



Australian Government



Innovation and
Science Australia

Chair

Dr David Gruen
Deputy Secretary (Economic)
Department of the Prime Minister and Cabinet
PO Box 6500
Canberra ACT 2600

Re: New Australian Government Data Sharing and Release Legislation

Dear Dr Gruen

I am providing this submission on behalf of Innovation and Science Australia (ISA). ISA was established by the Australian Government as an independent statutory board with responsibility for providing strategic whole-of-government advice on all science, research and innovation matters. This advice included development of a strategic plan for the Australian innovation, science and research system to 2030 - *Australia 2030: prosperity through innovation*¹ [the 2030 Plan] which was publicly released on 30 January 2018 and responded to by the Australian Government on 22 May 2018².

ISA's 2030 Plan welcomed the Productivity Commission's recommendation for comprehensive reform of Australia's data sharing and release arrangements. ISA is pleased to respond to your Department's issues paper and supports the development of a data sharing and release framework that seeks to shift the paradigm from one which restricts data use to one which authorises sharing and release under appropriate controls.

Increasing Australia's ability to seize innovation opportunities requires us to build on our strengths, including our valuable government data assets. Historically, Australia has underutilised data collected by government agencies and missed out on potentially innovative outcomes. As the Hon Michael Keenan MP, stated in his announcement of the reforms, "data is the fuel that is powering our new digital economy...it is the new oil".³

Purpose test for data sharing and release

It is currently unclear from the issues paper if public good Research and Development (R&D) conducted by industry would fall within the scope of the purpose test for data sharing and release. ISA seeks a data sharing and release framework that accommodates the use of Government data for all R&D purposes, including where commercial and public interest uses overlap. This might include R&D conducted in either the public or private sectors, or both, which are designed to provide both public and commercial benefits.

¹ Innovation and Science Australia (2018) *Australia 2030: prosperity through innovation*, www.industry.gov.au/isa

² <https://industry.gov.au/innovation/InnovationPolicy/Pages/Government-Response-to-2030.aspx>

³ <https://ministers.pmc.gov.au/keenan/2018/committee-economic-development-australia-speech>

Examples of this in practice may include pharmaceutical companies leveraging public datasets to support the development of treatments for chronic diseases, or healthcare providers collaborating with entrepreneurs to create new clinical management systems that can improve efficiencies in the public health system. Jurisdictions such as the USA have long recognised the value of government data and its ability to power software applications that help people to make informed decisions. Examples vary from efforts to benchmark the energy efficiency of the country's buildings through to smartphone applications to help citizens explore salary and job statistics within a region. We note that the Australian Government, in its *Framework to guide the secondary use of My Health Record system data*, has made it possible for Australians' health record data to be made accessible by industry provided the purpose of use is not purely commercial.

ISA believes that a broader scope accommodating both public and industry-driven R&D would unlock the potential of data linkage, which can support the global competitiveness of innovative Australian industries. Industry routinely collects large amounts of 'ambient' data through real-time sensors in order to improve services and products – for example in aircraft engines to identify malfunctions and optimise performance, or in next-generation cars to develop self-driving capabilities. Continuous data collection will only continue to grow and become more important; in the health technologies space, for example, it is expected that most Australians will have some sort of sensor on or inside their bodies by 2030 to monitor disease and identify warning signs. Limiting data sharing to public R&D risks restricting Australian industries' capacity to innovate in the long-term.

ISA strongly supports the purpose test for data sharing and release "to inform government policy making, which could include understanding cross-portfolio impacts, trends, modelling policy interventions, assessing broader system trends and evaluation to inform future policy." The Chair and the Deputy Chair of ISA were both engaged in the Review of the R&D Tax Incentive – the Government's largest innovation support program. During the Review, we became aware of legislative restrictions that limited APS officers' ability to share data between the agencies involved in the program's development. Specifically, the Review concluded that:

"In the history of R&D tax measures, the lack of transparency on the tax data has impeded policy evaluation and public scrutiny. Other countries have better access to the R&D tax data from their programmes and as a consequence have better internal and external contestability of policy reform. The panel assesses that improved access to data by policymakers and the public would facilitate programme evaluation and expose recipients to appropriate public scrutiny around their receipt of public funds. Options should be examined to rectify this situation."

Data sharing controls

ISA supports the proposed controls on the release of data outlined in the issues paper, including the 'Five Safes Framework', the accreditation regime for data users, and the establishment of the National Data Commissioner (NDC).

It should be emphasised, however, that the success of any data sharing framework will be dependent on the Government being able to secure and maintain social license. We suggest the Government explore public engagement efforts that have been carried out abroad to

understand people's expectations for the sharing of Government data. The New Zealand government, for example, has commissioned a Data Futures Partnership which is conversing with New Zealanders from all walks of life to understand how – and under what conditions – social license for the sharing of publicly-held data can be obtained. The conversations have resulted in new guidelines for data sharing rooted in New Zealanders' attitudes, values, and expectations. We anticipate that similar engagement exercises in Australia will yield valuable insights that can inform the work of the National Data Commissioner and the requirements for the Government to work closely with the ICT community to ensure the privacy and security of the data following release.

Australia's data reforms will need to outline clearly what the acceptable parameters for the use of public data may be, and we expect the process of obtaining social license from the Australian public will also establish what data use scenarios are considered unacceptable by Australian communities. ISA strongly supports the proposal that the NDC will have the powers to audit users of public data to ensure compliance with legislation.

It is unclear from the issues paper whether there will be any implications for data sharing internationally under the new framework. Greater clarity will be required on this issue, particularly for the globally engaged Australian science and research community.

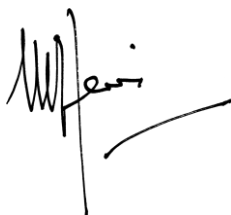
Artificial intelligence and machine learning

Government data sharing arrangements must consider implications for the revolutionary wave of artificial intelligence and machine learning. To support the development of home-grown algorithms, we need to have high-quality datasets free of biases and prejudices. Currently, some departments in the Australian Public Service have developed data quality standards, but not all. The Government also needs to make appropriate investments to ensure that high-quality datasets are continually maintained and updated. This will be particularly important to support areas such as public health research, where circumstances will evolve over time and require continuous snapshots of the population.

Australia's data reform process, and the national conversation it has sparked, provides an opportunity to strike a balance between privacy and security and increasing opportunities to tap in to this vast resource to drive enormous economic and social benefits for all Australians.

Thank you for the opportunity for the ISA Board to provide input into this consultation. ISA looks forward to the further development of the legislative framework.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Bill Ferris', with a long horizontal stroke extending to the right.

Bill Ferris AC

27 July 2018