Metadata Cheat Sheet

How to access metadata

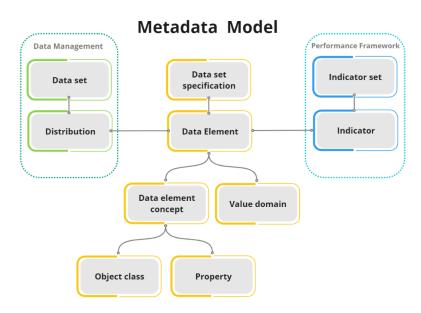
The Department of Employment and Workplace Relations' (DEWR) publicly available business metadata is available on Aristotle. You can access DEWR's publicly available metadata by clicking the link located on our report pages, or you can browse all of the available metadata for our reports here.

What is metadata

Metadata gives you context around the data you are using. It provides data definitions that help ensure the data is correctly interpreted, supporting better analysis and understanding. Like data, it is useful to store metadata in a central repository where it can be accessed and properly maintained. These repositories are known as metadata registries. DEWR structures its metadata according to the ISO-11179, which is the international standard for metadata registries.

Under the ISO-11179 standards, there are various metadata 'building blocks' that are combined to form Data Elements. Each Data Element is designed to give you the information you need to understand a single data item. Data Elements can also be brought together to produce more complex metadata items like Distributions and Indicators. These provide information about how a database is structured, or how the numbers in a report are calculated.

The diagram below shows how these items fit together, followed by a short description of each item type.



Metadata 'building blocks'

- **Object class:** The thing or entity we are interested in gathering information about e.g. a Person, Organisation, Business or Event.
- **Property:** A characteristic or attribute that is common to an object class e.g. Age, Duration or End date.
- **Data element concept:** The pairing of an object class and a property. Data Element Concepts tell us that an object class has a specific attribute and how it's defined.
- **Value domain:** How the data is recorded. For example this could be a picklist of permissible values, a code-set or free text.
- **Data element:** The combination of the Data Element Concept (object class and property) and Value Domain for a single data item. Each Data Element tells us about one specific attribute of a thing or entity and how it's recorded in the data.

More complex metadata items

Data set registration and management items

- **Distribution:** How data elements are stored in a data table.
- Data set: How multiple tables are stored together as a set of tables or database.
- **Data set specification**: How a data set is collected. That is, the questions or inputs that create the data, and what shape or format the data takes when collected.

Performance indicator management items

- Indicator: Describes a measure that is regularly reported for tracking the performance of a
 process or policy. Indicators can be expressed as a simple number, fraction, percentage,
 proportion, or more complex computations. Indicators use Data Elements to define their
 component parts, allowing you to see the mathematics involved in a calculation and the
 definitions of the data involved.
 - You can see an example indicator here: <u>Number of Workforce Australia Services</u> participants on caseload by employment region, cohort and allowance group
- Indicator sets: Are a group of indicators that, combined, provide an overview of a topic. Indicator sets often reflect a specific report or framework, providing context for the actual data that make up the report.

You can find more detailed information regarding each metadata item mentioned above <u>here</u>.