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The Manager
Data Availability & Use
Productivity Commission
GPO Box 1428
Canberra ACT 2601

ACS Submission to Productivity Commission Draft Report: *Data Availability & Use*

Dear Sir/Madam,

Please find attached the ACS submission in response to the Productivity Commission's *Draft Report on Data Availability & Use*.

We welcome the opportunity to respond to the Commission on this important issue.

If you require any further information regarding this submission, please contact Alexis Roitman, ACS Director, Corporate Affairs & Public Policy

Yours sincerely,

Andrew Johnson
Chief Executive Officer



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The Australian Computer Society is the professional association for Australia's Information and Communication Technology (ICT) sector. The ACS has over 22,000 members and a presence in every state and territory of Australia. In 2016, the ACS celebrated its 50th anniversary.

As the ICT professional body, the ACS:

- assesses and accredits its members as Certified Technologists or Certified Professionals against an internationally accepted framework called *Skills for the Information Age* (SFIA);
- works with public and private workplaces across Australia on ICT workforce planning and training programs; and
- conducts professional accreditation of ICT degrees in Australia.

These activities, along with member consultation, research on behalf of members on ICT and skills related issues and international liaison with counterparts and global ICT bodies, provide the ACS with an in depth perspective on ICT issues impacting Australia.

Introductory Comments

The ACS agrees with the Commission that reforms to data availability and use must move from a system based on risk aversion and avoidance to one based on transparency and confidence in data processes.

We are pleased to note that many of the concerns and recommendations we put forward in our response to the Commission's *Issues Paper* have been addressed in the *Draft Report*, through the introduction of a *Data Sharing & Release Act*, the newly established Office of the National Data Custodian and the development of a framework to support the anonymisation of datasets.

These important reforms will necessitate cultural change across the public and private sectors and among Australians more widely, which is why the ACS proposed a national education and awareness raising campaign about the benefits and implications of open data. As the rights and responsibilities surrounding the management of personal data develop, concomitant profile raising and training in these areas must also develop as a core component of the digital literacy of all Australians.

Equally, significant numbers of skilled data analysts and managers will be required in the near future to bring these reforms into effect. We reiterate that greater collaboration with the tertiary education sector to increase the pool of skilled data analysts is a natural implication of the reforms proposed.

Finally, raising awareness and capability in the area of cybersecurity in both the public and private sectors will be an important consideration in the implementation of these reforms.

While we note that the Commission has not included these issues in the *Draft Report*, the ACS stands ready to work with government to assist and advise in all of these areas in due course.

An Accounting Standard for Data

The ACS reiterates its recommendation that an Accounting Standard be developed for data.

Accounting standards make financial statements meaningful across a wide variety of businesses and industries. They specify when and how economic events are to be recognised, measured and displayed.

External entities such as banks, investors and regulatory agencies rely on accounting standards to ensure relevant and accurate information is provided about an entity.

In an historical analogy to the Commission's proposed Data Availability & Use reforms, the first accounting standards were developed in the 1930s to ensure transparency in reporting and set the boundaries for financial reporting measures.

Without accounting standards, there is little consistency as to the reporting of financial information. They ensure that financial statements from organisations are comparable, credible and allow for more economic decisions based on accurate and concise information.

In the current accounting standards environment, datasets are intangible assets; an identifiable non-monetary asset without physical substance. Realistically, only at the time of considering a business sale, when determining market value, are datasets broader than the customer database considered by potential purchasers.

In the Digital Economy, data is a primary factor of production. The term 'data capital' fulfils the literal definition of economic capital: a necessary input for producing goods and services. Government and businesses alike realise that data in the Digital Economy will generate probable future economic benefits.

In some cases, data capital substitutes for traditional capital. Companies like Facebook owe their stock valuation premium to their robust data capital. It is estimated that 84 per cent of the market value of S&P500 companies comes from intangible assets, including patents, software and data. While data shares characteristics with other kinds of intangible capital, it is unique. (Source: Paul Sonderegger: The Rise of Data Capital www.oracle.com)

Technology firms are beginning to include data capital numbers in their quarterly meetings with analysts. However, perceptions of the value of data vary widely across sectors and industries. Unless the value of data can be made visible, tracked and systematised, it will be undervalued as a factor of production in the Digital Economy. Open data is nothing less than a fundamental building block of competitive advantage, a form of capital on par with financial and human capital.

Given the ground breaking reforms proposed by the Commission's *Draft Report*, the ACS believes that Australia should also be at the forefront of systematising accounting frameworks for data through the creation of an Accounting Standard for Data.

Information Request: National Interest Datasets

The Commission requested further views on datasets of national interest which could feasibly be designated as such in the reform process.

In our earlier submission, the ACS referred to the importance of spatial datasets as having some of the greatest potential for economic impact. Most commentary on data availability and use focuses on efficiencies that may be realised in the delivery of public sector services and ensuring competitive advantage is not eroded when making available private sector datasets.

In this submission we propose that there is a dataset that should be initially prioritised for classification as a National Interest Dataset; aggregate mobile telephone location data. This dataset from telecommunications providers would provide a snapshot of the population in a given area each day. It would be useful for service provision, infrastructure planning, traffic management and would support



smart service design. The finer the granularity (e.g. SA2, SA1, meshblock) and the more frequently this information is provided (i.e. number of times per day), the more use cases are enabled.

Smartphones are carried by 12.5 million Australian adults (Source: [IAB Mobile Ratings Report 2015](#)). The ACS believes that smartphone data, properly managed to protect privacy and other rights, offers such substantial insights and benefits to both public and private sectors that it should properly be classified as a National Interest Dataset.

Regarding the management of National Interest Datasets across different time periods, we submit that the proposed reforms should clarify the relationship between the new legislation and existing privacy, FOI, archives and public records legislation.

ACS Data Taskforce

Recognising the transformative capability of a data-driven future, ACS has been working with its own taskforce of subject matter experts to consider:

- the measure of anonymity for Personally Identifiable Data (PID)
- whether standard tests for the presence of PID may be established
- how to determine the value of PID in a dataset
- whether there is an acceptable scaling of risk for some PID, and
- whether there are techniques that should be recommended to allow for the manipulation of PID while maintaining privacy.

Through the work of this taskforce, ACS would be pleased to provide advice on facilitating the important reforms contained in the Commission's *Draft Report* on Data Availability & Use.
