



Standard Business Reporting

SBR AU TAXONOMY ARCHITECTURE

v14.0

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Version: 14.0

DOCUMENT CHANGE CONTROL

Version number	Date of issue	Author(s)	Brief description of change	
Draft 10.0	01/05/2009	Lara De Paula	Updates related to change in the way how IFRS will be used by SBR Program (Figure 2 and 3, and Section 2.2.5).	
			Updates on section 2.6.3 re strategy of release packaging.	
Draft	01/08/2009	Lara De Paula	Re-structuring of the document to improve readability.	
11.0			Inclusion of section 1.2 to introduce some core concepts in the architecture and a consistent terminology across the document.	
			Inclusion of section 2.5.1 and 2.5.2 re contextualisation of facts Temporary removal of the decision tree, which is currently being revised and refined.	
			Inclusion of section 2.3.4.1 to 2.3.4.3 re dimensions implementation strategy.	
			Inclusion of Credit and Insurance information classification subject areas	
			Inclusion of a new version of the dimension and tuples decision tree	
			Inclusion of section 2.7 on Versioning	
Draft 11.0 Final	11/08/2009	Craig Chapman	Review, updates to detail contained within the document, inclusion of attribute statement, update of changes to architecture section	
Draft 11.1 Final	25/09/2009	Lara De Paula	Content of Sections 2.4 and 3.2 moved into the SBR AU Naming Convention document	
Draft 12.0	13/12/2011	Lara De Paula Katina Chambers	Reformatting and restructuring of the document for better clarity, as follows:	
		Ratina Chambers	· Section 2.3 Taxonomy Modularity -> 2.2 Modularity	
			 2.3 SBR AU Taxonomy section added and 2.2 SBR Information Classification System section moved into it 	
			2.3 SBR AU Reports section added and former section 2.5 Contextualising facts in a report moved into it	
			Inclusion of new sections: Purpose, Context and Data Element Lifecycle	
			Replacement of content that is now part of the SBR AU Principles with a reference to the principles document	
			Inclusion of content about the provision of labels and references at the definition and report layers	
			Update on external taxonomies section to accommodate IFRS	
Draft	30/04/2012	Katina Chambers	Cosmetic changes, including updating terminology	
v13.0			Addressed feedback from APRA	
			Updated data element lifecycle section	
			Removed references to BIR	
v13.1	15/08/2012	Katina Chambers	Addressed feedback from CR 70957	

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Version number		Author(s)	Brief description of change
v14.0	27/08/2012	Katina Chambers	Addressed feedback from CR 70957 v2

DOCUMENT APPROVALS

This document was approved by:

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1 INTRODUCTION

1.1 Document purpose

The SBR AU Taxonomy Architecture document describes the architecture that underpins the SBR AU taxonomies. Its objective is to assist the SBR community to browse and/or consume the SBR AU taxonomies in the capacity required by explaining its goals, strategy, modularisation, components and versioning.

1.2 Document context

The SBR AU Taxonomy Architecture document must be read in conjunction with the following documents:

- SBR AU Naming Convention
- SBR AU Principles

All three documents can be found on the SBR website: www.sbr.gov.au

The intended audience of these documents are users who are familiar with the basic constructs of XBRL. This document does not describe how to build XBRL taxonomies.

The SBR AU Taxonomy will grow and its architecture will evolve over time.

1.3 Introductory concepts

There are a few core concepts that drive the architecture of the SBR AU Taxonomy. These concepts are explained below to assist with understanding the architecture.

The SBR Program is enabling the exchange of data between the Australian Government and businesses, in the course of fulfilling a reporting obligation. A reporting obligation can have one or more business collaborations. Business collaborations are comprised of a sequence of business interactions between business and government. The required content of each business interaction, along with rules and associated metadata, will be defined by an XBRL reporting taxonomy.

Figure 1, on the following page, shows how the core concepts of the SBR AU Taxonomy architecture relate to each other.

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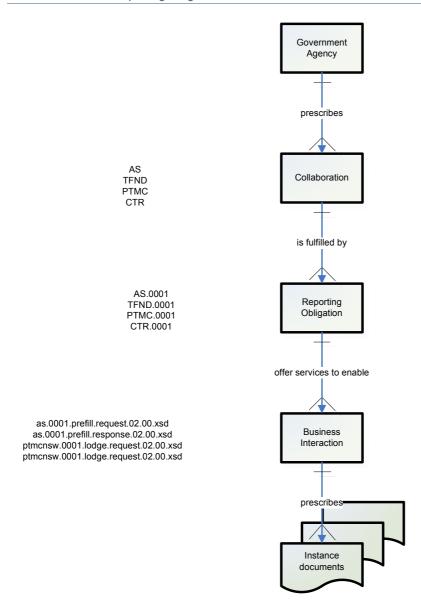


Figure 1 - Architecture core concepts

1.4 Summary of key features of the SBR AU Architecture

The following is a summary of the key features of the SBR AU Taxonomy Architecture:

- Alignment to 'Natural Business Data' is an important SBR business outcome and as such it is
 integral to the SBR solution that the taxonomy should not be architected from a government agency
 and forms perspective, but rather a functional information classification perspective.
- The SBR AU Taxonomy Architecture is founded on the principle that information is defined once
 and reused many times. All data elements are independently defined in the SBR AU (Definitional)
 Taxonomy. As business collaborations are identified these elements are then imported and used
 within the specific reporting taxonomies required by these business collaborations (see figure 2).
- Data elements are re-used across agency reporting taxonomies. The architecture defines data elements only once in the information classification taxonomies and does not repeat the definition in agency specific reporting taxonomies.

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- Data elements are organised and grouped using, wherever possible, the Australian Government Architecture (AGA) Business Reference Model (BRM) as a guide.
- Industry Standards are used to inspire the SBR AU Taxonomy. Examples include:
 - o International Financial Reporting Standards (IFRS); and
 - o Australian Standard on Interchange of Client Information (AS 4590).
- The goal of SBR is to reduce the regulatory burden on business. A key step in this reduction is agreeing common definitions of the information required across all government agencies involved. This process is called **harmonisation**.
 - O Harmonisation identifies data elements that are exactly the same (i.e. equivalent) and defines them only once in the SBR AU (Definitional) Taxonomy, thereby promoting the use of the same term for the same meaning in multiple places. There are three main ways that harmonisation can be achieved:
 - Rationalisation identifies data elements that are not required to be reported (i.e. obsolete or redundant). For example, where identical data elements are reported multiple times across different reports there is the opportunity to review the need for collecting the same information many times, which in turn leads to rationalisation of the reported data elements.
 - Standardisation redefines data elements in order to conform to an endorsed standard; i.e. making all uses of the data elements across different reports look and feel the same (same name, same business definition, with perhaps different report level guidance to expose the specific nuances for a given report).
 - Normalisation identifies whether data elements that seem similar can be treated as equivalent.
- Naming conventions are critical to consistency and harmonisation. The Information Classification method used provides rigorous, repeatable and simply understood naming conventions.
- The agencies involved in the SBR Program have requirements for financial reports that are
 transactional in nature. These transactional reports require data elements to be reported with
 various usage contexts, optionality, complex cross-context validation, calculation rules and deeply
 nested business relationships. These will be described using both the XBRL Discoverable
 Taxonomy Sets (DTS) and the Message Implementation Guide (MIG) documents.
- Some facts reported within an instance may contain associated attributes, for example isEditable='True'. The use of these attributes is determined at run time and, as such, there is no schema describing them. A full description of all relevant SBR attributes is described in further detail in the SBR Web Service Implementation Guide (WIG). In addition, each relevant Message Implementation Guide (MIG) will specify the specific set of attributes used within each business collaboration.
- The implementation of dimensional hypercubes uses positive hypercubes whenever possible. The
 use of negative hypercubes is restricted. See section 2.2.4 on dimensional modularisation and the
 use of restricted hypercubes.
- Each message within SBR requires a reporting party ID. To ensure the implementation of reporting
 party is implemented consistently across all reports, SBR has used a reporting party dimension in
 every SBR message.

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2 TAXONOMY ARCHITECTURE

2.1 Goal

The goal of the SBR Program is to reduce the regulatory reporting burden on business. The SBR Taxonomy aims to support that goal by defining data elements only once in the SBR AU (Definitional) Taxonomy and then re-using them across any number of SBR AU Reports.

One of the key value propositions of XBRL is the separation of the data element definition from its context of use. The SBR AU (Definitional) Taxonomy leverages this capability.

Figure 2 provides a diagrammatic view of the dual layer architecture.

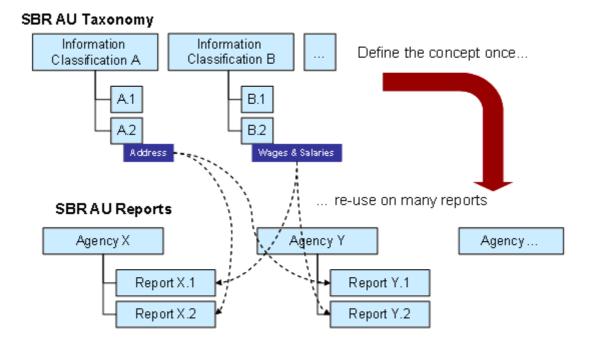


Figure 2 - Dual layer architecture

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2.2 Modularity

The SBR AU Taxonomy is separated into two components:

- 1. SBR AU (Definitional) Taxonomy: where all SBR reportable facts are defined and classified;
- 2. SBR AU Reports: the collection of data elements required to satisfy the reporting obligation between Australian businesses and government.

The SBR AU (Definitional) Taxonomy contains the following parts:

- Information Classification taxonomies [icls]
- Foundation taxonomies [fdtn]
- Common Modules [comnmdle]
- Dimension taxonomies [dims]
- External taxonomies [extl]

The SBR AU Reports contains a folder for each agency report implemented via the SBR Program. Each of these agency reports folders contain subfolders that describe the business collaborations and corresponding business interactions implemented through the SBR channel.

Figure 3 shows how these components are related:

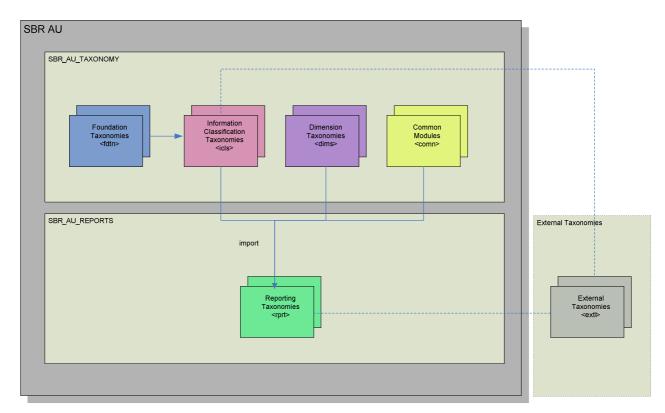


Figure 3 - SBR modularisation diagram

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2.2.1 Information Classification taxonomies [icls]

The Information Classification taxonomies contain:

• The definition of all SBR data elements grouped into subject areas according to the government data classification scheme.

The SBR Information Classification system is fully described in section 2.3.1 of this document.

SBR data elements are designed based on the information requirements of the agency and follow the principles described in the SBR AU Principles document, available at www.sbr.gov.au.

The Information Classification contains a sub-folder for each node in the scheme, with the following:

- Schema files containing a flat list of data elements.
- An XBRL label linkbase containing the formal definitions of each data element in the schema. Label linkbases will always have content as all data elements must have a business definition.
- An XBRL reference linkbase containing pointers to the authoritative source of the data element
 definition, such as established industry standards. If no references exist for data elements within a
 particular ICLS schema then, for completeness, the reference linkbase will be published empty.
- An XBRL presentation linkbase to assist with human readability of the XBRL schema.

The Information Classification taxonomies are located in the [icls] folder under the sbr_au_taxonomy folder.

2.2.2 Foundation schemas [fdtn]

The Foundation taxonomies contain:

- Data type schemas that complement the XSD and XBRL primitive types. They contain re-usable core type definitions such as 'code', 'identifier', etc. Types can be further qualified and can include facet restrictions (e.g. 'ABN_Identifier' would limit string length to 11 characters). In addition, many data element values are drawn from a limited set of allowed values (e.g. 'Country Code'). Very often the value domain is managed by an external body (e.g. ISO in the case of Country Code).
- A Technical schema that contains the definition of XBRL roles used across the entire SBR taxonomy.

It should be noted that length restrictions (or other facet restrictions) are applied only when they are a native property of the data element (e.g. all Australian Business Numbers must be 11 numeric digits) or when they are defined by a widely accepted standard (e.g. field lengths defined in AS 4590). Limitations of agency back office systems are not imposed on the taxonomy.

The Foundation taxonomies are located in the [fdtn] folder under the sbr_au_taxonomy folder.

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2.2.3 Common modules [comnmdle]

Common modules are structures of data that will be available for consistent re-use in multiple reports. These are typically sets of facts that are likely to be implemented in many reports with the same structure or with a limited variation of patterns.

Examples of common modules are:

- Payment Mechanisms (e.g. Cheque, BPay, Direct Credit, Direct Debit);
- · Address; and
- Organisation Name.

Common modules can also include the nesting of other common modules, however more than two levels of nesting is not recommended.

The Common Module schemas are located in the [comnmdle] folder under the sbr au taxonomy folder.

Note:

A previous version of this document referred to "definitional tuples". Such structures have been decommissioned, and whilst they still exist in the previously published ICLS schemas new definitional tuples will not be created.

Reusable structures will be solely implemented by Common Modules. Common Modules provide a more flexible mechanism to enforce the consistent implementation of common structures, as they allow the assembly of structures across different ICLS schemas if necessary.

For further information on this topic and related SBR principles please refer to the SBR AU Principles document, available at www.sbr.gov.au.

2.2.4 Dimension schemas [dims]

XBRL dimensions are used where specific reporting requirements exist that suggest business analysis and/or comparison will be undertaken based on a specific criterion embedded within the data element's metadata. The metadata that specifically relates to this analysis/comparison criterion should be extracted and applied in the form of a dimension.

It is worth noting that the same concept (e.g. 'state') might be implemented as both a simple code list and also as an XBRL dimension. Each implementation has a different purpose:

- the code list would be used to validate the value domain of a reported data element (e.g. the 'state' element within an 'address' structure);
- the dimension would be used to query and summarise many reported facts (e.g. summarise all payroll facts for each 'state').

The Dimension schemas contain the following:

- Schema files containing dimension item(s) and the set of domain value items applicable to the dimension(s) contained in the schema.
- Associated XBRL label linkbase containing label and business definitions for the dimension(s) and domain value items.

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Dimensions can be either explicit or typed. Explicit dimensions occur when the domain explicitly names its members. Typed dimensions occur when the number of members is impractically large to enumerate explicitly.

Two different dimensions can be logically linked to the same domain value set via alias dimensions. Alias dimensions only apply to explicit dimensions and share the same domain members while allowing the use of separate dimension definitions. For example, the Australian States Territories and Offshore Areas dimension schema (AuStsTerrOS.bb.ee.data.xsd) contains 2 dimension items: [Australian States Territories And Off Shore Areas] and [Risk Location States And Territories], along with a range of domain values that cover all Australian states, territories, offshore areas and combinations thereof. The taxonomy will still generate one dimension file for each dimension.

The Dimension schemas are located in the [dims] folder under the sbr_au_taxonomy folder.

For SBR principles related to the use of Dimensions, please refer to the SBR AU Principles document, available at www.sbr.gov.au.

2.2.4.1 Dimension modularisation

The [dims] folder contains a library of dimension schemas. Each dimension schema will contain the dimension element and the abstract elements required to implement the superset of domain values that the dimension supports. It will not contain the arc-roles between dimension and domain values, nor the facts (or primary items) that will be reported for the dimension.

The assembling of the hypercubes' skeleton occurs in the business collaboration's private module. This is the empty shell of the hypercube, which has only the set of dimensions and domain values allowed for that hypercube in that business collaboration but no facts. The dimensions used in the hypercubes will always match the dimensions defined in the SBR AU (Definitional) Taxonomy (with perhaps just a subset of the domain values).

The last step is the inclusion of the facts into the hypercube. This happens in the actual report schema.

This approach allows the report schemas to 'compose' the required subset of domain values and facts relevant to that particular hypercube.

The following figure shows how the implementation of dimensions is modularised.

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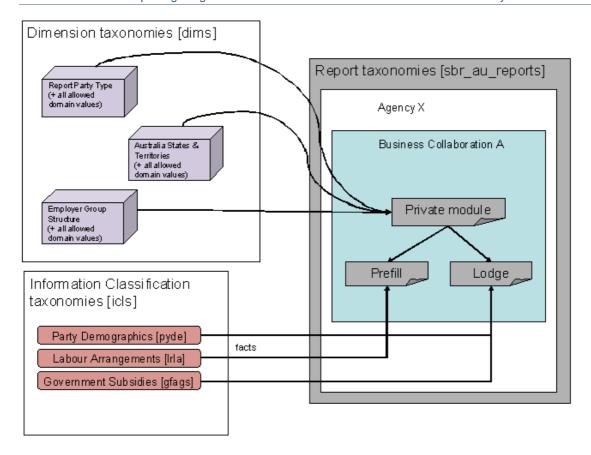


Figure 4 - Modularised implementation of dimensions

2.2.4.2 Use of restricted hypercubes

The policy in regards to hypercube restriction is to avoid their use. That means, whenever possible we should use positive hypercubes which avoids having to apply restriction.

In the scenario presented below (Figure 5 and 6), a range of facts are reported across four different domain values (A, B, C and D). However, facts one and two are only relevant to domains A and B, fact five can only be reported for domains C and D, and fact three and four are relevant to all four domain values (these are shown below represented by the grey cells)

Figure 5 shows the facts in 3 distinct grids implemented by 3 separate positive hypercubes without requiring any restriction.

Figure 6 shows all five facts in one single grid, therefore requiring two negative hypercubes to negate domains C and D for facts one and two, and domains A and B for fact five.

The implementation described in Figure 5 has been deemed more appropriate and will be used whenever possible. The exception to this rule is when it is fundamental for making business sense of the data that all facts are combined in one single grid as shown in Figure 6.

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	Domain	Domain
	Value A	Value B
Fact 1		
Fact 2		

		Domain Value C	
Fact 3			
Fact 4			

	Domain	Domain
	Value C	Value D
Fact 5		

Figure 5 – Use of positive hypercubes only

	Domain Value A		Domain Value D
Fact 1			
Fact 2			
Fact 3			
Fact 4			
Fact 5			

Figure 6 - Use of negative hypercubes

2.2.4.3 Other dimension considerations

The SBR Program will not make use of 'default' dimensions as there is no justifiable need for this feature across the government reports in scope for the Program.

In order to simplify the implementation, all dimensions will use context segments. We understand that context scenarios were a useful construct to enable forging multi-faceted context prior the publication of the dimensions' specification. However, the dimensions' specification enables the setup of labels for hypercubes, dimensions and domain members, which in turn provides a richer mechanism to describe the intent of each of these objects in a way that is more suitable than adopting the existing convention around segments and scenarios.

Note that external taxonomies adhere to their own architectures (for example, the IFRS taxonomy uses context scenarios). Dimensions will be used in SBR reports according to the principles described in the SBR AU Principles document, available at www.sbr.gov.au.

2.2.5 External taxonomies [extl]

The [extl] folder contains taxonomies that are external to the SBR taxonomy, and are imported or otherwise leveraged either in its SBR AU Taxonomy or SBR AU Reports components. These taxonomies could just be referenced natively in their servers of origin. The reasons for creating a local copy are essentially processing performance and greater control on their availability.

In situations where it is possible to identify and separate the specific external taxonomy files that are required for a certain purpose, only those files will be copied in the [extl] folder. This means that there is no warranty that an external taxonomy copied in the [extl] folder will be complete and fit to support purposes different from those that determined its inclusion in the [extl] folder in the first place.

In general, a copy of an external taxonomy or of a subset of an external taxonomy is included in the [extl] folder when:

• There is equivalence between data elements defined in the SBR AU Taxonomy and elements defined in the external taxonomy, and there is a requirement or a desire to provide means to make that equivalence explicit; for example to enable comparability or to provide guidance in the creation

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of instance documents when both taxonomies are used. In these situations, a mapping between the equivalent data elements expressed in an appropriate technical format may be provided;

 The external taxonomy is directly referenced (imported) in the SBR Taxonomy, as a whole or in part.

If the external taxonomy or the subset of an external taxonomy included in the [extl] folder is extended in order to enable its use within the SBR AU Taxonomy, its extension may also be located in the [extl] folder. This may happen because external taxonomies will generally follow their own architectural principles, which may differ from the architectural principles that govern the SBR AU Taxonomy. Keeping them in the same folder where the extended taxonomy is located achieves consistency and ease in identifying components that are logically tied together, such as a base taxonomy and its extension.

2.2.5.1 IFRS

At the date of publication of the SBR AU Taxonomy Architecture document, the [extl] folder
contains the International Financial Reporting Standards (IFRS) Taxonomy and the Australian
extension to the IFRS Taxonomy (IFRS AU). More information on the structure of the IFRS
Taxonomy, the IFRS AU Taxonomy and on the technical implementation of the extension can be
found in the most recent edition of the IFRS AU Taxonomy Guide.

2.2.6 Reporting taxonomies [rprt]

Reporting taxonomies define the requirements of business interactions that may be exchanged in the course of fulfilling a reporting obligation. They will be organised by Agency/Business Collaboration under the sbr au reports folder.

The SBR AU Reports contain the following set of files for each reporting taxonomy:

- A report schema: This schema will import the relevant information classification schemas that
 contains definitions required for the form. It will also import the private schema which contains
 skeletons of the required hypercubes. It assembles the information classification data elements into
 structures that represent the form and defines cardinality for each data element. Instance
 documents must validate against this schema.
- One label linkbase: this provides human readable labels and an optional guidance to assist in providing content to the taxonomy data elements contained in the report.
- One presentation linkbase: this is provided to assist with the human readability of the XBRL schema and should not be used to drive any rendering of the report.
- One definition linkbase: this contains the final assembling of the hypercubes (i.e. the definition arcroles between primary items and hypercubes).
- One reference linkbase: this provides links to form specific legislation that defines how the data elements are used and interpreted in the context of the form. It also provides references to industry standards that may apply to the data element.
- Optional calculation / formula linkbases or Schematron files. These provide machine readable calculation rules and other more complex business validation that may be used to derive government obligation data.
 - The policy adopted by the SBR Program on the implementation of such rules is that government agencies will choose to implement using either:
 - Schematron XSLT1.0 stylesheets to implement any business validation rules including simple calculations, or

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XBRL calculation linkbase for simple addition or subtraction operations.

For further information about the roles implemented in the SBR AU Taxonomy and how to best use them, please refer to <u>section 2.5</u> of this document.

In addition, one private module schema will be released for each business collaboration. This private module will contain the skeletons of the hypercubes and primary items abstracts that will be imported and re-used by the report schemas.

It should be noted that samples instances are not provided as part of the SBR AU set of taxonomies. They are, instead, included in the conformance suite provided to support the adoption of SBR reports.

The Reporting taxonomies are located in the [sbr_au_reports] folder, classified by Agency and Business Collaboration.

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2.3 SBR AU (Definitional) Taxonomy

2.3.1 SBR Information Classification system

The SBR AU (Definitional) Taxonomy employs a robust system for classifying the data elements that will then be used in the assembling of reporting taxonomies. It is called the SBR AU Taxonomy Information Classification.

This approach ensures that data elements are classified independently from where they are used on reports, allowing for an SBR view of the data as opposed to an Agency-centric view.

It enables:

- grouping and classifying the large diversity of data elements covered by the SBR agencies that contain similar types of information;
- a better understanding of the meaning and definition of each data element; and
- meeting the SBR goal of defining the data elements once and reusing them in whatever agency report, which guarantees that data elements can only have one meaning.

2.3.2 Subject Areas

The following figure provides a <u>sample</u> snapshot of the information classification subject areas:

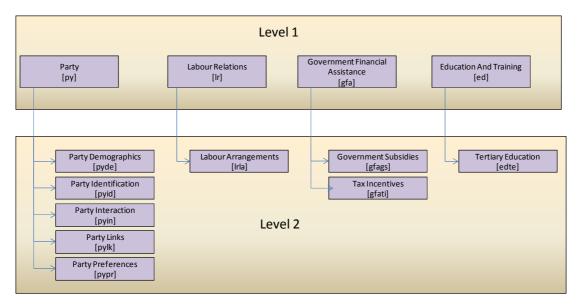


Figure 7 - Information Classification sample

Note: The figure above does not show the complete set of Subject Areas used by the SBR Program. The information classification will substantially grow as more data elements are included in the SBR AU (Definitional) Taxonomy.

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2.3.3 Data element lifecycle

In the lifetime of taxonomies, data elements are created, become mature, and occasionally some may end up no longer being required. The lifecycle phases of a data element and the transition across such phases need to be properly managed under an agreed set of rules to establish when the transition occurs and what actions are allowed in each phase.

Furthermore, the lifecycle status of each data element must be explicitly conveyed in the XBRL implementation of the taxonomy so that consumers of the SBR AU (Definitional) Taxonomy that may choose to utilise the SBR data element for purposes other than to implement SBR reporting taxonomies will be able to treat them accordingly and avoid the use of data elements that are no longer active.

A data element Status label is allocated to every data element within the SBR AU (Definitional) Taxonomy. It indicates the state that the data element has within the SBR AU (Definitional) Taxonomy. The generation of this label is triggered by the lifecycle status of the data element in the metadata repository, as follows:

#	Status	Description	Allowed actions
1	DRAFT	DRAFT data elements are created when new data elements are included in the SBR AU (Definitional) Taxonomy OR when previously published data elements are changed. Data elements in DRAFT are outlined to the best of knowledge at a point in time. Such data elements may not yet have sign-off by business experts, however it must be mature enough to possess the minimum set of metadata ¹ in order to be included in the SBR AU (Definitional) Taxonomy and therefore made available across agencies for potential use. Any changes to Published data elements also trigger a new DRAFT version of the data element.	 Changes to any metadata Deletion of the DRAFT data element
2	PUBLISHED	Once the data element is generated and included in a taxonomy release then its status is set to PUBLISHED. No label is produced as by default all data elements in a published SBR AU (Definitional) Taxonomy are of status Published.	 Any changes to PUBLISHED data elements are subject to Change Control approval and will trigger a new version of the data element that will have a status label of DRAFT. DEPRECATE a PUBLISHED data element

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¹ The metadata required for an element to be drafted is: Information Classification, Business Definition, Datatype, Period Type, Balance and Standard References and/or Enumerations if applicable.

#	Status	Description	Allowed actions
3	DEPRECATED	DEPRECATED data elements are published data elements that become redundant due to: • no longer recommended for use • harmonisation occurs leading to data elements no longer being required • change reporting requirements.	No changes permitted

Data elements that became obsolete (no longer used in any active SBR AU Reports) will not be physically removed from the schema files. However, they will be flagged as 'deprecated' through the use of a status label.

2.4 SBR AU Reports

2.4.1 Contextualising facts in a report

The contextualisation of facts in reports is about defining the additional information to surrounds the data element within a specific business collaboration message to assist consumers in their interpretation of that data value and therefore provide the correct information in the instance documents.

In other words, the goal of data contextualisation is to enable a data element to "stand on its own", meaning that a data element and its context can be taken from an instance document and the consumer has all the information required to understand what this data element is about.

The design of the SBR AU reports follows a set of principles to guide the way the data is contextualised in relation to:

- 1. **Who** the entity that the data is about?
- 2. When the period to which the fact values relates
- 3. What the information required to enable the correct interpretation of the data?

These principles are described in the SBR AU Principles document (available at www.sbr.gov.au) and they will ensure that the contextualisation of the facts contained in the SBR Reports is done in a consistent way.

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2.5 XBRL roles

This section provides an overview of all roles defined and used in the SBR AU Taxonomy. It also provides guidance on when and how these roles should be used.

2.5.1 Label roles

The following table shows the label extended link roles used in the SBR AU Taxonomy and SBR AU Reports, with the associated label roles used at the definitional and report levels.

	Standard roles:		
	http://www.xbrl.org/2003/role/link		
Role	Description / usage		
label	The SBR label attached to the data item at the SBR AU Taxonomy level. It is a mandatory label derived from the data element name and it provides a label that is agnostic of its usage within a particular agency / report.		
businessDefinition	It is a mandatory label that provides the broad business definition of the data element from a 'whole of government' perspective as opposed to an agency centric view of it.		
dataElementGuidance	This label is optionally provided against a data element and it is provided where addition information is required to complement the label and businessDefinition label. Typically this label is provided when the data element has the data type of code and the set of valid enumeration values (facet restrictions) are not understandable on their own and an English description of the enumeration is required.		
dataElementStatus	This label is allocated against a data element at the SBR AU Taxonomy level and it indicates the state that the data element has within the SBR AU Taxonomy.		
	SBR customised roles:		
http://sbr.gov.au/rprt/ <agency>/<obligation>/<obligation>.<collaboration>.<service action="">.<service intent="">.<baseline number="" version="">. <extension number="" version="">/labRole</extension></baseline></service></service></collaboration></obligation></obligation></agency>			
Role	Description / usage		
Label	This is a mandatory plain English free text label that assists in the understanding of the data element within the context of the report.		

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reportGuidance This is an optional label that provides specific guidance or instructions for the data element within the context of the report. The report guidance can specialise but never contradict what is provided in businessDefinition and dataElementGuidance labels in the definitional layer.

The following table defines the taxonomy objects and possible labels that can be linked to that object. The table also illustrates where the label resides within either the SBR AU Taxonomy or the SBR AU Reporting Taxonomy.

		Taxonomy Label Types					
			SBR AU T	SBR AU Reporting Taxonomy			
		Standard Label	Business Definition	Guidance	Status	Report Label	Report Guidance Label
Taxonomy Object	Data Element	M	M	0	0	0	0
	Dimension	М	М	n/a	n/a	n/a	n/a
	Domain Value	М	М	n/a	n/a	n/a	n/a
	Hypercube	n/a	n/a	n/a	n/a	0	n/a
	Tuples	М	М	n/a	n/a	0	n/a

Legend: M = Mandatory, O = Optional, n/a = not applicable

2.5.2 Presentation roles

Presentation roles are made available to assist consumers of the SBR AU Taxonomy to navigate and understand of the structure of the report. They should not be used for rendering the report, as they do not possess the level of detail required for this purpose. The presentation linkbase is also required for the XBRL API.

Each report schema will have one presentation linkbase containing one default presentation role. Multiple presentation roles may be provided if the nature of the report calls for it in order to be more understandable. For example, the Financial Report has been published with the default presentation role plus extra presentation roles to express specific sections of the reports (eg. Balance Sheet, Income Statement, etc...).

Naming conventions can be found in the SBR_AU_Naming Conventions document, available at: www.sbr.gov.au.

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2.5.3 Reference roles

SBR data elements can have two kinds of references implemented in the reference linkbases:

- Industry Standard: these as references to industry standards that assist in defining the meaning of the data elements and how they should be populated.
- Legal: these are pointers to legal references that authorise the collection of data by a report.

Industry Standard references will be attached to the data elements independently of the usage of the element in a report. In other words, these references are implemented in the SBR AU Taxonomy, whereas the Legal references are related to the use of a data element in a particular report, which means that Legal references are implemented in the SBR AU Report schemas.

The Industry Standards reference link role / role used in the SBR AU Taxonomy is:

http://www.xbrl.org/2003/role/link → industryStandardReference

Naming conventions can be found in the SBR_AU_Naming Conventions document, available at: www.sbr.gov.au/.

2.5.4 Definition roles

Each report schema will have its own definition role, where the final assembling of the hypercubes' facts takes place.

Each hypercube skeleton defined in the collaboration's private module will have its own definition role, which will be the target role in the final assembling of the facts in a report schema.

Naming conventions can be found in the SBR_AU_Naming Conventions document, available at: www.sbr.gov.au.

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2.6 Versioning

The main drivers for the taxonomy versioning strategy are:

- Users of SBR AU Reports and the SBR AU Taxonomy are explicitly made aware of changes to the SBR AU Taxonomy and SBR AU Reports.
- 2. Uptake costs to use the taxonomy are minimised software developers and SBR Agencies are not required to make changes to keep unchanged reports working.
- 3. Users of SBR AU Reports and the SBR AU Taxonomy can determine which SBR AU Reports (and which versions) are active for lodgement.

Specifically tailored implementations have been devised for the SBR AU Taxonomy and the SBR AU Reports in order to improve the efficiency of each, considering its different characteristics and behaviours. Additionally the SBR taxonomy relies upon concepts called Entry Point Schemas (EPS) to implement, amongst other things, versioning.

2.6.1 Entry point schemas

The SBR Taxonomy consists of numerous modules and these modules are combined on multiple levels. One level of module combination is via the use of constructs called Entry Point Schemas (EPS). EPS are used to achieve the following:

- 1. Combines baseline and delta files to form the SBR AU Taxonomy.
- 2. Specifies the latest versions of reporting taxonomies within a specific collaboration.
- 3. Enables the taxonomy to be opened in related chunks within relevant tools.

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There are EPS at numerous levels within both the SBR AU (Definitional) and SBR AU Reporting taxonomies which will be mentioned within the following two sections. The following table describes the various EPSs used within the SBR Taxonomy and their location within the SBR.

EPS Type	Absolute Location Root = http://sbr.gov.au/taxonomy Relative Location Root = {zip folder name}/sbr_au/	EPS File Name Convention and Example	Description
Top level entry point	Root	sbr.au.YYYY.[BB].[ee].xsd (e.g. sbr.au.2010.02.08.xsd)	Imports the latest Reporting Taxonomy and SBR AU (Definitional) Taxonomy entry point schemas. This is what realises the SBR Taxonomy. A new file required with every taxonomy release.
Top level Taxonomy entry point	Root/sbr_au_taxonomy/	sbr.au.taxonomy.[BB].[ee].xsd (e.g. sbr.au.taxonomy.02.07.xsd)	Imports the latest ICLS, Dim, Comnmdle schemas. New File Required whenever the SBR AU (Definitional) Taxonomy changes for a release.
Information Classification entry point	Root/sbr_au_taxonomy/icls/	icls.[BB].[ee].data.xsd (e.g. icls.02.07.data.xsd)	Imports the latest versions of the information classification domains.
Subject areas entry points	Root /sbr_au_taxonomy/icls/baf	[clvl2].[BB].[ee].data.xsd (e.g. baf.02.02.data.xsd)	Imports all the schemas that make up this information classification domain – SBR AU versioning relies on the use of delta files being combined with the baseline schema.

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EPS Type	Absolute Location Root = http://sbr.gov.au/taxonomy Relative Location Root = {zip folder name}/sbr_au/	EPS File Name Convention and Example	Description
Top level Reports entry point	Root/sbr_au_reports/	sbr.au.reports.BB.ee.xsd (e.g. sbr.au.reports.02.08.xsd)	Imports the latest reporting taxonomy entry point schemas for each agency.
Agency level Reports entry point	Root/sbr_au_reports/osrsa/	gggg.BB.ee.xsd (e.g. osrsa.02.02.xsd)	Imports the latest entry point schemas for available collaborations. Note this does not include the common services files (e.g. Lists) as common services do not have an entry point schema. These files are brought together within the entry point schema for the collaboration (see 7).
Agency Collaboration level Reports entry point	Root/sbr_au_reports/osrsa/pt mrsa/	gggg.osos.BB.ee.xsd (e.g. ptmrsa.0001.02.01.xsd)	Imports the latest schemas (request/response) required for the collaboration (e.g. ptmrsa)

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2.6.2 SBR AU Taxonomy versioning

The implementation of the SBR AU Taxonomy versioning strategy entails two principal actions:

- 1. The publication of baseline versions (Baseline releases) including the entire set of data elements contained in the SBR AU Taxonomy.
- 2. The publication of 'delta' version (Extension releases) where changes to existing taxonomy elements and newly included elements are published in separate 'delta' schemas that will add up to the baseline schema (Taxonomy elements which are not changed are not republished in the delta schemas).

The following figure demonstrates a typical versioning pattern for SBR AU Taxonomies:

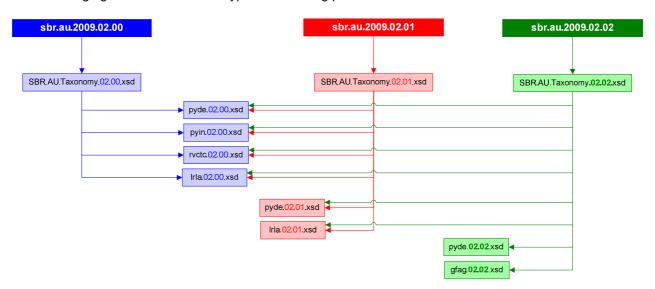


Figure 8 – SBR AU Taxonomy versioning pattern

The diagram above represents a baseline release of the EPS SBR.AU.Taxonomy.02.00.xsd in importing four information classification (icls) baseline schemas – Party Demographics (pyde), Party Interaction (pyin), Tax Collection (rvctc), and Labour Arrangements (Irla).

Then an Extension release is published EPS SBR.AU.Taxonomy.02.01.xsd in red which has exactly the same imports as v02.00 as well as new versions (v02.01) of Party Demographics (pyde) and Labour Arrangements (Irla). These could contain newly defined elements and the subset of data elements changed from v02.00.

Later another Extension release is published EPS SBR.AU.Taxonomy.02.02.xsd in green which again imports all previously published information classification (icls) schemas (blue and red and an ew set of elements from an icls schema used for the first time (gfag.02.00.xsd).

2.6.3 SBR AU Reports versioning

The versioning strategy for reporting taxonomies differs slightly from that used for the SBR AU Taxonomy in that both Baseline and Extension releases are self contained (no delta schemas).

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When any change is made to a report a new wholesale version of the report is created. This report version is independent of other reports, and consists of the schema, link bases, validation rules, implementation guide, etc, which fully describes the report.

As SBR message architecture is based on synchronous message exchange and due to the use of generic web services there is no way to correlate the version numbers of the request and response messages. As a result SBR will implement the principle that the request and response reporting taxonomies will always have the same version numbers. This will occur even if only one of the two reporting taxonomies has a change.

When a new version of a report is published, the old version of the report may still be lodged – this depends on the requirements of the SBR Agency which is specified within the Message Implementation Guide (MIG).

Reporting taxonomies that are no longer supported in production by the agency are still available in the SBR taxonomy files but are not discoverable via the top level entry point. SBR AU Report versioning does not currently provide any information about the status of reports.

Software developers who do not need to use the new report will not need to make any changes to their systems.

<u>Figure 9</u> shows a typical versioning pattern for SBR AU Reports, showing its 'imports' to the SBR AU Taxonomy.

In this figure, EPS sbr.au.reports.02.00.xsd (in blue) contains version 02.00 of both Activity Statement (as) and Tax File Number Declaration (tfnd), which in turns imports the baseline versions of pyde, pyin, rvctc and Irla, where required.

Then EPS sbr.au.reports.02.01.xsd (in v02.01) is published with a new version of the Activity Statement (as v02.01). Since all publications must provide the full set of 'active' reports it also packages the Tax File Number Declaration (tfnd v02.00), and if v02.00 of the Activity Statement is still able to be lodged then it should also be included (above in v).

Finally EPS sbr.au.reports.v02.02.xsd (in green) is published containing a new version of the Tax File Number Declaration (tfnd v02.01) along with all other active reports (again arrow assumes that both Activity Statement version 02.00 and 02.01 are active at the same time).

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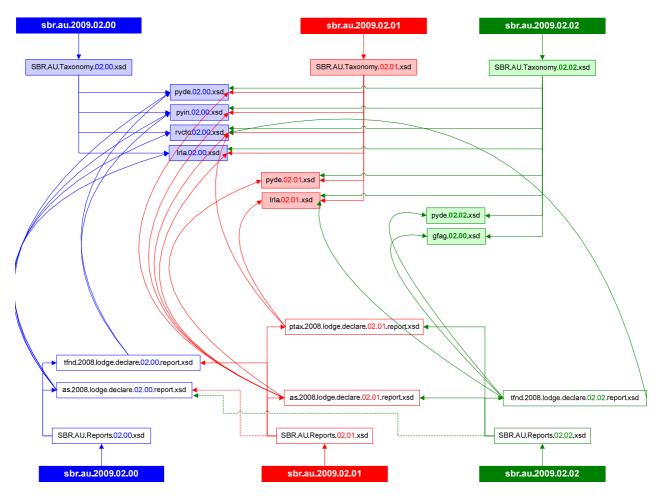


Figure 9 - SBR AU Reports versioning pattern

2.7 Taxonomy schema location

The SBR AU Taxonomy is highly modular and many schemas import other schemas. Import statements in schema files must reference the 'schemaLocation' of the imported schema.

SBR publishes the taxonomy using relative references. Relative references require that the entire taxonomy is downloaded in one package and installed locally on a user / developer hard drive. It is then the responsibility of the user to ensure that his local copy is up to date.

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