide ongoing funding for the Office of the National Data Commissioner to enable the National Data Commissioner to perform their statutory regulatory and education functions. This is an ongoing measure which will commence subject to the Parliament passing the Data Availability and Transparency Bill.

Consumer Data Right, Department of the Treasury

The right for consumers to share their data between providers. Currently available in the banking sector, followed by energy then telecommunications.

Making data discoverable

Digital Atlas for Australia, Geoscience Australia

Develop dynamic displays of data on an interactive map of Australia. Will be available and accessible to businesses, citizens and governments from end of 2022.

Exploring for the Future 2, Geosciences Australia

Expand *Exploring for the Future Program* in 2020-21 Budget. The program uses cutting-edge techniques to collect new scientific data and information about prospective mineral, energy and groundwater systems. Data will be available for public use to ensure development of Australia's resources sector by June 2024 and will likely be compatible with the Digital Atlas.

Making Government Assets Discoverable to Support More Data Use, Office of the National Data Commissioner

Improve the discoverability of public sector data through a pilot project to develop data inventories for Australian government agencies, and a government-wide catalogue. Development of data inventories is currently planned from 2022.

Australian Climate Service, Bureau of Meteorology, Geoscience Australia, CSIRO, Australian Bureau of Statistics

Bring together BOM, CSIRO, GA and the ABS to provide authoritative data, information and knowledge services to support the National Resilience and Recovery Agency, and Emergency Management Australia. To be established July 2021

Future planning

National Freight Data Hub, Department of Infrastructure, Transport, Regional Development and Communications

A federated data sharing network for freight data to improve infrastructure planning and transport network investment. The hub is likely to be compatible with the Digital Atlas. Starting in 2021-22 and delivered by 2024-25.

Regional Data Hub, Department of Infrastructure, Transport, Regional Development and Communications

Improve the coordination, collection and tracking of regional economic, social and demographic data and develop a data asset bringing together data on regions.

AI Action Plan, Department of Industry, Science, Energy and Resources

A range of AI focused measures to position Australia as a global leader in developing and adopting trusted, secure and responsible AI. To be delivered June 2021.

Security

National Data Security Action Plan, Department of Home Affairs

Principles to uplift the Government's data security settings, provide a holistic view of data security arrangements and introduce a narrative on data security across the economy.

Cyber Security National Workforce Growth Program, Department of Industry, Science, Energy and Resources

Enhance data collection on cyber security skill demand in Australia to more effectively target initiatives that address skills shortages. Ongoing work concluding June 2024.

Education

Vocational Education and Training National Data Asset, Department of Education, Skills and Employment

Enhancing the understanding of employment and social outcomes of Vocational Education and Training (VET) students in Australia to support the National Skills Commissioner inform policy for more targeted, outcomes-based investment in the VET system.

Health

Mental Health and Suicide Prevention Package, Department of Health

Establish a comprehensive evidence base to support real time monitoring and data for the Australian mental health and suicide prevention systems.

Empowering consumers of aged care with information to exercise choice, Department of Health

Improve and better use aged care data to inform current and future service demand, workforce, health interface interaction, quality and safety and outcomes of care. A component will include developing a National Aged Care Data Strategy and a Minimum Data Set by 2024.

Improving Access to Primary Care and Other Health Services, Department of Health

Building a better data base to improve outcomes and transitions between health and aged care settings, including building data analytics infrastructure and enhanced data linkages between health and aged care systems.

More equitable access to aged care for First Nations people and special needs groups, Department of Health

Gathering market intelligence and data to address service gaps in regional, rural and remote Australia, focusing on Indigenous people and consumers with special needs.

Agriculture

Biosecurity measures, Department of Agriculture, Water and the Environment

Biosecurity funding to build a modern, effective biosecurity system underpinned by the improved technology, information systems and analytical capabilities.

Agriculture biodiversity stewardship pilot, Soils package, Department of Agriculture, Water and the Environment

Improve biodiversity measurement and improve the management of soils through improved soil monitoring.

Appendix 2

Principles and Shell

Principles

1. The Strategy will clearly articulate a national vision and identify the Government's priorities over the period from publication to 2025.

2. The Strategy will identify the value of public and private data, and settings to build this value with appropriate safeguards.

3. Actions in the Strategy will have a demonstrated benefit to Australians.

4. Chapters will make clear commitments from Government.

5. Chapters will contain measurements against which achievements can be determined.

6. Chapters will commit APS agencies to actions.

Strategy shell

Minister's foreword

Executive summary

- Will set the ambition to 2025

Opportunity and Vision

- Why data is important
- Public trust
- Data has enormous economic and public value

Data now

- How data is managed
- Keeping data safe and secure
- Data is used to respond to priority issues
- Data infrastructure
- How government data is shared
- Australia's data capabilities
- International trends and opportunities

Creating value for the future

- Public trust
- Security
- Managing data assets
- National data system
- Workforce capability
- International engagement

Current data initiatives

State and Territory data strategies

Action plan

Communication plan

Appendix 3

Initial Consultation questions

Name*	Email address*	Contact number

1. To what extent do you agree that the outline of the Australian Data Strategy covers the right issues?

2. What key areas or issues are missing? Why are they key issues?

3. Are the issues below considered important to your organisation; and if so why?

   a. Ethical and transparent use of data
   b. Data security
   c. Data privacy
   d. Data innovation
   e. Accessible data/open data
   f. Data sharing for improved services

4. What are the top three outcomes from the Australian Data Strategy you would like to see by 2025?

5. Do you have any other comments on the Australian Data Strategy?

6. How should the Government keep talking about data issues?

7. How do you see your organisation interacting with the Australian Data Strategy? What guidance is important to you to help you achieve the actions set out in the Strategy?