



ACRA Taxonomy 2016 v4.1 Guide

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Intended Audience

The ACRA Taxonomy 2016 v4.1 Guide has been prepared as a technical supporting guide for users of the ACRA Taxonomy 2016 v4.1. The guide addresses the financial reporting content and the XBRL framework of the ACRA Taxonomy 2016 v4.1. It is intended for use by those who are already familiar with and are able to apply the XBRL Specifications. This guide is software neutral and does not require the use of any specific tool.

This guide is useful to the following groups:

- (a) Data consumers who will be using the data from instance documents for analysis

The guide describes the modelling techniques used. This will help the data consumers to understand how data will be available in instance documents and thus how to structure their systems in consuming XBRL data.

- (b) IT solution providers who will be providing systems to generate instance documents

The guide describes the physical structure of taxonomy files and the modelling techniques used. This will provide guidance to the IT solution providers in reading the taxonomy and generating instance document based on the taxonomy.

To understand the document, prior knowledge of XBRL is recommended.

[For other XBRL matters, please address the queries to:](#)

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1. The ACRA Taxonomy 2016 v4.1

The Accounting and Corporate Regulatory Authority (ACRA) has released an updated version of taxonomy (ACRA Taxonomy 2016 v4.1) available to download from <https://www.acra.gov.sg/how-to-guides/filing-financial-statements-in-xbrl-format/introduction-to-acra-taxonomy>. The ACRA Taxonomy 2016 v4.1 is the XBRL representation adhering to the standards and legislation, to allow companies to prepare a set of financial statements¹ in XBRL format. The ACRA Taxonomy 2016 v4.1 is not intended to be an exhaustive representation of the requirements under the accounting standards and legislation.

The taxonomy covers the following requirements for purposes of ACRA's revised XBRL filing requirements:

- Singapore Financial Reporting Standards (SFRS), SFRS (Intentional) (SFRS(I)) and Singapore Financial Reporting Standard for Small Entities (SFRS for Small Entities) issued by the Accounting Standards Council (ASC);
- Information to be included in AGM financial statements as per Singapore Companies Act;
- Information to be included in AGM financial statements for listed companies as per Listing Manual issued by Singapore Exchange Securities Trading Limited (SGX);
- Independent Auditors Report as per Singapore Standards of Auditing;
- Document and Entity Information (DEI) requirements to identify filing entities;
- Certain Information to be included in AGM financial statements as per the Banking Act Notices; and
- Common Practice reporting items that companies typically report in their financial statements.



Figure 1: Content model of ACRA Taxonomy 2016 v4.1

¹For purposes of this guide, "AGM financial statements" means the set of financial statements as tabled in the Annual General Meeting (AGM) by Singapore incorporated companies prepared in accordance with the requirements of the Companies Act. In the case of a private company which has dispensed with holding of an AGM, this refers to the financial statements that were sent to the shareholders of the company.

2. Scope of ACRA Taxonomy 2016 v4.1

The ACRA Taxonomy 2016 v4.1 is designed to facilitate preparation of a full set of financial statements and Financial Statements Highlights (FSH), both in XBRL format. Please refer to <https://www.acra.gov.sg/xbrl-filing-and-resources/who-needs-to-file-financial-statements> for the detailed requirements for Singapore incorporated companies to file financial statements with ACRA.

3. ACRA Taxonomy 2016 v4.1 Architecture

3.1 Logical structure

Logical modeling refers to how the reporting concepts are grouped to allow viewing based on some criteria. In other words, it facilitates users to view the elements which are relevant to them. Each grouping is commonly referred to as entry-point. In ACRA Taxonomy 2016, entry-points are created based on the following criteria:

- (i) Accounting standards used to prepare financial statements; and
- (ii) Whether preparer is filing a full set of financial statements or FSH.
- (iii) The nature of company preparing FSH

Based on the above criteria, the grouping (entry-points) in ACRA Taxonomy 2016 v4.1 are defined as follows:

Entry points for Full XBRL filing

- (a) Companies preparing financial statements using SFRS / SFRS(I);
- (b) Companies preparing financial statements using SFRS for Small Entities;

Entry points for FSH

- (c) Insurance companies (Licensed insurers);
- (d) Banks and finance companies (Commercial Banks, Merchant Banks, Finance Companies); and
- (e) Other companies which are exempted from filing a full set of financial statements in XBRL.

3.2 Physical structure

Physical structure refers to inter-linkages between the various files. The physical structure is depicted in Figure 2 below.

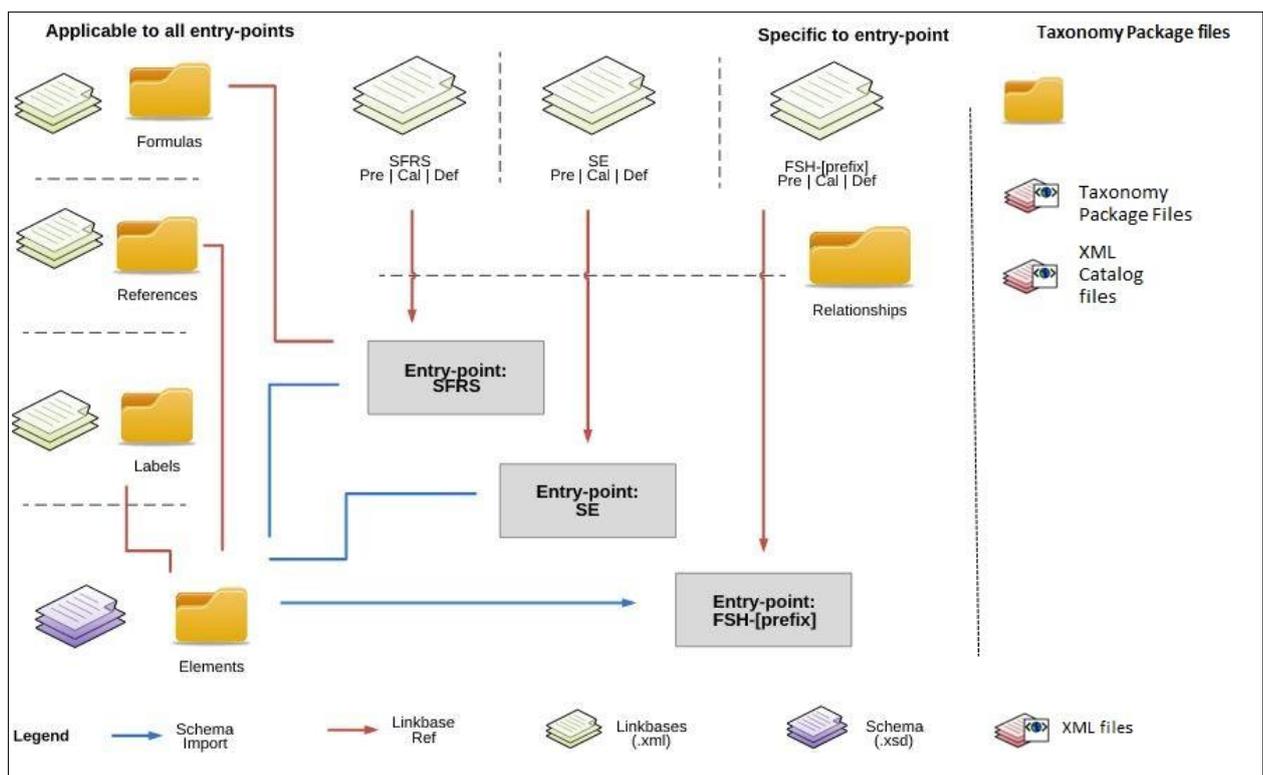


Figure 2: Physical taxonomy structure of ACRA Taxonomy 2016 v4.1

3.3 Folder and file structure

Taxonomy structure refers to the general composition of the files and folders within taxonomy. The folder structure of the ACRA Taxonomy 2016 v4.1 is depicted in Figure 3.

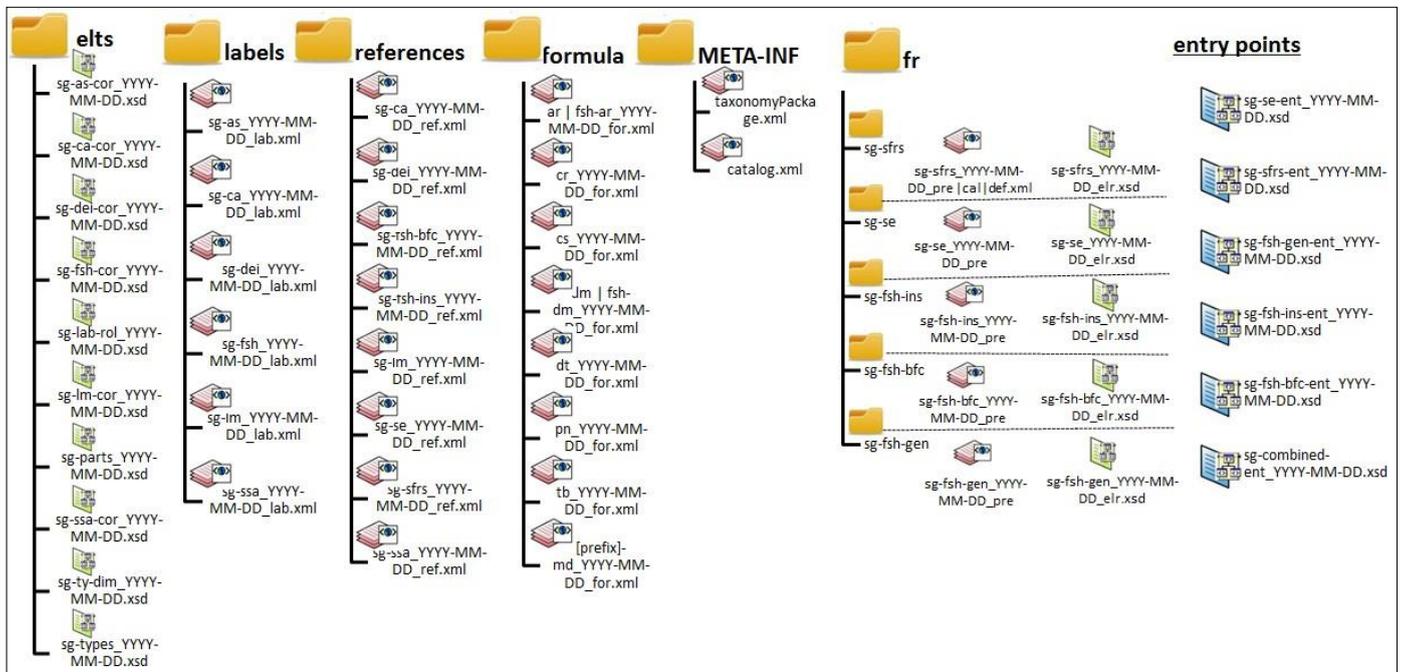


Figure 3: Folder and file structure of ACRA Taxonomy 2016 v4.1

The folders and their contents, and the guidelines for folder and file names, are as follows

- (a) YYYY-MM-DD (where YYYY-MM-DD represents the taxonomy release date) and is set to 2016-12-15 for ACRA Taxonomy 2016 v4.1.
- (b) elts (denotes elements)
 - (i) *sg-as-cor_YYYY-MM-DD.xsd* is the core schema which contains reportable concepts based on the requirements of the accounting standards;
 - (ii) *sg-ca-cor_YYYY-MM-DD.xsd* is the core schema which contains reportable concepts based on the requirements of Singapore Companies Act;
 - (iii) *sg-lm-cor_YYYY-MM-DD.xsd* is the core schema which contains reportable concepts to be included as part of financial statements based on the Listing Manual of SGX;
 - (iv) *sg-ssa-cor_YYYY-MM-DD.xsd* is the core schema which contains reportable concepts based on the requirements of Singapore Standards of Auditing;
 - (v) *sg-dei-cor_YYYY-MM-DD.xsd* is the core schema which contains reportable concepts for identifying the company and the document which is submitted by filer (also referred to as scoping information);
 - (vi) *sg-types_YYYY-MM-DD.xsd* is the core schema which contains custom data types defined for ACRA Taxonomy 2016 v4.1;
 - (vii) *sg-ty-dim_YYYY-MM-DD.xsd* is the core schema which contains the typed domain constructs defined for ACRA Taxonomy 2016 v4.1
 - (viii) *sg-lab-rol_YYYY-MM-DD.xsd* is the core schema which defines new label roles defined for ACRA Taxonomy 2016 v4.1

- (ix) [sg-fsh-cor_YYYY-MM-DD.xsd](#) is the core schema which contains reportable concepts for Financial Statements Highlights
 - (x) [sg-parts_YYYY-MM-DD.xsd](#) is the core schema which contains the additional reference parts as defined for ACRA Taxonomy 2016 v4.1
- (c) labels
- (i) [sg-as_YYYY-MM-DD_lab.xml](#) contains the labels in English language for the reportable concepts based on the requirements of the accounting standards;
 - (ii) [sg-ca_YYYY-MM-DD_lab.xml](#) contains the labels in English language for the reportable concepts based on the requirements of Singapore Companies Act;
 - (iii) [sg-lm_YYYY-MM-DD_lab.xml](#) contains the labels in English language for the reportable concepts to be included as part of financial statements based on the Listing Manual of SGX;
 - (iv) [sg-ssa_YYYY-MM-DD_lab.xml](#) contains the labels in English language for the reportable concepts based on the requirements of Singapore Standards of Auditing;
 - (v) [sg-dei_YYYY-MM-DD_lab.xml](#) contains the labels in English language for the reportable concepts for identifying the company and the document which is submitted by filer (also referred as scoping information);
 - (vi) [sg-fsh_YYYY-MM-DD_lab.xml](#) contains the labels in English language for the reportable concepts based on the requirements for Financial Statements Highlights;
- (d) references
- (i) [sg-sfrs_YYYY-MM-DD_ref.xml](#) contains the references for the reportable concepts based on SFRS;
 - (ii) [sg-ca_YYYY-MM-DD_ref.xml](#) contains the references for the reportable concepts based on the Singapore Companies Act;
 - (iii) [sg-lm_YYYY-MM-DD_ref.xml](#) contains the references for the reportable concepts based on the Listing Manual of SGX;
 - (iv) [sg-ssa_YYYY-MM-DD_ref.xml](#) contains the references for the reportable concepts based on the Singapore Standards of Auditing;
 - (v) [sg-dei_YYYY-MM-DD_ref.xml](#) contains the references to the reportable concepts for identifying the company and the document which is submitted by filer (also referred as scoping information);
 - (vi) [sg-se_YYYY-MM-DD_ref.xml](#) contains the references for the reportable concepts based on the SFRS for Small Entities;
 - (vii) [sg-fsh-ins_YYYY-MM-DD_ref.xml](#) contains the references for the reportable concepts as required for insurance companies
 - (viii) [sg-fsh-bfc_YYYY-MM-DD_ref.xml](#) contains the references for the reportable concepts as required for banks and finance companies.
- (e) formulas
- This folder contains all the business rules which are modelled in the ACRA Taxonomy 2016 v4.1 using formula linkbase. The formulas files could be:
- (i) **common** which implies the file is referred in more than one entry-point schema or

- (ii) **specific** which implies the file is referred only in one entry-point and is limited to that entry-point only.

The details of formula linkbase are mentioned section 3.9.6

(f) fr

The folder contains the linkbase based on the reporting requirements for different type of entities.

- (i) **sg-sfrs** contains the relationships as required for companies preparing financial statements using SFRS;
- (ii) **sg-se** contains the relationships as required for companies preparing financial statements using SFRS for Small Entities;
- (iii) **sg-fsh-ins** contains the FSH as required for insurance companies;
- (iv) **sg-fsh-bfc** contains the FSH as required for banks and finance companies; and
- (v) **sg-fsh-gen** contains the FSH for other companies exempted from filing a full set of financial statements in XBRL.

Every sub-folder contains the following files the linkbase files for presentation, calculation and definition and schema containing extended link role declaration. The suffixes are used to identify each type of file

- pre : presentation linkbase
- def : definition linkbase
- cal : calculation linkbase
- elr : extended link role declaration

(g) entry-points

- (i) [sg-sfrs-ent_YYYY-MM-DD.xsd](#) is the entry-point that provides files for companies preparing financial statements using SFRS;
- (ii) [sg-se-ent_YYYY-MM-DD.xsd](#) is the entry point that provides files for companies preparing financial statements using SFRS for Small Entities;
- (iii) [sg-fsh-ins-ent_YYYY-MM-DD.xsd](#) is the entry-point that provides files for insurance companies filing FSH;
- (iv) [sg-fsh-bfc-ent_YYYY-MM-DD.xsd](#) is the entry-point that provides files for banks and finance companies filing FSH;
- (v) [sg-fsh-gen-ent_YYYY-MM-DD.xsd](#) is the entry-point that provides files for other companies filing FSH because they are exempted from filing a full set of financial statements in XBRL; and
- (vi) [sg-combined-ent_YYYY-MM-DD.xsd](#) is the entry point that combines all of the files for SFRS, SFRS for Small Entities and FSH.

(h) META-INF

- (i) [taxonomyPackage.xml](#) is taxonomy package file containing information about taxonomy like description, version, publisher, entry points etc.
- (ii) [catalog.xml](#) is an OASIS XML catalogue file containing remappings for offline work with taxonomies.

3.4 Data modelling techniques in the ACRA Taxonomy 2016 v4.1

The ACRA Taxonomy 2016 v4.1 is designed to reflect the disclosure requirements for Singapore incorporated companies which are required to file their financial statements in XBRL format with ACRA. While deciding data modelling structures, the key factors under consideration are:

- (a) Allow the disclosure of a complete set of financial statements using a combination of text block and detailed information elements. Disclosures which are deemed useful for consumption on a standardised manner are collected using detailed information elements.
- (b) The taxonomy structure should resemble (to the extent possible) a set of AGM financial statements.
- (c) Companies are not allowed to create extensions in the form of new elements so as to increase the comparability of data collected. However, certain flexibility will be given to companies reporting information within some disclosure notes like operating segments or subsidiary information.

The ACRA Taxonomy 2016 v4.1 uses hierarchical list and dimensions for data modelling. No tuples are defined in ACRA Taxonomy 2016 v4.1. The modelling techniques are explained in the following sections.

3.4.1 Simple hierarchical list

Most of the relationships between elements are defined using a simple hierarchy which denotes the parent and child hierarchy. This linear hierarchy is used across calculation, presentation and definition linkbases.

An example of simple hierarchical modelling is shown in Illustration 1 (below) for *Statement of financial position presented using order of liquidity* and in Illustration 2 in the *Notes - Inventories*.

Ext	[21200000] Statement of financial position presented using order of liquidity
E	Statement of financial position [text block]
Ea	Assets
E	Cash and bank balances
E	Trade and other receivables
E	Finance lease receivables
E	Financial assets measured at fair value through profit or loss
E	Derivative financial assets
E	Held for trading financial assets
E	Financial assets available-for-sale
E	Held-to-maturity investments
E	Other financial assets
E	Non-current assets or disposal groups classified as held for sale or as held for distribution to owners
E	Inventories
E	Development properties
E	Deferred tax assets
E	Biological assets
E	Investments in associates
E	Investments in joint ventures
E	Investments in subsidiaries
E	Investment properties
E	Goodwill
E	Intangible assets
E	Property, plant and equipment

Illustration 1: Hierarchical modelling in financial statement

[-] Ext	[31080000] Note - Inventories
[-] E	Disclosure of inventories [text block]
[-] Ea	Classes of inventories
E	Raw materials
E	Production supplies
E	Work in progress
E	Finished goods
E	Spare parts
E	Other inventories
E	Total inventories
[-] Ea	Other disclosure information of inventories
E	Type of inventory cost formula used
E	Inventories, at fair value less costs to sell
E	Cost of inventories recognised as expense during period
E	Inventories pledged as security for liabilities
[-] Ea	Write-downs (reversals of write-downs) of inventories
E	Inventory write-down
E	Reversal of inventory write-down
E	Net write-downs (reversals of write-downs) of inventories

Illustration 2: Hierarchical modelling in a note

3.4.2 Dimensional modelling

The next modelling technique used in the ACRA Taxonomy 2016 v4.1 is the use of dimensions. Dimensions are generally used to model tabular data having information in both rows and columns such as disclosures required within the disclosure note for Property, Plant and Equipment. Dimensions are also used when detailed breakdowns are to be provided for any reporting concepts. Dimensional modelling requires defining *hypercubes* (called as tables) and *dimensions* (called as axes). The non-dimensional elements are generally referred as *line items*. For creating a dimensional model, the *line items* are linked to a *table*, and the *table* is linked to an *axis* (or axes). The sub-categories for the breakdown are referred as domain members. There are two types of axes – Explicit and Typed Axes.

3.4.2.1 Modelling using explicit members

Explicit dimensional modelling implies that the domain members are defined in the taxonomy. Illustration 3 provides example of the Notes–Related Party Transactions and Illustration 4 represents the same note in a tabular format. In these illustrations, the categories of related parties i.e. Parent, Associate, Subsidiaries etc. (referred as domain members) are pre-defined in the ACRA Taxonomy 2016 v4.1. The amount for each type of transaction i.e. revenue from sale of good, services received etc. can be reported for any or all categories of related parties.

[-] Ext [33020000] Note - Related party
[-] E Disclosure of related party [text block]
[-] Ea Key management personnel compensation
[-] Ea Related party transactions
[-] Related party transactions [table]
[-] Categories of related parties [axis]
[-] Total related parties
Parent
Entities with joint control or significant influence over entity
Subsidiaries
Associates
Joint ventures
Key management personnel of entity or parent
Other related parties
[-] Ea Disclosure of transactions between related parties
[-] Ea Inflows from related party transactions
E Revenue from sale of goods
E Sales of property and other assets
E Revenue from rendering of services
E Leases as lessor
[-] Ea (Outflows) from related party transactions
E Purchases of goods
E Purchases of property and other assets
E Services received

Illustration 3 : Hierarchical representation of explicit dimensions defined in taxonomy

	Parent	Entities with joint control or significant influence over entity	Subsidiaries	Associates	Joint ventures	Key management personnel of entity or parent	Other related parties
Related party transactions							
Disclosure of transactions between related parties							
Inflows from related party transactions							
Revenue from sale of							
Sales of property and other assets							
Revenue from rendering of services							
Leases as lessor							
(Outflows) from related party transactions							
Purchases of goods							
Purchases of property and other assets							
Services received							

Illustration 4: Tabular view of explicit dimensional hierarchy

3.4.2.2 Modelling using typed dimensions

Typed dimensions allows user to define the domain members according to their requirements. Typed dimensions are used when the members are not universal or generic, but are company specific and differ from company to company.

Illustration 5 provides an example of typed dimensional modelling for *Notes – Investment in subsidiaries* information and Illustration 6 represents the same note in a tabular format. In these illustrations, the user would have to define their own domain members (e.g. the subsidiary) under the axis *Name of subsidiary*, as Name of Subsidiary will differ from company to company.

Once the subsidiaries are defined, the details like country of incorporation, proportion of voting power etc. can be reported for every subsidiary.

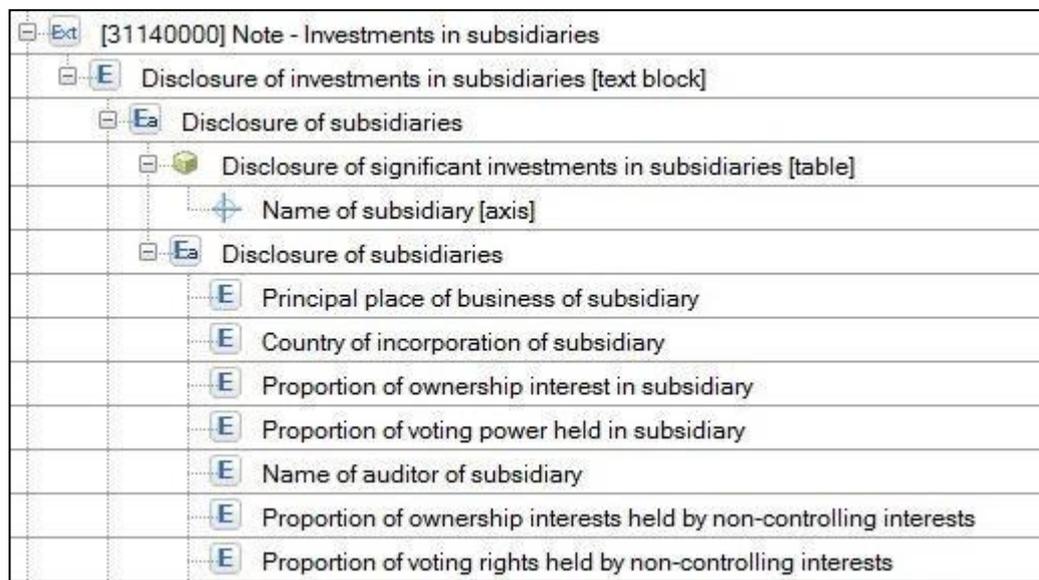


Illustration 5: Hierarchical representation of typed dimensions defined in taxonomy

	[Add name of subsidiary]			
Disclosure of subsidiaries				
Principal place of business of subsidiary				
Country of incorporation of subsidiary				
Proportion of ownership interest in subsidiary				
Proportion of voting power held in subsidiary				
Name of auditor of subsidiary				
Proportion of ownership interests held by non-controlling interests				
Proportion of voting rights held by non-controlling interests				

Illustration 6: Tabular view of typed dimensional hierarchy

3.5 Absolute and relative paths

The unique root resource location (URL) of the ACRA Taxonomy 2016 v4.1 is <http://www.bizfinx.gov.sg/taxonomy/YYYY-MM-DD/>, followed by the file path as per the folder structure (refer section 3.3). The URL is formed according to the style set out in section 4.5.2.

The table below provides examples of absolute paths to ACRA Taxonomy 2016 files.

File	Absolute path
Core schema for Accounting standards	http://www.bizfinx.gov.sg/taxonomy/YYYY-MM-DD/elts/sg-as-cor_YYYY-MM-DD.xsd
English label linkbase for Accounting standard concepts	http://www.bizfinx.gov.sg/taxonomy/YYYY-MM-DD/labels/lab-en_sg-as_YYYY-MM-DD.xml
Reference linkbase for SFRS for Small Entities	http://www.bizfinx.gov.sg/taxonomy/YYYY-MM-DD/references/ref_sg-se_YYYY-MM-DD.xml
Role schema for DEI	http://www.bizfinx.gov.sg/taxonomy/YYYY-MM-DD/fr/sg-dei/rol_sg-dei_YYYY-MM-DD.xsd

Table 1 : Absolute paths

The ACRA Taxonomy 2016 v4.1 files can be referenced using both absolute and relative paths. Software vendors should note that ACRA Taxonomy 2016 v4.1 files should not be amended and should therefore be referenced via absolute paths in order to avoid file changes being made by preparers and extenders. This is particularly important when working directly on the entry point schemas without importing them to another extension schema. In such cases, all linkbase amendments should be treated as an extension and saved in new, separate linkbase files.

3.6 Namespaces and prefixes

Namespaces are required to uniquely identify the schemas that are defined in the taxonomy. In addition, it also provides information relating to release date of taxonomy and owners of the taxonomy.

For every namespace a unique prefix is to be defined. The prefix provides some indication of what the namespace refers to. The table below summarises all the namespaces and prefixes used in the ACRA Taxonomy 2016 v4.1:

#	Prefix	Namespace URI	Use
1	sg-as	http://www.bizfinx.gov.sg/taxonomy/YYYY-MM-DD/elts/sg-as	Accounting standards (SFRS, SFRS for Small entities, SFRS(I) (including simultaneous compliance with IFRS), IFRS only, Other accounting standards)
2	sg-lm	http://www.bizfinx.gov.sg/taxonomy/YYYY-MM-DD/elts/sg-lm	SGX Listing manual
3	sg-ca	http://www.bizfinx.gov.sg/taxonomy/YYYY-MM-DD/elts/sg-ca	Singapore Companies Act
4	sg-ssa	http://www.bizfinx.gov.sg/taxonomy/YYYY-MM-DD/elts/sg-ssa	Singapore Standards for Auditing
5	sg-dei	http://www.bizfinx.gov.sg/taxonomy/YYYY-MM-DD/elts/sg-dei	Scoping information (Document and Entity Information)

#	Prefix	Namespace URI	Use
6	sg-fsh	http://www.bizfinx.gov.sg/taxonomy/YYYY-MM-DD/elts/sg-fsh	Financial Statement Highlights
7	sg-types	http://www.bizfinx.gov.sg/taxonomy/YYYYYY-MM-DD/elts/sg-types	Custom data types
8	sg-ty-dim	http://www.bizfinx.gov.sg/taxonomy/YYYYYY-MM-DD/elts/sg-ty-dim	Typed domain constructs
9	sg-lab-rol	http://www.bizfinx.gov.sg/taxonomy/YYYYYY-MM-DD/elts/sg-lab-rol	New label roles
10	sg-parts	http://www.bizfinx.gov.sg/taxonomy/YYYY-MM-DD/elts/sg-parts	New reference parts
11	sg--sfrs-ent	http://www.bizfinx.gov.sg/taxonomy/YYYYYY-MM-DD/sg-sfrs-ent	Entry-point for companies preparing financial statements using SFRS
12	sg-se-ent	http://www.bizfinx.gov.sg/taxonomy/YYYYYY-MM-DD/sg-se-ent	Entry-point for companies preparing financial statements using SFRS for Small Entities
13	sg-fsh-ins-ent	http://www.bizfinx.gov.sg/taxonomy/YYYYYY-MM-DD/sg-fsh-ins-ent	Entry-point for insurance companies submitting FSH
14	sg-fsh-bfc-ent	http://www.bizfinx.gov.sg/taxonomy/YYYYYY-MM-DD/sg-fsh-bfc-ent	Entry-point for banking and finance companies submitting FSH
15	sg-fsh-gen-ent	http://www.bizfinx.gov.sg/taxonomy/YYYYYY-MM-DD/sg-fsh-gen-ent	Entry-point for other companies filing FSH because they are exempted from filing a full set of financial statements in XBRL
16	sg-combined	http://www.bizfinx.gov.sg/taxonomy/YYYYYY-MM-DD/sg-combined-ent	Entry-point to have a consolidated view of all the entry-points. This entry-point shall not be used but is provided only for viewing.
17	sg-sfrs-rol	http://www.bizfinx.gov.sg/taxonomy/YYYYYY-MM-DD/sg-sfrs-rol	Extended link roles for SFRSs
18	sg-se-rol	http://www.bizfinx.gov.sg/taxonomy/YYYYYY-MM-DD/sg-se-rol	Extended link roles for SFRS for Small Entities
19	sg-fsh-ins-rol	http://www.bizfinx.gov.sg/taxonomy/YYYYYY-MM-DD/sg-fsh-ins-rol	Extended link roles for Financial Statement Highlights for insurance companies
20	sg-fsh-bfc-rol	http://www.bizfinx.gov.sg/taxonomy/YYYYYY-MM-DD/sg-fsh-fi-rol	Extended link roles for Financial Statement Highlights for banks and finance companies
21	sg-fsh-gen-rol	http://www.bizfinx.gov.sg/taxonomy/YYYYYY-MM-DD/sg-fsh-gen-rol	Extended link roles for other companies filing FSH because they are exempted from filing a full set of financial statements in XBRL

Table 2: Namespaces and Prefixes

3.7 Modularisation

Modularisation indicates the fragmentation of taxonomy components into different files.

3.7.1 Modularisation of schema

In the ACRA Taxonomy 2016 v4.1, there are five schemas containing reportable concepts, one schema containing typed domain constraints, one schema containing the custom data types and one schema containing label roles. In

In addition, there is schema for extended link roles placed in each relationship folder. These role schemas contain definitions of the presentation, calculation and definition ELRs. Role schemas do not contain concepts, tables, axes or members. The combined entry point schema is created for viewing all the entry-points together and is not to be used for creating instance documents. The Style Guide provides guidelines for constructing role URIs for ELRs in the ACRA Taxonomy 2016 v4.1.

In the ACRA Taxonomy 2016 v4.1, the element declaration is segregated based on the disclosure requirements. Thus separate schemas are created for elements originating from Accounting standards, Companies Act, Listing Manual requirements, Singapore Standards for Auditing and Other information required to identify company and the document filed.

Following table summarises then number of elements defined in the schema:

Schema prefix	Number of elements defined
sg-as	1,619
sg-ca	22
sg-dei	35
sg-lm	9
sg-ssa	39
sg-fsh	25
Total	1,749

Table 3: Number of elements defined in modular schemas

In addition to elements, there are new data types, new reference parts, new label roles and typed dimension components defined for ACRA Taxonomy 2016 v4.1 in separate schema files.

3.7.2 Modularisation of linkbases

In the ACRA Taxonomy 2016 v4.1, all the five linkbases as specified in XBRL 2.1 specification are defined. These linkbases are modularised as per the logical modelling as mentioned in section 3.1 above. The linkbase files are referenced via a linkbaseRef from the entry point. The presentation, calculation and definition linkbases are modularised based on the accounting standards followed and the applicability of filling full statements in XBRL or limited to financial statement highlights.

3.7.3 Presentation Approach

The ACRA Taxonomy 2016 v4.1 is developed following a “Presentation-centric Approach”, which effectively means that the taxonomy is developed to represent the presentation of a set of AGM financial statements. The disclosure requirements, guidance and examples are analysed, modelled into an appropriate hierarchy, and are eventually constructed into XBRL files.

The benefit of following the Presentation Approach is that it aligns the taxonomy in a manner which information is presented in financial statements. This approach also organises the taxonomy in a way that is familiar to preparers

and consumers i.e. following the structure of a set of annual financial statements, thereby facilitating readability and usability.

3.8 Concept definitions in schemas

3.8.1 Concept names and ids

In the ACRA Taxonomy 2016 v4.1, concept names and identifiers (IDs) are defined as per the Style Guide in section 4.6. The concept names reflect the underlying reporting elements. Certain non-accounting words like *abstract, table, axis etc.* are also used as these are required for constructing the taxonomy.

In the subsequent versions of the taxonomies to be released by ACRA, the concept names and IDs would not be updated if there are changes in the nomenclature of the concepts in the applicable Accounting Standards or other relevant statutory regulations. The concept names will remain the same, as concept names are used for mapping purposes. This will allow re-using or pre-populating the data from previously created instance documents, if required. Only the labels would be updated to reflect the correct and latest nomenclature of the relevant standards or Acts. This could lead to a variation from the camel case rule (elaborated in Section – 4.6.3 which says the element name of a concept should be a camel case version of its label) as only labels are updated. Therefore, the concept name should not be used for interpretation of the meaning and disclosure requirements. Labels and information from other linkbases should be used.

3.8.2 Concepts with a restricted list of allowed values

The ACRA Taxonomy 2016 v4.1 uses item types as defined in XBRL 2.1 specification and the additional data types as defined in add on schemas (numeric-2009-12-16.xsd and non-numeric-2009-12-16.xsd).

Certain concepts have restrictions on the allowed values. These restrictions will be enforced by creating special data types (XML schema enumerations) for the concepts. For example, a concept of the data type `LevelOfRoundingItemType` has enumerations of Actual, Thousands, Millions, Billions and user submitting values for this concept will be restricted to this set of enumerations. The definitions of all the data types will be placed in a special module (called sg-types) which will be imported by schemas containing the concepts. The list of new data type defined within ACRA Taxonomy 2016 v4.1 is defined in Table 5.

This module will also import the data types defined by XBRL International.

Type	Count	Example
nonnum:domainItemType	127	Ships [member] , Ordinary shares [member]
nonnum:textBlockItemType	146	Disclosure of complete set of financial statements [text block], Disclosures in statement by directors [text block]
num:percentItemType	15	Proportion of ownership interest in subsidiary
num:perShareItemType	6	Basic earnings (loss) per share, Diluted earnings (loss) per share

Type	Count	Example
sg-types:AccountingStandardsItemType	1	Type of accounting standard used to prepare financial statements
sg-types:AmortisationMethodItemType	1	Amortisation method, intangible assets
sg-types:CashFlowStatementItemType	1	Type of statement of cash flows
sg-types:CompanyItemType	1	Type of company during current period
sg-types:ComprehensiveIncomeItemType	1	Type of other comprehensive income
sg-types:CurrencyCodeItemType	2	Description of presentation currency
sg-types:DepreciationMethodItemType	3	Depreciation method, investment properties
sg-types:DesignationOfPreparerItemType	1	Designation of preparer
sg-types:IncomeStatementItemType	1	Type of income statement
sg-types:InventoryCostFormulaItemType	1	Type of inventory cost formula used
sg-types:LevelOfRoundingItemType	1	Level of rounding used in financial statements
sg-types:ListingItemType	1	Type of exchange on which company is listed
sg-types:MethodOfPresentingAllItemsOfIncomeAndExpensesItemType	1	Whether all items of income and expense are presented in a single statement of comprehensive income or two statements of income statement and statement of comprehensive income
sg-types:ModificationsToAuditorsReportItemType	1	Type of modification to independent auditors' report
sg-types:NatureOfCompanyFilingFinancialHighlightsItemType	1	Nature of company filing financial statements highlights
sg-types:NatureOfFinancialStatementsItemType	1	Nature of financial statements - Company level or consolidated
sg-types:PreparationOfXBRLFileItemType	1	How was XBRL instance document prepared
sg-types:ScopeOfFilingItemType	1	Whether company is filing full set of financial statements in XBRL or financial statements highlights
sg-types:ShareOptionPricingModelItemType	1	Share option pricing model
sg-types:StatementOfFinancialPositionItemType	1	Type of statement of financial position
sg-types:TaxonomyVersionItemType	1	Taxonomy version
sg-types:UENItemType	1	Unique entity number

Type	Count	Example
sg-types:YesNoItemtype	38	Whether company is listed as at current period end date, Whether there are restatements to comparative amounts
sg-types:yesnounabletoconcludeitemtype	1	Did the auditor conclude that there is a material misstatement of the "Other Information"
xbri:dateItemtype	8	Current period start date, Date of independent auditors' report
xbri:decimalItemtype	14	Number of options granted during period
xbri:gYearItemtype	1	Year of appointment of signing auditor
xbri:monetaryItemtype	956	Loans and borrowings, Restricted cash and bank balances, non-current
xbri:nonnegativeintegeritemtype	29	Number of Key Audit Matters Reported
xbri:positiveIntegerItemtype	1	Number of directors signing statement by directors
xbri:sharesItemtype	20	Number of shares in entity held by its subsidiaries, Number of treasury shares cancelled
xbri:stringItemtype	362	Name of company, Description of nature of entity's operations and principal activities

Table 4 : Data types used in ACRA Taxonomy 2016 v4.1

Table 5 summarises the data types defined in ACRA Taxonomy 2016 v4.1 and their expected values.

#	Data type	Assigned to element	Enumerations
1	AccountingStandardsItemtype	TypeOfAccountingStandardUsedToPrepareFinancialStatements	<ul style="list-style-type: none"> • SFRS • SFRS for Small entities • SFRS(I) (including simultaneous compliance with IFRS) • IFRS only • Other accounting standards
2	AmortisationMethodItemtype	AmortisationMethodIntangibleAssets	<ul style="list-style-type: none"> • Straight-line-method • Diminishing balance method • Units-of-production method • Other amortisation method

#	Data type	Assigned to element	Enumerations
3	CashFlowStatementItemType	TypeOfStatementOfCashFlows	<ul style="list-style-type: none"> • Direct • Indirect • Not prepared
4	CompanyItemType	TypeOfCompanyDuringCurrentPeriod	<ul style="list-style-type: none"> • Private company • Public company • Exempt private company
5	ComprehensiveIncomeItemType	TypeOfOtherComprehensiveIncome	<ul style="list-style-type: none"> • Presented before tax • Presented net of tax • No other comprehensive income
6	CurrencyCodeItemType	DescriptionOfPresentationCurrency	<ul style="list-style-type: none"> • ISO currency code
7	DepreciationMethodItemType	DepreciationMethodPropertyPlantAndEquipment	<ul style="list-style-type: none"> • Straight-line-method • Diminishingbalance method • Units-of-production depreciation method • Other depreciation method
8	DesignationOfPreparerItemType	DesignationOfPreparer	<ul style="list-style-type: none"> • Accountant or person providing accounting related services • Company secretary or person providing corporate secretarial related services • Director • Others
9	IncomeStatementItemType	TypeOfIncomeStatement	<ul style="list-style-type: none"> • By function of expense or cost of sales • By nature of expense
10	InventoryCostFormulaItemType	TypeOfInventoryCostFormulaUsed	<ul style="list-style-type: none"> • Specific identification • FIFO • Weighted average cost formula • Combination of specific identification / FIFO / weighted average method
11	LevelOfRoundingItemType	LevelOfRoundingUsedInFinancialStatements	<ul style="list-style-type: none"> • Actual • Thousands • Millions • Billions
12	ListingItemType	TypeOfExchangeOnWhichCompanyIsListed	<ul style="list-style-type: none"> • Listed in securities exchange in Singapore • Listed in securities exchange in Singapore and other country(s) • Listed only in securities exchange in other country(s)

#	Data type	Assigned to element	Enumerations
13	ModificationsToAuditorsReportItemType	TypeOfModificationToIndependentAuditorsReport	<ul style="list-style-type: none"> Qualified opinion Disclaimer of opinion Adverse opinion
14	NatureOfCompanyFilingFinancialHighlightsItemType	NatureOfFinancialStatementsCompanyLevelOrConsolidated	<ul style="list-style-type: none"> Solvent EPC Banks/Merchant Banks/Finance Companies Registered Insurers Company exempted by ACRA from filing a full set of financial statements in XBRL Insolvent EPC
15	NatureOfFinancialStatementsItemType	NatureOfFinancialStatementsCompanyLevelOrConsolidated	<ul style="list-style-type: none"> Company level Consolidated
16	PreparationOfXBRLFileItemType	HowWasXBRLInstanceDocumentPrepared	<ul style="list-style-type: none"> In-house Outsourced
17	ScopeOfFilingItemType	TypeOfXBRLInstanceDocumentPrepared	<ul style="list-style-type: none"> Full set of financial statements Financial statement highlights
18	ShareOptionPricingModelItemType	DescriptionOfShareOptionPricingModel	<ul style="list-style-type: none"> Black-Scholes model Binomial model Other pricing model
19	StatementOfFinancialPositionItemType	TypeOfStatementOfFinancialPosition	<ul style="list-style-type: none"> Current and non-current Order of liquidity
20	YesNoItemType	WhetherCompanyIsListedAsAtCurrentPeriodEndDate	<ul style="list-style-type: none"> Yes No
21	MethodOfPresentingAllItemsOfIncomeAndExpensesItemType	MethodOfPresentingAllItemsOfIncomeAndExpenses	<ul style="list-style-type: none"> Single statement of comprehensive income Two statements of income statement and statement of comprehensive income
22	TaxonomyVersionItemType	TaxonomyVersion	<ul style="list-style-type: none"> SFRS_2016_v4.1 SFRS_SE_2016_v4.1 FSH_General_2016_v4.1 FSH_Banks & Finance Company_2016_v4.1 FSH_Insurance_2016_v4.1
23	UENItemType	UniqueEntityNumber	<p>10 Characters, first 9 should be numbers and the last character would be an alphabet</p> <p>For Example : - 190012345F</p>

#	Data type	Assigned to element	Enumerations
24	YesNoUnableToConcludeItemType	DidAuditorConcludeThatThereIsMaterialMisstatementOfOtherInformation	<ul style="list-style-type: none"> • Yes • No • Unable to conclude

Table 5 : List of new data types

3.9 Linkbases

Presentation-centric approach is used to develop the ACRA Taxonomy 2016 v4.1. This enables linkbases to be organised and viewed as a set of financial statements as prepared by different types of entities. The ACRA Taxonomy 2016 v4.1 uses sort codes (an artificial 8-digit number) at the beginning of each ELR definition, which provides viewing and sorting functionality. The Style Guide in section 4.5 specifies the guidelines followed for creating ELRs.

3.9.1 Calculation linkbase

In the ACRA Taxonomy 2016 v4.1, calculation linkbases are used to define arithmetical relationships as per XBRL specifications. Example of the calculation view of *Note – Development properties* is provided in Illustration 7.

Element Name	Order	Weight
[31100000] Note - Development properties		
Development properties		
Gross completed properties and properties in course of development	1	1
Completed properties	1	1
Properties in course of development	2	1
Allowance for foreseeable losses	2	-1
Unbilled revenue		
Properties in course of development at cost and attributable profits	1	1
Progress billings for development properties	2	1

Illustration 7: Calculation hierarchy as defined in note

Weight of +1 denotes the element will be added to arrive at the sub-total, while -1 indicates value to be reduced. Due to certain limitations of calculation linkbase, not all additive and subtractive relations can be defined. For example, additive and Subtractive relationship cannot be handled in Calculation linkbase due to the different Periodtypes (Instant & Duration) being assigned to elements.

3.9.2 Presentation linkbases

The presentation linkbase is designed to display the hierarchy of elements as it would appear in a typical set of financial statements. Example of the presentation view of *Note – Development properties* is provided in illustration below:



Illustration 8: Presentation hierarchy as defined in note

While in calculation linkbase, the calculated parent appears top of hierarchy, in presentation hierarchy, the totals appear at the end of hierarchy. In presentation hierarchy, header elements (called as abstracts) are created to facilitate grouping of elements in hierarchy structure.

3.9.3 Definition linkbases

The ACRA Taxonomy 2016 v4.1 uses definition linkbases to express dimensional relationships. Both explicit and typed dimensions are used to model the dimensional relationships. Most of the dimensions in the taxonomy are linked to line items via hypercube. However, there are a few open dimensions which are not assigned to any line items and users of the taxonomy are expected to use them only one need-to basis. They are listed in Table 6.

#	Open dimensions	Purpose
1	Retrospective application and retrospective restatement [axis]	Used when accounts are restated
2	Departure from requirement of Accounting standards [axis]	Used when practices other than stated in standard are followed
3	Creation date [axis]	The default date used in financial statements. Used mostly for reporting prior-period information
4	Continuing and discontinued operations [axis]	Used for segregating information between continuing and discontinued operations during the period
5	Assets and liabilities classified as held for sale [axis]	Used for identifying the non-current assets which are held for sale purpose
6	Consolidated and separate financial statements [axis]	Used for identifying company and group level information.

Table 6: List of open dimensions

The principles followed while creating definition linkbase are:

- (i) Only ELRs with dimensional relationships are included in definition linkbase;
- (ii) An ELR in definition linkbase will have at most one hypercube;
- (iii) All defaults of explicit dimensions are defined together in one ELR;
- (iv) All the hypercubes are modelled using contextElement as scenario and closed as true; and
- (v) To enable providing the total (or default) value for typed dimension, an additional ELR is defined in the definition linkbase. In this linkbase, all the elements which appear with typed dimension and also require a total are included. An empty explicit dimension is included to achieve the purpose.

3.9.4 Label linkbases

The ACRA Taxonomy 2016 v4.1 uses the label roles as specified in XBRL 2.1 as well as label roles which are introduced in XBRL standards in recent years. A new label role “Disclosure label” is also defined to meet the presentation requirements of ACRA Taxonomy 2016 v4.1. All the labels are defined in English language and are created as per the rules specified in Style Guide. The different types of labels are defined to make the taxonomy to facilitate easy viewing of taxonomy. The label roles used in the ACRA Taxonomy 2016 v4.1 are listed in Table 7.

Label role	Use	Element Name	Label
http://www.xbrl.org/2003/role/label	Standard label role for a concept. The standard labels are unique and reflect the complete element names.	DisclosuresInIndependentAuditorsReportTextBlock	Disclosures in independent auditors' report [text block]
http://www.xbrl.org/2003/role/terseLabel	A more concise label role for a concept, often omitting the portion of label name required when the concept is reported in the context of other related concepts.	DisclosuresInIndependentAuditorsReportTextBlock	Independent auditors' report
http://www.xbrl.org/2003/role/totalLabel	The label role for a concept when it is to be used to present values associated with the concept when it is reported as the total of a set of other values.	LoansAndBorrowings	Total loans and borrowings
http://www.xbrl.org/2003/role/periodStartLabel	The label role for a concept with the periodType="instant" when it is to be used to present values associated with the concept when it is reported as a start (end) of period value.	BiologicalAssetsAtFairValue	Biological assets at fair value at beginning of period
http://www.xbrl.org/2003/role/periodEndLabel		BiologicalAssetsAtFairValue	Biological assets at fair value at end of period

Label role	Use	Element Name	Label
http://www.xbrl.org/2009/role/netLabel	The label for a concept when it is to be used to present values associated with the concept when it is being reported as the net of a set of other values. Net labels allow the expression of labels, other than the one to be used as total label, if the presentation tree represents a gross/net calculation instead of a traditional calculation roll-up. For example, the standard label for Property, plant and equipment can have the total label Total property, plant and equipment and the net label Net property,	CashFlowsFromUsedInFinancingActivities	Net cash flows from (used in) financing activities
http://www.xbrl.org/2009/role/negatedLabel	Label for a concept, when the value being presented should be negated (sign of the value should be inverted). For example, the standard and standard positive labels might be profit (loss) after tax and the negated labels loss (profit) after tax.	PaymentsToAcquireInterestsInJointVentures	Payments to acquire interests in joint ventures
http://www.xbrl.org/2009/role/negatedTotalLabel	standard and standard positive labels might be profit (loss) after tax and the negated labels loss (profit) after tax.	IncomeTaxRelatingToComponentsOfOtherComprehensiveIncomeThatWillBeReclassifiedToProfitOrLoss	Aggregated income tax relating to components of other comprehensive income that will be reclassified to profit or loss
http://www.xbrl.org/2009/role/negatedTerseLabel	For Example – The concept “TreasuryShares” has been assigned a negated label in StatementOfFinancialPositionCurrentNoncurrent as it is deducted from Share capital to	ImpairmentLossOnDecreaseThroughClassifiedAsHeldForSaleGoodwill	Decrease through classified as held for sale
http://www.bizfinx.gov.sg/taxonomy/YYYY-MM-DD2016-12-15/role/disclosureLabel	Disclosure label role has been specifically defined for ACRA Taxonomy in order to accommodate concepts which do not exactly fall under any of the label roles mentioned above.	WhetherThereAreAnyDirectorsInterestedOrDeemedToHaveInterestInSharesOrDebenturesOfCompanyAndRelatedCorporations	At the end of the period, are there directors interested or deemed to have interest in shares or debentures of company and related corporations

Table 7: Label roles used in ACRA Taxonomy 2016 v4.1

3.9.4.1 Total and net labels

Total and net labels are used as preferred labels in presentation linkbase for those elements which have calculations are defined in calculation linkbase. For example, if an element (which is numeric in nature) is a summation of other elements, then total label role is used.

Example of use of total label role is provided in illustration 9.

Element	Order	Preferred Label
[31010000] Note - Cash and bank balances		
Disclosure of cash and bank balances [text block]		
Cash and bank balances [abstract]	1	
Cash on hand	1	
Bank balances	2	
Fixed deposits	3	
Pledged deposits	4	
Other banking arrangements	5	
Total cash and bank balances	6	totalLabel

Illustration 9: Use of preferred label role in presentation linkbase

Illustration 10 displays the calculation hierarchy of the example where total label is used in presentation linkbase.

Element	Order	weight
[31010000] Note - Cash and bank balances		
Cash and bank balances		
Cash on hand	1	1
Bank balances	2	1
Fixed deposits	3	1
Pledged deposits	4	1
Other banking arrangements	5	1

Illustration 10: Corresponding calculation hierarchy where total label is used in presentation linkbase

3.9.4.2 Negated labels

Negated labels in the ACRA Taxonomy 2016 v4.1 use a set of label roles from the XBRL International Link Role Registry (LRR). Negated labels are generally used for elements which are to be reduced in order to arrive at a sub-total. The label merely indicates, the negative weight and the use of negated labels do not affect the sign of a reported value in XBRL. Negating a label only affects the visualisation of the reported data; it does not affect the data itself (there is no influence on the sign of reported concepts).

The following negated labels are used in the ACRA Taxonomy 2016 v4.1:

- Standard negated label role
- Negated total label role
- Terse negated label role

Example of use of negated label is as below:

Element	Order	Preferred Label
[-] Ext [31090000] Note - Construction contracts		
[-] Ext [31100000] Note - Development properties		
[-] E Disclosure of development properties [text block]		
[-] Ea Development properties	1	terseLabel
[-] Ea At cost	1	terseLabel
[-] E Completed properties	1	
[-] E Properties in course of development	2	
[-] E Total gross completed properties and properties in course of development	3	totalLabel
[-] E Allowance for foreseeable losses	4	negatedLabel
[-] E Net development properties	5	netLabel
[+] Ea Development properties under construction where significant risks and rewards of ownership are tra...	2	terseLabel
[+] Ea Other disclosure information of development properties	3	terseLabel

Illustration 11: Use of negated labels

Calculation view of the same example of treasury shares is as below:

Element	Order	weight
[-] Ext [31100000] Note - Development properties		
[-] Dr Development properties		
[-] +Dr Gross completed properties and properties in course of development	1	1
[-] +Dr Completed properties	1	1
[-] +Dr Properties in course of development	2	1
[-] -Dr Allowance for foreseeable losses	2	-1
[-] Dr Unbilled revenue		
[-] +Dr Properties in course of development at cost and attributable profits	1	1
[-] +Dr Progress billings for development properties	2	1

Illustration 12: Corresponding calculation view where negated label is used in presentation

In the taxonomy, the debit and credit attributes impact the way calculation linkbase is created. So as per XBRL specifications, a debit can be added to debit, or credit can be added to credit and a credit can be reduced from debit or a debit can be reduced from credit. Addition or reduction of elements is determined by weight attribute. So if weight is +1, it indicates elements are added and if weight is -1, it indicates element is to be reduced in order to arrive at the sub-total.

Allowance for foreseeable losses is to be reduced from Gross completed properties to arrive at Net development properties. Therefore, Allowance for foreseeable losses is defined with “-1” weight in the taxonomy. As the weight is negative, the value to be stored in instance document will have no sign (or will be positive). By doing this, the calculation relationships defined in the taxonomy will tally.

In the taxonomy, negated labels are used to indicate those elements which have negative weight in the calculation linkbase. However, while displaying the information, software products may use inverted sign, wherever negated

labels are used in the taxonomy. Inverted values may be presented in brackets, in a separate column or with a minus before the value.

3.9.4.3 Disclosure labels

There are circumstances where the pre-defined label roles of XBRL specifications may be not appropriate to be used and there is need to display a user-friendly label as compared to the standard label. Hence a new label is defined in ACRA Taxonomy 2016 v4.1 called as *disclosureLabel*.

The use of disclosureLabel is illustrated using the ELR Note - Statement Of Cash flows, indirect method as below:

[25200000] Statement of cash flows, indirect method			
Statement of cash flows (text block)			
Statement of cash flows	1	terseLabel	A
Cash flows from (used in) operating activities	1	terseLabel	
Cash flows from (used in) investing activities	2	terseLabel	
Cash flows from (used in) financing activities	3	terseLabel	
Net increase (decrease) in cash and cash equivalents before effect of exchange rate changes	4	netLabel	
Effect of exchange rate changes on balance of cash held in foreign currencies	5		
Net increase (decrease) in cash and cash equivalents	6	netLabel	
Cash and cash equivalents at beginning of period	7	periodStartLabel	
Cash and cash equivalents at end of period	8	periodEndLabel	
Cash and cash equivalents if different from statement of financial position	2	terseLabel	
Cash and bank balances	1		
Bank overdrafts	2		
Pledged deposits and restricted cash	3		
Cash and cash equivalents classified as part of disposal group held for sale	4		
Other differences to cash and cash equivalents in statement of cash flows	5		
Total cash and cash equivalents as per cash flow statement	6	totalLabel	
Net cash flows	3	terseLabel	B
Net cash flows from (used in) operating activities	1	disclosureLabel	
Net cash flows from (used in) investing activities	2	disclosureLabel	
Net cash flows from (used in) financing activities	3	disclosureLabel	

Illustration 13: Use of disclosure label

- The highlighted section A within illustration 13 consists of elements which represent totals for operating, investing and financing activities respectively. As per the ACRA Taxonomy 2016 v4.1 design rules, total or net label role should be used when an element is shown as aggregate of its sub-elements. Since “Net increase (decrease) in cash and cash equivalents” is total of the elements as highlighted in section A, net label role is used.
- In section B, there are no supporting calculations or sub-elements defined in the hierarchy. Hence the *disclosureLabel* is assigned to signify that “Net” figure is expected, but the derivation of the “Net” figure is not shown.

3.9.5 Reference linkbases

The ACRA Taxonomy 2016 v4.1 uses reference roles as listed in Table 8.

Reference role	Use
----------------	-----

http://www.xbrl.org/2003/role/disclosureRef	Reference to documentation that details an explanation of the disclosure requirements relating to the concept.
http://www.xbrl.org/2003/role/exampleRef	Reference to documentation that illustrates by example the application of the concept that assists in determining appropriate
http://www.xbrl.org/2009/role/commonPracticeRef	Reference for common practice disclosure relating to the concept. Enables common practice reference to a given point in a

Table 8: Reference roles used in ACRA Taxonomy 2016 v4.1

A reference resource is made of several parts and these are parts defined in XBRL specification. Table 9 below summarises the reference parts that are used for Accounting Standards and Acts that have been referred

Standard/Regulation	Part	Example
Singapore Financial Reporting Standards	Name	SFRS
	Number	27
	Paragraph	1
	Sub-paragraph	a
	Clause	i
	Effective date (if applicable)	2015-01-01
	Expiry date (if applicable)	2014-01-01
Singapore Financial Reporting Standards for Small Entities	Name	SFRS for SE
	Paragraph	4.3
	Sub-paragraph	22
	Clause	ii
Singapore Companies Act	Name	Companies Act
	Chapter	50
	Section	201
	Paragraph	6A
	Sub-paragraph	b
	Clause	i
Singapore Standard on Auditing	Name	Singapore Standard on Auditing
	Number	705
	Paragraph	5
	Sub-paragraph	a
Banking Act	Name	BA
	Chapter	19

Standard/Regulation	Part	Example
	Notice	612
	Paragraph	6.3
	Sub-paragraph	A
SGX - Listing manual	Name	Listing Manual
	Chapter	7
	Paragraph	1207
	Sub-paragraph	6
	Clause	a

Table 9 Reference parts used in ACRA Taxonomy 2016 v4.1

The meaning details of reference parts which are used in ACRA Taxonomy 2016 v4.1 are mention in section 4.9.3

Examples of references defined in ACRA Taxonomy 2016 v4.1 are as below:

Element	Reference Role	Reference part	Reference value
Proceeds from issuing preference shares	commonPractice	Name	SFRS
		Number	7
		Paragraph	17
Property, plant and equipment recognised as of acquisition date	example	Name	SFRS
		Number	103
		Clause	i
Number of options granted during period	disclosure	Name	Companies Act
		Chapter	50
		Section	201
		Paragraph	11
		Clause	b

Illustration 14: References defined in ACRA Taxonomy 2016 v4.1

Reference resources are placed in the folder “references”. Every schema has one or more reference linkbase file associated except for sg-types_YYYY-MM-DD.xsd and sg-ty-dim_YYYY-MM-DD.xsd. In addition, there are a few elements of DEI which do not have references.

3.9.6 Formula linkbase

Formula linkbase is one of the recent developments in XBRL space and is designed with an objective to overcome the limitations of the existing linkbases to the extent possible. Formula linkbase can model most mathematical, logical and user defined formulae. These formulae can be built for dimensional as well as non-dimensional data.

In ACRA Taxonomy 2016 v4.1, the formula linkbase is created to define all the validation rules which can ensure consistency of data, adherence to the accounting standards and other regulations. These validation rules cover or require operations like comparing values, totalling values, checking if values are reported, if proper signs are provided etc. The validation rules are categorized into various buckets with ACRA Taxonomy 2016 v4.1. The modularization of formula linkbase is thus based on nature of business rules. Since there are multiple entry-points in the taxonomy and some business rules vary for every entry-point, the formula linkbase is further categorized into common and entry-point specific rules.

The process for modularization and the different categories of business rules identified are illustrated in Figure 4 below.

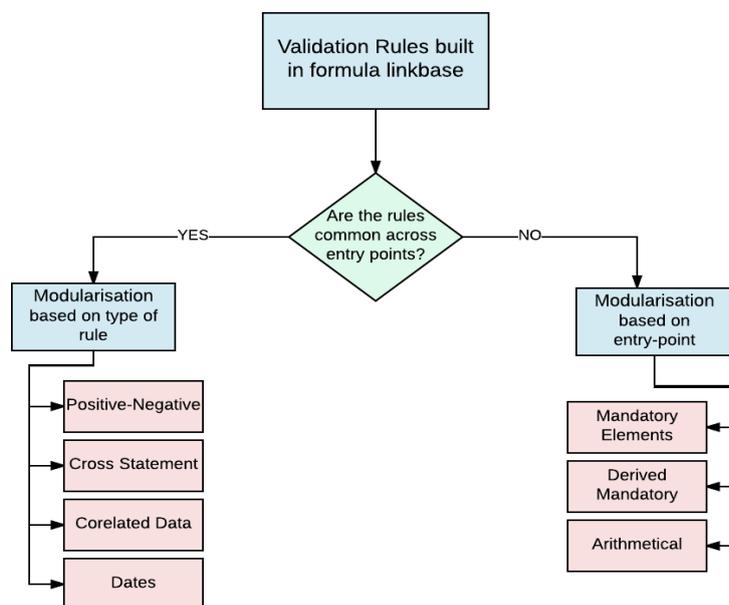


Figure 3: Business rules in ACRA Taxonomy 2016 v4.1

3.9.6.1 Modelling of validation rules in formula linkbase

The ACRA Taxonomy 2016 v4.1 uses *existenceAssertion* and *valueAssertion* for modelling the validation rules in formula linkbase. The modelling of different categories of business rules and the assertions used for them are explained in this section. The approach for modelling business rules in ACRA Taxonomy 2016 v4.1 is considering a positive outcome. Thus, the result “true” indicates that the rule is passed, while “false” indicates that the rule is not passed.

3.9.6.1.1 Mandatory elements

There are certain elements which are mandatory and need to be reported by companies within the instance document. This category of validation rules will ensure that all these elements are present in the instance document. The mandatory elements validation rule are modelled using *existenceAssertion*. A separate assertion rule is created for each mandatory element as this will help to identify and highlight the element which is not reported.

Example of validation rule:

“Total Assets” should be reported

3.9.6.1.2 Derived mandatory

There are some elements which are required to be reported depending on the values submitted for other elements. These are termed as derived mandatory elements. While a mandatory element as explained in section 3.9.6.1.1 is required for all reporting companies, a derived mandatory element is only required under certain circumstances. The derived mandatory items are modelled using *preconditions and valueAssertions*. In precondition, the base element and its expected value are provided and the dependent element is mentioned as part of *valueAssertion*.

Example of validation rule:

If “WhetherCompanyIsPreparingFinancialStatementsForFirstTimeSinceIncorporation” = NO,
Then PriorPeriodStartDate and PriorPeriodEndDate should be reported.

3.9.6.1.3 Arithmetical checks

Calculation linkbase can only perform calculation involving addition and subtraction. Hence, other arithmetical checks such as division and multiplication are built using formula linkbase. These checks are built using *valueAssertion*.

Example of validation rule:

“Total basic earnings per share” can be verified by dividing “Total profit (loss) attributable to ordinary equity holders of entity” divided by “Adjusted weighted average number of ordinary shares, for purpose of basic earnings (loss) per share”².

3.9.6.1.4 Positive and negative values

As per accounting rules, there are certain fields which will usually have a negative value or a positive value. E.g. Investment in subsidiaries will always have a positive value, while expense items like Cost of sales will usually have a negative value. However, there are no elements which should always be stored as a negative value in an instance document as negatively weighted elements such as *Expenses* would be stored as positive numbers in most of the cases as well. This formula linkbase for this category contains elements which should always be stored as a positive value in an instance document. These checks are modelled using *valueAssertion*.

Example of validation rule:

“Property, plant and equipment” will always have a positive value.

3.9.6.1.5 Cross statement

The ACRA Taxonomy 2016 v4.1 is modelled to represent a set of AGM financial statement. Every statement and every note is modelled as a separate ELR. The purpose of this category of validation rules is to validate similar data elements which are present in different ELRs. These checks include comparing values of two different elements, or comparing a dimensional element to a non-dimensional one. These checks are modelled using *valueAssertion*.

Examples of validation rule:

² Rounding off of resultant figures, especially because of division, are taken care of.

“Share capital” reported in Statement of Financial Position should be same as the amount of “Equity” reported with “Share capital” member in Statement of Changes in Equity.

“Depreciation expense” as reported in Income Statement should be more than or equal to “Depreciation” during current period as reported in disclosure note for Property, Plant and Equipment.

3.9.6.1.6 Correlated data

This category is similar to cross statement. While similar data elements are compared for validation rules in cross statement, correlated data validation rules check the validity of values reported for the different elements. The data elements can either be in same ELR or in different ELRs. These checks are modelled using *valueAssertion*.

Example of validation rule:

“Total assets” should have the same value as “Total Equity and Liabilities”.

3.9.6.1.7 Dates

This category consists of checks related to consistencies of dates provided in an instance document. These checks are modelled using *valueAssertion*.

Example of validation rule:

Current period start date should be earlier than or same as the current period end date.

In addition to the above stated rules, there are some formula files created but not referenced in entry-point via linkbaseRef. These rules are created for next phase of implementation and hence preparers and software vendors SHOULD NOT process these files.

3.10 Taxonomy packages

ACRA Taxonomy 2016 v4.1 is distributed as a taxonomy package. Taxonomy package helps users to understand the meta data about the taxonomy like publisher, versions, entry points, Taxonomies are made up of many constituent XML files, and have historically been published alongside documentation that provides an explanation of which parts of the taxonomy do what. Taxonomy package specification allows compliant tools to identify these entry points automatically, making the process of getting started with a new or updated taxonomy vastly simpler. The specification also allows the inclusion of remappings, which provide public locations for the files within the package. This allows XBRL tools to treat the contents of the package as an offline copy of taxonomies published at an Internet location, without the need for additional configuration.

Additional resources on Taxonomy Package can be found XBRL International’s website at:

<https://specifications.xbrl.org/work-product-index-taxonomy-packages-taxonomy-packages-1.0.html>

4. Style Guide

4.1 Introduction

The **purpose** of the ACRA Taxonomy 2016 v4.1 Style Guide is to:

- serve as a reference for users and extenders of the ACRA Taxonomy 2016 v4.1; and
- facilitate the creation of a high quality, easy-to-use and consistent taxonomy, through defining standardised styles or naming conventions for all components of the ACRA Taxonomy 2016 v4.1.

The Style Guide will address the following components of the ACRA Taxonomy 2016 v4.1:

- (a) Namespaces and prefix
- (b) Extended link roles (ELR's) and Sort codes
- (c) Element names
- (d) Element labels
- (e) Element properties
- (f) Element references
- (g) Data types

4.2 General Guidance Rules

In general, the following basic conventions apply to all components of the ACRA Taxonomy 2016 v4.1.

4.2.1 Follow Singapore Financial Reporting Standards (SFRS's), Legislative (Companies Act) and Listing Requirements (SGX)

Wording prescribed in the SFRS's, Companies Act and SGX disclosure documents/manuals/Acts takes precedence over the rules in this document. This document is to be used in conjunction with the above mentioned and should be applied when the SFRS's, Companies Act and SGX disclosure documents/manuals/Acts do not provide enough guidance to construct components of the ACRA Taxonomy 2016 v4.1.

4.2.2 Conformance to Style Guide

For describing the rules, the following words/phrases are used. The implications of these words are:

MUST: Conforming documents and consuming applications are required to behave as described; otherwise they are in error.

MUST NOT: Conforming documents and consuming applications are required not to behave as described; otherwise they are in error.

SHOULD: Conforming documents and applications are encouraged to behave as described.

SHOULD NOT: Conforming documents and applications are encouraged not to behave as described.

4.3 File naming style

The following style if followed for creating the file and folder names for ACRA Taxonomy 2016 v4.1:

File type	Style	Examples
Label linkbase	[prefix]_YYYY-MM-DD_lab.xml	sg-as_2016-12-15_lab.xml
Reference linkbase	[prefix]_YYYY-MM-DD_ref.xml	sg-ca_2016-12-15_ref.xml
Calculation linkbase	[prefix]_YYYY-MM-DD_cal.xml	sg-sfrs_2016-12-15_cal.xml
Definition linkbase	[prefix]_YYYY-MM-DD_def.xml	sg-sfrs_2016-12-15_def.xml
Presentation linkbase	[prefix]_YYYY-MM-DD_pre.xml	sg-se_2016-12-15_pre.xml
Schema for ELRs	[prefix]_YYYY-MM-DD_elr.xsd	sg-fsh-gen_2016-12-15_elr.xsd

4.4 Namespace and Prefix

The namespace and prefix associate the taxonomy with its purpose and/or its owner. The namespace and the prefix should be unique. As per the XBRL specifications, following components are recommended to be used in the namespace:

- Taxonomy Owner
- Jurisdiction
- Reporting Type : fr (stands for financial reporting) , br (business reporting)
- Accounting Type: gaap, accounting standards etc.
- Industry: C&I (commercial and industrial), banks, insurance, all (assuming applicable to all industries), etc.
- {Qualifier “/”}: Optional. Required if further categorisation needed
- version Date

The namespace style followed for ACRA Taxonomy 2016 v4.1 is:

[http://www.bizfinx.gov.sg/taxonomy/YYYY-MM-DD/\[folder name\]/\[prefix\]](http://www.bizfinx.gov.sg/taxonomy/YYYY-MM-DD/[folder name]/[prefix])

The prefixes represent the content that is defined in taxonomy files. All the prefixes start with ‘sg’ to denote Singapore. The abbreviations of rules and regulations are used as part of prefix. For example, “as” for Accounting standards, “ca” for Companies Act etc.

The purpose of prefix is to clearly suggest the nature of file / content included in the file. Due to this, there is a non-conformance to FRTA clause which states that prefix should have only 12 characters. There are certain prefixes which exceed 12 characters

The namespaces and prefixes for the ACRA Taxonomy 2016 v4.1 are mentioned in section3.6.

4.5 Extended link role (ELR)

Extended link roles are the logical groups defined in the taxonomy for modeling the linkages/relationships between elements. The ELRs would be defined in a separate schema file. For every ELR, the following attributes MUST be defined:

- **Id:** The name given for the extended link name. The ELR id SHOULD be unique. For example ‘statementOfFinancialPosition’ could be an id.

- **role URI** : The unique resource identifier as defined for the ELR. The role URI is created by including some of the components of namespace of the schema (in which the ELRs are defined) and the ELR id.

For example: `www.acra.gov.sg/as/role/StatementOfFinancialPosition`

`"http://www.bizfinx.gov.sg/taxonomy/2016-12-15/sg-sfrs/role/StatementOfFinancialPositionOrderOfLiquidity"`

- **definition**: The human readable name provided for every ELR. As a best practice, an artificial number (called as sort code) is included in the definition to arrange the ELRs in a logical sequence
- **used on**: The ELR can be used in one or any of the linkbases (presentation, calculation or definition). This attribute specifies on which of the linkbases the ELR can be used

4.5.1 Roles id would be textual in nature and would represent the financial statement or the note which it refers to

For example,

- The current/non-current classification of financial position can have the id as `"StatementOfFinancialPositionPresentedUsingOrderOfLiquidity"`
- Note related to leases can have the id as `"NoteOperatingLeases"`

4.5.2 Roles URI would have the namespace of the schema in which the roles are defined, followed by the role id.

The format to be followed for role URI (the data that would change is mentioned in curly brackets){URI of schema}/role/{date}/{id}

For example, the role URIs created based on accounting standards followed in Singapore –

<http://www.bizfinx.gov.sg/taxonomy/2016-12-15/sg-se/role/FilingInformation>

4.5.3 Roles definitions MUST start with the ordering number.

For better sorting of the extended link roles (ELR), the definitions of the ELRs MUST start with an eight-digit number. The numbers allow sorting of the ELRs according to the structure of financial reports. The 8 digit sort code would be mentioned in square brackets.

The following pattern is followed for arriving at Sort Codes:

- Starting with 1 : ELRs related to Filing information, Disclosures and Index of Notes
- Starting with 2 : ELRs pertaining to financial statements
- Starting with 30 : General information notes
- Starting with 31 : Notes related to balance sheet
- Starting with 32 : Notes related to income statement
- Starting with 33 : Other notes
- Starting with 8 : FSH
- Starting with 90 : Open (floating) dimensions

4.5.4 Specific sort codes –

[99999999] for the ELR Axis-defaults

4.5.5 Roles definitions SHOULD use the agreed wording

Roles definitions for disclosures should start with the number followed by the word ‘statement of’ or “Note” or “Axis”.

For example: [31010000] Notes - Trade and other receivables

Exceptions are as follows:

[10000000] Filing information

[11000000] Full set of financial statements

[12000000] Directors’ report

[13000000] Statement by directors

[14000000] Independent auditors’ report

[22100000] Income statement classified by function of expense

[22200000] Income statement classified by nature of expense

4.5.6 The usedOn attribute should be selected for all linkbases

All the ELR’s should have the usedOn for all the three linkbases i.e. presentation, calculation and definition.

Exceptions are as follows:

[99999998] Typed Axis - Defaults

[22900000] Additional calculations

[25100000] Statement of cash flows using direct method

[25200000] Statement of cash flows using indirect method

4.6 Element name and id

4.6.1 *The element id MUST be created in the format namespace prefix of the taxonomy, followed by an underscore, followed by the element name (“prefix_ElementName”)*

For example,

- sg-as_Investments
- sg-ca_DisclosureOfDirectorsInterest

4.6.2 *Element name SHOULD be concise, follow terminology as per the regulations, and avoid being excessively descriptive*

For example

“PropertyPlantAndEquipmentBeforeAccumulatedDepreciationAndExcludingIntangibleAssets” should be

“PropertyPlantAndEquipmentGross”.

However in certain cases descriptive names could be required to make the element name unique and also self-explanatory.

For example:

ProfitLossAttributableToOrdinaryEquityHoldersOfEntityIncludingDilutiveEffects

4.6.3 *Concept names SHOULD adhere to the LC3 convention*

LC3 means Label Camel Case Concatenation (LC3). Some of the important or relevant LC3 rules require that:

- Element names **MUST** be based on an appropriate presentation label for the element. The element name **SHOULD** be a natural language expression that is meaningful to experts in the domain covered by a taxonomy
- The first character of the element name must not be underscore (_)
- The first character of the element name must be capitalised
- Connective words in the label may be retained in the element name. Examples of English connective words include (but are not limited to) the following: and, for, which, with
- As a consequence of XML element name restrictions, all special characters must be omitted from the element name. Special characters include the following:
 () * + [] ? \ / ^ { } | @ # % ^ =
 ~ ` " " ; : , < > & \$ £ €
- Element names must be limited to 256 characters or fewer

4.6.4 *The following articles **MUSTNOT** be used in element names:*

Disallowed articles:

- An
- A
- The

4.6.5 *Adjectives in all element names **SHOULD** be used with a noun*

For example, “TemporarilyIdle” alone means nothing. “ExplorationAndEvaluationAssetsTemporarilyIdle” is meaningful.

4.6.6 **Numbers SHOULD be expressed as text when less than 10**

The expression of number is a matter of judgment. The following rules for numbers should be considered:

- Exact numbers one through nine should be spelt out, except for percentages, numbers referring to parts of a book (for example, “5 per cent”, “page 2”) and accounting standard number or paragraph, if to be used
- Numbers of 10 or more should be expressed in figures.

4.6.7 **Adjectives SHOULD be used when there is ambiguity surrounding a concept**

- For example, “Provisions” should always be current, non-current or total. The proper name for the taxonomy concept should be “Current provisions”, “Non-current provisions”. (“Total provisions” should be used as a totalLabel role for the concept Provisions).

4.6.8 **Concepts for disclosures that define textual type explanations SHOULD start with a descriptor that explains the nature of the text**

- For example, “ExplanationOfAmountOfCommitmentsForDevelopmentOrAcquisitionOfBiologicalAssets” or “DescriptionOfNatureOfFinancialStatements”.

- Whereas for the concept name “ImpactOfChangesInAccountingEstimates”, it is not clear if the concept is an amount or a narrative.
- The following are common starting wordings for text-type content that appear in disclosures:
 - AdditionalInformationAbout
 - AddressOf
 - AddressWhere
 - CountryOf
 - DescriptionAndCarryingAmountOf
 - DescriptionOf
 - DescriptionOfAccountingPolicyFor
 - DescriptionOfNatureOf
 - DescriptionOfReasonFor
 - DescriptionOfReasonWhy
 - DisclosuresIn
 - DisclosureOf
 - DomicileOf
 - ExplanationOf
 - ExplanationWhen
 - IndicationOf
 - InformationAbout
 - InformationRequired
 - InformationWhether
 - MethodsUsedTo
 - NameOf
 - PrincipalPlaceOf
 - QualitativeInformationAbout
 - RangeOf
 - ResidenceOf
 - StatementOf
 - SummaryQuantitativeDataAbout
- Exceptions include are as follows:
 - IncomeStatementTextBlock

4.6.9 Concepts that represent a non-monetary or non-text value SHOULD start with an appropriate descriptor

These include concepts that are decimals, percentages and dates. The following are common starting labels for non-monetary and non-text content which appear within disclosures:

- “DateOf...”
- “NumberOf...”

- “WeightedAverageExercisePriceOf ...”
- “PercentageOf...”
- “ProportionOf...”

4.6.10 The element name for abstract concepts that do not represent hypercubes, dimensions, domains, or domain members MUST append the word “Abstract” or “LinItems” to the end of the element name

Abstract elements are used to organise the taxonomy. Element names for abstract items shall append the word “Abstract” or “LinItems”. The reason for this is to differentiate the abstract concepts from the concepts which can actually hold values.

For example: “

- “AssetsAbstract”
- “DisclosureOfOperatingLeaseByLesseeLinItems”

4.6.11 The element name for nonnum:textBlockItemType concepts MUST append the word “TextBlock” to the end of the name

Text block elements are used to disclose narrative information.

For example: “DisclosureOfRelatedPartyTextBlock”

4.6.12 The element name for dimensions MUST append the word “Axis” to the end of the name

Dimensions are abstract concepts used as containers for domains, and domain members should be clearly recognisable through their names.

For example: “RestatementsAxis”

4.6.13 The element name for hypercubes MUST append the word “Table” to the end of the name

Hypercubes are abstract concepts used as link between dimensions and line items.

For example: “RestatementsTable”

4.6.14 The element name for domain and domain members MUST append the word “Member” to the end of the name

Domain and domain members are abstract concepts used as members on the axis (dimension).

For example: “RestatedMember”

4.6.15 The element name for typed domain constraints MUST append the word “Domain” to the end of the name

The typed domain constraints are defined in the file ‘sg-ty-dim_YYYY-MM-DD.xsd’. For such elements the word “Domain” is used as suffix.

For example: “GeographicalAreasDomain”.

4.6.16 The word “total” MUST NOT be used in any element name

The word “total” should not be used in an element name. The word “total” can be used in the total label role. In addition, the total label role can use the word “aggregated” and net label role the word “net”.

For example, “AssetsTotal” should not be used as element name; “Assets” is sufficient. A total label as “Assets, Total” should be created instead.

4.6.17 Authoritative references SHOULD NOT be used in a name, unless necessary to make the element name meaningful

Element names should not include the name, number and other details of rules and regulations. However in certain cases, where it is necessary to include such details, there it can be used.

4.6.18 Abbreviations are only to be used when they are better known than the words of the substitute

Do not use abbreviations unless the words they abbreviate are less known than the abbreviations, e.g., SGX is used for Singapore Stock Exchange or GRI is commonly used for “Global Reporting Initiative”.

The commonly used abbreviations are:

- (a) FRS – Financial Reporting Standards
- (b) SFRS – Singapore Financial Reporting Standards
- (c) SE – Small Entities
- (d) IFRS – International Financial Reporting Standards
- (e) GST – Goods and Service Tax

4.6.19 Concepts names MUST follow the official UK English spelling

Example: UK spelling	Wrong spelling
Organisation	organization

4.6.20 The gender specific term His/Her MUST not be used

Avoid gender specific terms such as his and her.

4.7 Element labels

4.7.1 Labels SHOULD be concise, follow terminology as per the regulations, and avoid being excessively descriptive

For example, “Property, plant and equipment before accumulated depreciation and excluding intangible assets” should be “Property, plant and equipment, gross”.

However, in certain cases descriptive names could be required to match the element name and also self-explanatory. For example, “Profit (loss), attributable to ordinary equity holders of entity including dilutive effects”

4.7.2 The agreed spelling SHOULD be used

As there are various accepted ways to spell some terms, the following list of terms should be used in the ACRA Taxonomy 2016 v4.1.

- **anti** no hyphen
- **co** no hyphen except
 - “co-operate/co-operation”
 - “co-ordinate/co-ordination”
- **non** *always hyphen* (but note “nonsense”, “nonentity” etc.)
- **over** no hyphen except
 - “over-optimistic”
 - “over-represent”
- **pre** no hyphen except
 - “pre-empt”
 - “pre-exist”
- **post** always hyphen
- **pro** no hyphen except
 - “pro-forma”
- **re** no hyphen except
 - “re-enter”
 - “re-present” (to present again)
 - “re-record”
- **semi** always hyphen
- **sub** no hyphen except
 - ‘sub-lessee”
 - ‘sub-lessor”
- **super** no hyphen
- **un** no hyphen
- **under** no hyphen except
 - “under-record”
 - “under-report”
 - “under-represent”
- Specific terms to be used with hyphen
 - Available-for-sale
 - Held-to-maturity
 - Held-for-trading

4.7.3 Labels MUST NOT contain certain special characters.

The following characters should generally be avoided in creating concept labels:

Disallowed Characters:	Allowed Characters:
? > < : * “ + ; = . & ! @ # { } \	A-Z, a-z, 0-9, (,), comma, -, “, space, [], /

4.7.4 Labels MUST start with a capital letter and MUST NOT use upper case, except for proper names and abbreviations

For example, “Whether all items of income and expense are presented in a single statement of comprehensive income or two statements of income statement and statement of comprehensive income”.

List of words (among others) that are capitalised:

- SFRS
- SE
- XBRL
- GAAP
- GST

4.7.5 The following articles MUST NOT be used in labels:

Disallowed articles:

- An
- A
- The

Exceptions are as follows:

At the end of the period, are there directors interested or deemed to have interest in shares or debentures of company and related corporations

4.7.6 Adjectives in all labels SHOULD be used with a noun (except terse labels)

For example, “Temporarily idle” alone means nothing. “Exploration and evaluation assets, temporarily idle” is meaningful.

4.7.7 Dashes MUST NOT be used in labels where commas can be used instead

For example, DO NOT use “Statement of financial position – Order of Liquidity [text block]”, but rather use “Statement of financial position presented in order of liquidity [text block]”.

An exception is the use of dashes in the definition of extended link roles.

4.7.8 In a series of three or more items, commas MUST be used after each item excluding the penultimate item

Use a comma to separate items in a series of three or more items not including before the final “and”.

For example: “Property, plant and equipment”

4.7.9 Numbers SHOULD be expressed as text when less than 10.

The expression of number is a matter of judgment. The following rules for numbers should be considered:

- Exact numbers one through nine should be spelt out, except for percentages and numbers referring to parts

of a book (for example, “5 per cent”, “page 2”).

- Numbers of 10 or more should be expressed in figures.

4.7.10 Labels MUST NOT have leading spaces, trailing spaces or double spaces.

4.7.11 Certain adjectives and prepositions used in labels SHOULD appear before or after the noun and be separated by a comma

For example: “Other intangible assets, gross” and “Other comprehensive income, net of taxation”.

The following sentence construct models the intention of how concept labels should be created. Note that what is contained in curly braces {}, is one component of the label. The different sets of curly braces are the different components of the same label.

The format below prescribes the order in which the components should appear if present:

{Total*} {other} {current or non-current} {noun}, {net [of tax] or gross [of tax]}, {at cost or at fair value}

For example: “Total other non-current asset, gross, at fair value”.

Below are examples of properly and poorly constructed labels:

Properly-constructed labels (per model):	Poorly-constructed labels (not per model):
<ul style="list-style-type: none"> • Current trade receivables, gross • Other comprehensive income, net of tax • Accumulated depreciation of biological assets, at cost 	<ul style="list-style-type: none"> • Current gross trade receivables • Trade and other receivables, current, net • Equity – share subscriptions, total • Accumulated at cost depreciation of biological assets

Exceptions include net or gross labels for which the counterpart does not exist.

For example: “Gross profit”, “Net exchange differences, brand names” or “Net cash flows from (used in) financing activities”.

4.7.12 Adjectives SHOULD be used when there is ambiguity surrounding a concept

For example, “Provisions” should always be current, non-current or total. The proper label for the taxonomy concept should be “Current provisions”, “Non-current provisions” or “Total provisions” (this used as a totalLabel role for the concept Provisions).

4.7.13 Concepts for disclosures that define textual type explanations SHOULD start with a descriptor that explains the nature of the text

For example, “Explanation of amount of commitments for development or acquisition of biological assets” or “Description of nature of financial statements”. Whereas for the concept label “Impact of changes in accounting estimates”, it is not clear if the concept is an amount or a narrative.

The following are common starting labels for text-type content that appear in disclosures:

- Additional information about...
- Address of ...
- Address where ...
- Country of ...
- Description and carrying amount of ...
- Description of ...
- Description of accounting policy for...
- Description of nature of...
- Description of reason for...
- Description of reason why...
- Domicile of ...
- Explanation of ...
- Explanation when ...
- Indication of ...
- Information about...
- Information required ...
- Information whether ...
- Methods used to...
- Name of ...
- Principal place of ...
- Qualitative information about ...
- Range of ...
- Residence of ...
- Statement of ...
- Summary quantitative data about ...

4.7.14 Concepts that represent a non-monetary or non-text value SHOULD start with an appropriate descriptor

These include concepts that are decimals, percentages and dates. The following are common starting labels for non-monetary and non-text content which appear within disclosures:

- Date of...
- Number of....
- Weighted average exercise price of ...
- Percentage of...
- Proportion of...

4.7.15 Labels SHOULD avoid defining what they do or do not include

For example, “Property, plant and equipment including land and buildings” should be avoided. What an item includes or excludes should be provided in the definition of the concept or the calculation linkbase. In some cases, a label needs to define inclusions and exclusions, because particular concepts do not have an agreed meaning. For example: “Intangible assets without goodwill” is allowed.

4.7.16 For concepts that can be either negative or positive, the concept label MUST use parentheses () to indicate which concept is represented as positive or negative values in the instance document

There are occasions in an instance document when the value of a concept could be positive or negative, for example, “Increase (decrease)”. A space should appear between the positive item and the opening parenthesis. A slash should not be used.

The following are examples of concepts that may have positive or negative values:

- Disposals (acquisitions)
- Loss (reversal)

- from (used in)
- Gains (losses)
- Income (expense)
- Increase (decrease)
- Inflow (outflow)
- Paid (refund)
- Profit (loss)
- Proceeds from (purchase of)
- Write-downs (reversals)

Parentheses SHOULD be used to denote positive or negative values and SHOULD NOT be used to denote alternative terms for a label such as “Deferred (unearned) revenue”.

4.7.17 The label component related to XBRL and not to regulations (accounting standards, acts etc.) MUST be placed between square brackets “[]” at the end or beginning of the label

The component of labels placed in square brackets provides XBRL-related information that does not influence the accounting information (for example for alternative breakdown). For example:

- [31240000] Note - Provisions
- Current assets [abstract]

4.7.18 The standard label for abstract concepts that do not represent hypercubes, dimensions or domain members MUST append the word “[abstract]” or “[line items]” to the end of the label

Abstract elements are used to organise the taxonomy. Labels for abstract items shall append the word “[abstract]”. The reason for this is to differentiate the concept labels and names.

For example: “Assets [abstract]”.

4.7.19 The standard label for nonnum:textBlockItemType concepts MUST append the word “[text block]” to the end of the label

Text block elements are used to disclose narrative information.

For example: “Disclosure of related party [text block]”.

4.7.20 The standard label for dimensions MUST append the word “[axis]” to the end of the label

Dimensions are abstract concepts used as containers for domains, and domain members should be clearly recognisable through their labels.

For example: “Restatements [axis]”.

4.7.21 The standard label for hypercubes MUST append the word “[table]” to the end of the label

Hypercubes are abstract concepts used as link between dimensions and line items.

For example: “Restatements [table]”.

4.7.22 The standard label for domain and domain members MUST append the word “[member]” to the end of the label

Domain and domain members are abstract concepts used as members on the axis (dimension).

For example: “Restated [member]”.

4.7.23 The word “total” MUST NOT be used in any label (except in the total label role or disclosure label role).

The word “total” should not be used in a standard label name. The word “total” can be used in the total label role. In addition, the total label role can use the word “aggregated” and net label role the word “net”.

For example, “Assets, total” should not be used as standard label; “Assets” is sufficient.

Examples of disallowed use of “total”, which should be avoided for standard label role:

- “Assets, total”
- “Changes in issued capital, total”
- “Sales, total”
- “Total assets”
- “Aggregated assets”

In cases where there is no calculation relationship, and still it is to be highlighted that the element represents a total or an aggregated amount, the “disclosureLabel” role is used

4.7.24 Authoritative references SHOULD NOT be used in a label, unless necessary to make the label meaningful

Labels should not include the name of authoritative literature. However in certain cases, where it is necessary to include such details, there is can be used.

4.7.25 Labels representing the period start label MUST use the following format “at beginning of period” at the end of the label. Labels representing the period end label SHOULD use “at end of period” at the end of the label

Example of proper use of the period start and period end label	Example of disallowed use of the period start and period end label
<ul style="list-style-type: none"> • Provisions at beginning of period • Provisions at end of period 	<ul style="list-style-type: none"> • Provisions, beginning balance • Provisions, at start • Provisions, period end

4.7.26 Abbreviations are only to be used when they are better known than the words of the substitute

Do not use abbreviations unless the words they abbreviate are less known than the abbreviations, e.g., SGX is used for Singapore Stock Exchange or SFRSI is commonly used for Singapore Financial Reporting Standards.

Examples of abbreviations used in ACRA Taxonomy 2016 v4.1 are:

- FRS – Financial Reporting Standards
- SFRS – Singapore Financial Reporting Standards
- SE – Small Entities
- IFRS – International Financial Reporting Standards
- GST – Goods and Service Tax

4.7.27 Labels names MUST follow the official UK English spelling

Example: UK spelling	Wrong spelling
Organisation	organization

4.7.28 The gender specific term His/Her MUST not be used.

Avoid gender specific terms such as his and her.

4.8 Element properties

This section describes the standard properties for certain types of elements.

4.8.1 Abstract and Line item

Attribute	Value
Abstract	true
Substitution group	xbri:item
Period Type	duration
Type	xbri:stringItemType
Nilable	true

4.8.2 Table

Attribute	Value
Abstract	true
Substitution group	xbrldt:hypercubeItem
Period Type	duration
Type	xbri:stringItemType
Nilable	true

4.8.3 Axis

Attribute	Value
Abstract	true
Substitution group	xbrldt:dimensionItem
Period Type	duration
Type	xbri:stringItemType
Nilable	true

4.8.4 Domain and domain member

Attribute	Value
Abstract	true
Substitution group	xbrldt:item
Period Type	duration
Type	nonnum:domainItemType
Nilable	true

4.8.5 All elements with type as xbrli:booleanItemType MUST have period as duration

4.8.6 All elements with type as xbrli:dateItemType MUST have period as instant

4.8.7 All elements with type as xbrli:stringItemType MUST have period as duration

4.9 Element references

The reference resources are defined as explained in section. This section enumerates the rules followed for creating references.

4.9.1 References MUST be defined for all non-abstract elements (i.e. elements having abstract as false).

4.9.2 References MUST be defined for Table, Axis, Domain and Domain members

4.9.3 Reference parts

The followings are the reference parts and the possible values for the reference parts:

Reference part	Use
Name	<ul style="list-style-type: none"> • SFRS • SFRS for SE • Companies Act • Singapore Standards for Auditing • Listing Manual • BA
Number	Number of the standard or interpretation
Chapter	Chapter number in the Act or Manual
Section	Title of sections of standard or interpretation (or section number in case of SFRS for Small Entities)
Paragraph	Paragraph (number) in the standard
Subparagraph	Subparagraph (number) of a paragraph
Clause	Subcomponent of a subparagraph
Appendix	Appendix in the standard
Example	Example in the standard
Effective date	New part. The date from which the accounting standard is effective
Expiry date	New part. The date when the accounting standard will expire
Notice	New part Used for references to Banking Act

4.10 Data types

This section specifies guidelines to be followed for new data types

4.10.1 All the data types MUST have the word “ItemType” appended at the end of its name

For example - sg-types:ListingItemType

4.10.2 The enumerated values MUST be in sentence case, except for proper nouns and abbreviations

For example:

sg-types:StatementOfFinancialPositionItemType	<ul style="list-style-type: none"> • Current and non-current • Order of liquidity
sg-types:DesignationOfPreparerItemType	<ul style="list-style-type: none"> • Accountant or person providing accounting related services • Company secretary or person providing corporate secretarial related services • Company Director • Others

4.11 Formulas

4.11.1 File and rule naming conventions

The formula linkbase files will be named to indicate the type of business rules that are included in the file. Similarly, every business rule which is defined in linkbase will have a unique ID, which represents the category of rule.

The following naming conventions are proposed:

#	Category of rule	File name	Business rule ID
1	Cross statement	cs_YYYY-MM-DD_for.xml	crossStatement_001, crossStatement_002 ...
2	Mandatory	[prefix]-md_YYYY-MM-DD_for.xml	Sfrs-mandatory_001, fsh-ins-mandatory_002 ...
3	Derived Mandatory	dm_YYYY-MM-DD_for.xml fsh-dm_YYYY-MM-DD_for.xml	derivedMandatory_001, fsh-derivedMandatory_002 ...
4	Correlated data	cr_YYYY-MM-DD_for.xml	correlated_001, correlated_002 ...
5	Dates	dt_YYYY-MM-DD_for.xml	dates_001, dates_002 ...
6	Arithmetical	ar_YYYY-MM-DD_for.xml	arithmetical_001, arithmetical_002 ...
7	Positive and negative values	pn_YYYY-MM-DD_for.xml	positiveNegative_001, positiveNegative_002 ...

4.11.2 Every formula will have an id and label which represents the category. A artificial number is also included to keep a count of the formulas included

References

The ACRA Taxonomy 2016 v4.1 Guide has been prepared considering the practices followed by some of the globally known taxonomies. The following documentation has been considered for identifying the scope of information to be provided as part of Taxonomy Guide.

- The IFRS® Taxonomy 2012 Guide
- Climate Change Reporting Taxonomy 2012 - Taxonomy Architecture and Style Guide
- FASB US GAAP Financial Reporting - Taxonomy Architecture (2012)
- GRI Taxonomy Architecture & Style Guide (2012)

The content of this Guide is purely based on ACRA Taxonomy 2016 v4.1. The above mentioned guides were referred in order to be in line with the documentation practices followed globally.