

Australian Bureau of Statistics (ABS) Submission to the Independent Review of the Australian Public Service

Key Conclusions

-)] The information resources of the ABS, complemented by data from public sector agencies and other sources, should be viewed as part of Australia's essential national infrastructure.
-)] Data is a major public resource that should be used to inform important decisions, including by the APS and governments in the design and delivery of a range of services, payments and infrastructure. There are many opportunities to improve our data resources and their use, both now and into the future.
-)] New data opportunities and improved ways of using data are expected to continue emerging over coming years, and the APS should be ready to capitalise on this development. This will require prioritisation of data activity, sufficient resourcing and effective collaboration.
-)] To maximise the public value of the APS data asset, the APS will need to effectively curate its administrative data and share information consistent with legislative, including privacy, provisions and community support for data use practices.
-)] The APS will need to continue building its capability to effectively use and safely release data and the capability to effectively analyse and communicate information based on its data assets. The APS will need to consider innovative communications approaches to have its voice heard.
-)] In the face of likely proliferation of new data options and increasingly sophisticated ways of using data, there also needs to be commensurate improvement in engagement with the community about how their data is being used and protections that underpin its safe use.
-)] The ABS and other data providers should be expected to provide more value added comprehensive analysis, providing data-related services that assist time-poor users of data. Tightly focussed agencies may have less ability to draw out some of the more complex interactions across our economy, population, society and environment.
-)] Statutory agencies within the APS can have greater opportunity to be innovative, and provide a test bed for public sector innovation, but actions to balance innovation and risk will need to become more sophisticated.

The Australian Public Service (APS) delivers policies, financial transfers, a range of services, infrastructure and regulation that contribute to an advanced and prosperous democracy. The Review of the APS will be more comprehensive if it effectively taps into this breadth of activity and the insights that come from the broad range of APS activities.

The APS does not operate in a vacuum. It operates within the context of our society, economy and environment, and the range of domestic and international developments that should cause the APS to regularly review prevailing arrangements. Information will be key to the APS better understanding and responding to the challenges being confronted by the community as well as measuring the outcomes from government interventions.

Many of the pertinent challenges facing our community – such as health, education, infrastructure, living standards, social services - are not just in the sole domain of the national Government. Information across levels of government and with the non-government sector are an important part of the Australian data landscape. Our Federation provides the opportunity to test, evaluate and learn from alternative approaches.

Australians' trust in key institutions such as government, the media, business and NGOs has been in decline (Edelman Trust Barometer). This trend of declining trust has also been seen across many advanced economies.

By contrast, community trust in the ABS has generally remained high with around 80-90% of the community trusting the ABS, (ABS 2015), higher than what is generally observed for statistical offices in developed countries. Expert data users have even higher trust in the ABS of around 99%. With the recent Census experience, there was a temporary impact on community trust in the ABS. Recent public sentiment testing in December 2017 found that community trust had been restored as 88% trust ABS to deliver high quality statistics and 84% were confident the ABS delivers quality Census data.

As the Review develops recommendations for the APS over coming decades it will be important to consider how potential future changes to technology, community expectations and the Government Budgetary environment are likely to interact to create new opportunities and challenges for the APS of the future.

The Role of the ABS

The purpose of the ABS is to inform Australia's important decisions by partnering and innovating to deliver relevant, trusted, objective data, statistics and insights (ABS 2017).

The ABS informs Australia's important decisions by all governments, by businesses, and by Australian citizens in their everyday lives. Statistical information produced by the ABS documents the complex and changing nature of life in Australia, covering our economy, population, society and environment.

ABS data are essential inputs to fiscal and monetary policy settings, social support programs and infrastructure spending. ABS data informs many pertinent public policy debates, such as employment and wage trends, housing affordability, income and wealth inequality, cost of living, energy prices, population, the quality of life in our cities and regions, education and health outcomes, needs-based school funding, outcomes for migrants, personal safety and so much more.

In addition, ABS data are key to effective functioning of our democracy, with population data helping establish fair electoral boundaries and our official statistics informing choices by voters and political aspirants.

The information resources of the ABS, complemented by data from public sector agencies and other sources, should be viewed as part of Australia's essential national infrastructure.

Opportunities and Challenges with the Information Age

New data sources are emerging, alongside recognition that the public sector can make better use of data to benefit the community.

The APS already uses some data to design policies and deliver improved services. However, there are many untapped opportunities to increase and improve use of public data for these purposes. This will require deliberate attention.

The public sector collects and produces a lot of data as part of its social welfare, tax, customs, immigration and many other functions. Administrative data is useful in the design policy and service delivery strategies, so the quality of this administrative data is important.

To produce many of our national statistics, the ABS has traditionally made extensive use of government administrative data, including customs data, immigration data, vitals information from the State Registrars of Births, Deaths and Marriages, government finance data, and increasingly building approval registrations. The ABS will assess other government data collections as potential substitutes for business and household survey data collections in order to improve quality and/or reduce respondent burden.

New data sources continue to emerge. For the ABS, supermarket scanner data and satellite imagery are contributing to national statistics. Scanner data has improved measurement of our CPI and ABS is working with Geoscience Australia to unlock the statistical potential from the Dynamic Land Cover Data. GPS technology and telecommunications data are two more areas where statistical opportunities are being explored without compromising the privacy of personal or business information.

Making effective use of new data sources for statistical purposes does take time, resources and effort, as key data users demand reliable statistics and consistent, unbroken statistical time series.

ABS is using machine learning to improve its statistical processes, and testing Application Programming Interfaces to enhance our dissemination of statistics to key users. More of our users are accessing ABS data from a range of mobile devices, and via social media.

Some information generated from the internet, or through other means, can provide accurate information. In other cases, big data will provide a misleading perspective as it is very biased. The APS will need to be a discerning consumer of information, assessing whether data quality is fit for purpose. The ABS currently makes these judgments for our statistical processes and is a major contributor to improving techniques around the use of big data across the international statistical community.

The APS will need to find more effective ways of engaging and supporting contemporary media operations and to the focus on more opinion and commentary, less capacity to carefully fact check and greater immediacy of reporting with the 24/7 news cycle. Social

media provides an opportunity for new voices, but with false perspectives also able to be easily spread.

Technological developments, especially greater access to more powerful and comparatively cheaper computing capability, are enabling more effective use of very large and linked data sets compared to what was feasible just a decade ago. New statistical developments have improved the quality of data linkage and introduced new confidentiality approaches to enable safe use of sensitive data without compromising the secrecy of sensitive personal and business information.

For the APS, new linked data resources (such as the Data Integration Partnership for Australia - DIPA) increase the opportunity to better design evidence-based policy and service strategies for the community. Examples of some of the insights already achieved from use of linked data include:

-) more accurate measures of Indigenous life expectancy;
-) understanding the importance of Small and Medium Enterprises to economic growth and job creation;
-) better measurement of productivity;
-) assessing participant outcomes from a range of education and industry assistance;
-) more reliable information available for needs-based school funding decisions.

The DIPA is already demonstrating its value at this initial stage, and this is expected to increase in coming years as the scope and use of DIPA is expanded. The ABS has the technical expertise to contribute to effective and safe use of data held by governments, such as the anticipated assistance to the future National Data Commissioner.

Privacy and social license to collect and use data will remain a challenging and important issue for the APS. Australians have a complex and diverse relationship with privacy of information, particularly compared to what occurs in many other developed countries. Australia is quite unusual in having regular debates over privacy with our Census collections since the 1970s, whereas other countries, including Canada, New Zealand, the Netherlands and Ireland all retain Census data indefinitely for regulated statistical purposes. Even with the latest 2016 Census privacy debate, public sentiment testing showed that the silent majority of the community remained resolute to provide full and accurate Census returns, while a small vocal group in the community were extremely concerned.

The recent Census experience also highlighted that the community has a strong interest in understanding how granular and integrated Census data is put to good use to benefit our society and economy. Those who undertake the analysis and research and those who receive the data insights – including agencies within the APS - need to more actively and publicly demonstrate these benefits from use of our national data resources. This is a not a conversation the ABS can or should carry alone.

Improved use of data will contribute to a more effective APS

More effective use of quality data has the potential to contribute to better decision-making and enhance Australia's growth potential, productivity, living standards and wellbeing.

It has been said that information is the new oil but, unlike oil, data is not an exhaustible resource. Good data is, and should be, used many times for many purposes. International

studies demonstrate very significant rates of return to the community from investment in quality data (for example, a 2014 assessment of the economic benefits from the NZ Census).

There are a number of good practices across the APS with the use of data, including:

-) The Department of Industry, Innovation and Science has been at the forefront of more effective use of data, including linked data, to support their policy and program activities.
-) The Department of Social Services (and its predecessor agencies) was instrumental in establishing major longitudinal studies – including the Household, Income and Labour Dynamics in Australia (HILDA) survey and the Longitudinal Study of Australian Children (Growing up in Australia) - that are now providing key insights for policy and research purposes.
-) The Productivity Commission remains an expert user of public data, and the ABS has had improved data access to support a range of their Inquiries and research activities.
-) The ABS has jointly undertaken, with relevant APS Agencies, strategic reviews into data for agriculture and communications respectively, which have each provided recommendations for improvement.

The APS would benefit from greater attention to anticipated medium-longer term data needs, as an adjunct to considering likely future policy and service delivery challenges.

The APS has recently focussed on improving use of public data (for example, 2017 Productivity Commission report on Data Availability and Use and the subsequent Government response being implemented).

For its part, the ABS has introduced a number of improvements, including adoption of the international Five Safes Framework enabling improved but still safe use of data. ABS has also implemented a Virtual DataLab improving access for expert users of microdata and drawn upon recent advice from the Australian Government Solicitor of the important legislative requirements around access and use of ABS data.

This is useful, but not sufficient. Other dimensions are also required for the APS to have an effective strategy to make best use of public data for the nation:

-) Ensuring the APS curates good quality, administrative data and produces the necessary quality and scope of statistical information. This is the necessary pre-requisite to obtaining maximum benefit from an open data policy – having quality data that can then be better used. Over the past decade, Budget constraints have led to reductions in the ABS statistical work program, while other agencies are facing challenges curating their administrative data resource to a suitable standard;
-) Ensuring the APS has the capability to effectively use and safely release data to its full potential. ABS is contributing to development of this capability across the APS, and there are other cross-APS initiatives. This does require further attention to build the data skills of APS staff working in policy and program roles to ensure they are able to analyse and interpret data and use it appropriately to inform advice, policies, programs and services. Some agencies are actively progressing partnerships with academic researchers to access and develop some technical skills that are in scarce supply. APS collaboration will be essential in order to effectively grow APS capability.

-) Ensuring the APS has the curiosity, foresight and creativity to ask the pertinent questions and to anticipate likely future policy and service delivery challenges. This might at times require courage for the APS and its senior leadership to develop more evidence around wicked problems, especially where the evidence generated could potentially challenge prevailing views.
-) Ensuring the APS maintains and further develops community trust around the use of data for public purposes. Data availability, analytical tools and statistical techniques have progressed over recent years, but sufficient attention also needs to be given to ensuring the community is aware and supportive of how information can be used for community benefit. There is more the APS should do on this front.

Transformation of the ABS

The ABS as an organisation has changed over its 110+ year history. Its scale and statistical program have evolved over time, alongside timely adoption of new technologies (such as computerisation) and developments in statistical practices.

Over the last three years, the ABS has been undertaking an extensive internal transformation program focussed on enhancing our understanding of our external environment, and improving our organisational effectiveness through our partnerships, strategy, governance, people, culture and infrastructure. The infrastructure element of the programme is introducing much overdue contemporary statistical systems over a five year period, drawing upon funding provided in the 2015 Budget and other ABS funding.

The ABS has six transformation goals. These transformation goals were set in our 2015 Corporate Plan, and have remained our constant focus since that time:

-) Environment – we collaborate with stakeholders to understand and better respond to the current and future external environment;
-) Strategy – our strategies enable rigorous statistics, strong partnerships and effective use of resources;
-) Governance – our governance supports responsive decision making, prioritisation and management of enterprise risk;
-) People – we have a diverse, expert, motivated and agile workforce;
-) Culture – we are high performing, aligned, engaged, innovative and accountable;
-) Infrastructure – our infrastructure is effective, efficient and adaptable.

Initiatives have been progressed in each of these transformation areas since this time. We report on progress to our staff each quarter (through a visual dashboard and staff presentations) and regularly highlight expected future transformation focus. We survey staff engagement with and views on our transformation on a regular basis. ABS transformation progress is also transparently reported to the public and the Parliament through the ABS Annual Report.

Transformation of the ABS is one of our three organisational priorities, alongside delivering official statistics and delivering new statistical solutions that maximise the value of public data. The ABS transformation is managed like a major business activity, given its significance to our current performance and future capability.

The ABS is now a more engaged organisation, more actively working with data users but inevitably prioritising its work program in response to resource reductions. ABS is

strengthening its governance with particular attention to risk management, continuing to have a professional workforce but now with a greater range of expertise and diversity, and pursuing increased collaboration and accountability through the organisation.

There is still more to do with the ABS transformation, and this should be an ongoing focus for the organisation as it continues to build capability and provide public value within a changing operating environment.

APS as a steward of taxpayer funds

Most of the APS, its services and operational costs, are largely funded from Consolidated Revenue, with some agencies also operating on a cost recovery or industry levy basis.

The APS should retain a strong understanding that funding of their operations comes predominantly from taxation sources, through the conduit of Government Budget decisions.

At the ABS, we seek to deliver as much public value as we can from the taxpayer funding we receive. We look at this carefully, and make choices across five main dimensions:

1. We produce our core statistics to necessary high standards. We are expected to deliver “perfect” statistics, first time, every time. The ABS delivers around 500 statistical series every year, and key data users point to a major problem with one statistical release on average every five years (representing 0.04% of statistical releases).
2. We also seek to ensure our work program is relevant, and evolves to meet emerging needs. Our economy, society and environment keep changing, so this is an ongoing challenge. ABS has recently enhanced its measurement of the CPI, labour market, productivity, and population estimates, while other lower priority statistical series have been moved to user funding, reduced or stopped in order for the ABS to operate within our reduced Appropriation.
3. We put effort into making our data available for important uses, while also making sure we do not compromise the secrecy of individual personal and business information provided to us on trust. In past years, the ABS had a default towards choices that did inevitably reduce the utility of ABS data to our nation and key decisions. Statistical techniques have since developed to enable a better balance between increased use and still safe use of sensitive data, alongside adoption of the international Five Safes framework.
4. We continuously seek to improve the efficiency of our operations, including data capture. We recognise the burden we place on households and businesses to respond to surveys and we look to capitalise as much as possible from existing data collections. As noted earlier, the ABS is looking to make better use of government administrative data, useful commercial data sources and data linkage to produce Australia’s essential national statistics. The ABS will continue to directly collect some information from households and businesses to deliver some statistics, and we are looking to make this as smooth as possible.
5. At the same time as we are delivering our current statistical program, we are also building the future capability of the organisation so the ABS is well placed to continue operating as an effective national statistical agency into the future.

The ABS has delivered more public value across all of these areas over recent years.

APS agencies are constantly juggling many opportunities and risks, with the intention to deliver best organisational outcomes from available resources. The ABS has found this focus on public value to be useful in shaping necessary prioritisation and resource decisions.

APS learning from past experiences

Innovation around what the APS does and how it operates is key to designing better policy, and delivering quality services and infrastructure that benefit the community.

Community expectations of government appear to be increasing, at the same time as there appears to be reduced tolerance for any error of judgment or delay in service provision.

Innovation does inevitably carry risk. The critical and transparent nature of what the APS does, and the speed of implementation often expected by Government, alongside resource constraints, does increase the likelihood that some implementation problems will emerge.

Recent ABS experiences with the 2016 Census and the recent Australian Marriage Law Postal Survey provide some useful case studies for the APS Review about organisational learning and its benefits.

Some aspects of the 2016 Census process were not undertaken to a high standard, and there were some ABS cultural dimensions that contributed to this outcome. Resource reductions to the 2016 Census program and some disruption to the Census process contributed to the risk profile. The Census on-line system provided under contract by IBM was not available for nearly two days within a Census collection period of around 8 weeks.

The ABS ensured everyone's 2016 Census data was secure. The ABS still delivered a Census in 2016 with the usual response rates and produced quality data that can be used with confidence (Census Independent Assurance Panel 2017). The 2016 Census did not fail and it was not the worst Census ever.

The ABS owned the 2016 Census process problems, has reflected upon the learnings from this experience and put in place revised operating arrangements across the ABS.

This has required courage and considerable transparency from the ABS. The Australian Statistician and other ABS Executives have spoken to many diverse audiences about the 2016 Census learnings, many of which have applicability beyond the ABS (for example, Kalisch 2016, 2017, 2018).

ABS expects that more organisations – public and private – now have greater understanding of the challenge of cyber security and the risks they may or may not be mitigating effectively. Broader dimensions from the 2016 Census process about community expectations, media and communications challenges, risk and issues management, and the importance of leadership and management have applicability to the broader APS, and the ABS has actively promulgated these insights across the APS and beyond.

The early implementation of these learnings in the ABS contributed to successful delivery of the Australian Marriage Law Postal Survey (AMLPS) just a year later. Our prevailing view is that the ABS would not have delivered such a seamless and successful AMLPS if it had not experienced and put in place improved strategies from the 2016 Census process.

The ABS has also documented the main features and learnings from the AMLPS, through an internal Conduct report and an external evaluation report. These are public documents, and

are available for the broader APS (or others) to use. ABS experience with the AMLPS will contribute to smoother implementation of the 2021 Census and other ABS activities.

ABS's ability to deliver accurate statistics also relies on a strong learning culture. ABS needs to be confident that its staff will readily identify and fix any problems with our statistical processes, given the many important ways in which our statistics are used. For the ABS, a blame culture would be more likely to discourage such reporting and resolution of any issues, potentially compromising our national statistics that inform key decisions.

The APS will be more successful in the future if there is greater adoption of a learning culture, and greater willingness to actively share key learnings from problems as well as successes.

Likely features when designing the APS of the future

While it is always somewhat fraught to predict the future, some key developments are pertinent for the APS in 2030 and beyond:

1. The community is likely to further increase their expectations and demands on what Government will deliver for them.
 -) There is an opportunity for Government and the Parliament to make much greater use of data and linked information to improve policy design and government service delivery, and robustly evaluate existing policies and services.
 -) The APS and all governments (Commonwealth and states) could initiate further dialogue with the Australian community about opportunities to use public data to improve the effectiveness and efficiency of public services to the community, building more community support for effective, safe use of public data.
2. With further proliferation of social media, and if public debates become more driven by ideology rather than an assessment of the facts, we are likely to see more unsubstantiated and emotional or fear-based claims asserted in public debates.
 -) Official statistics should become more valuable in this context as a source of truth, compared to assertions and 'fake news'. The role that the Australian Bureau of Statistics provides, delivering trusted data that informs key decisions by governments, Parliaments, business and the community, should be of greater public value in any more contested environment.
 -) The APS may also find it more difficult to have its perspectives reflected in the media and through other channels, and may need to consider innovative communications approaches to ensure its voice is heard in the community.
3. We should also expect that statistical and analytical techniques will further develop over coming years to draw more value from new and existing data sources.
 -) Government should be able to capitalise on new information sources and improved ways of using information. ABS will continue to engage with the domestic and international statistical community to improve statistical methods and techniques.
 -) ABS will continue to be a discerning user of new information, making judgments around what is fit for purpose.

4. Data skills are expected to be in greater demand across the economy, especially at the more sophisticated end of the data analysis spectrum, while more routine data analysis may be increasingly undertaken by available software packages.

-) ABS has developed, and can further develop, expertise that should be used more effectively across the APS.
-) Data expertise required and developed by the ABS will be more highly sought after by more organisations in Australia and overseas, introducing greater challenges for the APS and ABS to attract and retain staff with these high-end data skills as this skill premium is likely to be more expensive in the labour market.
-) The APS will need to pursue more comprehensive, cooperative and collaborative strategies to grow, share and retain necessary data and analytical expertise required to improve overall APS performance over coming years.

5. In the face of likely proliferation of new data options and increasingly sophisticated ways of using data, there also needs to be a commensurate improvement in engagement with the community about how their data is being used and protections that underpin its safe use.

-) The challenge for governments and other key users of data will be to better explain to the public how data can be used for community benefit, to be transparent about their data practices and continue upgrading privacy and security protections.
-) Poor data protections in some organisations alongside unsubstantiated claims and fear can limit effective use of data for public purposes.
-) More intensive engagement with the community about acceptable use of public and sensitive data will be key to improved future use of data for worthwhile public purposes.

6. If resource constraints on the APS continue, for example a further 20% cut in ABS funding over the next decade, there could be a serious mismatch between the data outputs from the ABS and the information insights required by government and the community.

-) Some of the core economic and population information currently available for governments, business and the community may no longer be able to be produced by the ABS, with potential opportunity costs for key decisions reliant on this information. Aspects of our labour force survey, some industry statistics and some population information would be at risk if this scenario plays out.
-) There are a number of areas where our national statistics should be improved, if resources were available. ABS has not undertaken a time use survey or a survey of mental health for over a decade. Our measurement of the service sector is still very modest, given its significance within the Australian economy. Globalisation and structural adjustment bring their own measurement challenges, but improved national statistics can contribute to a better informed community.
-) ABS would have less opportunity to capitalise on new information opportunities that will inevitably arise over coming years. Data innovations require effective resourcing to ensure reliable consistent statistics can be produced.
-) User funding, an alternative and increasing source of resourcing to the ABS over recent years, would also be expected to be more fraught in coming years if the main source of funds – other government agencies - are also subject to ongoing efficiency dividends.

7. Further consideration should be given to operating structures, scope and the scale of organisations in the APS over future years.

-) The ABS and other data providers should be expected to provide more value added comprehensive analysis, providing data-related services that assist time-poor users of data. Tightly focussed agencies may have less ability to draw out some of the more complex interactions across our economy, society and environment.
-) Statutory agencies within the APS can have greater opportunity to be innovative, and provide a test bed for public sector innovation.
-) Smaller niche organisations can have greater challenges attracting professional skills, and internal working arrangements may limit professional development and structured career opportunities.
-) Small-medium sized organisations in the APS are subject to the full range of PGPA Act and other government red tape requirements, and can face considerable scale challenges to be efficient.

Appendix

ABS legislative and operational features

The core roles and responsibilities of the ABS are defined in its legislation. The Australian Bureau of Statistics Act 1975 establishes the ABS as an independent statutory authority and defines its functions, including to:

-) constitute the central statistical authority for both the Australian Government and the state and territory governments;
-) ensure coordination of the operations of official bodies in the collection, compilation and dissemination of statistics and related information;
-) develop standards for statistics, ensure compliance and provide advice and assistance to official bodies in relation to statistics; and
-) provide liaison between Australia, other countries and international organisations on statistical issues.

The Australian Statistician is responsible for the operations of the ABS, consistent with the UN Fundamental Principles of Official Statistics and OECD legal requirements, to help deliver official statistics with integrity. ABS legislation requires that ABS not use contractors for statistical activities, to help protect the secrecy of sensitive personal and business information required by the ABS to produce essential national statistics.

ABS is a complex organisation with currently around 2500 staff largely working from nine locations (all capital cities and Geelong). In addition, a further 400 interviewers are distributed across the nation.

National statistical programs are delivered from across our nation, and teams are often located across multiple locations. ABS has more staff located outside of Canberra than in the nation's capital. This ensures strong relationships with state and territory governments and key data users, alongside essential Commonwealth Government relationships.

ABS economic and population statistics, alongside our core statistical infrastructure, are predominantly funded by our annual Commonwealth Budget Appropriation. Many social statistics and an increasing number of lower priority statistics are now user funded.

Each five yearly Census is separately funded, costing around \$500 million. Census funding is very unevenly distributed over a five year period, which does introduce challenges with this major ramp up and then reduction of staffing and activity across this multi-year cycle.

ABS has an extensive range of advisory arrangements, including a legislated Australian Statistics Advisory Council (currently chaired by Professor Gary Banks AO). This is of considerable importance as the ABS has undertaken more prioritisation of its work program, and taken greater account of the perspectives of key data users and stakeholders.

ABS has also deliberately expanded sources of advice, from across the public sector and private industry, again recognising that not all the knowledge, experience and insights we require will be located within the Agency. This has been a feature of major program implementations, such as the Statistical Business Transformation Program funded in the 2015 Budget and implementation of the 2021 Census, with establishment of Executive Boards that include external members.

ABS has a strong professional workforce, with an enduring tradition of strong graduate intakes supported by professional development for our staff. This is necessary for the ABS to

successfully deliver on its current and future work program. We undertake work of national importance across a wide range of very interesting and professionally challenging areas. ABS staff are highly sought after across the public and private sector.

The ABS seeks to provide an attractive workplace, as part of our approach to attracting and retaining highly skilled staff, and ensuring the ABS has the necessary capability to perform its necessary functions. ABS is well known and recognised for its workplace flexibility. Activity Based Working across all nine locations, modern ICT and other working arrangements alongside a very positive workplace culture contribute to attractive work-life balance for staff, workforce attraction and retention, as well as organisational productivity.

In terms of the scale of operations, the ABS:

-) is large enough to have specialisation and expertise across many corporate functions, to enable us to meet the significant red tape burden on all APS agencies,
-) is small enough to be able to test and practice greater innovation around how we work, including flexible work practices,
-) does have scale and resource challenges to be able to independently deal with some major technology or risk dimensions. The ABS, and probably most APS agencies (probably aside from Defence, ATO, DHS and Home Affairs), will be at least partly reliant upon effective cross-APS and private sector partnerships to deliver responsive services, and manage some key risks such as cyber security.

References

- Australian Bureau of Statistics (2015), Trust in ABS and ABS Statistics, A survey of informed users and the general community.
- Australian Bureau of Statistics. (2017). *ABS Submission to the Productivity Commission Inquiry into Data Availability and Use*. Retrieved from www.pc.gov.au:
https://www.pc.gov.au/data/assets/pdf_file/0018/203643/sub094-data-access.pdf
- Australian Bureau of Statistics. (2017). *Australian Statistician's Review*. Retrieved from Australian Bureau of Statistics -- Annual Report, 2016-17:
<http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/1001.0~2016-17~Main%20Features~Australian%20Statistician's%20Review~7>
- Australian Bureau of Statistics (2018), Conduct Report of the Australian Marriage Law Postal Survey
- Australian Bureau of Statistics (2018) External Evaluation of the Australian Marriage Law Postal Survey, Nous Consulting Group
- Census Independent Assurance Panel (2017) Report on the Quality of 2016 Census Data
- Edelman Australia. (2018, February). *Australia: Trust in Tumult*. Retrieved from www.edelman.com: <https://www.edelman.com/post/australia-trust-in-tumult>
- Kalisch, D. W. (2016) 2016 Census Learnings, IPAA ACT Branch, December
- Kalisch, D. W. (2017) Insights and Learnings of Census 2016, CEDA Sydney, September
- Kalisch, D. W. (2017) 21st Century Leadership in the Public Sector and Learnings of Census 2016, IPAA Tasmania, September
- Kalisch, D. W. (2018) Tales from the Corporate Battlefield, Census 2016 and AMLPS 2017, AICD Governance Forum, March
- Kalisch, D. W. (2018) Building trust in statistics through communications, Conference of European Statisticians, Geneva, June
- Productivity Commission. (2017). *Inquiry Report into Data Availability and Use*. Retrieved from <http://www.pc.gov.au/inquiries/completed/data-access/report>
- Statistics New Zealand (2014), Valuing the Census, Retrieved from www.stats.govt.nz/methods/research-apeprs/topss/valuing-census.aspx