DANISH BUSINESS AUTHORITY

The Danish Business Authority

IFRS DK XBRL Taxonomy Framework Architecture

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Index

1 Introduction

The purpose of this document is to present and explain the architecture of the framework of XBRL taxonomies created by the Danish Commerce and Companies Agency[1] [DCCA]. In particular, it explains the scope (coverage of information requirements), modularization in files, manner of defining concepts and relations and other important design aspects.

This document is aimed at users of the IFRS DK taxonomy, in particular business users working with the taxonomy in order to produce instance documents (by applying mappings to internal systems or assigning XBRL tags with values in any other manner) as well as developers of IT solutions facilitating reporting in the XBRL format or analysis of XBRL data.

2 Scope of the framework

The IFRS DK XBRL taxonomy framework reflects information requirements for mandatory filings submitted by registered entities to the Danish Business Authorityas well as to other cooperating agencies, institutions and authorities in Denmark.

Under the current version, the scope of the framework is limited to the following acts:

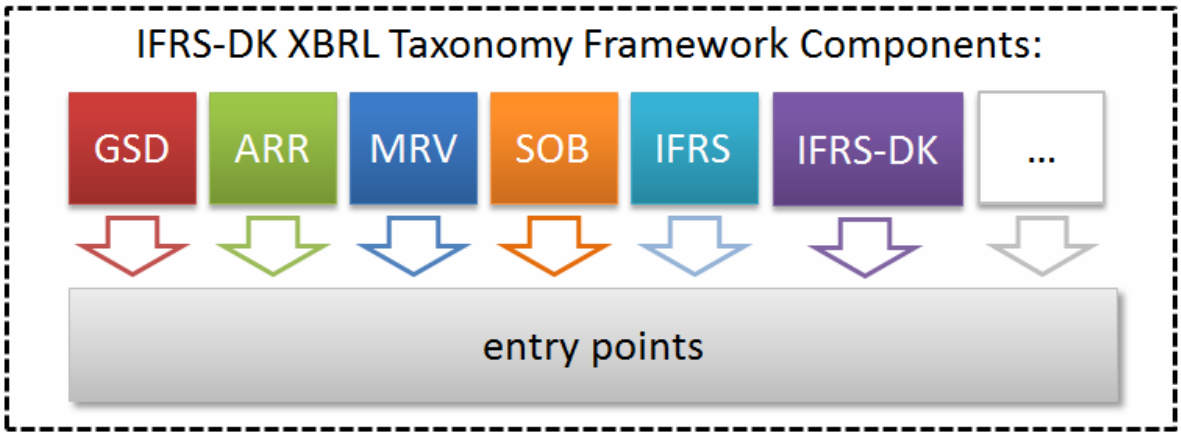
- the Danish Annual Accounts Act as of 27 December 2008[2] (for the scope of regulations applying to class-B and class-C companies, solo and consolidated financial statement),
- the Danish Executive Order on Approved Auditor's Reports as of 26 June 2008[3],
- the Danish Executive Order on Approved Auditor's Reports as of 26 June 2008[4], complemented with the common practice information recognized by the Danish Commerce and Companies Agency.
- IFRS Bound Volume 2011 and Danish common-practice extension to IFRS standards.

3 Components of the framework

The IFRS DK XBRL taxonomy framework consists of sets of taxonomy files reflecting regulations of certain acts or additional reporting requirements. The overview diagram of the IFRS DK XBRL taxonomy framework is presented on Fig 1 below.

Fig 1

[1] http://www.eogs.dk/
[2] https://www.retsinformation.dk/Forms/R0710.aspx?id=125071
[3] http://www.eogs.dk/graphics/_ny%20eogs/English%20version/Legislation/Danish%20Executive%20order%20on%20Approved%20Auditor's%20Reports.pdf
[4] http://www.eogs.dk/graphics/_ny%20eogs/English%20version/Legislation/Danish%20Executive%20order%20on%20Approved%20Auditor's%20Reports.pdf



Explanation of abbreviations used on the diagram presented on Fig 1:

- **GSD – general and submission data** (generelle indberetningsdata mv): contains information on submission, reporting entity and a report itself, such as reporting period covered, submitting and reporting entity registration and contact data, information on auditors, financial institutions and law firms representing reporting entity as well as members of executive and supervisory boards,
- **ARR – approved auditor's reports** (revisor erklæring): represents information requirements defined in the Danish Executive Order on Approved Auditor's Reports with regard to report on audited financial statements, review of financial statements or other assurance reports,
- **MRV – management's review** (edelses beretning): represents the content of the Management's review as defined by the Danish Annual Accounts Act extended by common practice requirements recognized by the Danish Commerce and Companies Agency,
- **SOB – statement of boards** represents the content of the Statement by executive and supervisory boards as defined by the Danish Annual Accounts Act,
- **IFRS – IFRS-based financial statements** : reflects information requirements defined in the IFRS Bound Volume 2011, IFRS common practice concepts dated on 2011-06-01 as well as information recognized by the Danish Business Authority(i.e. Danish IFRS common concepts) implemented as Danish extension to base IFRS taxonomy within xmlns: ifrs-dk
- **IFRS-DK – Danish extension to IFRS-based financial statements** : reflects information recognized by the Danish Business Authority(i.e. additional common concepts identified in IFRS-based reporting in Denmark) implemented as Danish extension to base IFRS taxonomy within xmlns: ifrs-dk

In terms of physical structure, the framework follows the architectural guidelines of IFRS Taxonomy Guide 2011 defined in chapter 2.3 The structure of the IFRS Taxonomy.[5]

Similarly, the entire framework has been modularized in sets of taxonomy files that are referred from entry point files depending on specific reporting requirements in order to allow for reuse of concepts globally as well as in a strictly as-is submission-oriented fashion.

[5] http://www.ifrs.org/IFRSTaxonomy2011Guide20110325.pdf

4 Location and modularization in folder and files

4.1 Location

The official root location of all files in the framework (root URL) is *http://archprod.service.eogs.dk/taxonomy/*. This domain is under control of the authority publishing the taxonomy which is the DCCA.

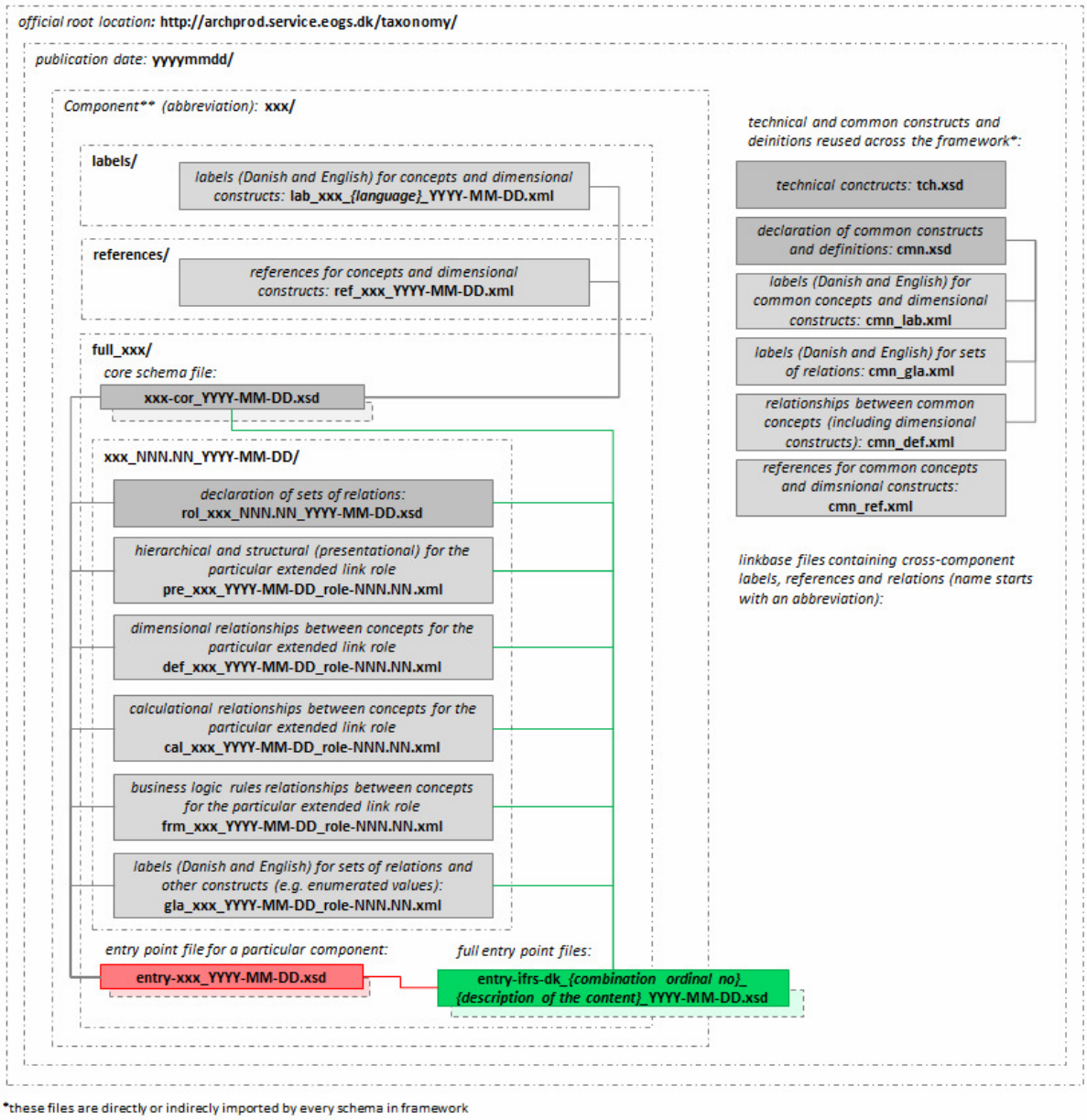
Components of the framework are placed in folders under the root URL followed by the date of publication according to the pattern: *{root URL}/{date of publication in format yyyymmdd}/{optional: abbreviated name of a component of the framework}/{file name}*.

Information about official location of each file is embedded in each file as `officialURI` processing instruction (e.g. `<?officialURI http://archprod.service.eogs.dk/taxonomy/20111220/ifrs-dk/entry-ifrs-dk_2011-12-20?>`).

4.2 Modularization in folders and files

General structure of folders and files inside of the official location is presented on Fig 2.

Fig 2



*these files are directly or indirecly imported by every schema in framework

As explained above the framework is defined in the root location *http://archprod.service.eogs.dk/taxonomy/* followed by the folder named after the publication date (using the date format *YYYYMMDD*). Inside of this folder there are:

A. XBRL schema and linkbase files for technical constructs (*tch.xsd*) and declaration of common constructs and definitions (*cmn.xsd, cmn_lab.xml, cmn_gla.xml, cmn_def.xml*, etc.) reused across the framework,
B. folders for each component of the framework (*xxx* abbreviation of component's name),
C. core and entry point schema files.

4.2.1 Technical and common constructs

Technical constructs reused across the entire framework are defined in the *tch.xsd* schema file. Currently, this schema file:

- imports all necessary XBRL technical schema files, i.e. XBRL 2.1 (*http://www.xbrl.org/2003/xbrl-instance-2003-12-31.xsd*), XBRL Dimensions 1.0 (*http://www.xbrl.org/2005/xbrldt-2005.xsd*), XBRL Generic Link (*http://www.xbrl.org/2008/generic-link.xsd*) and XBRL Generic label (*http://www.xbrl.org/2008/generic-label.xsd*) specifications schema files, XBRL International registry of additional data types (*http://xbrl.org/dtr/type/numeric-2009-12-16.xsd*, *http://xbrl.org/dtr/type/nonNumeric-2009-12-16.xsd*), reference parts (*http://www.xbrl.org/2006/ref-2006-02-27.xsd*), etc.,
- defines technical constructs that are custom to the DCCA taxonomies and expand the syntax of XBRL specifications (e.g. `preferredLabel` attribute that is used on definition arcs).

Common constructs and definitions reused across the entire framework are declared in the *cmn.xsd* XBRL schema file and the supporting linkbase files (*cmn_lab.xml*, *cmn_gla.xml, cmn_def.xml*). These files contain declarations of common XBRL concepts (applicable for different components and that cannot be exclusively ascribed to any of them), `roleType`s used on extended links and relations. For example, the common constructs include declaration of a container (`roleType` used on definition extended links) for storing relations between dimensions and their default members (see Section 9 for details). They also contain definition and relations for dimension used for distinguishing between the solo and consolidated data that is applied to every concept within the framework (regardless of the component, hence described as a common construct). It may also include declaration of reportable concepts that are not exclusively defined by any of the components but reused in more than one.

4.2.2 Components of the framework

Each component of the framework is represented by a separate folder named after to the three letter abbreviation (but in case of Danish IFRS it is *ifrs*) indicating its content. This folder includes:

- an XBRL schema file (also called core schema file) containing definitions of concepts (items) and dimensional constructs (i.e. hypercube items, dimension items and domain members) and names for sets of relationships (`roleType`s); this file is named with the following the pattern ***{component abbreviation}-cor_{date stamp in format YYYY-MM-DD}.xsd***
- folder called *labels* that contains linkbase files containing Danish and English standard and specific purpose labels for concepts and dimensional constructs defined by a schema file for a component; these files are named with the following pattern: ***lab_{component abbreviation}_{two letter code for language}_{date stamp in format YYYY-MM-DD}***; label linkbase files are referenced from a schema file for a component;
- folder called *references* that contains (except for gsd) linkbase file with references for concepts and dimensional constructs; this file is named with the following pattern: ***ref_{component abbreviation}_{date stamp in format YYYY-MM-DD}***; reference linkbase file is referenced from a schema file for a component;
- folder called *full_{component abbreviation}* that contain one or set of folders that represents role-based modularization for a component e.g. arr component is based (semantically) on a single role, therefore it contains single folder called *arr_1NN.NN_2011-12-20*. In case of ifrs-

dk component, there are 12 role-driven modularization folders.[6] Each of these folders, in turn, contains the following set of files applicable to each specific role:

- one role-driven schema file that contains one or more declarations of extended links. It follows the pattern:
  rol_{component abbreviation}_{ordinal number of extended link role in format NNN.NN}_{date stamp in format YYYY-MM-DD}.xsd
- one or more linkbase files containing relationships between concepts and dimensional constructs created in standard (XBRL 2.1) presentation linkbase, calculation linkbase as well as definition linkbase using arcs and arcroles as defined in the XBRL Dimension 1.0 Specification (extended with a specific application of the `preferredLabel` attribute); naming convention for these files is as follows:
  pre_{component abbreviation}_{date stamp in format YYYY-MM-DD}_role-{ordinal number of extended link role in format NNN.NN}.xml for `presentationLink` type of the extended link
  def_{component abbreviation}_{date stamp in format YYYY-MM-DD}_role-{ordinal number of extended link role in format NNN.NN}.xml for `definitionLink` type of the extended link
  cal_{component abbreviation}_{date stamp in format YYYY-MM-DD}_role-{ordinal number of extended link role in format NNN.NN}.xml for `calculationLink` type of the extended link
  These linkbase files are not referenced from the role-driven schema file for a component of the framework; instead, they are extended in linkbase files containing cross-components definitions or referenced directly from entry schema files,
- a generic linkbase file containing Danish and English labels for sets of relations (`roleType`s) or other artefacts (e.g. enumerations in custom data types) defined by a schema file for every extended link of each component; generic linkbase file follows the pattern:
  gla_{component abbreviation}_{date stamp in format YYYY-MM-DD}_role-{ordinal number of extended link role in format NNN.NN}.xml for generic labels of `gen:link` type; this linkbase file is referenced from a schema file for a component;
- one or more formula linkbase file (according to XBRL Formula Specification 1.0) containing validation checks (such as requirement of reporting certain concepts) and error messages in English and Danish for unsatisfied test; naming convention for these files is as follows:
  frm_{component abbreviation}_{date stamp in format YYYY-MM-DD}_role-{ordinal number of extended link role in format NNN.NN}.xml;
  these linkbase files are not referenced from the schema file for a component of the framework; instead, they are extended in linkbase files containing cross-components definitions or referenced directly from entry schema files.

[6] Actually, there could be as much as 58 role-driven modularization folders in total, but since filers shall be allowed to report using one out of only sixteen variants (by selecting appropriate form of disclosure of balance sheet/income statement/OCI statement/cashflow statement), the decision was made to keep this number at minimum.

– an XBRL schema file serving as an entry point for an entire single component. It imports core schema files and all role-driven schema files with their linkbases within particular component; naming convention of this file is as follows:
entry-{component abbreviation}_{date stamp in format YYYY-MM-DD}.xsd

4.2.3 Full entry point files

Full entry points are schema files referring to linkbases defined in role-driven modularization folders and to cross-component linkbase files. These are the schema files that are referenced from instance documents (reports) filed by reporting entities. They allow classifying submitted reports in terms of reported components (e.g. applied variants of income statement/balance sheet/cashflow statement etc.).

Full entry points are used to differentiate multiple reporting scenarios under adopted IFRS to DCCA requirements. They are built upon:

- arr component applied in a full scope for every variant,
- gsd component applied in a full scope for every variant,
- mrv component applied in a full scope for every variant,
- sob component applied in a full scope for every variant,
- ifrs-dk component (imports base ifrs component) that is currently represented in 16 variants

The name of the entry point files start with the word *entry* followed by: framework abbreviation i.e. *ifrs-dk*, ordinal number of combination of statements, camel-case[7] description of its content and a publication date in format *YYYY-MM-DD*. The naming convention for full entry points are as follows:

entry-ifrs-dk_*{combination ordinal no}_{description of the content}_*
***{date stamp in format YYYY-MM-DD}*.xsd**

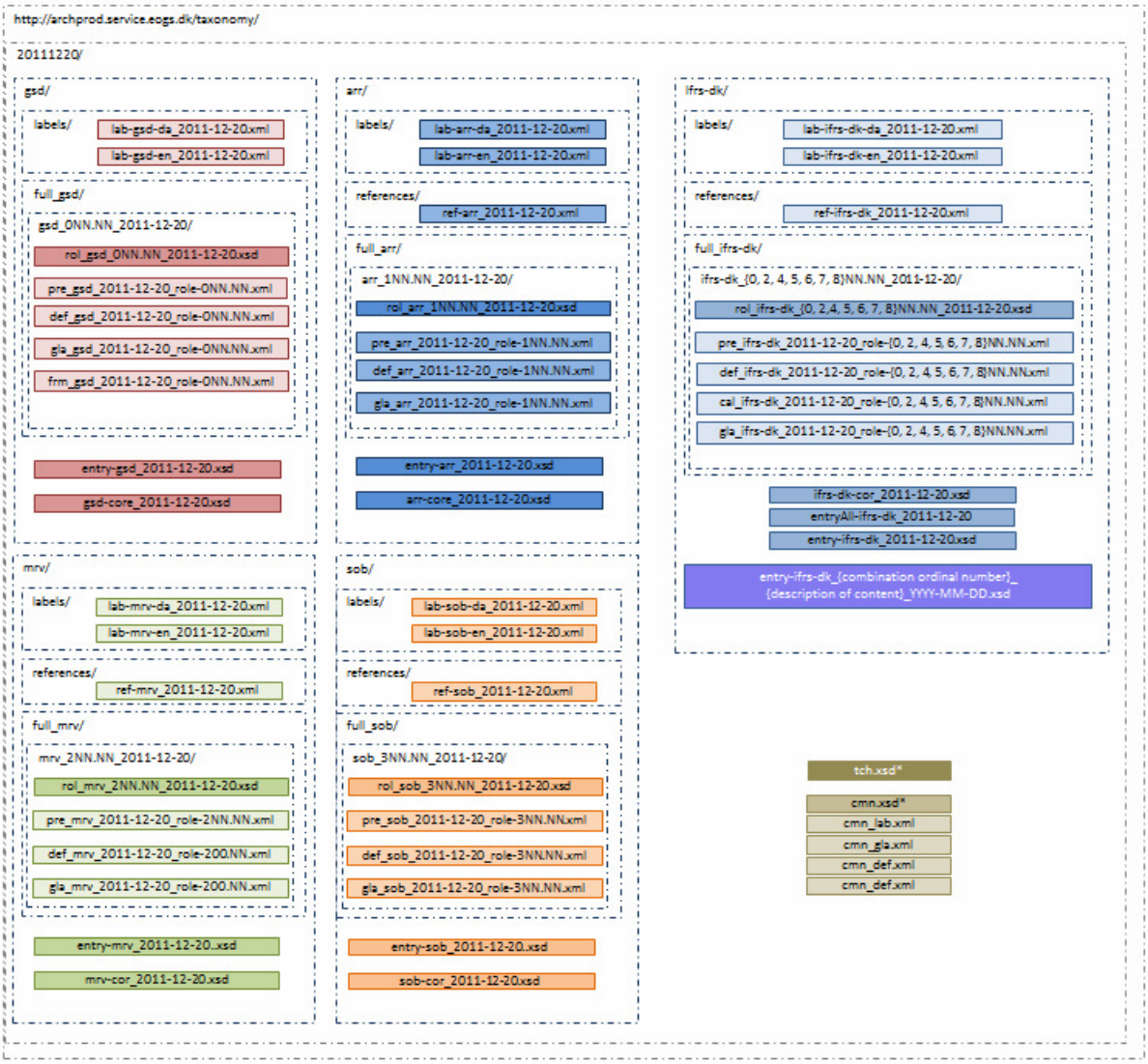
It is under consideration to use the modules manager[8] for the IFRS DK taxonomies in order to allow reporting entities to create customised entry schema files by selecting from the predefined modules.

4.3 Overview of current structure

Folders and files structure of the current content of the framework is presented on Fig 3.

[7] http://en.wikipedia.org/wiki/CamelCase
[8] Taxonomy modules manager is an online (web based) application that allows users to select from the predefined modules and customize the entry schema to meet specific reporting requirements of an entity. Similar open source tool has been provided by the International Accounting Standards Committee (IASC) Foundation for the IFRS Taxonomy – see: http://xbrl-ifrs.org/ITMM/.

Fig 3



As presented on Fig 3 the current version of the taxonomy is placed under location *http://archprod.service.eogs.dk/taxonomy/20111220* (the last component expresses its publication date which is 20th of December 2011). It consists of five components: *gsd, arr, mrv, sob, and ifrs* The abbreviations and content of each of these components are explained in Section 3 of this document. Each component contains a schema file (defining concepts and dimensional constructs), a linkbase file specifying labels for these concepts (in English and Danish), a generic linkbase file defining generic labels for other artefacts (e.g. `roleType`s, enumerations for custom data types, etc.), a set of presentation, definition and calculation (only in case of IFRS component) linkbase files containing relations and one or more formula linkbase files. Components based on legal regulations include linkbase files with references to the underlying legislation.

The IFRS DK taxonomy is modularized in files which allow selecting these pieces of information set that are applicable for certain type of reporting requirements. Currently, it is possible to select from the following components:

1. General and submission data,

2. General information about financial statements
3. Auditor's report (on audited financial statements, review or assurance),
4. Management's review,
5. Management's commentary
6. Statement by executive and supervisory boards
7. Statement of financial position, current/non-current
8. Statement of financial position, order of liquidity
9. Income statement, by function of expense
10. Income statement, by nature of expense
11. Statement of comprehensive income, OCI components presented net of tax
12. Statement of comprehensive income, OCI components presented before tax
13. Statement of cash flows, direct method
14. Statement of cash flows, indirect method
15. Statement of changes in equity
16. Statement of changes in net assets available for benefits
17. Notes (financial instruments, intangible assets, investment property, operating segments PPE, income statement, income taxes, related parties, other),

It is under consideration for future versions of the taxonomy to split the following components in more detailed sections:

- Auditor's report (on audited financial statements, review or assurance):
  - Auditor's report on audited financial statements,
  - Auditor's report on review,
  - Auditor's report on assurance,

The current version of the taxonomy allows selecting between the various entry point schema files. The following figure presents the list of available entrypoints in IFRS DK dated on 2011-12-20 with their imported components:

Fig 4

ID	Entry point file name	[000.00] General and submission data	[001.00] General information about financial statements	[100.00] Auditor's report	[200.00] Management's review	[201.00] Management commentary	[300.00] Statement by executive and supervisory boards	[400.00] Statement of financial position, current/non-current	[401.00] Statement of financial position, order of liquidity	[500.00] Income statement, by function of expense	[501.00] Income statement, by nature of expense	[502.00] Statement of comprehensive income, OCI components presented net of tax	[503.00] Statement of comprehensive income, OCI components presented before tax	[600.00] Statement of cash flows, direct method	[601.00] Statement of cash flows, indirect method	[700.00] Statement of changes in equity	[750.00] Statement of changes in net assets available for benefits	[8NN.NN] Notes
GSD	entry-gsd_2011-12-20.xsd	✓	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
ARR	entry-arr_2011-12-20.xsd	–	–	✓	–	–	–	–	–	–	–	–	–	–	–	–	–	–
MRV	entry-mrv_2011-12-20.xsd	–	–	–	✓	–	–	–	–	–	–	–	–	–	–	–	–	–
SOB	entry-sob_2011-12-20.xsd	–	–	–	–	–	✓	–	–	–	–	–	–	–	–	–	–	–
IFRS-DK	entry-ifrs-dk_2011-12-20.xsd	–	✓	–	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
all	entryAll-ifrs-dk_2011-12-20.xsd	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
01	entry-ifrs-dk_01_IS-ByNature_SFP-CurrentNoncurrent_OCI-BeforeTax_CF-IndirectMethod_2011-12-20.xsd	✓	✓	✓	✓	✓	✓	✓	–	–	✓	–	✓	–	✓	✓	✓	✓
02	entry-ifrs-dk_02_IS-ByNature_SFP-CurrentNoncurrent_OCI-NetOfTax_CF-IndirectMethod_2011-12-20.xsd	✓	✓	✓	✓	✓	✓	✓	–	–	✓	✓	–	–	✓	✓	✓	✓
03	entry-ifrs-dk_03_IS-ByFunction_SFP-CurrentNoncurrent_OCI-BeforeTax_CF-IndirectMethod_2011-12-20.xsd	✓	✓	✓	✓	✓	✓	✓	–	✓	–	–	✓	–	✓	✓	✓	✓
04	entry-ifrs-dk_04_IS-ByFunction_SFP-CurrentNoncurrent_OCI-NetOfTax_CF-IndirectMethod_2011-12-20.xsd	✓	✓	✓	✓	✓	✓	✓	–	✓	–	✓	–	–	✓	✓	✓	✓
05	entry-ifrs-dk_05_IS-ByNature_SFP-OrderOfLiquidity_OCI-BeforeTax_CF-IndirectMethod_2011-12-20.xsd	✓	✓	✓	✓	✓	✓	–	✓	–	✓	–	✓	–	✓	✓	✓	✓
06	entry-ifrs-dk_06_IS-ByNature_SFP-OrderOfLiquidity_OCI-NetOfTax_CF-IndirectMethod_2011-12-20.xsd	✓	✓	✓	✓	✓	✓	–	✓	–	✓	✓	–	–	✓	✓	✓	✓
07	entry-ifrs-dk_07_IS-ByFunction_SFP-OrderOfLiquidity_OCI-BeforeTax_CF-IndirectMethod_2011-12-20.xsd	✓	✓	✓	✓	✓	✓	–	✓	✓	–	–	✓	–	✓	✓	✓	✓
08	entry-ifrs-dk_08_IS-ByFunction_SFP-OrderOfLiquidity_OCI-NetOfTax_CF-IndirectMethod_2011-12-20.xsd	✓	✓	✓	✓	✓	✓	–	✓	✓	–	✓	–	–	✓	✓	✓	✓
09	entry-ifrs-dk_09_IS-ByNature_SFP-CurrentNoncurrent_OCI-BeforeTax_CF-DirectMethod_2011-12-20.xsd	✓	✓	✓	✓	✓	✓	✓	–	–	✓	–	✓	✓	–	✓	✓	✓
10	entry-ifrs-dk_10_IS-ByNature_SFP-CurrentNoncurrent_OCI-NetOfTax_CF-DirectMethod_2011-12-20.xsd	✓	✓	✓	✓	✓	✓	✓	–	–	✓	✓	–	✓	–	✓	✓	✓
11	entry-ifrs-dk_11_IS-ByFunction_SFP-CurrentNoncurrent_OCI-BeforeTax_CF-DirectMethod_2011-12-20.xsd	✓	✓	✓	✓	✓	✓	✓	–	✓	–	–	✓	✓	–	✓	✓	✓
12	entry-ifrs-dk_12_IS-ByFunction_SFP-CurrentNoncurrent_OCI-NetOfTax_CF-DirectMethod_2011-12-20.xsd	✓	✓	✓	✓	✓	✓	✓	–	✓	–	✓	–	✓	–	✓	✓	✓
13	entry-ifrs-dk_13_IS-ByNature_SFP-OrderOfLiquidity_OCI-BeforeTax_CF-DirectMethod_2011-12-20.xsd	✓	✓	✓	✓	✓	✓	–	✓	–	✓	–	✓	✓	–	✓	✓	✓
14	entry-ifrs-dk_14_IS-ByNature_SFP-OrderOfLiquidity_OCI-NetOfTax_CF-DirectMethod_2011-12-20.xsd	✓	✓	✓	✓	✓	✓	–	✓	–	✓	✓	–	✓	–	✓	✓	✓
15	entry-ifrs-dk_15_IS-ByFunction_SFP-OrderOfLiquidity_OCI-BeforeTax_CF-DirectMethod_2011-12-20.xsd	✓	✓	✓	✓	✓	✓	–	✓	✓	–	–	✓	✓	–	✓	✓	✓
16	entry-ifrs-dk_16_IS-ByFunction_SFP-OrderOfLiquidity_OCI-NetOfTax_CF-DirectMethod_2011-12-20.xsd	✓	✓	✓	✓	✓	✓	–	✓	✓	–	✓	–	✓	–	✓	✓	✓

- **entryAll-ifrs-dk_2011-12-20.xsd** IS NOT meant for reporting – only for accession the taxonomy.

5 Definitions of concepts, dimensional constructs and other

Concepts, dimensional constructs and other artefacts are defined in XBRL schema files.

In particular, XBRL schema files contain definitions of:

- reportable concepts (items),
- non-reportable concepts (abstracts) used to support browsing of the taxonomy tree structures (relations),
- dimensional constructs (hypercube items, dimension items and domain members) that reflect breakdowns or special characteristics applicable for reportable concepts,
- `roleType`s used on definition extended links that combine relationships of a specific nature or application (e.g. Statement of Financial Position, Note on related parties, etc.).

5.1 Namespaces

Namespaces are used to differentiate between concepts defined by different regulations or applicable for different purposes. They are used in order to avoid name clashes and indicate the origin of each defined concept or construct.

Namespaces in this framework are constructed using the base part *http://xbrl.dcca.dk/* followed by a three letter identification of a component of a framework (as defined in Section 3 of this document). The list of currently used namespaces and prefixes (applied consistently across the framework) is defined in Table 1.

Table 1

Recommended prefix	Namespace
arr	http://xbrl.dcca.dk/arr
cmn	http://xbrl.dcca.dk/cmn
gsd	http://xbrl.dcca.dk/gsd
mrv	http://xbrl.dcca.dk/mrv
sob	http://xbrl.dcca.dk/sob
ifrs-dk	http://xbrl.dcca.dk/ifrs-dk

5.2 Concepts and constructs

As described above, the IFRS DK XBRL taxonomies contain definitions of reportable concepts (items), non-reportable concepts (abstracts) and dimensional constructs (hypercubes, dimensions and domain members).

All concepts are defined in `item` substitution group or derived from it (`hypercubeItem` for hypercubes and `dimensionItem` for dimensions). All concepts are nillable (`@nillable="true"`) hence, they can be reported as nilled (`@xsi:nil="true"`). Although semantically unimportant, values

of `@id` attribute (used for the purpose of creating links in XLink) are constructed basing on the pattern: *{recommended prefix}_{element name}*[9].

Naming convention for IFRS DK concepts follows IFRS rules and principles defined in Appendix C: Style Guide.[10]

5.2.1 Reportable concepts

Definition of a reportable (non-abstract, i.e. `@abstract="false"`) concept must at minimum consist of:

- unique local (within a namespace) name,
- indication of a period type,
- identification of a data type.

Names of reportable concepts correspond to the L3C (Label CamelCase Concatenation) representation of meaningful standard labels in English.

Value of `@periodType` attribute is either `instant` for these concepts that are reported at a point of time (as of specified date) or `duration` for concepts representing flows and changes (between specified dates or infinite). In cases where the period type is not obvious, the period type attribute is set to `duration`[11]. This information must be taken into consideration in instance document when constructing contexts for facts based on reportable concepts. For textual concepts (i.e. concepts whose data type is `stringItemType`) start and end dates should reflect the boundary dates for which a report is created, for example, if the financial statement covers the third quarter of 2010 then the dates are 2010-07-01 and 2010-09-30 respectively. Similarly reasoning applies for concepts that represent dates. For instance in an annual report commencing June 2009 the context start and end dates for date concepts such as “Reporting period end date”, “Reporting period start date” and “Date of approval of report” would be 2009-07-01 and 2010-06-30 respectively.

Data types define constraints on possible to report values. It is assumed that taxonomy may apply any of the standard XBRL data types[12] as well as their extensions and restriction. Currently, the DCCA taxonomies make use of the following data types for reportable concepts:

- `stringItemType` (base XBRL type),
- `monetaryItemType` (base XBRL type),
- `decimalItemType` (base XBRL type),
- `dateItemType` (base XBRL type),
- `sharesItemType` (base XBRL type),
- `anyURIItemType` (base XBRL type),
- `booleanItemType` (base XBRL type),

[9] As defined in http://www.xbrl.org/technical/guidance/FRTA-RECOMMENDATION-2005-04-25+corrected-errata-2006-03-20.htm (FRTA) rule 2.1.5. This pattern applies to items, abstracts, dimensional constructs, `roleType`s, data types and enumerations for custom data types.
[10] http://www.ifrs.org/XBRL/Resources/IFRS+Taxonomy+Guide.htm
[11] This is for the reasons that it is always possible to indicate a moment in time using two identical dates (more precisely data and time) while it is not possible to describe a period of time using just a single date. The same approach was taken by the IFRS taxonomy (http://www.ifrs.org/NR/rdonlyres/38EAB597-A726-4A74-91EC-EEEF29BBE8A6/0/ITG201020100702.pdf page 31).
[12] As defined in http://www.xbrl.org/2003/xbrl-instance-2003-12-31.xsd

- `gYearItemType` (base XBRL type),
- `percentItemType` (XBRL International Registry type)[13],
- `cvrItemType` (custom DCCA IFRS DK item type; restriction of a `stringItemType` to a pattern of eight digits),
- `cprItemType` (custom DCCA IFRS DK item type; restriction of a `stringItemType` to a pattern of nine digits),
- `pnrItemType` (custom DCCA IFRS DK item type; restriction of a `stringItemType` to a pattern of ten digits),
- `submittedReportItemType` (custom DCCA IFRS DK item type; restriction of a `tokenItemType` to a list values),
- `classOfEntityItemType` (custom DCCA IFRS DK item type; restriction of a `tokenItemType` to a list values),

Enumerated values (restriction of tokenItemType) correspond to the L3C (Label CamelCase Concatenation) representation of meaningful standard generic English label defined in a generic label linkbase file referenced from a component schema file (this generic label linkbase file defines also generic labels in Danish for each enumeration).

Fragment of the custom enumerated data type `classOfEntityItemType` declaration defined in *cmn.xsd* schema file is presented on Code example 1.

Code example 1

```
<xsd:complexType name="classOfEntityItemType" id="cmn_classOfEntityItemType">
  <xsd:simpleContent>
    <xsd:restriction base="xbrli:tokenItemType">
      <xsd:enumeration value="accountingClassA" id="cmn_accountingClassA"/>
      <xsd:enumeration value="accountingClassB" id="cmn_accountingClassB"/>
      <xsd:enumeration value="accountingClassC_mediumSizedCompany" id=
      "cmn_accountingClassC_mediumSizedCompany"/>
      <xsd:enumeration value="accountingClassC_largeCompany" id=
      "cmn_accountingClassC_largeCompany"/>
      <xsd:enumeration value="accountingClassD" id="cmn_accountingClassD"/>
      <xsd:attributeGroup ref="xbrli:nonNumericItemAttrs"/>
    </xsd:restriction>
  </xsd:simpleContent>
</xsd:complexType>
```

The taxonomy defines in total 469 reportable concepts: 10 in CMN, 41 in GSD, 101 in ARR, 44 in MRV, 17 in SOB and 256 in IFRS-DK plus imported 1759 IFRS core concepts and 290 common practice concepts (2011-06-01) however the number of possible to report records is much higher as a result of application of XBRL dimensions to model the information requirements and request for previous period information (beginning balance).

5.2.2 Abstract constructs

All not-reportable concepts have `@abstract="true"`.

[13] As defined in http://www.xbrl.org/dtr/type/nonNumeric-2009-12-16.xsd

Names of abstract constructs correspond to the L3C (Label CamelCase Concatenation) representation of meaningful standard labels in English followed by the word `Abstract` (e.g. `@name="IntangibleAssetsAbstract"`) in order not to occupy meaningful names that may be otherwise assigned to reportable concepts and differentiate from other constructs.

Although it is semantically unimportant, all abstracts are `@periodType="duration"` and `@dataType="stringItemType"`.

5.2.3 Dimensional constructs

Definition of dimensional constructs follows the rules of the XBRL Dimensions 1.0 specification and the recent recommendations and deliverables of the XBRL International Working Group on Interoperable Taxonomy Architecture.

According to the above, all dimensional constructs are abstracts (`@abstract="true"`). Moreover, hypercubes are defined in `hypercubeItem` and dimensions in `dimensionItem` substitutions groups[14], data type of domain members is `domainItemType`[15], and, although semantically unimportant, all dimensional constructs are `@periodType="duration"` and hypercubes and dimensions are `@dataType="stringItemType"`.

Names of dimensional constructs correspond to the L3C (Label CamelCase Concatenation) representation of meaningful standard labels in English followed by one of the following words:

- `Table` for hypercube items imported from IFRS taxonomy (e.g. `@name="DisclosureOfClassesOfShareCapitalTable"`),
- `Hypercube` for hypercube items other than those imported from IFRS taxonomy (e.g. `@name="DetailsOnMembersOfSupervisoryBoardHypercube"`),
- `Axis` for dimension items imported from IFRS taxonomy (e.g. `@name="MaturityAxis"`),
- `Dimension` for dimension items other than those imported from IFRS taxonomy (e.g. `@name="IdentificationOfAuditorDimension"`),
- `Member` for domain member (e.g. `@name="PlantAndMachineryMember"`),

in order not to occupy meaningful names that may be otherwise assigned to reportable concepts and differentiate from other constructs.

The existence of two naming conventions for hypercube items and dimension items results from the incorporation of two frameworks: IFRS and part of DCCA into a single DTS. It does not bring any negative effect on the taxonomy quality, but it could be subject to future changes.

As a result of application of certain modelling techniques which rationales are described later in this document, the IFRS-DK taxonomy defines a number of typed dimensions and hence also typed domains (see Section 9.3 for details). Definition of a typed domain must consist of a `@name`, `@dataType` and `@id` (semantically unimportant but required in order to reference from a declaration of a typed dimensions). Names of typed domains reflect the camel-case description of their content followed by the component `Identifier` (e.g. `memberOfBoardIdentifier`). `@dataType` of typed domains is always `string` (XML Schema data type).

[14] As defined in http://www.xbrl.org/2005/xbrldt-2005.xsd.
[15] As defined in http://www.xbrl.org/dtr/type/nonNumeric-2009-12-16.xsd

5.3 Roles used on extended links

XBRL schema files contain declarations of `roleType`s used on extended links. They distinguish and name the sets of relations defined in linkbase files.

Declaration of a `roleType` consists of a `@roleURI` attribute (which is a unique identification of a role in a form a Unified Resource Identifier[16] that allows to create networks of relations spread across many files), an `@id` attribute (used for linking purposes with no semantic meaning) and subelements: `definition` (containing human readable description in a single language) and `usedOn` specifying the kinds of extended links (or resources) where the declared `roleType` can be applied.

In general, `roleType`s are created for two purposes:

- due to business reasons - in order to support browsing of a taxonomy by separating information sets (concepts and relations between them) that represent certain parts of reporting requirements (e.g. all concepts from *Balances sheet account form* and relations between them),
- due to technical reasons:
  - as a result of limitations of design of XBRL relations in form of tree structures (graphs),
  - as a consequence of rules defined in specifications (e.g. disallowing undirected cycles for certain types of relations, algorithms for inheritance of dimensional information ancestors, etc.).

Due to the reasons defined above all `roleType`s defined in the IFRS-DK taxonomy contain a number component. It consist of a <u>three-digit identifier of an information set from business perspective</u>, followed by a dot and followed by a <u>two-digit identifier of a subset of relations due to technical limitations/rules</u> for a given information set (e.g. *811.02*). This number component is included on each `roleType` as part of a value of `@roleURI`, `definition` element and generic labels for `roleType`s. This component serves also the ordering purposes in the absence of an order identifier on extended links. Its use and construction are explained later in this section.

In terms of structuring of relationships in the definition linkbase, the IFRS-DK taxonomy distinguishes between the following four types of `roleType`s, which are used to define:

a) **general information sets** containing items linked to commonly applied dimensional information (e.g. distinction between solo and consolidated data),
b) **detailed information sets** – items for which they are detailing hypercubes (more detailed breakdowns defined using XBRL dimensions),
c) **detailing hypercubes** identifying dimensions and their members (sub-domains) relevant for each hypercube,
d) **general domains of dimensions**.

Description of a type of information set (regarding which group it applies to) is expressed by the pattern applied for the number component and construction of a value of `@roleURI` attribute, `definition` element and generic labels for `roleType`s.

[16] http://en.wikipedia.org/wiki/Uniform_Resource_Identifier

Number component for information sets defined in groups a) to c) specified above contains a three-digit identifier distinguishing the component of the framework:

- *000* for GSD,
- *100* for ARR,
- *200* for MRV,
- *300* for SOB,
- *40{N}, 50{N}, 60{N}, 70{N}, 8{NN}* for IFRS-DK.

Three digit identifier with values *9{XX}* is reserved for general domains of dimensions (group d).

In order to facilitate browsing and discovery of reportable information defined by the taxonomy in the definition linkbase (see Section 6 for details) the two-digit identifier of a subset of relations for `roleType`s specifying general and detailed information sets (items linked to dimensional information) is always *00*. For detailed hypercubes and general domains of dimensions this identifier is different than *00* (e.g. *01*, *02*, …).

As explained above, value of `definition` subelements consist of a number component (in square brackets) followed by the human description (in English) of the content of the extended link for the purpose of which the `roleType` is defined (e.g. *[100.00] Auditor's reports*). If a `roleType` is used to express detailed information set (from group b) it contains component – *Details* at the end of `definition` (e.g. *[100.00] Auditor's reports - Details*). For detailing hypercubes `definition` begins with a word *Hypercube* followed by identification of general information set (in square brackets) followed by dash and the description of the content of the details (e.g. *[100.01] Hypercube [Auditor's reports] - Details on signature of auditors appointed to perform audit*).

Construction of `@roleURI`s begins with the following base URI: *http://xbrl.dcca.dk/role* followed by the number component and followed by the camel-case description (in English) of the content of the extended link for the purpose of which the `roleType` is defined (each component is separated with a slash, e.g. *http://xbrl.dcca.dk/role/100.00/AuditorsReports*). If a `roleType` is used to express detailed information set (from the group b) it contains component */Details* at the end of `@roleURI` (e.g. *http://xbrl.dcca.dk/role/100.00/AuditorsReports/Details*). For detailing hypercubes (group c) `@roleURI` begins with a base URI and the number component followed by */Hypercube* followed by identification of general information set (camel-case description in English) followed by the camel-case description of the content of the details (each component separated with a slash e.g. *http://xbrl.dcca.dk/role/100.01/Hypercube/AuditorsReports/DetailsOnSignatureOfAuditorsAppointedToPerformAudit*).

`roleType`s defined by in the IFRS-DK taxonomy[17] can be used on `presentationLink` and `definitionLink`, however in some cases they can also indicate `labelLink` that contains specific labels applied for an information set (see Section 7 for details) or generic link for formula linkbase.

Example of a custom `roleType` declaration defined in *rol_ifrs-dk_400.00_2011-12-20.xsd* is presented on Code example 2.

[17] Apart from those defined in the schema file for technical constructs, i.e. *tch.xsd*.

Code example 2

```
<link:roleType roleURI=
"http://xbrl.dcca.dk/role/400.00/StatementOfFinancialPositionCurrentNonCurrent"
 id="ifrs-dk_40000_StatementOfFinancialPositionCurrentNonCurrent">
  <link:definition>[400.00] Statement of financial position,
  current/non-current</link:definition>
  <link:usedOn>link:presentationLink</link:usedOn>
  <link:usedOn>link:calculationLink</link:usedOn>
  <link:usedOn>link:definitionLink</link:usedOn>
</link:roleType>
```

Code example 3 shows a fragment of code of *gla_ifrs-dk_2011-12-20_role-400.00.xml* generic linkbase containing generic labels in English and Danish declared for the `roleType` presented on Code example 2.

Code example 3

```
<link:loc xlink:type="locator" xlink:href=
"rol_ifrs-dk_400.00_2011-12-20.xsd#ifrs-dk_40000_StatementOfFinancialPositionCurrent
NonCurrent" xlink:label="roleType"/>
<label:label xlink:type="resource" xlink:label="label" xlink:role=
"http://www.xbrl.org/2008/role/label" xml:lang="en">[400.00] Statement of
financial position current/noncurrent</label:label>
<gen:arc xlink:type="arc" xlink:arcrole=
"http://xbrl.org/arcrole/2008/element-label" xlink:from="roleType" xlink:to="label"
 order="20.0"/>
<label:label xlink:type="resource" xlink:label="label_2" xlink:role=
"http://www.xbrl.org/2008/role/label" xml:lang="da">[210.000] Opgørelse af
finansiel stilling</label:label>
<gen:arc xlink:type="arc" xlink:arcrole=
"http://xbrl.org/arcrole/2008/element-label" xlink:from="roleType" xlink:to=
"label_2" order="10.0"/>
```

Description of the content and explanation of relations between the different types of extended links is explained in the next section of this document.

6 Sets of relations

The IFRS-DK taxonomy contains relations in the presentation and definition linkbases. Relations in the presentation linkbase are constructed as defined in the XBRL 2.1 Specification. Definition linkbase relations are constructed using arcs with `arcrole`s defined in XBRL Dimensions 1.0[18].
Relations provide semantic information on:

- placement of concepts (items with dimensional information) in particular information sets (such as *Statement of financial position, current/non-current*, *Notes - Analysis of income and expense* etc.),
- application of dimensional information for items,
- hierarchical structures between items and members of dimensions.

[18] http://www.xbrl.org/Specification/XDT-REC-2006-09-18+Corrected-Errata-2009-09-07.htm#_Toc243301749

Due to a number of reasons indicated in the previous section of this document, relations need to be split in sets and defined in separate extended link roles.

In order to facilitate browsing and discovery of the content of the IFRS-DK taxonomy, relations have been split in sets according to certain rationale.

In both, presentation and definition linkbases the reportable information can be found in extended links which `definition`, `@roleURI` and generic labels values containing *00* as a two-digit identifier of a subset of relations. Discovery starts from a general information set as described in the previous section (e.g. from extended link with `@roleURI="http://xbrl.dcca.dk/role/817.00/NotesIntangibleAssets"`).

Additionally, in the definition linkbase, the detailing information it is indicated on definition arc by the `@targetRole` attribute pointing to an extended link role containing the details (Code example 4).

Code example 4

```
<link:definitionArc
xlink:type="arc"
xlink:arcrole="http://xbrl.org/int/dim/arcrole/domain-member"
xlink:from="DescriptionOfKeyFiguresAndFinancialRatios"
xlink:to="DetailsOnKeyFiguresAndFinancialRatiosAbstract"
order="1.0"
xbrldt:targetRole="http://xbrl.dcca.dk/role/200.00/ManagementsReview/Details"/>
```

Targeted extended link contains detailed information sets, each starting from an abstract item to which a hypercube is linked. Content of each hypercube is defined in a separate extended link which role is indicated by the `@targetRole` attribute value on a definition arc linking an abstract item to a hypercube (Code example 5).

Code example 5

```
<link:definitionArc
xlink:type="arc"
xlink:arcrole="http://xbrl.org/int/dim/arcrole/all"
xlink:from="DetailsOnOtherKeyFiguresAndFinancialRatiosAbstract"
xlink:to="DetailsOnOtherKeyFiguresAndFinancialRatiosHypercube"
order="1.0"
xbrldt:contextElement="scenario"
xbrldt:closed="true"
xbrldt:targetRole=
"http://xbrl.dcca.dk/role/200.02/Hypercube/ManagementsReview/DetailsOnOtherKeyFigure
sAndFinancialRatios"/>
```

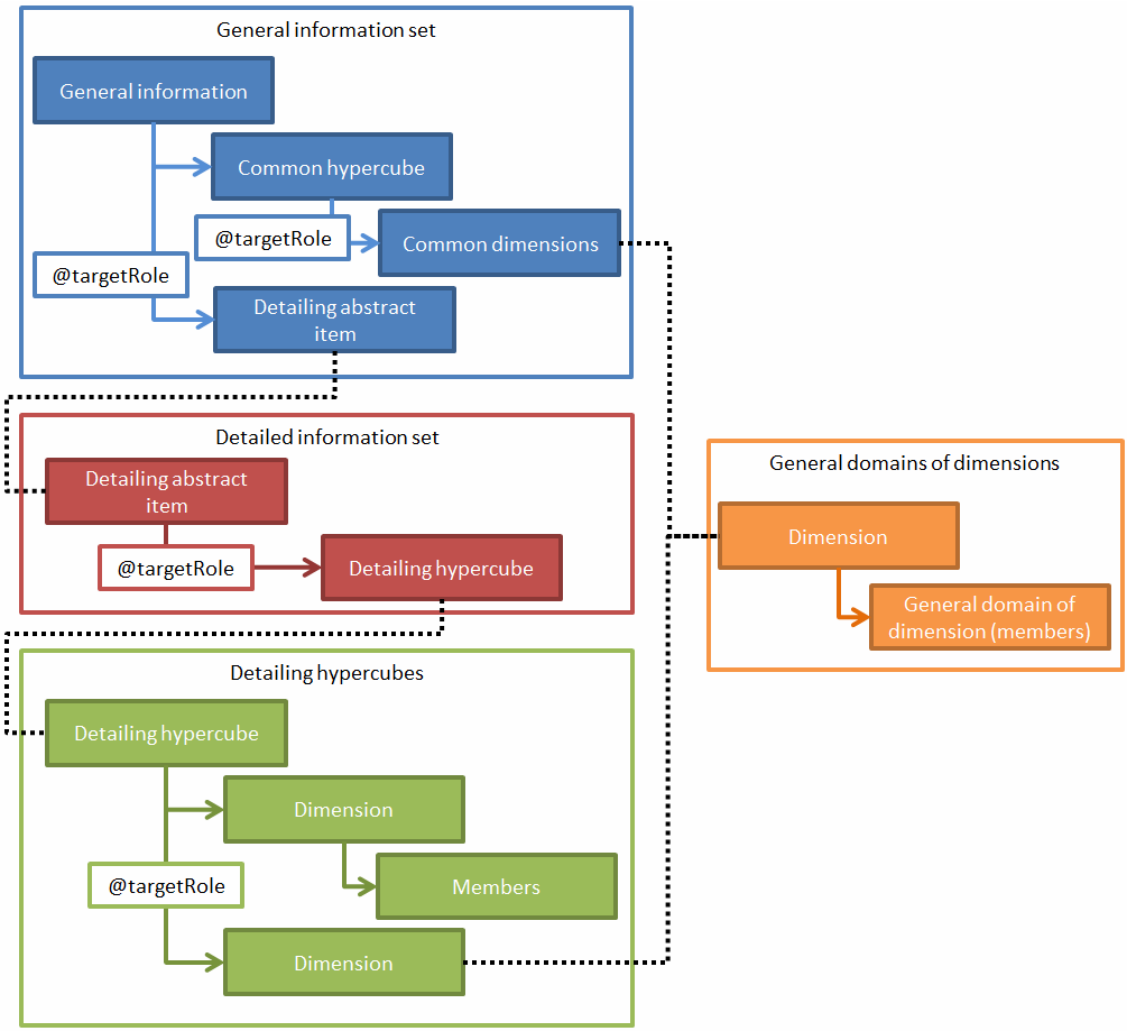
Targeted extended link which two-digit identifier of a subset of relations is different than *00* (e.g. *200.02* as on Code example 5) contains identification of applicable dimensions which members are either explicitly identified within this extended link role or further discovered using the `@targetRole` attribute mechanism (pointing to general domains of dimensions with number component starting with *9*) as presented on Code example 6.

Code example 6

```
<link:definitionArc
xlink:type="arc"
xlink:arcrole="http://xbrl.org/int/dim/arcrole/hypercube-dimension"
xlink:from="DetailsOnOtherKeyFiguresAndFinancialRatiosHypercube"
xlink:to="RetrospectiveInformationAxis"
order="2.0"
xbrldt:targetRole="http://xbrl.dcca.dk/role/902.01/AxisRetrospectiveInformation"/>
```

The overview of the IFRS DK taxonomy browsing and discovery based on the definition linkbase taking into account `@targetRole` attribute mechanism is presented on Fig 5.

Fig 5



7 Labels

The IFRS DK taxonomy contains Danish and English labels for each concept. This enables browsing the taxonomy content in these two languages. Additionally, in contains also generic labels for other constructs such as `roleType`s etc. (see Code example 3).

Apart from the standard labels (which role is `http://www.xbrl.org/2003/role/label`) the IFRS DK taxonomy includes also other labels for certain concepts like:

- period start (label role `http://www.xbrl.org/2003/role/periodStartLabel`),
- period end (label role `http://www.xbrl.org/2003/role/periodEndLabel`[19]),
- net label (label role `http://www.xbrl.org/2009/role/netLabel`)
- negated label (label role `http://www.xbrl.org/2009/role/negatedLabel`)
- negated terse label (label role `http://www.xbrl.org/2009/role/negatedTerseLabel`)

An example of these contextual labels defined using period start and period end label roles for the concept "Cash and cash equivalents" in English and Danish is presented on Code example 7.

Code example 7

```
<link:loc xlink:type="locator" xlink:href=
"../ifrs-cor_2011-03-25.xsd#ifrs_CashAndCashEquivalents" xlink:label="loc_256"/>
<link:label xlink:type="resource" xlink:label="res_285" xlink:role=
"http://www.xbrl.org/2003/role/label" xml:lang="en" id=
"ifrs_CashAndCashEquivalents_label">Cash and cash equivalents</link:label>
<link:labelArc xlink:type="arc" xlink:arcrole=
"http://www.xbrl.org/2003/arcrole/concept-label" xlink:from="loc_256" xlink:to=
"res_285"/>
<link:label xlink:type="resource" xlink:label="res_293" xlink:role=
"http://www.xbrl.org/2003/role/periodStartLabel" xml:lang="en" id=
"ifrs_CashAndCashEquivalents_periodStartLabel">Cash and cash equivalents at
beginning of period</link:label>
<link:labelArc xlink:type="arc" xlink:arcrole=
"http://www.xbrl.org/2003/arcrole/concept-label" xlink:from="loc_256" xlink:to=
"res_293"/>
<link:label xlink:type="resource" xlink:label="res_294" xlink:role=
"http://www.xbrl.org/2003/role/periodEndLabel" xml:lang="en" id=
"ifrs_CashAndCashEquivalents_periodEndLabel">Cash and cash equivalents at end of
period</link:label>
<link:labelArc xlink:type="arc" xlink:arcrole=
"http://www.xbrl.org/2003/arcrole/concept-label" xlink:from="loc_256" xlink:to=
"res_294"/>


<link:loc xlink:type="locator" xlink:href=
"../../../ifrs-cor_2011-03-25.xsd#ifrs_CashAndCashEquivalents" xlink:label=
"CashAndCashEquivalents"/>
<link:label xlink:type="resource" xlink:label="label_CashAndCashEquivalents"
xlink:role="http://www.xbrl.org/2003/role/label" xml:lang="da" id=
"label_CashAndCashEquivalents">Likvide beholdninger</link:label>
<link:labelArc xlink:type="arc" xlink:arcrole=
"http://www.xbrl.org/2003/arcrole/concept-label" xlink:from=
"CashAndCashEquivalents" xlink:to="label_CashAndCashEquivalents"/>
<link:label xlink:type="resource" xlink:label="label_CashAndCashEquivalents_3"
xlink:role="http://www.xbrl.org/2003/role/periodStartLabel" xml:lang="da" id=
"label_CashAndCashEquivalents_3">Likvide beholdninger, primo</link:label>
<link:labelArc xlink:type="arc" xlink:arcrole=
"http://www.xbrl.org/2003/arcrole/concept-label" xlink:from=
"CashAndCashEquivalents" xlink:to="label_CashAndCashEquivalents_3"/>
<link:label xlink:type="resource" xlink:label="label_CashAndCashEquivalents_4"
xlink:role="http://www.xbrl.org/2003/role/periodEndLabel" xml:lang="da" id=
"label_CashAndCashEquivalents_4">Likvide beholdninger, ultimo</link:label>
<link:labelArc xlink:type="arc" xlink:arcrole=
"http://www.xbrl.org/2003/arcrole/concept-label" xlink:from=
"CashAndCashEquivalents" xlink:to="label_CashAndCashEquivalents_4"/>
```

These label roles are later referenced from arcs in the presentation linkbase using a standard `@preferredLabel` attribute (as defined in the XBRL 2.1 Specification) and in the definition linkbase using `@preferredLabel` attribute defined in *tch.xsd*[20] (Code example 8).

[19] http://www.xbrl.org/Specification/XBRL-RECOMMENDATION-2003-12-31+Corrected-Errata-2008-07-02.htm#_5.2.2.2

Code example 8

```
<xsd:attribute name="preferredLabel">
  <xsd:simpleType>
    <xsd:restriction base="xsd:anyURI">
      <xsd:minLength value="1"/>
    </xsd:restriction>
  </xsd:simpleType>
</xsd:attribute>
```

In the future this custom solution will be replaced by the generic preferred label attribute defined as part of the XBRL standard functionality[21].

Information about time contextual labels shall be consumed by XBRL applications for the benefit of user interface (similarly to how this is done for the standard mechanism used in the presentation linkbase and defined in the XBRL 2.1 specification[22]).

8 References

In order to facilitate understanding of meaning and content of concepts defined, the IFRS DK taxonomy provides (where possible) references to legal regulations. These references are constructed using parts defined by the XBRL International (Appendix B of the Financial Reporting Taxonomy Architecture with errata corrections to 2006-03-20[23]). The full list of parts is presented in Table 2.

Table 2

Part	Description
Appendix	Refers to the name of an Appendix, which could be a number or text.
Article	Article refers to a statutory article in legal material.
Chapter	For a publication that uses chapters, this part should be used to capture this information. Chapters are not necessarily numbered.
Clause	Sub component of a sub paragraph.
Example	Example captures examples used in reference documentation.
Exhibit	Exhibit refers to exhibits in reference documentation.
Footnote	Footnote is used to reference footnotes in reference information.
IssueDate	The issue date of the specific reference. The format is CCYY-MM-DD.
Name	Name refers to the specific publication. For example, “Statement of Financial Standards”, “Statement of Position” or “IFRS”. It does not include the number.
Note	Notes can contain reference material; use this element when the note is published as a standalone document.
Number	Number is used to record the actual number of the specific publication. For example, the number for FAS 133 would be 133.

[20] This is similar solution to the `@preferredLabel` attribute defined for the presentation linkbase arcs (http://www.xbrl.org/Specification/XBRL-RECOMMENDATION-2003-12-31+Corrected-Errata-2008-07-02.htm#_5.2.4.2).
[21] http://www.xbrl.org/Specification/genericPreferredLabel/PWD-2011-04-13/genericPreferredLabel-PWD-2011-04-13.html
[22] http://www.xbrl.org/Specification/XBRL-RECOMMENDATION-2003-12-31+Corrected-Errata-2008-07-02.htm#_5.2.4.2
[23] http://www.xbrl.org/technical/guidance/FRTA-RECOMMENDATION-2005-04-25+corrected-errata-2006-03-20.htm#_Toc131223668

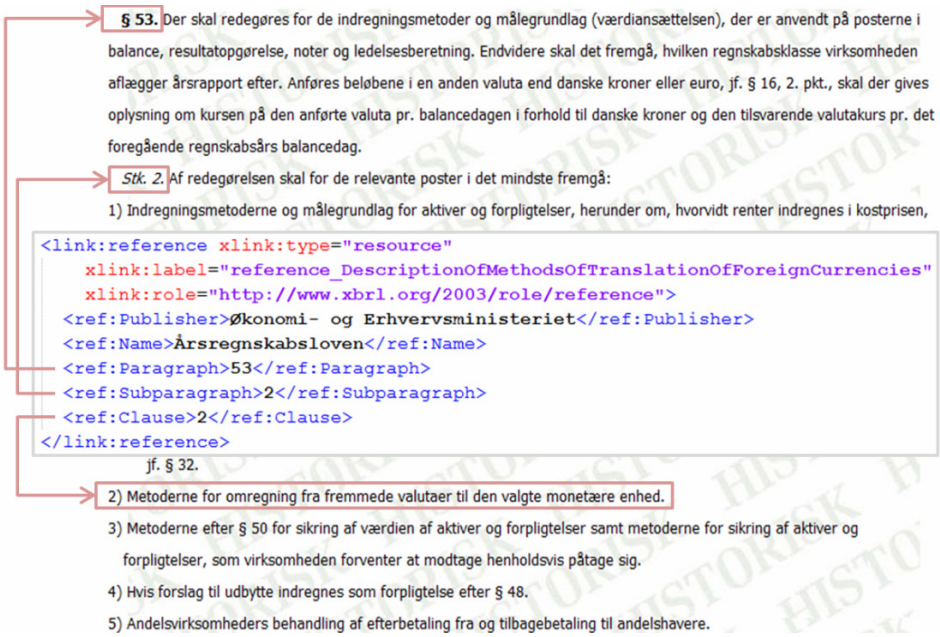
Part	Description
Page	Page number of the reference material.
Paragraph	Paragraph is used to refer to specific paragraphs in a document.
Publisher	Publisher of the reference material, such as SEC, FASB, or AICPA.
Section	Section is used to capture information typically captured in sections of legislation or reference documents.
Sentence	In some reference material individual sentences can be referred to, and this element allows them to be referenced.
Subclause	Subcomponent of a clause in a paragraph.
Subparagraph	Subparagraph of a paragraph.
Subsection	Subsection is a subsection of the section part.
URI	Full URI of the reference such as “http://www.fasb.org/fas133”.
URIDate	Date that the URI was valid, in CCYY-MM-DD format.

Currently, the DCCA taxonomy makes use of the following parts:

- **Publisher** – name of a publishing authority of a legal regulation or other requirement that resulted in creation of a concept in question, e.g. *Økonomi- og Erhvervsministeriet* (the Danish Ministry of Economic and Business Affairs), *Erhvervs- og Selskabsstyrelsen* (the Danish Commerce and Companies Agency), *Skat*, etc.
- **Name** – name of a legal regulation, e.g. *Årsregnskabsloven* (the Annual Accounts Act), *Erklæringsbekendtgørelsen* (the Executive Order on Approved Auditors’ Reports), *Bekendtgørelse om dokumentation af omsætningensstørrelse m.v.*, or identification, that the concept was created based on common/best practices: *Praksis*,
- **Paragraph**, **Subparagraph** and **Clause** – reflect the structure of legal regulations,
- **Note** and **Appendix**.

Code example 9 presents an example of a reference to a text of a legal regulation.

Code example 10



Code example 11 presents a reference to a schedule/scheme in an annex to a regal regulation.

Code example 11

Code example 12 presents a reference indicating that an item was created in order to reflect a common/best practice (i.e. not defined in any regulation but frequently used in reports).

Code example 12

```
<link:reference xlink:type="resource"
    xlink:label="reference_DescriptionOfAccountingPoliciesRelatedToDerivativeFinancialInstruments"
    xlink:role="http://www.xbrl.org/2003/role/reference">
  <ref:Publisher>Erhvervs- og Selskabsstyrelsen</ref:Publisher>
  <ref:Name>Praksis</ref:Name>
</link:reference>
```

Currently all references are defined in a standard role (`http://www.xbrl.org/2003/role/reference`). XBRL standard provides a number of roles that can be used in order to more precisely indicate the type of reference expressed by parts (e.g. related to measurement, definition, etc.)[24]. It is planned for the next releases of the IFRS DK taxonomy to further expand the list of references including also identification of their types.

9 Application of dimensions

The IFRS DK taxonomy makes an extensive use of XBRL dimensions[25]. Currently it defines 61 explicit dimensions (mostly imported from IFRS taxonomy) and 7 typed dimensions (whose values are defined by reporting entities in instance documents).

The designated container for dimensional information in instance documents is `scenario` element as indicated on definition arcs with `http://xbrl.org/int/dim/arcrole/all` arcrole (see Code example 5). The taxonomy does not contain any arc with `http://xbrl.org/int/dim/arcrole/notAll`. Every hypercube is closed (`@closed="true"`).

[24] http://www.xbrl.org/Specification/XBRL-RECOMMENDATION-2003-12-31+Corrected-Errata-2008-07-02.htm#_5.2.3.2
[25] http://www.xbrl.org/Specification/XDT-REC-2006-09-18+Corrected-Errata-2009-09-07.htm

9.1 Default members of dimensions

The taxonomy defines a default member for each explicit dimension. This is important information due to the fact that default members must not be declared in instance documents[26]. In order to facilitate discovery of default members they are all defined in a single extended link with `@roleURI` `http://xbrl.dcca.dk/role/900.01/AxisDefaultMembers`.

9.2 Solo/consolidated

The IFRS-DK taxonomy is applicable for consolidated reports (which include figures and other information for both, a group and a parent) and solo reports containing data of a single entity. This distinction has been modelled using XBRL dimension *Consolidated and separate financial statements* that is defined in base IFRS component of the framework. There are no distinct files, extended link roles, whatsoever indicating which information is reportable only on solo and which on consolidated basis. Moreover the taxonomy may define superfluous information in this area. Therefore it is the responsibility of reporting entities to provide valid information in this regard in instance documents. A single XBRL instance document can contain solo as well as consolidated data.

9.3 Typed dimensions

As explained in section 11 of this document, typed dimensions are used for allowing disclosing certain information of a predefined type that needs to be further characterized in order to identify its exact meaning.

In particular, they are used to identify:

- members of executive and supervisory boards,
- auditors performing audit, review or assurance engagement,
- key figures or financial ratios.

As described in section 5.2.3, typed domains of all typed dimension are always simple constructs which data type is `string`. In an instance document typed domain must be instantiated as a unique "key" value linking facts that have something in common.

For example, reporting entities are required to disclose information about auditor and audit firm that perform audit on the report. Therefore, the taxonomy defines six primary items: *Identification number [CPR] of auditor*, *Name and surname of auditor, Identification number [CVR] of audit firm, Identification number [PNR] of audit firm, Name of audit firm* and *Description of auditor* that are linked to a hypercube containing *Identification of auditor* typed dimension. In instance document *Identification of auditor* should contain a unique typed domain value for a given auditor.

10 Relation to other taxonomies

The IFRS-DK taxonomy framework is dependent from IFRS taxonomy and thus follows the architecture of the IFRS taxonomy. The main reason behind this decision was to avoid confusions and makes it more implementation-friendly for software vendors (supporting a single interface for single common architecture).

[26] http://www.xbrl.org/Specification/XDT-REC-2006-09-18+Corrected-Errata-2009-09-07.htm#_Toc243301768

Nevertheless the IFRS-DK taxonomy framework contains also a number of departures from the rules set out by the IFRS taxonomy architecture. This is partly related to extensibility issue (see next section) but also results from specific requirements not addressed by the IFRS taxonomy (e.g. tax and statistics reporting).

11 Extensibility

IFRS DK taxonomy is composed of multiple components mentioned in section 3. Some components are strictly DCCA specific and are shared with DCCA taxonomy i.d. arr, mrv, sob and gsd. Therefore, any extensions shall be done according to guidelines described in the DCCA taxonomy documentation.

The situation for IFRS DK is a little different because it is the local Danish extension of IFRS taxonomy and thus follows most modelling principles and techniques formulated by IFRS Foundation. Therefore, filers using IFRS DK taxonomies shall refer directly to official IFRS taxonomy supplementary materials, in particular:

- The IFRS Taxonomy 2011 Guide[27] – with special attention on *section 3 Preparer's Guide, section 4 Extender's Guide* and *Appendix C: Style Guide*,
- Global Filling Manual 2011-04-19[28] – where set of rules which provide guidance on the preparation, filing and validation of XBRL filings created using the IFRS taaxonomy,
- Illustrative examples to IFRS taxonomy[29],
- IFRS Taxonomy Illustrated[30].

For any enquiries or doubts, please contact to DCCA or IFRS Foundation.

12 Versions

Taxonomy version is indicated using a publication date on file names as well as on the folder name following the root location (see Section 4.1 above).

Version information is NOT defined on any of the namespaces, `roleURI`s or any other XBRL technical construct.

Additionally a three-digit component identifying the version is embedded in each file on processing instruction `taxonomy-version` (e.g. `<?taxonomy-version 1.2.5?>`). **First digit** of this component corresponds to a significant change in business requirements (e.g. new legal regulations) or technical aspects (introduction of new specification resulting in significant change in the taxonomy architecture). **Second digit** identifies a change that requires a change in mapping (e.g. new concept is added) within a given scope. **Third digit** reflects changes that do not require remappings (improvements in functionality or minor technical bug unrelated to element names and assignment of dimensional information, for example: change in hierarchy, change in a label or reference as a result of former bugs, etc.).

[27] http://www.ifrs.org/XBRL/Resources/IFRS+Taxonomy+Guide.htm
[28] http://www.ifrs.org/XBRL/Resources/Global+filing+manual.htm
[29] http://www.ifrs.org/XBRL/Resources/XBRL+Illustrative+examples.htm
[30] http://www.ifrs.org/XBRL/Resources/IFRS+Taxonomy+Illustrated.htm

13 Instance documents

The content of instance documents in determined by the taxonomies that is references. There is however a set of other characteristics defined in instance documents that the taxonomy doesn't control[31]. The set of rules and hints below shall help entities to comply with the reporting requirements of the IFRS DK.

13.1 Schema reference

Instance documents must reference (using `link:schemaRef` element) one of the entry schema files as described in section 4.2.3 of this document.

13.2 Multilingual values

The IFRS-DK taxonomy is bilingual, i.e. all concepts, roles used on extended links are supplied with English and Danish labels defined either in label or generic label linkbases. This allows browsing the taxonomy content in one of these two languages.

Similarly, instance documents can be prepared in English and/or Danish (and additionally any other language). Technically, each textual tag can have `@xml:lang` attribute which informs about the language of the value that it contains. For example: `<t:textualTag contextRef="D" xml:lang="en">This is a text in English</t:textualTag>`.

Moreover, any textual fact in an instance document can be reported many times (i.e. a tag referring to the same context) with different value of `@xml:lang` attribute as presented on Code example 13.

Code example 13

```
<arr:DescriptionOfQualificationsOfAuditedFinancialStatements contextRef="FY2010e" xml:lang="en">
    The audit did not result in any qualifications.
</arr:DescriptionOfQualificationsOfAuditedFinancialStatements>
<arr:DescriptionOfQualificationsOfAuditedFinancialStatements contextRef="FY2010e" xml:lang="da">
    Revisionen har ikke givet anledning til forbehold.
</arr:DescriptionOfQualificationsOfAuditedFinancialStatements>
```

13.3 Precision of values

Precision of reported monetary figures (i.e. information if the amount is in kroner or thousands/millions of kroner or with øre decimal places) is set in instance document for each tag by a reporting entity. This is for the reason, that a reporting entity is the one that knows how accurate are the numbers being reported. Information about this accuracy is reflected using `@decimals` or `@precision` attributes as described in the XBRL 2.1 Specification[32]. It is therefore possible, that an entity reports in an instance document the same information twice: in thousands (with `@decimals="-3"`) and in kroner (with `@decimals="0"`). This approach however is not recommended as it hiders comparability of data and may lead to inconsistencies (two or more different values

[31] These characteristics can be controlled by a formula linkbase that supports the taxonomy. Current version of the DCCA taxonomy does not contain such functionality though.

[32] http://www.xbrl.org/Specification/XBRL-RECOMMENDATION-2003-12-31+Corrected-Errata-2008-07-02.htm#_4.6.3. It is also possible to define custom unit measures such as `<xbrli:measure>mu:thousandDKK</xbrli:measure>`. This however would require change of the data type of items to different than monetary (http://www.xbrl.org/Specification/XBRL-RECOMMENDATION-2003-12-31+Corrected-Errata-2008-07-02.htm#_4.8.2).

representing a single fact). Therefore, each fact must be tagged only once with reference to the ISO 4217 currency code and appropriate accuracy. It is the role of a user interface or rendering application to display the numbers properly (i.e. in millions, thousands, etc.).

13.4 Sign of values

IFRS DK taxonomy is aligned with IFRS architecture and modelling techniques also in `@balance` attribute[33] aspect and usage of additional labels e.g. negated label, net label and total etc. The latter one is used primarily to indicate calculation roll-ups and enhance readability. However, it does not affect the reported data (no influence on signs of reported factds).

For more information please refer to sections 2.3.10 – 2.3.13 and Appendix C in The IFRS Taxonomy 2011 Guide[34].

14 Enquiries

Any enquiries regarding the taxonomy, its architecture or application should be submitted to the following e-mail: Regnskab@eogs.dk.

[33] http://www.xbrl.org/Specification/XBRL-RECOMMENDATION-2003-12-31+Corrected-Errata-2008-07-02.htm#_5.1.1.2
[34] http://www.ifrs.org/XBRL/Resources/IFRS+Taxonomy+Guide.htm