



Naming Conventions Used in XBRL Taxonomies

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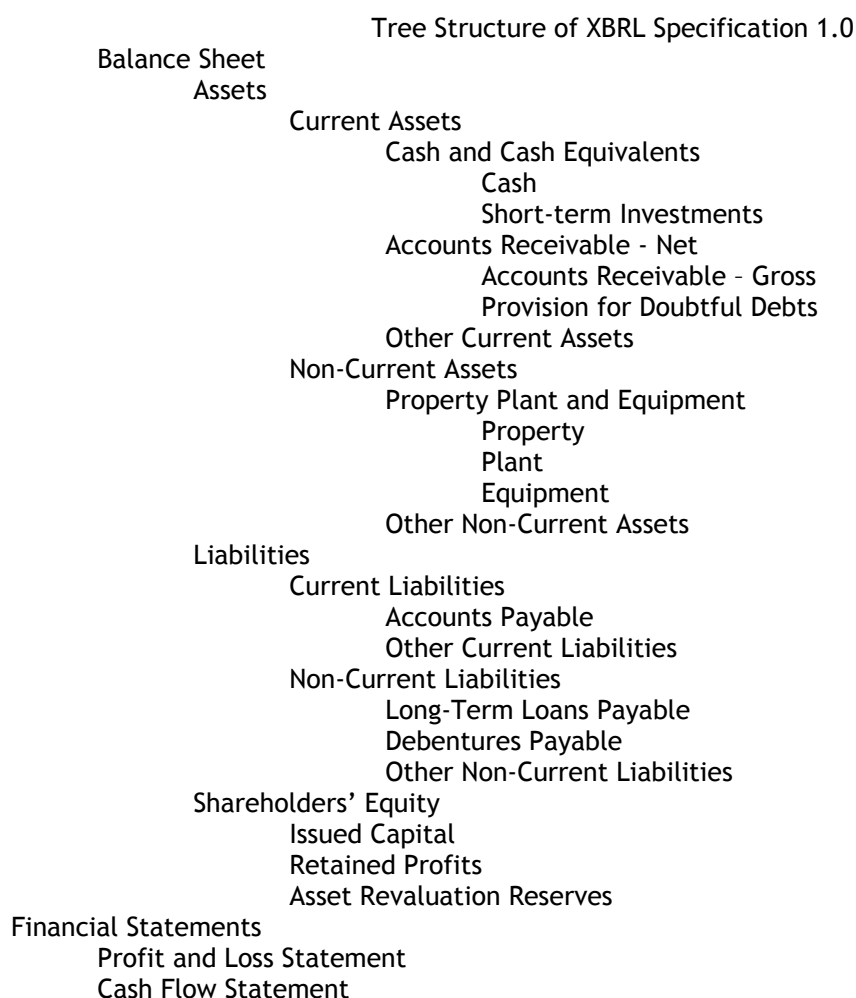
1.0 Introduction

The release of the first taxonomy for Commercial and Industrial organisations (commonly referred to as the USA GAAP CI taxonomy) was based on XBRL Specification 1.0. As a result of reviews of the Specification, a new specification (XBRL Specification 2.0) was released in December 2001. Experience has now been gained in developing a small number of taxonomies. This has resulted in a number of different naming conventions being developed.

2.0 The USA GAAP Naming Convention – Specification 1.0

The specification under which the USA GAAP CI taxonomy was created visualised the structure of financial reporting as very structured and a tree structure was used in the naming convention to name the various elements in the taxonomy.

A simple illustration of the tree-structure is shown below.



This structure led to a naming convention that allowed the various elements to be linked by following the tree structure. All element names consisted of either one or two parts, with most consisting of two parts. The very first element contained only one part but the remaining elements in the taxonomy contained two parts.

The first part was referred to as the parent name and the second part as the child name. The naming convention started at the left-hand side of the tree with Financial Statements. The element name given was "statements". The first statement tree above is the Balance Sheet. Using the parent.child naming convention used, the element name for the balance sheet was statements.balanceSheet. The first section of the Balance Sheet is assets, so its name becomes balanceSheet.assets.

I am sure that you are now capable of naming all of the elements in the above tree example.

An advantage of such a naming convention was that it kept names relatively short and two elements were easily linked by the parent.child relationship.

A possible alternative was to use names that indicated the structure and all levels of the tree in the name. However, this would lead to very long names for elements deep in the structure. For example, in the simple example above you could find a name such as:

```
statements.balanceSheet.Assets.currentAssets.cashAndCashEquivalents.cash
```

By starting with "statements" and using XML tools it was possible to traverse the tree to find all of the elements contained in the taxonomy. Using style sheets it was possible to produce a document that laid out the tree structure in the format shown by following the parent-child relationships in the element names. When the search techniques reached the end of a branch they went back to the start of the branch and moved along to the next branch.

Another point to notice is the use of what is commonly referred to as "camel case" notation - the use of upper and lower case characters. This is best illustrated in the above example by the part of the element names using "balanceSheet". Remember that XML, and therefore XBRL, is case sensitive. This means that all names could be in lower case or upper case or some combination. The camel case notation used makes it easier to read element names that are made up of several words. The first word is always in lower case and then the first letter of subsequent words is in uppercase. This makes it easier to read the element names and overcomes the rule that XML element names cannot include spaces.

The use of the camel case notation becomes even more important in the following discussion of the naming convention used in the alpha release of the Australian taxonomy released on April 30, 2002.

3.0 The Australian Taxonomy – Specification 2.0

After the experiences from Specification 1.0, the development of new XML recommendations and problems with the rigidity of the tree structure (discussion of which is beyond the scope of these notes), it was decided to simply create the taxonomy (and consequently any instance documents) as a list of elements without any fixed structure.

Removal of the rigid tree structure meant that long names were going to be necessary. Some involved with the development felt that such an approach may cause problems for software developers. Software developers responded that it did not really matter to them, but it may mean that searches took longer than if shorter names were used.

The Australian taxonomy development groups has used its own naming structure, which may be subject to change once the IAS naming convention is finalised (see next section). An email received in reply to the release of the Australian taxonomy referred to one element name that consisted of 87 characters. You might want to check the taxonomy and see if this is the longest name. Such a name would not even print out on this page without wrapping to the next line.

Some sample element names from the Australian taxonomy, to coincide with the tree structure discussed previously are shown below. In the actual taxonomy document, the elements are listed in alphabetical order.

```
aASBBaseXBRLTaxonomy
statementFinancialPosition
totalAssets
totalCurrentAssets
cashAssets
receivablesCurrent
otherFinancialAssetsCurrent
otherCurrentAssets
totalNonCurrentAssets
property_Plantequipment
otherNonCurrentAssets
totalLiabilities
totalCurrentLiabilities
nonInterestBearingLiabilities
interestBearingLiabilitiesCurrent
otherCurrentLiabilities
totalEquity
contributedEquity
retainedProfits
reserves
```

You will notice that there is no linking between elements and in some cases the camel case notation has not been followed. This is not required but is a comment that could be made about some of the element names.

Most of the names have been generated from the common labels used to describe the values presented in financial statements. By simply removing spaces and unnecessary words and converting the labels into camel case notation, the creation of the element names was almost automatic.

4.0 The International Accounting Standards Naming Convention – Specification 2.0

The Working Group that developed the IAS taxonomy decided that the naming convention explained above for the Australian taxonomy resulted in element names that were too long. Instead, they decided on a short-hand method that makes determining the meaning of the element names might be difficult for the new user, but becomes easier as one becomes familiar with it.

Another point to keep in mind that these are the element names only. There is a separate file (the labels file) that contains the element name and the full label that should be applied to each element name. This also applies to the Australian taxonomy. This means that standardised names can be used for each element. Details of the information contained in the labels file will be explained in another lecture. All that is needs to be known here is that by using the XLink technology is it possible to produce a report with the fill element labels from a file containing the element names and their values.

The IAS taxonomy working group decided on a naming convention where any part of an element consisted of 3 characters (all lower case) and an element name could consist of as many segments as necessary. A full explanation of the naming convention is contained in the document related to the IAS taxonomy. This is now commonly referred to as the triad naming convention.

Using the IAS taxonomy the list of element names for our simple example might be something like this:

bst
ast
ast.cur
ast.cur.cce
ast.cur.cce.csh
ast.cur.cce.otr
ast.ncr
ast.ncr.ppe
ast.ncr.ppe.pro
ast.ncr.ppe.plt
ast.ncr.ppe.eqp
ast.ncr.oth
lia
lia.cur
lia.cur.tro
lia.cur.otr
lia.ncr
lia.ncr.brw.ibr
lia.ncr.deb
eqy
eqy.iss
eqy.prf
eqy.res

5.0 Concluding Comments

It can be seen from the above discussion that the naming conventions to be used in XBRL taxonomies is far from over. A fourth convention could have been included - the one used by the sample files supplied by Reuters. This uses a different naming convention again but is based on a draft UK taxonomy developed prior to the IAS taxonomy. It was not discussed as it is anticipated that the IAS naming convention may win the day.