



Data Governance Framework

Workplace Gender Equality Agency

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Contents

Message from the Director	3
Introduction	3
Strategic vision for the Agency's data	4
Purpose of the Framework	5
Definition of data	6
Scope of the Framework	6
Data governance within the Agency	7
Data management principles	ę
Measuring data management effectiveness	10
Policies and procedures	1′

Message from the Director

The rich dataset held by the Workplace Gender Equality Agency (Agency) is a testament to the determination of the business community and the Australian Government to work together to address gender inequality in the workplace.

The data is collected and held for the sole purpose of driving our efforts to remove the barriers to women and men's equal participation and reward at work.

It provides a comprehensive picture of women and men's experiences at work, rich with detail including promotion rates, employer actions and employee remuneration across occupations and manager categories. It provides the evidence base we need to identify and address the factors causing unequal outcomes for women and men at work.

This Data Governance Framework outlines our commitment to managing the data we hold with care and robust, best practice data management policies; from collection and storage to analysis and promotion.

With this Framework, Australian employers and employees can be sure that the Agency is doing its part to safeguard the confidential information which is the foundation of this shared initiative.

Libby Lyons

Director

Introduction

The Workplace Gender Equality Agency (Agency) is an Australian Government statutory agency created by the Workplace Gender Equality Act 2012. (the Act)

The Agency is charged with promoting and improving gender equality in Australian workplaces.

We work collaboratively with employers providing advice, practical tools and education resources to help them improve their performance on workplace gender equality issues. Our staff are workplace gender equality specialists and provide industry-specific advice.

The Agency also works with employers to help them comply with the reporting requirements under the Act. These reporting requirements aim to encourage measures that improve gender equality outcomes, and have been designed to minimise the regulatory burden on business.

This Data Governance Framework (Framework) provides a structure for the development, promotion and implementation of good data management practices. The Agency is committed is to having well-defined, best practice data management policies and procedures supported by staff training and support systems that make effective data management part of our day-to-day work practices.

Strategic vision for the Agency's data

The Agency has the vision of women and men to be equally represented, valued and rewarded in the workplace. Critical to the delivery of this vision is strong data governance and management processes that establish the Agency as a best practice data agency. These processes are supported by key data management capabilities for Agency staff.

The Agency's strategic mission is to lead, influence and inspire change to promote gender equality in Australian workplaces utilising our world leading dataset.

Data governance, policies and procedures

Data management capabilities

Security, access and privacy

Manage the data life cycle	Mine the data for insights	Use the data to communicate		
Storage	Processing	Reporting		
Cleaning	Analysis	Sharing		
Metadata standards	Integration	Analytics		
Staff education, support and training				

IT software, systems and support

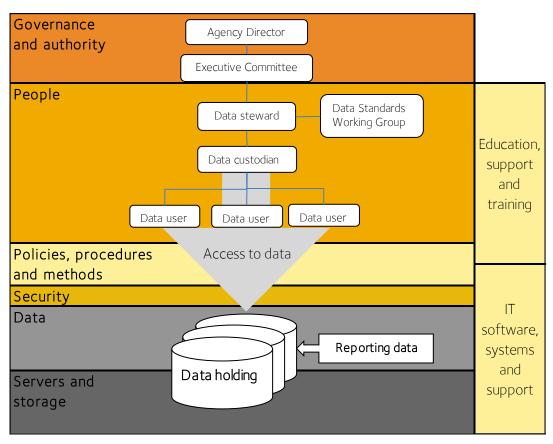
The Agency's data governance and management processes are developed with a focus on the security and privacy of organisations that report to the Agency in accordance with the Act, supported by a secure ICT infrastructure environment, and a commitment to quality control processes.

Purpose of the Framework

The Framework aims to support data management through the stages of planning, collecting, processing, analysing, publishing and archiving of data. It enables the consistent application of data management terminology and practices, and supports staff in the performance of their data management roles.

In the context of this Framework, data governance refers to:

"a system of decision rights and accountabilities for information-related processes, executed according to agreed-upon models which describe who can take what actions, with what information and when, under what circumstances, using what methods!".



WGEA Data Governance Framework

Data management refers to the 'agreed upon models' in the definition above. It is:

"the development, execution and supervision of plans, policies, programs and practices that control, protect, deliver and enhance the value of data and information assets?".

Data management requires shared responsibility between three areas of expertise:

- 1. **Governance and authority,** which provides strategic intent and business goals of the organisation as well as the boundaries for the Agency's work. This also defines and promotes the Agency's data management activities and provides supporting resources for these activities.
- 2. **People,** in their roles as data stewards, data custodians and data users are involved in the day-to-day acquisition, storage, management and dissemination of the Agency's data.

¹ The Data Governance Institute http://www.dataqovernance.com/adq_data_qovernance_definition/ accessed 09/02/2017

² The DAMA Guide to the Data Management Body of Knowledge (DAMA-DMBOK), 1st Edition 2009, p.4

3. **Systems,** in the form of policies and procedures, security, software, hardware and applications that support effective data management.

This Framework articulates the key responsibilities of Agency staff in defined roles, as they relate to data management.

Some of the processes of data governance and management will evolve in response to the Agency's current and future priorities. This framework provides a structure within which these processes can be developed and authorised.

Definition of data

The concept of data is not always straightforward. In the world of data, the existence of a defined data object is not always clear. For example, a report sent to the Agency based on its 2016–17 reporting questionnaire and workplace profile is a data object which may then be queried, processed and resubmitted which then creates an additional data object. This would subsequently be combined with reports from other reporting organisations to create the annual WGEA dataset (another data object). The WGEA dataset may then be processed and extracted for specific analyses and reporting (e.g. using statistical or business intelligence tools) to produce more data objects such as the WGEA Scorecard or the Agency's Competitor Analysis Benchmark Reports.

The preferred term for each of these objects is a data holding. A data holding is defined by the Agency as

a cohesive set of data, designed to address specific organisational needs, which may be created externally and provided to the Agency or generated internally, either by direct collection or modification of existing data.

A data holding will:

- be used for a defined purpose or set of purposes
- be identified within the Agency as an asset using agreed metadata
- · have an identified data steward with responsibility for management of the data within the organisation
- · have at least one identified data custodian with responsibility for the operational aspects of handling the data
- typically have one master/source file stored in a single location
- have a community of people who use the data
- have policies and procedures that define how the data is created, updated, retrieved, checked, used and destroyed
- have metadata that records how and when the above processes occur

The Workplace Gender Equality Act 2012 (Act) as amended by Workplace Gender Equality (Matters in relation to Gender Equality Indicators) Instrument 2013 (No. 1) establishes a set of six **gender equality indicators**. These gender equality indicators may be quantitative or qualitative measurements that allow for a reporting organisation to be assessed based on comparison with an agreed standard, target or with data from another point in time.

Gender equality indicators are derived from the data holdings managed by the Agency and are considered to be an essential component of our data management practices.

Scope of the Framework

Data can be stored in:

- structured formats such as databases
- semi-structured formats such as spreadsheets
- published formats including content on websites
- non-structured formats such as emails and documents.

The scope of the Framework is the life-cycle management of all of these types of data as they relate to reporting against the gender equality indicators.

Data governance within the Agency

Data governance refers to the authority which the Agency has to collect, store, analyse, process and publish data as well as the decisions made with this authority. The Act establishes the requirement for relevant employers to provide reports to the Agency and for the Agency to use these reports to perform a range of functions. These include:

- collection and analysis of information provided by relevant employers under the Act (s10.1.d)
- development of benchmarks in relation to gender equality indicators (\$10.1.aa)
- undertaking research, educational programs and other programs for the purpose of promoting and improving gender equality in the workplace (s10.1.e)
- publishing of public reports by electronic or other means (s15.1.a).

The Act provides the Agency with the overall authority to acquire and manage data. In addition, the Agency is subject to a range of obligations under legislation such as the *Archives Act 1983* and the *Privacy Act 1988* as well as the <u>Australian</u> Government Protective Security Policy Framework.

Within the Agency, specific roles and responsibilities are required for data governance and management.

- 1. **Agency Director** the Director has responsibility for the management of the Agency and for the Agency's discharging of its responsibilities under the Act.
- 2. **Executive Committee** the Executive Committee collectively leads and takes responsibility for the day to day performance of the Agency and supports the Director in their role. The specific responsibilities of the Executive Committee include:
 - ensuring rules and procedures are in place to support ethical behaviour and provide guidance on appropriate work methods
 - providing final approval of an appropriate set of policies and ensuring that these are put in place so as to support the operation of the Agency
 - ensuring that employees are offered the training and tools necessary to fulfil their duties.
- 3. **Data steward** A data steward is a role within the Agency which manages the use and quality of the Agency's data holdings from an organisational perspective. A data steward is a subject matter expert with a base level of technical data literacy.
- 4. **Data Standards Working Group** The Data Standards Working Group reports to the Executive Committee on matters relating to data management. The responsibilities of the Data Standards Working Group include:
 - development and implementation of data management policies and procedures
 - development, oversight and coordination of the development of data specifications for gender equality indicators and contextual information produced by the Agency
 - development, oversight and coordination of the development of Agency standards in relation to access, use and disclosure of data.
- 5. **Data custodian** A data custodian is a role within the Agency which performs operational management of the collection, storage and use of one or more data holdings. Data custodians have high levels of data literacy as well as skills in data management software systems and tools.
- 6. **Data user** Data users are those staff within the Agency who need access to the data for analysis and producing Agency reports, but who are not custodians or stewards of the data. Data users will have varying levels of data literacy and data management skills.
- 7. **IT and systems support** IT and systems support refers to a range of experts which provide specialist hardware, software and systems advice and support to the data steward and data custodian.

Role of the Executive Committee as it relates to data management

As part of its role to oversee the implementation of this framework, the Executive Committee has responsibility for:

- final approval of the Agency's data management policies and promotion of these policies
- setting short and medium term goals for data management activities
- ensuring that the Agency has appropriate information architecture for the storage and management of data and gender equality indicators.

Role of the data steward

A data steward is normally a senior role within an organisation, with responsibility for specific data holdings. A data steward will understand the organisation's requirements for collecting and holding data, as well as its permitted uses, publication and dissemination.

Data stewards have dual roles in education and training. Collectively they are responsible for ensuring that data custodians and data users have an awareness and understanding of the Agency's data management policies and procedures, and access to appropriate education and training in order to implement those policies and procedures. For each of the data holdings under their care, data stewards also have a responsibility to ensure that their users have access to the information (mostly in the form of metadata) and skills they require to correctly access and use that data.

A data steward will provide clear delegation and instructions to data custodians so that security privileges to their data holdings are maintained and monitored.

Data stewards require access to IT support tools to allow them to view and monitor their data holdings attached to their data steward role.

The Agency's data steward is the Chair of the Data Standards Working Group.

Role of the Data Standards Working Group

The Data Standards Working Group reports to the Executive Committee. It has responsibility for:

- establishing and reviewing an overall program of standards, monitoring and compliance, which includes the allocation of data holdings to a data steward and data custodians
- setting, implementing and monitoring standards for:
 - o the storage and use of data holdings
 - o security of data holdings
 - o data quality
 - o metadata requirements and solutions
 - o other data management compliance measures as required
- resolving issues raised by data stewards, data custodians and data users
- participating in the development of IT solutions for data management activities
- initiating reviews and audits of the Agency's data management practices.

Role of the data custodian

A data custodian has delegated operational management of specific data holdings by a data steward. This means that they may be involved in the design of data acquisition, receipt and storage, processing, analysis, reporting, publication, dissemination and archival or deletion of data. Data custodians generally have considerable skills in using data and the associated software tools and systems.

Where a data custodian is unsure of their authority to access, process, report or disseminate data they should refer issues to the data steward.

Data custodians require IT support tools to allow them to view and monitor their role. This includes access to effective metadata so that they can fully understand the context, definitions, meaning and data quality indicators for the data

they are using. They also require considerable training and education, and generally benefit from peer review and sharing mechanisms so that expertise in how data is being stored and processed is available to other data custodians as a learning tool.

Data custodians can be required to provide assistance and support services to data users for the data under their control.

The actions of data custodians must be visible to the data steward of the data they are using.

It is possible for the same person to perform the dual roles of data steward and data custodian.

Role of data users

A data user will have access to specific data holdings to be able to analyse and report on the data. They will vary in their level of technical data literacy, subject matter knowledge and security clearance so it may be appropriate for them to be a 'read-only' user, where they can interrogate and use the data but do not have the authority to update or delete the

By being provided with access to data they are assuming responsibility for its correct use, analysis, interpretation, reporting and publication, and they must be supported in this role through effective IT systems, education and training.

Where a data user is unsure of their authority to access, analyse, report or disseminate data they should refer issues to a data custodian in the first instance.

The actions of data users must be visible to the data custodians of the data they are using. It is possible that an individual may be both a data custodian and a data user.

Role of IT and systems support

The data steward, data custodians and data users need access to user-friendly and appropriate data systems, hardware and software tools in order to effectively store, process and access data. In order to provide and maintain these systems, the Agency needs access to IT systems expertise.

One of the key requirements for the Agency is an integrated data management solution, not just a series of one-off solutions. The Agency has an ongoing requirement for an integrated data management solution that can accommodate a variety of user needs and outputs. This system also requires a certain degree of continuity and transferability with Australian government standards for data collection and storage. Whilst system changes are inevitable over time, the Agency will need to consider broader, Agency-wide implications before solutions are implemented.

There are many hardware and software options available for data storage, processing, analysis, reporting and publication. The Agency should assess the most appropriate tool for the task, and make this assessment in the context of its full suite of data management policies.

Over time the Agency is expected to continually improve its processing and reporting systems, and will continue to require efficient IT and systems support to specify, acquire, build, implement and maintain these systems. IT support may be sourced from external partners or agencies, and this internal strategic and technical IT role is still crucial for effective data management.

Data management principles

A data management principle is a statement that serves as the foundation for a system of behaviour. The Agency's data management principles therefore provide an organisation-wide basis for data management behaviour.

- 1. The Agency adopts a risk-management approach to data management with data security incorporated into its broader risk management framework.
- 2. Data will only be collected, stored, used, published and archived with appropriate authority.
- 3. Data will be collected, stored, used, published and archived within the scope of obligations of a government agency.
- 4. Data will be defined and documented in a consistent form (metadata), including quality indicators.

- 5. The life cycle of a data holding within the Agency will be managed through interconnected systems so that reported data will be traceable back to its source(s) and its life cycle will be discoverable.
- 6. International and national standards and conventions for data and data management will be formally recognised and adopted where appropriate. Best practice solutions will be adopted for specific aspects of our agency.
- 7. Wherever possible, data will be collected once and stored in a single location for a defined purpose(s).
- 8. Data will be protected with appropriate security systems and procedures.
- 9. Data will be made easily accessible to internal users as well as external users where appropriate to promote and support reuse, in accordance with authorisation principles and agreements.
- 10. The input of stakeholders and experts (e.g. in the form of advisory groups) will be used to continually monitor and improve data management practices, particularly in the development of new data sources, performance indicators and collection methodologies.
- 11. Staff will be supported in their data management responsibilities and activities through appropriate and well-resourced systems, procedures, induction materials, education and training.
- 12. Data management activities will be subject to routine audits to monitor the effectiveness of the implementation of policies and procedures.

Measuring data management effectiveness

Over time the Agency will develop and measure compliance with data management policies and procedures, based on the assessment of risks. As an organisation, the highest risk data management activities will need to be determined and appropriate quality controls and safeguards in will be put in place.

Systems which record data and metadata will support the measurement of compliance with policies and procedures. In some cases this will be done via mandatory enforcement of rules through software and systems. In addition to systems support for compliance, reviews and audits of specific aspects of data management will be implemented in order to assess compliance levels, and address any issues which may be limiting our ability to comply.

The Agency's Data Standards Working Group has responsibility for implementing data management compliance systems and support, as well as for initiating reviews and audits. The Data Standards Working Group may receive direction from the Director or Executive Committee on priorities and issues which require specific attention.

Policies and procedures

The accompanying data management policies cover the following topics:

- 1. Data governance
 - Authority for Agency's work
 - Approvals within the Agency
 - Role allocation within the Agency
- 2. Data access and storage
 - Information security
 - Use of corporate data solutions
 - Documenting business processes
- 3. Data quality
 - Data quality model and statements
 - Data cleaning activities
 - Changes to reporting data
 - Responsibility for data quality and commitment to improvement
- 4. Data processing and analysis
 - Recording processing metadata
 - Use of standard methods
- 5. Data reporting, sharing and dissemination
 - Release of public reports
 - Agency use of remuneration data
 - Open data
 - Data requests
- 6. Metadata management
 - Recording and updating metadata
- 7. Staff education, support and training
 - Role definitions and support
 - Responsibility for providing education, support and training