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## Survey Participant Information - How The ABS Keeps Your Information Confidential

The ABS depends on the goodwill and cooperation of Australians, businesses and other organisations to provide information in response to its many data collections. A critical way of maintaining such cooperation and goodwill is by ensuring that information supplied remains confidential while being used as a valuable resource for the production of statistics and supporting statistical research.

The importance of this is recognised in the **Census and Statistics Act**, with confidentiality being a legislative guarantee to respondents. This is a condition under which the ABS exercises its authority to obtain the information it requires to meet the information needs of governments and the community generally.

The ABS meets the confidentiality requirements of the **Census and Statistics Act** by ensuring that information provided to it is:-

- securely maintained
- only used for statistical purposes
- not inadvertently revealed in any published statistics, and
- used safely as unidentifiable microdata files to support research and analysis.

This statement outlines how the ABS goes about each of these aspects to achieve its excellent record of maintaining confidentiality and the resultant public confidence.

### **SECURITY** **RESTRICTING USE OF INFORMATION TO STATISTICAL PURPOSES**

## AVOIDING INADVERTENT DISCLOSURE IN PUBLISHED STATISTICS MICRODATA MAKING SURE SECURITY IS WORKING

### SECURITY

#### Employee undertaking

All employees of ABS, regardless of their duties and status of employment, must sign an **Undertaking of Fidelity and Secrecy** on commencement of employment with ABS. This includes contractors. The undertaking requires that employees do not disclose information acquired during their employment with ABS and continues to apply after ceasing employment. Significant penalties apply for any breach, including up to 2 years imprisonment and/or a \$5,000 fine.

The importance of confidentiality is communicated to staff in many ways, beginning with induction training for all new employees. The ABS organisational culture is one which emphasises the importance and need for confidentiality, with the message reinforced to employees in corporate documents, training courses and the everyday conduct of their work.

#### Building security

Staff are also reminded of the importance of security many times each day as they go about their work. The ABS buildings and computers provide a working environment that physically keeps confidential information secure. All entry into an ABS building is through a security area which electronically monitors and determines movements into and out of the building, and only staff and escorted visitors are able to enter. Some work areas are further restricted to certain staff.

#### Computer system security

The ABS maintains a complex computing environment which is essential for the efficient processing of the information it collects, processes and publishes. There are many layers of security including firewalls against external intrusion. Staff are reminded each day when they log on to any ABS computer that action could be taken if they misuse the computing environment. Audit trails are available for examination should investigation

be necessary. The security of the ABS environment is formally assessed annually to ensure compliance with all Australian Government IT security standards.

### **Need to know access to data, even for ABS staff**

Policies and practices for keeping information secure are adhered to by all staff when collecting information and processing it to produce statistics.

Data collected under the **Census and Statistics Act** can only be accessed by ABS staff if they have a genuine 'need to know' that information. An ABS staff member has a genuine 'need to know' if, without access, they would be hindered in the performance of their ABS work. ABS staff are only provided with the minimum amount of information they 'need to know'.

During the early phases of data collection names and addresses are necessary to ensure the quality of the resulting statistics produced. For example, we occasionally need to contact respondents to verify reported data. Access to files where the names and addresses are attached is tightly restricted to people working on these types of tasks.

### **Data records de-identified as soon as possible**

Once quality has been assured, however, names and addresses are removed, because this information is not needed for the production of statistics. Removal provides added protection against any breach of security of confidential information.

Internally generated identifiers are usually attached to each record, but cannot be used to identify a respondent. Nevertheless, the combination of these identifiers and the name and address to which they refer can be used to make records identifiable. Hence any linked files are carefully protected and only available on a strict need to use for work basis.

### **Secure disposal of forms**

Once information has been extracted from forms (including electronic records) and coded, and the forms are no longer required for verification, editing or quality studies, they are securely stored and eventually destroyed in a secure manner in accordance with government policy.

## RESTRICTING USE OF INFORMATION TO STATISTICAL PURPOSES

Consistent with the **Census and Statistics Act**, information collected by the ABS is restricted to use for statistical purposes only. This means that the information cannot be used for any administrative, regulatory, law enforcement, adjudicatory, or other purpose that affects the rights, privileges, or benefits of a particular identifiable individual or organisation.

## AVOIDING INADVERTENT DISCLOSURE IN PUBLISHED STATISTICS

The Australian Statistician is required to compile and analyse the statistical information collected under the **Census and Statistics Act** and to publish and disseminate the results so that the statistics derived from the information collected are available to the public. When releasing statistics it must be done in a manner that is "not likely" (in a legal sense) to enable the identification of a particular person or organisation. This requires the application of statistical methods which avoid identification while allowing sufficient detailed information to be released to make the statistics useful. These methods have been developed by statisticians in universities and statistical agencies around the world, including ABS statisticians. They are continually being further developed.

The following basic techniques are applied to tables of statistics likely to contain cells which should be kept confidential.

1. Limiting the detail available (eg collapsing detail in classifications, combining cells).
2. Slightly altering outputs so that results from analysis based on the data are insignificantly affected yet the original values cannot be known with certainty. This method is usually adopted for count data such as released from the population census.
3. Suppressing information.

There are a small number of explicit situations permitted by legislation where information about businesses, but not individuals or households, might be released or controlled access provided to unidentified records by persons who are not members of ABS staff. These exceptions are tightly prescribed by Determinations of the **Census and Statistics Act** made by the Minister. Release under a Determination also requires the approval of the Australian Statistician.

## MICRODATA

An important Determination made under the **Census and Statistics Act** enables the Australian Statistician to provide access to unidentifiable individual statistical records (commonly called microdata) to enable wider access to ABS data for social and economic research and analysis. In doing so, the Australian Statistician must ensure that all identifying information is removed prior to release and that the information is released in a manner that is *not likely* to enable the identification of a particular person or organisation.

### **Enabling only, not obligatory**

There is no obligation on the Australian Statistician to release microdata files. The Determination is an enabling provision only, and specifies minimum conditions that must be agreed to before access to microdata can be granted, and the penalties that apply should these conditions be breached.

### **Range of protections for confidentialised microdata release**

The ABS has adopted a manner of release for microdata that protects the data in four ways:-

- i) by confidentialising the data on the records;
- ii) by providing access in different ways depending on to the level of detail available;
- iii) by requiring individual users and their employing organisations to sign undertakings that restrict how they use the data; and
- iv) by raising awareness in users as to why it is vital to keep data confidential and what that means in practice when they are using the files and publishing results.

### **Confidentialising unit record files**

The unit record files are confidentialised by removing name and address information, by controlling and limiting the amount of detail available, and by very slightly modifying or deleting data where it is likely to enable identification of individuals or businesses.

When considering requests for access to microdata the Australian Statistician seeks expert advice from the organisation's Microdata Review Panel on whether the data is *likely* to result in identification of an individual person or business. The Microdata Review Panel consists of senior

executives who consider technical assessments of risk of identification associated with any file considered for release.

The Australian Statistician personally decides, for each and every confidentialised file, whether or not to approve release. Even after that, one of the Deputy Australian Statisticians must approve release of the data to every organisation that wishes to use the data. The law requires formal undertakings from recipients which means they are subject to legal penalties if they breach conditions.

### **Penalties for breaching the CURF Undertaking**

Any person who fails to comply with an undertaking given by that person in respect of a CURF is guilty of an indictable offence, punishable on conviction by a fine not exceeding \$5,000 or imprisonment for a period not exceeding 2 years, or both.

Any inappropriate activity relating to the use or custody of an ABS CURF may jeopardise any future applications for access to ABS CURFs by an individual user and/or the user's organisation.

### **Modes of access**

The ABS currently provides three different ways of accessing microdata, with each method providing access to different levels of detail in the data. The methods that provide the most detail are more tightly controlled and monitored. This ensures the manner in which the data are released is *not likely* to enable indirect identification of a particular person or organisation. The three different modes are:-

- a) Confidentialised Unit Record Files (CURFs) released on CD-ROM – these are files of individual unidentifiable records restricted to variables released in broad categories;
- b) Remote Access Data Laboratory (RADL™) - This is a facility where approved users can remotely use expanded CURFs that contain more variables and/or more detail. The users submit analysis jobs to be run against the CURFs which remain on the ABS premises, with extra protection provided by the automatic logging of RADL activity and subsequent audits of this activity. The data itself remains on ABS premises and cannot be "seen" by researchers. The code submitted to the RADL facility is automatically logged and audited so that ABS retains a history of the outputs produced from each CURF; and
- c) the ABS Data Laboratory (ABSDL) - supervised access is provided on

ABS premises to specialist CURFs which contain the most variables and detail. All analytical output and other material is vetted before being removed from the Data Laboratory.

## **MAKING SURE SECURITY IS WORKING**

### **Expertise in security and confidentiality techniques**

Keeping information confidential requires constant attention. The ABS invests significant resources in establishing and maintaining building and IT security. It has methodologists and other staff developing improved technical methods for avoiding inadvertent disclosure of information in published statistics and when microdata is being used for research and analysis. Disclosure control is an issue managed by all official statistical offices around the world and the ABS contributes to international developments and information sharing.

### **Senior management oversight**

Confidentiality practices are regularly reviewed by management. Their importance is reinforced in corporate and local area plans. Policies and practices are maintained and promoted for all staff to follow. Security is overseen by a committee of senior executives chaired by a Deputy Australian Statistician and reporting to the Australian Statistician. The Microdata Review Panel is chaired by a senior executive. Audits of practices of work areas are conducted regularly, including formal external audits. The IT security system has been certified by the Defence Signals Directorate.

### **Openness**

Openness is also an important feature of the way the ABS operates. While particular details about security and disclosure protection methods are not able to be divulged because it would undermine their effectiveness, the ABS is open about the way it goes about its business. It strives to maintain the confidence in the organisation held by independent guardians of the public interest (such as the Privacy Commissioner) and key stakeholders by discussing its methods and potentially sensitive areas of privacy with new developments. It also lets respondents and staff know of the guarantees provided to respondents by the **Census and Statistics Act**.

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