

12. Assigning Instance Fact Values¹⁰

Next we will discuss expressing financial reporting values in XBRL. What this means is actually creating an XBRL instance document. You can think of this as having a paper-based financial statement and trying to express that financial statement in XBRL.

A major desire is to have the XBRL-based financial statement and the paper-based financial statement convey the same meaning.

So in this section, we discuss the actual putting of data into an XBRL instance document based on the concepts within a taxonomy considering what a reporting entity actually desires to express. Until you actually try this, you will not appreciate all the decisions which need to be made to actually do it.

We won't actually do the creation of XBRL instance documents in this section; we will do that in a later section. Here, we will discuss the issues surrounding assigning the values. We will, however, provide enough information to allow a reader to understand how to create each instance document component discussed.

12.1. Overview

If there were a one-to-one correlation between the financial data reported by an entity and taxonomies which provide meta-data for reporting financial information, then using XBRL would be far easier. For example, if a financial statement were a "form".

However, this is not the case. XBRL is not an inflexible "standard chart of accounts", financial reporting under IFRS and US GAAP is flexible and dynamic, and taxonomies are not perfect in all aspects.

Some groups exchanging data may use XBRL as a standard chart of accounts, requiring everything in their taxonomy to be reported and allowing no extensions. Using XBRL in these cases is easy.

But consider the following small, more realistic example of actually using XBRL to express financial information. Suppose a paper-based financial statement has a balance sheet with the line item "Cash, cash equivalents, and investments". But let's say the taxonomy has the elements "Cash" and "Cash Equivalents" and "Investments", but not one concept which expresses the combination of these concepts which the entity has chosen, for whatever reason, to report together. How does someone desiring to use XBRL express the information in the manner they desire it to be expressed? Issues like these are what is discussed in this section.

What is more challenging is balancing all of the following:

- Maximizing comparability of information across entities preparing financial information using XBRL.
- Maximizing the flexibility allowed an entity in expressing its financial information.
- Minimizing the effort of actually marking up data in XBRL.

The following table summarizes the possibilities:

Possibility	Explanation
One to one correlation	This means that there is a one-to-one correlation between what is in an XBRL taxonomy and what an entity desires to

	report. For example if the concept "Cash and cash equivalents" exists in a taxonomy and that is the concept the entity desires to report.
One to many correlation	This means that there is a one-to-many correlation between what is in an XBRL taxonomy and what an entity desires to report. For example if the concepts "Cash" and "Cash equivalents" is in the taxonomy, but the entity desires to show ONE line item "Cash and cash equivalents", rather than breaking the data out into two concepts. Note that in this case, the taxonomy does not contain the concept "Cash and cash equivalents", only the detailed breakdown.
Many to one correlation	This means that there is a many-to-one correlation between what is in an XBRL taxonomy and what an entity desires to report. For example, in an entity wishes do report "Cash", "Cash equivalents" and "Pledged cash", but the taxonomy only has the concept "Cash and cash equivalents"
Many to many correlation	This fills out the spectrum, but is really covered as a combination of one or more of the other components of the spectrum above.

Dealing with the issues of expressing numeric information are not the only issues. In addition, there are issues relating to expressing textual type information or "prose" within XBRL. For example,

- How is information which is presented as a list or table presented in XBRL, which allows no markup within an XBRL element?
- How is inline content handled, such as the desire to show one word in bold or in bold italic?
- How is section headers, labels, column headers, and other such textual information which is not really considered data dealt with in XBRL.

This section addresses these issues. It raises more questions and shows options rather than poses answers as there is no real answer to these questions right now as XBRL International has not provided any official guidance (as it has with the FRTA and FRIS which deal with issues in other areas).

But, these issues will need to be addressed in order to:

- Maximize the consistency of meaning between current paper-based financial statements and XBRL-based financial information for one entity.
- Maximize consistency and comparability across many entities.

12.2. Background

Today, most financial information is rendered on paper and is consumed by humans, usually knowledgeable in the area of financial reporting. These humans manually, commonly, extract and use the information they desire to extract and use. These humans, very knowledgeable in the area of financial reporting, can complete this task.

In the future, many of these paper-based renderings of financial information will be electronic and able to be consumed by a computer application, to some degree. The degree to which this can occur will be dependent on the domain using XBRL and how well they make XBRL work in their domain.

This section helps to ensure that any XBRL instance document created which follows these guidelines and conventions will have the same meaning as its paper-based rendering of financial information. It also contributes to the amount of automation which can be achieved and will help one see potential pitfalls of

automation of data extraction and reuse. The "automation" part is not so hard; it is the "reuse", or appropriate reuse, which is more challenging.

This section attempts to help maximize the amount of meaning transferred to a computer application about the XBRL-based financial information. An XBRL processor or other application which follows these guidelines and conventions would be able to glean the maximum amount of baseline "meaning". In addition, if two or more XBRL processors or other applications consume the same document, they derive consistent baseline meanings. Basically, basic meaning derived is consistent across XBRL processors and other applications which follow these guidelines and conventions.

If two or more entities issue financial information using XBRL, an XBRL processor or other application which follows these guidelines and conventions would have maximum consistency and comparability across two or more financials.

The primary goals of this section are to help ensure that:

- XBRL-based information and paper-based information have the same meaning.
- To maximize the amount of meaning consumable by a computer application
- To facilitate consistent baseline consumption (derived meaning is the same) between applications.
- To maximum consistency and comparability between entities which produce XBRL-based financial information.

While a taxonomy defines reporting concepts, it does not contain the actual values of facts based on the defined concepts. The fact values are contained in XBRL instances and are referred to as "fact values". Besides the actual value of a fact, such as "cash is 500,000", the XBRL instance provides contextual information necessary for interpreting the fact values. As pointed out earlier, this contextual information includes the reporting entity, reporting period, reporting scenario, and such. Additionally, for numeric facts, the XBRL instance also documents measurement accuracy and measurement units. Footnotes can also be added to an XBRL instance document to create ad hoc connections between data in an instance document and to elaborate on that data. Lastly, there is stuff in a financial statement such as the labels of line items and headings which is not really even data to most people, but some do consider this data.

Something should be in the back of your mind as you consider this information. The method of presenting financial information will likely change as a result of XBRL over the longer term. While it is not XBRL's goal or intension to create this change, such a change is inevitable. However, financial reporting needs to remain useful and as stable as possible through this evolution.

12.3. Example of Financial Statement

The following are two screenshots which point out some of the issues discussed in this section so you can get an idea of what the issues are.

12.3.1. Numeric Information

Consider the following information which is numeric in nature:

Sample Company		
For year ended December 31,		
	2003	2002
	€'000	€'000
Land	5,347	1,147
Buildings	244,508	366,375
Furniture and Fixtures	34,457	34,457
Computer Equipment	4,169	5,313
Other	6,702	6,149
Total	295,183	413,441

Note the following relating to the above screenshot:

- The data is in the "cells" where a line item, such as "Land" and a period, such as "2003" intersect.
- The data is scaled to thousands of Euros within the presentation.
- The name of the entity is provided, but XBRL actually does not have a place to put the company name, only the entity identifier such as its ticker symbol and the scheme used.
- The period is expressed in a narrative form, "For year ended December 31," but XBRL requires periods to be reported differently.

12.3.2. Textual information

Below is a sample of textual information or prose:

Sample Company
Notes to the consolidated financial statements
Multiple Number of Values
Events After Balance Sheet Date
On 14 January 2002, a building with a net book value of \$1,695,000 was severely damaged by flooding. It is expected that insurance proceeds will fall short of the costs of rebuilding and loss of stocks by \$750,000.
Subsequent to 31 December 2001, the court administration proceedings relating to ABC Limited (see note 19) were completed and an application was made to wind-up the company. No further distributions to the Group are anticipated. The Group has no obligation to meet outstanding liabilities of ABC Limited.
On 1 March 2002 the Group acquired a 100% interest in XYZ Limited which manufactures paints and is incorporated in Singapore. The consideration of LC 7,950 was settled in cash. The fair value of the net identifiable assets of the company at the date of acquisition was LC 5,145. This acquisition has not been recognised in the Group's 2001 financial statements. Goodwill arising on this acquisition of LC 2,805 will be amortised on a straight line basis over 10 years, reflecting the importance of this acquisition in expanding the Group's market coverage in the paints industry. The operating results and assets and liabilities of XYZ Limited will be consolidated with effect from 1 March 1999.

Note the following:

- Note that there are three paragraphs of text, yet XBRL cannot really break out paragraphs.
- There is imbedded data inside the paragraphs of text, for example the book value of \$1,695,000 relating to flood damage. If that value is imbedded in text, it is not accessible for use by computer applications as the paragraph is seen simply as a "chunk" of text.

- Note the two section header "Events after balance sheet date", that is not data. Hard coding headings into the rendering process can cause difficulty rendering financial information into multiple languages.
- In the third paragraph, note the bold italic and blue colored font, which is inline formatting.

12.3.3. Maintaining Paper-based Meaning in XBRL Instance

XBRL is a mechanism for expressing financial information electronically. One goal of XBRL is to leave unaltered the meaning of financial information presented by the issuer of the financial information. Whether the information is presented on paper, or electronically using XBRL, the meaning of the information must be the same to the user of the financial information. The only difference between the information is that the XBRL-based information will be able to be automatically and reliably extracted from the document carrying the data; whereas paper-based financial must be manually extracted by a human user of the information.

In most cases, the mapping of financial data to taxonomy concepts will be straightforward.

Inevitably, however, situations will appear where there is not a clear choice, or their may be several clear choices, as to how to map XBRL information to financial data. For example,

- it is not clear which concept is most appropriate.
- a concept does not exist in the taxonomy

Occasionally the instance author may have to create an extension taxonomy to capture important distinctions or additional classes of fact not foreseen by the author of the base taxonomy. This section provides some guidance on a number of common mapping issues.

12.3.4. Level of Detail

There are options as to the level of detail provided in breakdowns of data. Historically, the best computer applications could do is see financial information as a big "chunk" of text which it could parse to a degree and extract some meaning, but not much.

The primary financial statements are fairly easy to "tag" using XBRL. It should take an entity no more than a day to tag a balance sheet, income statement, cash flow statement, and statement of equity if an organization has the knowledge and tools required.

Tagging the explanatory disclosures takes significantly more effort.

Is it acceptable to tag a "chunk" of notes as one disclosure, rather than tagging the detailed information within the note? The answer is determined by the "contract" between the user of the information and the consumer of the information. Either option is possible.

The IFRS-GP taxonomy was created to allow for tagging at higher levels, and then over the years as skills increased, software improved, etc., then users could tag at a more detailed level. For example, each movement analysis within the IFRS-GP taxonomy has one element, for example "Movements in Property, Plant and Equipment" which is a string data type where the entire movement analysis can be placed as a chunk of text.

12.3.5. Styling/Presentation Information

Styling information may or may not be considered "data". But what about labels for the line items of a financial statement, are they data or presentation type information? What is the best way to maximize reuse of labels in, say, different languages. For example, consider labels to the line items on the balance sheet such as "Cash and cash equivalents". If these labels are hard-coded into a rendering method, then changing the rendering into another language will be challenging.

In addition, if labels are used one way in financial information by one entity, and another way by another entity, then comparing the financial information may be challenging.

12.4. Assigning Contexts

Contexts distinguish one instance document fact value from another based on which entity, which period, and which reporting scenario the fact value relates to. For example, a financial statement may show "Cash and cash equivalents" for the year 2004 and the year 2005. The concept is the same for both periods, but the context of the fact is different as they relate to different periods.

12.4.1. Assigning Entity and Entity Segment Information

XBRL instance documents allow you to assign an entity ID and the scheme used to identify the entity. There is no real location for the actual name of the entity.

For example, some entity schemes are their DUNS number.

The proper place to distinguish one portion of an entity with another portion in that same entity is using the segment element, not a different entity identifier.

12.4.2. Assigning Period Information

There are standard period descriptions used in financial reporting such as the terms "As of" or "As at" to denote the balance sheet date, or "For the period ended" or "For the period ending" to denote the income statement date.

There are also common terms such as "current period" and "prior period".

Periods used should represent the actual dates and it is not necessary to have the date labels and actual dates coincide.

For example, on a statement of changes in equity, the label for the beginning period may read "As of December 31, 2004" and the label serves as the beginning balance for one period and the ending balance for another period. The startDate attribute of the period for the context of the fact values for the, the period 2004-01-01 should be used.

The following table gives examples of periods which would be appropriate:

Table 1. Mapping period information.

Period	Period type	Period value	Remarks
As of December 31, 2004	Instant	Instant of: 2004-12-31	Typical period for financial data on a balance sheet.

Period	Period type	Period value	Remarks
For the period ended December 31, 2004	Duration	Start date of: 2004-01-01 End date of: 2004-12-31	Typical period for financial data on an income statement, most of the cash flows statement (except for the beginning and ending values for cash.)

Times of day are typically not used in financial reporting and the time portion SHOULD NOT be used for instant, startDate, endDate.

Times are generally not used in financial reporting. If they are important for a users instance document, then they should be used, otherwise they should be avoided.

12.4.3. Assigning Scenario Information

The context scenario attribute is used to denote different types of reporting scenarios such as "actual", "budgeted", "restated", etc.

Any fact value assigned to a context which does not have a scenario assigned is assumed to be an actual value, as apposed to budgeted or other reporting scenario.

Most values reported are actual. If the reporting scenario is not actual, then the reporting scenario should be specified.

12.5. Assigning Unit of Measurement

Unit of measurement information is used to distinguish if a fact value within an XBRL instance is reported in, say "US Dollars", "Euros", or perhaps if a value is for the number of employees.

ISO currency codes MUST be used to distinguish between different types of reporting currencies of monetary items.

This is required by the XBRL specification. All monetary items must have an ISO currency code associated with them.

Should use consistent units of measure to maximize comparability of data across instance documents, perhaps a units of measure registry, like the link role registry, will be created by XBRL International.

12.6. Assigning Concepts to Fact Values

The bulk of an XBRL instance documents is concepts assigned to values from an XBRL taxonomy. These concepts may be non-numeric in nature (textual, strings) or numeric in nature (monetary, decimal, etc.) The following sections describe general considerations which apply to all fact values and then discusses non-numeric and numeric concepts.

Each value within an XBRL instance document has an XBRL concept assigned to it from a taxonomy. In addition, tuples which bind other elements together also have element names.

12.6.1. General Concepts Applying to Non-Numeric and Numeric Fact Values

In the discussion below the following convention applies: The first part of the relation is the entity reporting, the second part is the taxonomy. So, for example "one to one" means one fact value for the entity, one concept in the taxonomy.

Note that these general scenarios are explained here, and then explained in additional detail in the "non-numeric" or "numeric" sections.

12.6.1.1. One to one correlation

This scenario is one fact value to report, one concept in the taxonomy.

The easiest scenario to use XBRL to report financial information is when there is a one-to-one correlation between the financial data you wish to report and the taxonomy which defines the concepts which can be reported.

For example, if an entity has on its financial statement a line item "Cash and cash equivalents" and it wishes to report using a taxonomy which has a concept "Cash and cash equivalents", then the entire process of using XBRL is quite easy:

- For a value,
- Assign a concept,
- Assign context information (entity, period, scenario),
- If numeric assign units information
- If numeric assign decimals information

This is then repeated for every fact value you wish to report.

12.6.1.2. One to Zero correlation

This scenario is one fact value to report, but the taxonomy does not contain that concept.

This scenario requires a straight forward extension to the taxonomy the entity desires to use.

For example, if an entity has on its financial statement a line item "Cash and cash equivalents" but that concept does not exist in the taxonomy:

- For a value,
- Create an extension taxonomy,
- Add the concept you wish to report to the extension taxonomy,
- Create the appropriate calculation and presentation relationships,
- Assign the concept you created to the fact value,
- Assign context information (entity, period, scenario),
- If numeric assign units information
- If numeric assign decimals information

This is then repeated for every fact value you wish to report.

12.6.1.3. One to many correlation

This scenario is one fact value to report, many concepts in the taxonomy.

A slightly more challenging reporting scenario is where an entity desires to report one line item, "Cash and cash equivalents", but the taxonomy does not have that concept in the taxonomy, but it does have, say, two detailed line items that, when added up, correspond to what the entity desires to report, for example, "Cash" and "Cash equivalents".

In this case, the entity can either (a) change what it reports or (b) extend the taxonomy and add the combined concept "Cash and cash equivalents".

Entities are not going to change what they report, and are not expected to. Therefore, while (a) is an option, it is highly likely that the entity will not choose that option.

The alternative (b), adding the concept "Cash and cash equivalents" to the taxonomy will be the more preferred option. To do this, the entity reporting needs to:

- Create a company extension taxonomy,
- Add the concept "Cash and cash equivalents",
- Create the appropriate calculation and presentation relationships.

12.6.1.4. Many to one correlation

This scenario is many fact values to report, one concept in the taxonomy.

In this case say the entity desires to provide a breakdown of "Property, Plant and Equipment", but the taxonomy only has one concept, "Property, Plant and Equipment".

To report under this scenario, the entity would

- Create a company extension taxonomy,
- Add the concepts, say "Land", "Building", "Furniture and Fixtures", etc.
- Create the appropriate calculation and presentation relationships.

12.6.1.5. Many to many correlation

This scenario is many fact values to report, many concepts in the taxonomy, but NONE of the values correlate, otherwise one-to-one or one-to-many would apply.

This scenario is actually a combination of other scenarios described above.

12.6.2. Non-Numeric Fact Values

Below more detailed examples are provided for specific fact values and concepts which are non-numeric in nature. Non-numeric means "string" or "textual" information, such as accounting policies and explanatory disclosures.

12.6.2.1. Text Only

This is straight text

Revenues are recognised when earned.

12.6.2.2. Text with Imbedded Numeric Information

Consider the following disclosure:

The negative goodwill of CU 4.67 million arose on the Group's acquisition of Sub A Limited in February 2002. At the date of acquisition, CU3.37 million of the negative goodwill was identified as relating to anticipated redundancy costs, expected to be incurred during 2002 and 2003. In 2002, redundancy costs of CU1.95 million were incurred and an equivalent amount of the negative goodwill was released to income. In 2003, final settlements in respect of redundancies amounted to CU1.42 million, and the remaining balance of negative goodwill attributable to such expenses was released to income.

Note that this paragraph of text has imbedded numeric information. In this case, how should this be reported? Options include:

- Report only as a block of text assigned to one taxonomy concept,
- Report block of text assigned to one taxonomy concept, but also report each numeric item individually assigned to taxonomy concepts,
- Report only the numeric fact values using taxonomy concepts.

Numeric and monetary facts buried in text are not accessible to automated computer applications, and therefore cannot be easily analyzed. Wherever possible these values SHOULD be presented separately, with appropriate contexts and units.

At times, the true meaning of the numeric information may not be clear without the narrative text. The text and the numeric information should be both presented, and they should be associated in some manner.

In such cases, a footnote perhaps should be used to associate the facts with an explanatory paragraph that restates the information in context.

12.6.2.3. Text with inline content

Consider the following disclosure:

Revenues are recognised when earned.

The reporting entity desires to emphasise the term "Revenues" therefore makes the text bold.

12.6.2.4. Text within bullet points or within a list

Consider the following policy:

Deferred income tax is provided, using the liability method, on all temporary differences at the balance sheet date between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes.

Deferred income tax liabilities are recognised for all taxable temporary differences:

- except where the deferred income tax liability arises from goodwill amortisation or the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; and
- in respect of taxable temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, except where the timing of the reversal of the temporary difference can be controlled and it is probable that the temporary difference will not reverse in the foreseeable future.

The reporting entity desires to show information in a bulleted or numbered list.

12.6.2.5. Text within a table

Consider the following:

The reporting entity desires to show the disclosed information in the form of a table.

12.6.3. Numeric Fact Values

Numeric fact value have two additional considerations. First, units must be assigned so consumers of the instance document can tell if values are reported in, say Euros or Pounds. Second, the number of decimal places to which the value is reliable must be reported.

12.6.3.1. Assigning Decimals Value

Appropriate decimal values MUST be used, when it is unclear as to the value INF MUST be used.

FRIS suggests that numeric items use the decimal attribute, as opposed to the precision attribute to explain the mathematical preciseness of data contained in XBRL instance documents.

This document will cover the use of the decimal attribute and will not cover the precision attribute.

The following table shows common decimal values

Actual Value	Presented in	Decimal Value	Remarks
\$1,000,000	Millions	-6	The value is accurate to the nearest millions, therefore the decimal value used should indicate this
\$5,001,000	Thousands	-3	
\$1,123,456	Actual values	INF or 0	

12.6.3.2. One to one correlation

Consider the following:

Cash and cash equivalents	\$100
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In this example, there is simply one value. There are no relations to consider, the taxonomy matches the fact values to be reported, everything is straightforward.

12.6.3.3. One to Many correlation

Suppose the reporting entity desires to report "Trade and other" receivables combined, but the taxonomy has two line items for the one concept the entity desires to report: "Trade Receivables" and "Other Receivables".

Receivables

Trade and other

Term

Total Receivables

In this example, basically a subtotal needs to be added.

12.6.3.4. Zero to One correlation

In the example below, the concepts "Trade" and "Other" are contained in the taxonomy, but the term "Term" is not in the taxonomy:

Receivables	
Trade	
Term	
Other	
Total Receivables	

In this example the reporting entity has four values to report, but the taxonomy only contains three value, "Term" is not provided in the taxonomy.

The concept "Term" simply needs to be added to the taxonomy using a company extension.

12.6.3.5. Many to One correlation

In the example above, the taxonomy has the concept "Total Receivables" only, none of the detailed items "Trade", "Term" or "Other" exist in the taxonomy:

Receivables	
Trade	
Term	
Other	
Total Receivables	

In this case, the reporting entity needs to create an extension taxonomy, add detailed line items for "Trade", "Term" and "Other", add the calculation and presentation links.

12.6.3.6. Many to Many correlation

This reporting scenario is simply a combination of other reporting scenarios above. There are many concepts the reporting entity desires to report, there are many concepts in the taxonomy, and none of them match. Therefore a combination of the above needs to be used to create the proper company extension taxonomy.

12.6.3.7. Unknown Values

At times the value for a fact value is unknown. This is different than zero (which means it is known, but it is zero) or the fact value does not exist (there IS NO fact value). What "unknown" may mean can be varied.

Consider the following example. Information is disclosed for 2004, but the data for 2000 is "unknown". It means that the data perhaps should exist, but for some reason the people providing the data have perhaps not provided it. The values are "unknown".

	2001	2000
Sales	100	-
COGS	100	-
Gross Profit	-	-

In the above example "-" indicates unknown.

12.6.3.8. Incomplete calculation Hierarchies

In the example below, a taxonomy calls for the reporting of various information and a total. However, some of the detailed information is not required to be reported.

As such, the calculations in the instance document of the reporting entity will not add up, as it chooses not to report a value or values which are used to come up with the total value.

Other operating expenses comprises:		
	2001	2000
	€000	€000
Warranty provision	200	50
Bid defence costs	655	-
Loss on disposal of available-for-sale financial assets	350	-
Loss on disposal of property, plant and equipment	-	850
	===	===
Total operating expenses	2000	2000

The above will result in a known inconsistency in a calculation relationship expressed in the taxonomy. This type of inconsistency is expected. The inconsistency should be communicated to users of the instance document in some way.

12.6.4. Tuples

Tuples pose an additional challenge to working with XBRL. All items are "global elements", there is no "hierarchy" to get in the way. This is one of the benefits of XBRL. However, tuples add hierarchy. If you want to add an item to a tuple, you have to create a new tuple.

But, you want the user of the data, many times, to realize that the tuples are the same thing, just slightly different.

XBRL has a mechanism for doing this, using the "similar-tuple" definition link.

Consider the following example. Suppose a taxonomy has the following tuple which expresses data for an address:

Address
Street
City
Province

Suppose the data to be reported looks like the following, adding a "Country":

Address
Street
City
Province
Country

The only difference is the addition of a "Country" fact value which the reporting entity deems appropriate to disclose, but it is not contained in the taxonomy.

The reporting entity needs to:

1. Create an extension taxonomy.
2. Add the concept "Country"
3. Create a new tuple which uses the concept "Address", "Street", "City" and "Province" from the base taxonomy, and includes the concept "Country" from the company extension.
4. Create a "similar-tuple" definition arc between the old tuple and the new tuple to indicate that they are basically the same concept.

Other concepts discussed above for numeric and non-numeric concepts are appropriate for tuples also, they apply in the same manner. The only difference is the need to create a new tuple and add a definition arc indicating comparability.

12.7. Dealing With Errors

At times, creator of instance documents will likely encounter errors which will need to be dealt with in one manner or another. For example, it is possible to have the following types of errors:

- A financial statement was released which contained a calculation error. If that financial information is expressed using XBRL, how should that calculation error be expressed?
- A taxonomy which the creator of an instance document is using contains an error within that taxonomy. Should, and if so how should an instance document creator correct the taxonomy error.

12.7.1. Errors in Existing Financial Data

Rarely, yet occasionally, a financial statement is issued which contains errors within the data. If the error were expressed in XBRL as is, which has the capability of validating calculations, an XBRL error would occur resulting in an illegal XBRL instance document.

This section explains how to handle these situations.

12.7.2. Errors in a Taxonomy

Different types of errors can exist in a taxonomy. For example, here is a summary of some of the different types of errors:

- Incorrect balance type, for example a debit when it should be a credit.
- Incorrect data type, for example a monetary data type when a string data type is needed to express the data.
- Incorrect period type, for example an instant when a duration is required.
- Improper reference and unable to determine the information to be presented by the existing reference.
- Improper calculation.

The following are not considered errors:

- A required disclosure is missing from the taxonomy. Overcome by simply extending a taxonomy.

- Incorrect balance type. Overcome by simply entering the numeric value it as a negative value.
- Improper reference when the meaning of the taxonomy is clear.
- Misspelled label or element name.

This section explains what is and is not considered a taxonomy error and how to handle the particular situations.