



Australian Government
Department of Foreign Affairs and Trade

THE PRODUCTIVITY COMMISSION'S INQUIRY INTO DATA AVAILABILITY AND USE



DEPARTMENT OF FOREIGN AFFAIRS AND TRADE
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EXECUTIVE SUMMARY

Department of Foreign Affairs and Trade (DFAT), including its portfolio agencies - the Australian Trade and Investment Commission (Austrade), Tourism Australia (TA) and the Australian Centre for International Agricultural Research (ACIAR) - welcome the opportunity to contribute to the Productivity Commission Public Inquiry into Data Availability and Use.

2. The Productivity Commission Inquiry complements a range of studies, inquiries and consultations being undertaken by the Federal Government as part of its nationally vital digital and innovation agenda. DFAT wishes to make a submission to this inquiry owing to the specialised nature of its interests in data as Australia's leading government portfolio in international engagement. Data is core business for DFAT, as it advances Australia's international interests. It shares data as appropriate to support the international activities of the Australian community.

3. DFAT is striving to go further, consistent with Government policy as it develops, with major initiatives on data across the range of portfolio interests. Consistent with the Public Sector Data Management Implementation Report of July 2016, making data publicly available in user friendly formats, is a high priority for DFAT, both in Australia and internationally:

- It offers a range of informative publications based on its datasets and across portfolio interests - from trade, to aid, to tourism and agricultural research.
- DFAT is developing an innovative [trade portal](#) to assist the private sector.
- It provides aid statistics publicly to assist stakeholders.
- DFAT is assisting regional countries with their data and statistical needs.
- It is examining the scope to publish a quarterly set of consular statistics.
- Making data more accessible internally, and ultimately more publicly available, are strands of DFAT's knowledge management initiatives.
- DFAT's track record is of continuous improvement of its data products, harnessing technological and policy advances to improve accessibility.
- DFAT supports making its data publicly available, with proper confidentiality and privacy protections, to foster transparency and public accountability.

4. Public constituencies already benefit materially from government data. The public would potentially benefit further from the extension of data availability, albeit within appropriate legislative and policy frameworks, which take into account other important policy interests such as national security and commercial confidentiality. Practical considerations such as operational efficiency and the cost to the taxpayer of making more data available are also very important considerations in the context of framing potential data availability reforms.

5. Equally important public interest considerations are relevant to data availability, such as privacy principles and existing legal protections on the release of data. Some of these public interest considerations could possibly be met by for example greater use of de-identified, disaggregated datasets. Legislative and

regulatory reform however may be essential in some areas before further progress on data availability can be made. The DFAT portfolio has demonstrated its willingness - and indeed policy interest - in the wider release of data - provided that the costs are not prohibitive; subject to consultations with Ministers and consistent with wider Australian Public Service (APS) policy and guidelines on data as they evolve.

6. DFAT and its portfolio agencies collect data for a range of policy and operational purposes. They contribute datasets to other government agencies and non-government bodies, both in Australia and internationally. DFAT and its agencies are also major consumers of data from external sources such as the Australian Bureau of Statistics (ABS), whose data role is seminal. ABS data is invaluable to the preparation of some datasets operationally vital to DFAT, such as trade statistics. Importantly, DFAT assists countries in our region with their data needs through the aid program.

7. In summary, the DFAT portfolio has a range of interests in the availability of data and its use. It has demonstrated its willingness to assist the Australian community with its international data needs, particularly through its data products, publications and advice. DFAT has served the Australian community in this way over a long period of time and across many policy areas. The portfolio has a proven track record of making specific and high quality data available to the public in areas such as trade promotion, tourism and international agricultural research.

8. We look forward to the insights from the Productivity Commission Inquiry report in due course. The following submission sets some areas where DFAT and its agencies have data interests, either as a promoter, producer or consumer of data-related products. It explains how DFAT is following through on its core commitment to make data available where appropriate; both for government policy purposes and public use. It offers some suggestions on areas for further reform or improvement which may be considered in the Productivity Commission Inquiry.

CONSULAR

9. DFAT's Consular and Crisis Management Division (CCD) is responsible for two databases that collect and store data: the Consular Information System (CIS) and the Online Register of Australians Overseas (ORAO) system.

Consular Information System (CIS)

10. CIS is DFAT's IT system for recording and managing consular cases. It is an internal departmental system that is used on a daily basis by consular officers both in Canberra and overseas. Statistical data that is generated from CIS can provide information on the number of consular cases that DFAT handles and be disaggregated to provide further detail on such things as case types and locations. This data is used to inform operational resourcing decisions.

11. Statistical data from CIS is also used in regular departmental reporting, such as DFAT's annual report, as well as consular reports, such as the consular 'State of Play' report. Statistical data from CIS can be used to respond to media inquiries.

12. CCD reviews carefully the public release of any statistical data from CIS to ensure that DFAT complies with its obligations under the Privacy Act. There is a resource cost in providing the public (primarily the media) with statistical data as it needs to be manually extracted and reviewed.

13. CCD is currently examining scope to publish on a quarterly basis a defined set of consular statistics drawn from CIS. This would provide the public with regular consular data. One of the objectives in publishing this data would be to move away from providing costly and resource intensive tailored statistics in response to individual requests.

Online Register of Australians Overseas (ORAO)

14. ORAO is an online registration system that enables members of the public to voluntarily register their overseas travel. ORAO can provide information, including contact details, on Australians who may be in a particular location during a crisis or major international incident.

15. Given that registrations are voluntary however, it is important to note that the system does not provide accurate statistics on the actual number of Australians in a particular location at any point in time. Accordingly, DFAT is reluctant to make statistical data from ORAO public as it can easily be misconstrued as information on the number of Australians in a particular location.

16. In June, ORAO was upgraded to include an accounts-based system, meaning that individuals can create an account to register their travel details and are then able to interact with that information and continue to access it in the future.

17. As part of the Consular Strategy 2014-16, CCD undertook to review the travel registration system. This review is scheduled for January 2017, to allow sufficient time to examine the operational impact of the new account-based registration system.

PASSPORTS

18. DFAT collects and stores a substantial quantity of personal data for the purposes of issuing and administering Australian travel documents under the *Australian Passports Act 2005* (the Passports Act).

19. DFAT is authorised under the Passport Act to collect personal information for the purpose of issuing a passport; and therefore may use and disclose an applicant's personal information to verify the identity and eligibility of a passport applicant.

20. DFAT is authorised by law to share personal information with a number of other Commonwealth, state and territory agencies, Interpol and foreign border authorities, for the purposes of:

- a) confirming or verifying information relating to an applicant for an Australian travel document or a person to whom an Australian travel document has been issued
- b) facilitating or otherwise assisting the international travel of a person to whom an Australian travel document has been issued
- c) law enforcement
- d) the operation of family law and related matters and
- e) the purposes of a law of the Commonwealth specified in a Minister's Determination.

21. This information is collected, used and disclosed in accordance with the Passports Act, the Australian Passports Determination 2015, the Privacy Act and the Australian Privacy Principles. It is held by DFAT in secure, individual person records in a mainframe database. Access is restricted to authorised officers and audited periodically.

22. Passport-related data can be categorised under three broad datasets: personal information; facial images and workflow-related data. There are currently 18 million person records which include identity and citizenship data of all current and past Australian passport holders and data related to the status of all passports issued to the holder. There is also a database of all facial images of each passport issued. The workflow-related data includes the number of applications lodged and issued each day. DFAT does not hold data on how the passport is used after it has been issued.

23. Passport holders can access their own personal information by calling the Australian Passport Information Service (131 232) or through a Freedom of Information request, depending on the type of information sought.

24. The current obstacles to sharing passports data are legal, technical and financial. The vast majority of passport data held is personal information that cannot be used or disclosed for secondary purposes unless one of the exceptions to the general prohibition against secondary use or disclosure under the Privacy Act applies. To depersonalise the data in order to share it more widely would be time consuming and costly, given the architecture underpinning how the data is currently stored.

25. DFAT is currently building a data warehouse analytics platform which will make it easier to extract datasets for sharing. The platform will give DFAT the capability to apply data analytic methods to prevent and detect passport fraud as well as improve workflow reporting and analysis. De-personalised passport data could be published on data.gov.au for use by researchers and the private sector.

CORPORATE MANAGEMENT

26. DFAT's Corporate Management Group (CMG) collects and stores human resources specific data, in accordance with the requirements of the *Privacy Act 1988*. The personal data and information collected within CMG is only focused on employees within the department. Through the Australian Public Service Commission (APSC) and departmental programs, DFAT already shares select human resources data and statistics with other Government agencies. DFAT recognises the benefits of doing so for comparison and benchmarking purposes.

27. For example, DFAT provides the APSC with six monthly full snapshots of employee data plus monthly change files. This is a requirement of all APS agencies as all APS employees have their full employment history with the APS recorded in the APS Employment Database. This database is used by the APSC to produce publications such as State of the Service, the APS Statistical Bulletin, and to provide analytics in an online tool called APSEDii (access to APSEDii is restricted to APS members).

28. Internally, DFAT provides its management and employees with aggregated data summaries. These summaries can for example provide a snapshot of DFAT's workforce and illustrate DFAT's efforts to increase workforce diversity and address personnel issues. These snapshots do not identify individuals or specific personal details.

29. While there are clear benefits to increasing and improving data linking and availability across organisational boundaries, the Department will always comply with its obligations to protect the privacy of information within employee records. That said, if securely de-identified, select human resources data sets could be shared publicly for research purposes.

GENDER EQUALITY: AN EXAMPLE OF DFAT'S USE OF DATA INTERNATIONALLY

Australia has an excellent reputation globally because of our collection of data on personal safety and violence against women. We often refer our partners to the Australian Bureau of Statistics' Gender Portal as an example of the standard we expect when it comes to gender data and sex disaggregation of data. Moreover the quality of our data collection and analysis in this area gives credibility to our international advocacy for evidence-based prevention programs and responses to violence against women, as well as illustrating the level of commitment by successive Australian governments to reducing violence against women.

ECONOMIC DIPLOMACY, TRADE ADVOCACY AND STATISTICS

30. Trade data and statistics were identified as high-value datasets in the Australian Government's ground-breaking Public Sector Data Management report of July 2015. While DFAT does not systematically collect trade data itself, it does hold considerable amounts of data which may be of interest to the private sector and other interested parties related to economic diplomacy, trade advocacy and trade or economic statistics. DFAT also purchases merchandise trade data sets from the Australian Bureau of Statistics (ABS) and the United Nations (UN) "Comtrade" system on a regular basis. These data sets are held by DFAT and used for the provision of published information as well as 'information on request'.

31. Information on request is available to internal clients (including Ministers) as well as external clients - for a fee in the latter case. The Australian data (from the ABS) represents the finest level data available for Australian merchandise trade statistics and is available back to the 1980s. Data purchased from UN Comtrade is at the HS 6 digit level of tariff classification, the finest level available for internationally comparative data. Data from UN Comtrade is available back to the 1990s.

32. DFAT presents much of this data in a suite of publications on the internet/intranet however once users require detail at a finer level than that published in regular DFAT products, special data runs are undertaken. For external clients, these runs are charged for services rendered, consistent with the user-pays principle.

33. Other data and information used by DFAT is downloaded from relevant databases/websites – some is free of charge (e.g. International Monetary Fund (IMF), Organisation for Economic Co-Operation and Development (OECD) and Australian Bureau of Agricultural and Resource Economics (ABARES). Some incurs a cost to the Commonwealth (for example, IBIS World, EIU Views Wire and the CEIC Asia Database).

34. It is important to note that in terms of Australian data, the ABS is overwhelmingly DFAT's major source, making it very dependent on that organisation for trade, international investment, national accounts and other economic and social indicator datasets vital to developing Australia's trade policy.

35. While most of the data DFAT obtains from the ABS is direct, DFAT sometimes uses ABS data indirectly via international organisations such as OECD or IMF. Other Australian data providers that are important to DFAT include: ABARES; the Department of Industry Innovation and Science; the Department of Education and the Department of Immigration and Border Protection.

FREE TRADE AGREEMENT PORTAL

The [Free Trade Agreement \(FTA\) Portal](#) is an online website that helps Australian goods traders understand and use FTAs. So far the portal covers the North Asia agreements with Japan, South Korea and China. The 2016 Budget announced \$1.8 million over four years from within existing resources to expand the Portal to all of Australia's existing FTAs and those that may enter into force over the forward estimates period.

Since being launched in October 2015, the Portal has been visited more than 26,000 times by over 14,000 unique users, totalling more than 240,000 page views. The high number of repeat visitors and long duration of sessions has been particularly pleasing. Feedback from industry groups, such as the Export Council of Australia, as well as individual businesses, has been positive across the board.

The FTA Portal has set a new standard internationally for a simple, clear and fast FTA information service employing common language searching, tailored product-by-product guidance, and use of Australian and international trade data to highlight market dynamics. Australian and United Nations trade data is delivered alongside tariff and rules of origin information, adding significant value to business.

The Free Trade Agreement Division undertook the work of translating the highly technical and legally-precise trade-in-goods outcomes, and turning them into an intuitive, user-friendly ICT application of more than a million data points.

The portal has been optimised for mobile and tablet usage. It also includes an Application Programming Interface (API) service, providing third party developers with easy access to the data and functionality.

AUSTRALIAN AID PROGRAM DATA AND STATISTICS

36. Aid data and statistics have been identified by the G20 as high value datasets. DFAT is responsible for reporting on the Australian aid program and collects information on behalf of all government agencies. DFAT presents statistical details of Australia's development cooperation with partner countries, multilateral and bilateral development agencies, civil society organisations and the private sector. It provides a range of information at the aggregate and investment level on where Australia's aid program is delivered and the type of assistance provided; as well as Australia's bilateral engagement with developing countries.

37. DFAT collects data directly from other government agencies through the Official Resource Flows to Developing Countries Survey from Australian federal and state and territory government departments and agencies. Information is collected on activities that are funded from the department's administrative and/or departmental appropriations to capture Australia's resource flows to developing countries. Activities funded from DFAT's appropriations are excluded from this survey and captured directly from DFAT's financial and aid management systems.

38. Australian aid program data is made publically available through the DFAT website and various publications, as well as through international databases such as the OECD Development Assistance Committee (DAC) Creditor Reporting System (CRS), the International Aid Transparency Initiative (IATI) and the World Bank's [“Open Data System”](#).

OUR PACIFIC NEIGHBOURS: A CASE STUDY OF AUSTRALIA ASSISTING OUR REGION ON DATA

In the context of our closest neighbours, the Pacific Islands, DFAT has been supporting governments in their development of official statistics mainly through the Ten Year Pacific Statistics Strategy (TYPSS). The overarching goal of DFAT's support for statistics is to enable improved evidence-based decision-making by Pacific Island Country (PIC) governments and their peoples and improved tracking of development progress.

Statistical information is important for a range of stakeholders in the Pacific, such as research organisations, the private sector, and development organisations. It is used for example to assess the state of economies and progress towards achieving social and environmental objectives. Good data about the Pacific region is also critical to the protection of Australian interests in areas such as security, trade, health and transnational crime.

The Australian Bureau of Statistics has a key capacity building role assisting counterpart agencies in the Pacific to collect, analyse and disseminate national data. While significant progress has been made over time regarding the frequency of major surveys since the inception of TYPSS, statistical data continues to be inadequate for the needs of users. There is more work to do on the comprehensiveness, quality and accessibility of key information, which underlines the importance of Australian assistance over the medium to long-term, and the value of work done to date.

One long-standing issue is the reluctance of some Pacific Island Countries (PICs) to release disaggregated datasets for analysis and research purposes. While release protocols are in place to protect privacy and maintain control over data use, these protocols have not necessarily led to consistent release of data by national statistical offices, which instead may prefer to release somewhat ad hoc aggregated statistical reports. These reports are compiled at a regional level by the Pacific Community (SPC), the Secretariat of the Pacific Island Forum (PIF).

As a result of these ongoing capacity constraints, the needs of many data users, such as researchers and aid workers, are yet to be adequately met in all circumstances. Australia's view is that the benefit of good statistical information on the Pacific, in crucial areas such as baseline health and education, far outweighs any sensitivities, capacity deficits or production costs to the development of core statistical indicators. Hence Australia's persistence with projects to assist our Pacific neighbours in the area of statistics and the public release of data.

In the education sector, for instance, DFAT is supporting the Pacific at a regional and a national level on the collection, analysis and use of data for evidence-based decision making. Australia has enabled a partnership between the SPC and the UNESCO Institute of Statistics in support of PIC Education Monitoring Information Systems. Australia and other partners supported the 2015 Pacific Islands Literacy and Numeracy Assessment (PILNA), which provides valuable information on student performance across 13 participating PICs.

INFORMATION MANAGEMENT DIVISION

Infrastructure

39. DFAT is responsible for the Government's Secure Australian Telecommunications and Information Network (SATIN) which is the platform for Australia's cable messaging system and supports diplomatic, trade, aid, consular, passport and DFAT corporate functions. SATIN provides classified and unclassified ICT capability to 170 sites in Australia and overseas and has 12,000 user accounts in Canberra, diplomatic posts and ministerial and state offices. About 50 government agencies use the network to support the international component of their operations.

40. The SATIN network has reached the end of its operating life and is being replaced by the International Communications Network (ICN). Funded in the 2013-14 Budget, ICN will deliver a state-of-the-art global infrastructure to meet the needs of Australia's diplomatic communications network into the next decade. SATIN and ICN underpin DFAT's ability to collect, store and share data by providing high availability communications infrastructure and data centres with data backup and failover processing, secure data storage and access, and 24x7 regional support services.

41. Increasingly we are exploiting the opportunities provided by secure cloud services for the agile delivery of ICT projects and external hosting of systems. We are using mobile technologies to improve remote access to data and collaboration facilities for Australian officials wherever they are in the world.

Data Warehouse / Analytics

42. DFAT has an Enterprise Data Warehouse (EDW) that is available to all DFAT officers. The objective of the warehouse is to improve the business value of our information assets by providing users with a self-service toolset for analysing DFAT's data and generating customised reports specific to their needs which can be published on their desktop or mobile devices. In the previous 12 months, 1250 users accessed the system and executed almost one million data queries.

43. The Business Intelligence (BI) toolset provides historical, current, and predictive views of business operations. Results can be provided in a number of ways including visualisations, reports and executive dashboards. Outputs can be delivered directly to the user, via a web interface, or on a subscriptions basis. A major subject area in the current EDW data holdings is the Australian Government's Aid Program. These statistics are made available outside the department to the OECD's Development Assistance Committee Creditor Reporting System, the International Aid Transparency Initiative and the World Bank's Open Data. The receiving organisations subsequently make the data available, alongside data from other contributor nations, to the international aid community and general public.

44. Within DFAT the information is used by aid delivery specialists working in-country, program managers and executives. The information from the EDW forms the basis for producing our aid data publications: [Australia's International Aid Program Statistical Summary](#) and to a lesser extent the [Australian Aid Budget Summary](#). Other data sets include the subject areas: Scholarships, Aid Financial (Administered) and Organisational (Corporate Directory).

45. There is currently a program of work underway to develop a data analytics and reporting platform within the data warehouse to support the Australian Passport Office. Stronger Business Intelligence capability over passport data sets will improve situational awareness for better decision making. For example, improved analytics and machine learning on passport data will enhance our ability to detect passport fraud.

KNOWLEDGE MANAGEMENT AND BEHAVIOURAL INSIGHTS

DFAT has embraced reform of its management of knowledge and information in order to improve the quality of the advice we give, the decisions we make and the actions we perform in the public interest. DFAT has developed a Knowledge Management Framework and an associated Roadmap for Change to give shape to these reforms.

The Knowledge Management Framework was launched in March 2016. The Framework promotes a set of behaviours to foster better consultation and policy information sharing practices by staff, including with public stakeholders.

The Roadmap for Change sets out projects across DFAT work areas to make practical improvements to DFAT's management of its knowledge and information. Many of these projects involve making data more available and better use of DFAT's knowledge base to serve the Australian community.

One area of reform work is the application of the insights of behavioural economics to design, promote and evaluate DFAT policies, communications and projects. Behavioural Insights (BI) are particularly applicable to improving aid project performance. Making publicly available the results of BI trials, usually in disaggregated and anonymous form, is one of the core methodologies of the approach.

PORTFOLIO AGENCY CONTRIBUTION: THE AUSTRALIAN TRADE AND INVESTMENT COMMISSION (AUSTRADE)

46. To promote Australia's trade, investment, international education and tourism agendas, the Australian Trade and Investment Commission (Austrade) maintains a number of datasets and databases:

- In administering the Export Market Development Grants scheme (EMDG), Austrade collects administrative details on Small to Medium Size Enterprises (SME's) in the initial stages of export.
- Further, Austrade is a funding partner of the Australian International Business Survey (AIBS), gaining access to a broad array of data from more than 1,000 active or aspiring exporters.
- All of Austrade's relationships with stakeholders, including those above, are recorded in its Relationship Management System (RMS). This extends to individuals, companies, documents, emails and records of conversation, both domestically and across Austrade's offices in international markets.
- Finally, Tourism Research Australia (TRA), a business unit within Austrade, manages both the International Visitor Survey (IVS) and the National Visitor Survey (NVS) to produce tourism forecasts and statistics.

The legal framework for releasing information

47. Austrade regularly enters into agreements with the Australian private sector and other organisations which involve the provision of commercial-in-confidence information or sensitive market strategies and advice. As such, it is not unusual for clients to request that confidentiality clauses be included in contracts.

48. Furthermore, Austrade complies with its obligations under the Privacy Act as well as the agency-specific secrecy requirements set out in section 94 of the *Australian Trade and Investment Commission Act 1985*. Section 94 provides that, subject to limited exemptions, an employee of Austrade must not divulge or communicate to any person any information concerning the affairs of another person acquired by the employee in the course of his or her employment.

49. Section 94 also restricts production of documents relating to the affairs of another person. A breach of section 94 attracts criminal penalties upon the individual responsible. In effect, this provision protects the sensitive commercial information of clients, customers, investors and other organisations that Austrade works with, whilst allowing specific information (e.g. regarding EMDG or other

information that serves the purposes of the Austrade Act) to be provided without divulging the affairs of particular individuals or organisations.

Export Market Development Grants (EMDG) scheme

50. In operation for over 40 years, the Export Market Development Grants (EMDG) scheme is a key Australian Government financial assistance program for exporters. EMDG reimburses eligible SMEs for expenditure on international marketing and promotion. In applying for reimbursement, firms contribute information on markets targeted, organisation size and industry.

51. Austrade is working with exporters to allow more business-specific information captured as part of individual applications to inform the trade policy and digital transformation agendas. For successful applicants, some information is already in the public domain thanks to existing Commonwealth grant reporting requirements, including company names and industry classification codes (ANZIC).

52. To reduce duplication and to feed into internal research aimed at helping businesses determine whether they should export and if so to which markets, Austrade will begin seeking participants' consent to use additional information, for example active markets, export revenue and organisation size. Under section 94, it is possible to share information of a statistical nature externally where it relates to making grants under the EMDG scheme. Austrade may also consider how useful data might be shared with the Australian Bureau of Statistics (ABS) in a way that does not provide for identification of individual grant recipients and their corresponding information that does not breach section 94.

Austrade Economics

53. A number of data sources are critical to inform Austrade's strategy and day-to-day work. Across its economics, trade, investment, education and tourism policy and research functions, the Austrade Economics Team delivers analysis on the major trends and events in the Australian and international economies that help shape Austrade's operating environment.

54. Austrade Economics' main analytical products include:

- analysis and advice on trade, investment and doing business internationally
- the [Benchmark Report](#) on Australia's international business performance¹
- the Australian International Business Survey (AIBS)
- analysis and advice on the services sector via the Visitor Economy project².

¹The Austrade Benchmark Report presents Australia's attractiveness as a business and investment destination. Using key economic, financial and demographic data, the report assists potential foreign investors to evaluate Australia's economic credentials against similar economies and to understand the investment opportunities Australia presents. The report examines five key reasons for investing in Australia – Growth, Innovation, Talent, Location and Business – and compares Australia's credentials with other countries.

55. The quantitative evidence base for this work is derived from both official data sources (including Tourism Research Australia and international agencies) as well as private sector data (often accessed via subscription).

56. Two primary sources are the Australian Bureau of Statistics international trade suite [ABS Cat No 5368.0], International Investment Position [ABS Cat No 5352.0] (and supplementary products), and the Department of Foreign Affairs and Trade's trade in goods and services statistics publications and products. Austrade's analysis of trade and investment largely relies on DFAT's statistics to ensure consistency, in particular on levels and rankings. It would be of substantial benefit to Australian policy makers and industry if the ABS International Investment Position data for investment flows by country could be broken down by industry. At the moment, investment flows are either disaggregated by country or industry.

57. The [Australian International Business Survey \(AIBS\)](#) is run by the University of Sydney in consultation with research partners Austrade, the Export Council of Australia and the Export Finance and Insurance Corporation (EFIC). Launched in 2014, it is one of the most comprehensive surveys of Australian companies in international business. The research aims to build a rich database on the profiles of Australian businesses internationally, their objectives and the challenges they face, as well as analyse trends and changes.

58. While the AIBS collects a range of information about the businesses surveyed, ABNs are not collected. There have been limited discussions with industry about collecting ABN data, with one aim to link AIBS data set to other data (ABS data sets serve as a primary candidate including, but not limited to, Selected Characteristics of Australian Business, 2013-14 [ABS Cat No 8167.0], Characteristics of Australian Exporters, 2014-15 [ABS Cat No 5368.0.55.006], Summary of IT Use and Innovation in Australian Business, 2014-15 [ABS Cat No 8166.0], or International Investment Position, Australia [ABS Cat No 5352.0]). Given the AIBS project is a partnership, agreement from all partners and legal advice regarding disclosure would be required prior to pursuing any data sharing.

59. While Austrade does not own unique datasets on international education, this is an area in which Austrade has sought to improve the use of available data through its Market Information Package (MIP) Orbis data visualisation tool. Austrade acts as an aggregator of data from the Department of Education and Training (enrolment and commencement data), the Department of Immigration and Border Protection (visa lodgement and grants data), and the ABS (export value).

60. [MIP Orbis](#) is a platform that allows providers in the sector to analyse and visually explore this data by markets, sectors, and states/territories. Its user-centric design lowers the entry barrier for users who may not be tech-savvy but who wish to see trends at a glance or to perform basic manipulation of data. It also caters for the

²The services sector accounts for almost 20 per cent of gross exports with Visitor Economy – tourism and international education – accounting for around two-thirds of services exports.

more technically advanced users who want to conduct deep analyses and explore the underlying datasets.

Relationship Management System (RMS)

61. Austrade's Relationship Management System (RMS) captures data about all interactions between Austrade and its stakeholders. Austrade also seeks to capture information about companies such as industry, estimated revenue, size, market interests and potential opportunities. Austrade's collection of personal information about an organisation's employees is subject to the Privacy Act and local privacy laws.

62. The data in RMS is used primarily to inform Austrade's trade and investment promotion efforts. By its nature, much of the information in RMS is ad hoc, personal and likely to be of limited statistical value. Austrade does however aggregate and publish some limited material informed by RMS data, including in its Annual Report or in targeted industry updates. Data on individuals stored in RMS is also protected by the secrecy provisions in Austrade's enabling legislation as well as the Privacy Act.

Tourism Research Australia (TRA)

63. Tourism Research Australia (TRA) formerly known as the Bureau of Tourism Research was formed in 1987. Its key charter is to manage the International Visitor Survey (IVS) and the National Visitor Survey (NVS) and to produce tourism forecasts. TRA is currently a business unit within the Tourism Division of Austrade. The unit manages and maintains a large number of databases including those built from data supplied by other government agencies, including:

- International Visitor Survey 1999 onwards
- National Visitor Survey 1998 onwards
- Overseas Arrivals and Departures (OAD) 1986 onwards
- Air transport statistics
- Tourism Forecasts and State Tourism Forecasts
- Regional Expenditure 2005 onwards
- Tourism Satellite Account and State Tourism Satellite Account
- Destination Survey Program data

64. The [visitor surveys](#) were implemented by the Commonwealth and states to address a market failure in information access for the tourism industry and government. The data collected is used extensively by all levels of government, as well as industry, academia and the public, to inform, shape and track policy initiatives and to identify and support investment and marketing opportunities. It is the only source for tourism expenditure which is critical for reporting the economic value of the tourism industry. The data is a critical input to the production of key economic indicators such as the Tourism Satellite Account (TSA) and Balance of Payments (BOP) as produced by the Australian Bureau of Statistics, for use in terms of trade statistics. The data is also used to model expenditure in regional areas. The

collected data is the basis for the implementation and tracking of the government's initiative, ['Tourism 2020'](#).

65. The surveys are provided under a joint funding arrangement under a service level agreement with the State Tourism Organisations (STOs). The fieldwork for the collections is undertaken by a field consultant with the management, compilation, cleaning, analysis and publishing of data undertaken by TRA. The collections are subject to an open tender process every three years or so for both field work and methodology. TRA has an ongoing improvement program for the collections. The collections are considered world best practice owing to the robust sample design and quality of available benchmark data.

66. TRA uses a 'fit for purpose' approach to the design and conduct of its collections and modelling approaches and general use of data for tourism. Being able to clearly define and control these definitions is critical to measuring change in visitor patterns.

67. TRA also uses various forms of transactional or big data to inform modelling and forecasting and to help validate findings, such as data taken from the Travel and Immigration Processing System (TRIPS) run by the Department of Immigration and Border Protection (DIBP). The TRIPS and overseas arrivals and departures information provides high quality data for use in the sampling and benchmark design work.

68. TRA strives to make as much data available as possible within resource constraints and provide a range of supporting information and educational services. The data is shared with the various parts of the community in a range of ways. TRA's experience is that the public good of providing the data about tourism far outweighs the risk of any associated errors or misuse.

69. The end goal is for TRA to provide the best quality advice via its outputs to inform governments and industry on the current level of visitor activity and to accurately track changes and identify emerging trends.

MAKING DATA AVAILABLE: A WAY FORWARD: A TRADE PROMOTION CASE STUDY

Tourism Research Australia (TRA) publishes a wide range of data across multiple media. A large amount of information is available on the [TRA website](#) via published reports, Excel workbooks, interactive visualisations and info-graphics. A range of supporting information is also supplied on the website to assist and enable users of the data. TRA also offers a statistics help line for calls and a research mailbox for email information requests.

Further options are available through propriety software tools on both desktop and web based systems. TRA have a number of subscribers to these systems which provides for 24/7 access to TRA datasets. TRA chooses to use propriety software tools (off the shelf products) instead of custom built applications owing to the often expensive and cumbersome task of maintaining custom built versions.

TRA conducts an exhaustive process to ensure its data is of the highest quality. This includes a range of work which is undertaken from the questionnaire and sample design through to publishing. It requires a highly-specialised skill-set.

TRA works hard to ensure it maintains consistent data over time. TRA has in the past undertaken back-casting work as required in order to avoid a break in the time series. It is vital that a fast growing industry has access to a robust time series.

Most of the resources needed to ensure that the available data is accurate and of sufficient quality to be published are included during the transformation from raw unit records to a clean database file. As its products attract more users, TRA will dedicate more resources to educate stakeholders and users.

The cost of providing data through interactive tools and maintaining a website has required significant investment, but this approach has proven successful in meeting the majority of the data needs for a large and diverse community of tourism industry users. TRA has received favourable feedback through stakeholder surveys and plaudits from parts of the research community including international data users on its approach to publishing data.

Private sector collaboration on trade data collection

70. Austrade notes the significant advancements by government in harnessing rapid technological changes to facilitate the capture of large amounts of administrative data automatically and at a low unit cost. Austrade believes there is still scope for the federal government to consider options to deepen and extend its relationships with private sector organisations that capture and collect big data. For example, embedded electronic chips will generate a wealth of highly accurate administrative data.

71. Consumer credit card data could be used to improve trade data (in this instance, data for small export markets by sub-sector may often need to remain confidential owing to current legislation). The combined use of industry and consumer data could be considered - to overcome issues around confidentiality therefore improving statistical detail, spatial and sectoral, and thus improving the quality of publicly available information.

Trade in services

72. Services account for the vast majority of Australian output and employment, however by conventional measures they comprise approximately 20 per cent of total exports, suggesting a great deal of services trade and other Australian international business activity is not being captured by conventional statistical and data measures. Traditional balance of payments statistics can under-estimate service sales by failing to account for services roles embodied in the export of goods and trade by foreign affiliates of Australian businesses.

73. Mode 3 services trade (the mode often known as Foreign Affiliates Trade in Services, or FATS), as defined by the WTO General Agreement on Trade in Services (GATS), is different in nature to the other modes of service exports. Australian businesses sell services to overseas customers via foreign affiliates or subsidiaries yet there is no regular data available to quantify these flows.

74. For example, according to a pilot study conducted by the ABS in 2002-03, outward FATS was worth \$59.4 billion (compared to direct services exports of around \$36 billion in the same year). That is, FATS then accounted for nearly two thirds of all Australian services being provided to the rest of the world, regardless of mode.

75. A more recent, DFAT-sponsored study looking at FATS for the finance and insurance sector for 2009-10 estimated the value of sales from affiliates at \$38.9 billion, compared to recorded exports of financial and insurance services from Australia of only \$1.4 billion over the same period. Further collaboration between government and industry could be pursued to develop robust and timely indicators

for FATS with the aim of understanding and capturing statistically the international activities of Australia's service sector companies in the modern global economy³.

Accessible formats

76. Despite efforts to modernise the dissemination of publicly owned data, a broad range of government information continues to be released in two dimensional forms (for example, in Microsoft Excel or Adobe PDF). In particular, protected-form PDFs (where the user is unable to copy/paste from), have hampered Austrade's economic analysis and where possible should be discouraged. Austrade considers that the value of data sets could be enhanced if there was a systematic approach to disseminating foundation economic, industry, and demographic data. For example, using datacubes (both Excel and SuperCross) would improve the level of meta-data detail in published collections. This would support the increased use of data and reduce agencies' need to order custom tables.

Data sharing

77. Data sharing across government agencies can be challenging and the costs of finding and obtaining data onerous. Privacy and secrecy legislation means that agencies, particularly those handling large administrative datasets, often make data either unavailable, or at the least very difficult to obtain; or provide it in unsuitable formats. This burden would also apply to the private sector, constituting a potentially significant overhead on Australian businesses. There is a strong economic and trade case for more "business friendly" data products and formats to be developed over time by government in order to assist Australian exporters and stimulate the domestic economy.

78. Large transactional datasets are of great benefit to the government planning process and assist businesses and individuals, but the IT systems these data are housed on are not yet as user friendly as those in the public domain. Similarly, the availability of common variables or fields in such large transactional databases to enable cross-referencing is not yet as commonplace as it perhaps could be with regard to government data generally speaking.

³ Refer Austrade Economics [Services Primer](#) (page 17) for further detail.

PORTFOLIO AGENCY CONTRIBUTION: TOURISM AUSTRALIA

79. Tourism Australia provides research services to the industry through consumer and market insights, plus tourism, aviation and economic analysis. The agency produces relevant and timely analytical research on inbound tourism markets, including analysing and communicating trends in global tourism and identifying new and high-yield markets. These reports are derived from a range of tourism data sets generated by Tourism Research Australia's International Visitor Surveys and National Visitor Surveys, and the Australian Bureau of Statistics overseas arrivals and departures data. This data is collected by the Department of Immigration and Border Protection using various processing systems, passport and visa information and relevant incoming/outgoing passenger information.

80. Tourism Australia makes these reports and publications available to industry and the general public via its corporate website: tourism.australia.com and promotes these services via industry communications channels, including its weekly "Essentials" tourism industry newsletter and corporate social media accounts.

Tourism Australia's Consumer Demand Project

81. Tourism Australia collects and analyses international data consumer in its Consumer Demand Project (CDP). This is commissioned via a specialist private sector provider. The CDP is a key input into Tourism Australia's strategic direction on behalf of the Australian tourism sector. Insights from this research help to drive strategy and campaign development as well as inform the tourism industry of potential opportunities to build the value of their businesses.

82. The CDP is used extensively in Tourism Australia's planning process, providing insights on consumer marketing measures and concept tests to identify areas of latent demand for destinations, products, experiences and alternative marketing approaches to maximise demand.

83. By better understanding what motivates consumers and Australia's relative strengths, weaknesses, opportunities and competitive threats, Tourism Australia is able to develop its marketing campaigns to build demand and stimulate bookings to Australia, supporting the industry's Tourism 2020 goals.

84. CDP data is considered competitively sensitive data. It is not for public release in its raw form due to its potential to benefit competitor destinations for international leisure tourism and business events.

Use of Consumer Demand Project research insights

85. Research insights derived from Tourism Australia's CDP are used to inform and support the development of Tourism Australia's strategic direction and campaign development as well as to inform the broader tourism industry on the target consumer. Since 2012, Tourism Australia has collected 60,000 plus respondents across four phases of the CDP.

86. Tourism Australia has used the CDP to:

- Develop strategic imperatives and priorities for Tourism 2020, Australia's national tourism strategy.
- Provide input into its marketing strategy and plans, for example, insights from the CDP were integral to the inception and development of Tourism Australia's Restaurant Australia campaign and the more recent aquatic and coastal focus.
- Identify trigger points required to convert awareness to visitation.
- Assess and track desired Australia brand attributes and associations.
- Fill gaps in industry knowledge.
- Provide an input to resource allocation based on identified latent demand potential.
- Profile and segment target customers.
- Identify development opportunities that can make Australia more attractive to target customers.

Website data

87. Tourism Australia tracks data about consumer behaviour in relation to visitation to the agency's websites, including its flagship consumer website australia.com. This data is competitively sensitive data and is not made freely available to the public. It is made available to Tourism Australia's commercial partners, such as airlines, large scale travel online travel agents and international hotel chains, under the terms of individual partnership marketing agreements.



Australian Government

**Australian Centre for
International Agricultural Research**

PORTFOLIO AGENCY CONTRIBUTIONS: AUSTRALIAN CENTRE FOR INTERNATIONAL AGRICULTURAL RESEARCH (ACIAR)

88. The Australian Centre for International Agricultural Research (ACIAR) takes the view that there are potentially great benefits to more open access to government data for the public, business, the academic community and across government itself, both within existing legislative and privacy frameworks; and from appropriately developed future APS policy and guidelines, now being explored.

89. ACIAR currently produces data that contributes mainly to transparency about government funding in support of Australia's aid program. ACIAR has, over a long period published data on its [website](#)⁴ setting out which countries it works in, project budgets, dates and related information. The ability to provide this data in a more usable format (machine readable) will increase later this year as a outcome of an internal ACIAR business system improvement project.

90. While providing access to this data may not contribute directly to the economy in the ways mentioned in the Productivity Inquiry Terms of Reference⁵, it could certainly be argued that ACIAR data assists materially in fostering better decision-making and policy development in conjunction with comparable data contributed from other agencies as part of Australia's aid program policy development. Publishing more of this data, as appropriate, would certainly provide a greater level of transparency and accountability and potentially contribute to improved efficiencies in the Australian aid program.

91. Cost and other considerations such as privacy, security and intellectual property (IP) are not necessarily considered by ACIAR as barriers to releasing its project funding data. A level of transparency has been built into ACIAR's internal systems for over 10 years, with the ability to publish project data on our website automatically while not requiring additional resources.

92. Other types of data that ACIAR currently collects and could consider publishing on behalf of the Australian Government include:

- Agricultural research data that is collected by researchers funded by ACIAR, primarily for universities and other research organisations. It would however potentially require a considerable amount of additional resourcing for ACIAR

⁴ <http://aciarc.gov.au/page/research-programs>

⁵ Background page iii

to properly investigate issues around IP, privacy, accuracy, data management and publishing were such an initiative to be undertaken.

- Personal and organisational information collected as part of project funding partnerships, applications and related administration (travel, contacts details, CVs etc.), fellowship and event funding as well as lists of subscribers to ACIAR publications and social media. This information is currently collected by ACIAR, as part of its normal business practices, but not published. Providing access to this information would also require additional funding support and resourcing.
- Data that is compiled by ACIAR for regular and ad hoc government reporting requirements (ICT benchmarking, Questions on Notice, [new contracts](#) etc.⁶) Some of this information is already published on the ACIAR website in line with existing standard government reporting requirements.

93. ACIAR is currently working towards providing access to the data we already gather on projects funded as part of Australia's aid program via [data.gov.au](#)⁷ and the "[National Map](#)" initiative⁸. ACIAR welcomes the introduction of these platforms to provide a way of publishing data in a standard format, which is particularly efficient and cost effective for small agencies like ACIAR, with limited resources.

94. ACIAR would be interested to understand better the demand for and benefits of releasing international agricultural research data produced as part of the projects it funds before considering the more complex areas of privacy, IP and related resourcing.

95. In summary, there may be considerable benefit to the academic community and to international researchers and governments were more data to be released on international agricultural research. ACIAR would like to see whole of government support to providing this data, ideally within a clear over-arching APS policy framework. ACIAR simply does not have the capability or resourcing to manage these important data policy issues alone, but would be more than willing to work with others, within its resources, on these important issues.

⁶ <http://aciar.gov.au/filelist>; <http://aciar.gov.au/contractsreport>

⁷ <https://data.gov.au/>

⁸ <https://nationalmap.gov.au>