



Economic Commission for Europe**Conference of European Statisticians****Seventieth plenary session**

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Collaboration with private data providers**Private sector big data: Australia's collaboration experience****Prepared by Australia***Summary*

National statistics offices (NSOs) are increasingly turning to the private sector as an important source of large, detailed data assets. The onset of the COVID-19 pandemic has accelerated collaborations with private sector data custodians in Australia, and the Australian Bureau of Statistics (ABS) has been able to generate enormous public value by securing privately held data to support the production of official statistics. This paper describes the post-pandemic experiences of the ABS to build the private sector collaborations to sustain these important data flows, and to explore new models for access to other data assets.

The document is presented to the Conference of European Statisticians' session on "Collaboration with private data providers" for discussion.



I. Introduction

1. Transaction level and other highly disaggregated data supplied by private sector businesses are increasingly important resources that inform public policy and service delivery. The Australian Bureau of Statistics (ABS) is exploring approaches that will build a culture of data sharing whilst maintaining the public trust required to enable incorporating these data into official statistics.
2. The paper summarises some of the lessons learned from ABS engagements with private sector data custodians, outlines possible future engagement options and describes some of the key challenges and constraints as we look to the future.

II. Lessons learned from engagements with private sector data custodians

3. **Private sector provider motivations vary.** Many private sector data custodians are willing to share data with the ABS to support the public good, especially when it aligns with social good objectives in their mission statement. Others are willing to work with the ABS for non-monetary value propositions – reducing survey burden, meeting with knowledgeable ABS staff to discuss statistical releases and their use. Other providers consider the data a commercial asset and expect to be compensated for access to their data.
4. **Relationships mature over time.** Engagement flexibility is important, especially in early stages with providers. This allows for pragmatic goals to be achieved in the short term, while evolving the relationship towards a more optimal setting. For example, the ABS negotiated access to financial transactions information during COVID and could initially use it for confrontation with existing official statistics. Subsequent investment with the provider helped develop a new spending indicator to be published as an index. Our next goal is to use the same information to produce level estimates, needing further investment.
5. Building trust with providers is a balancing act across their need as data owner to be comfortable they are not breaching their customers' expectations and privacy, there being alignment on purpose in using data for the public good, the data being valuable to government agencies, ongoing control and line of sight over their data once shared and the cost equation being acceptable to both parties. Establishing direct personal relationships at key levels and demonstrated awareness of their concerns from the NSO are both important to successfully establishing trust (e.g. the ABS gives providers pre-warning before public statistics using their data are released to help them maintain line-of-sight over their data).
6. **Privacy, security and maintaining public trust are not negotiable.** The ABS is committed to supporting provider obligations under the Australian Privacy Act¹, and to enabling best practice approaches to secure data transmission, storage, access control and publication. Providers have reported that they need confidence that data provided to the ABS will be used only for agreed purposes, and not be used for other purposes (e.g. shared for regulatory or compliance purposes). Citizens need assurance that data about them will be handled safely, used appropriately, and treated with respect. The ABS regularly conducts, or engages external experts to conduct, public consultations and Privacy Impact Assessments² to understand public perceptions on data use, inform best practice data use and establish appropriate protections.
7. **Significant investment is required in capability and systems** to support productive relationships with private sector data custodians. The ABS has identified that legal agreements with the private sector include new clauses not typical in government-to-government agreements, such as indemnity and commercial intellectual property (IP) clauses. The ABS is investing in people capability and capacity to engage with additional complexities in procurement, policy, and legal areas, as well as funding a new engagement

¹ <https://www.oaic.gov.au/privacy/the-privacy-act>

² <https://www.abs.gov.au/about/legislation-and-policy/privacy/privacy-impact-assessments>

team. The ABS has also invested in a Scaled Analytic Data Environment hosted on Amazon Web Services technology to enable analysis of big data.

8. **Provider readiness takes time.** Even a willing provider needs to obtain internal risk and legal sign-offs, needs to ensure technology setup is compatible and often needs their own board approval – in the ABS experience this can often take as long or longer than expected from a government bureaucracy. Our experience to date is that private sector providers are as cautious and have comparable risk settings on privacy, IT security and legal risk from the outset of an engagement as government. Any need for IT upgrades at the provider end to enable the supply of their data can also add time and complexity.

9. **Providers with an ‘analytics hub’ and analytics consultancy can add time and effort.** These providers have additional reasons, sometimes obligations, to consider the data a commercial asset. This can take time to work through where the NSO policy is not to pay commercial rates for data. They can also make the legal/governance arrangements a tripartite rather than bilateral set up and can obscure the NSO’s intent in the engagement by looking to sell analytic services an NSO does not need, rather than focus on the data itself.

10. **New opportunities come with new risks.** To date, all agreements with private sector partners have been voluntary and supply has not been compelled under ABS legislation. As a result, new risks are emerging for consideration such as stability and continuity of data supply.

III. Next generation models for private sector engagement

11. The ABS has developed a framework for the acquisition, curation and maintenance of private sector administrative data. The approach relies upon establishing strong relationships with providers to support voluntary data sharing arrangements and includes:

- Prioritisation of high value targets by a Collection Program Committee (a senior staff forum) based on enterprise need and value, impact on providers, connectedness to the needs of ABS partners, and likelihood of success
- Defined roles and accountabilities across the ABS
- Use of cloud-based technology to ingest, store and process data at scale, at high frequency and with enterprise re-use in mind.

12. The ABS has identified areas requiring additional development, including:

- Clear internal funding arrangements for the acquisition and maintenance of strategic data assets with potential across multiple statistical outputs
- Strategic coordination between government agencies across different levels of Australian government to identify priority private sector data sources, acquire these data, and manage on-going relationships with providers.

13. Noting that private sector agreements reached to date have predominantly been with single data providers for the provision of de-identified, aggregated data, the ABS is in the early stages of exploring several future models for private sector engagement. These include:

- Engagement with a financial sector industry body to collect administrative data from multiple member agencies
- Collaborating with large retailers that already provide transactional data to explore further opportunities to reduce survey burden through expanding their data supply
- Exploring the feasibility of establishing a secure data environment to enable the ABS and other government agencies to query microdata held by a major Australian company.

IV. Constraints and challenges in the current landscape

14. Many of the challenges with private sector engagements are familiar for NSOs – statistical risk, data quality, privacy, public trust – some, however, are particularly pertinent.

15. **Commercial considerations.** Private sector data assets can deliver commercial value. Large private companies are increasingly partnering with analytics companies to monetise their data. NSOs risk becoming ‘just another customer’. Current ABS policy provides that we will generally pay no more than the extraction costs for data.

16. **Personally identifiable information requires individual consent.** Current Australian Privacy Laws³ provide a framework for sharing personal data in a way that promotes trust and confidence. However, the ABS has never received a supply of personally identifiable data from a private sector partner. Other models, such as analysing the data in situ and then disclosing de-identified results to the ABS may be more appropriate.

V. Conclusion

17. The ABS experience is that securing new data assets from the private sector is very much a partnership requiring a focus on mutual understanding and collaborative development of arrangements. Individual agreements with companies for the voluntary supply of lightly aggregated transactions data remain important to the development of timely official statistics. New models of engagement will be required to support access to richer private sector data assets such as microdata from large companies, industry wide data from smaller companies, and data containing potentially identifiable information. Another frontier to be explored will be the potential to integrate certain private sector administrative data with other government administrative data held by the NSO.

³ See Australian Privacy Principle 4: <https://www.oaic.gov.au/privacy/australian-privacy-principles/read-the-australian-privacy-principles>