

# XBRL Uniform Presentation (UP)

## Basis for a normative presentation

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## 1. Table of Contents

<b>XBRL Uniform Presentation (UP)</b> .....	1
Basis for a normative presentation .....	1
1. Table of Contents .....	1
1 Introduction .....	3
1.1 Documentation conventions .....	3
1.2 Purpose .....	3
1.3 Relationship to other work .....	4
1.4 Terminology (non-normative except where otherwise noted) .....	4
2 Uniform Presentation Specification .....	5
2.1 Initial assumptions .....	5
2.2 The overall approach .....	5
2.3 Instances .....	5
2.4 Taxonomy .....	5
2.5 Taxonomy presentation frameworks .....	6
2.6 Table linkbases .....	6
2.7 Presentation linkbases .....	7
2.8 Hybrid: Table and Presentation Link bases .....	7
3 Display Groups .....	8
3.1 Display Groups .....	8
3.2 Display Group Report Information .....	11

3.3	Display Group quick Ordering .....	11
3.4	Display Grouping and ordering .....	12
4	Rendering.....	13
4.1.1	Entities .....	13
4.1.2	Entity Order .....	13
4.1.3	Entity Display .....	13
4.2	Extended Link Roles .....	13
4.2.1	Discover ELR's .....	14
4.2.2	ELR typing.....	14
4.2.3	Ordering of ELR's.....	15
4.3	Rendering of facts based on T-links .....	15
4.4	Rendering of facts based on P-links .....	17
4.5	Periods.....	18
4.6	Segment and Scenario.....	21
5	Rendering of facts in Display Groups.....	22
5.1	Language and Labels .....	22
5.1.1	Language.....	22
5.1.2	Labels and label roles.....	23
5.2	Display of fact values.....	24
5.3	Unit.....	24
5.4	Scaling .....	25
5.5	Separators .....	27
5.6	Nil and empty fact values.....	27
5.7	Footnotes .....	27
5.8	Non Presentable Facts Display Group .....	28
6	Other XBRL related objects.....	29
6.1	Entrypoints .....	29
6.2	Non referenced contexts.....	29
6.3	Non referenced units .....	29
6.4	Random Xlink content .....	30
6.5	Other XML content.....	30
7	Appendix A: Document history (non-normative) .....	31
8	Appendix B: Rule reference .....	32

# 1 Introduction

There is a generic need to display (render) XBRL instance data in a human readable format. For accountants this need arises from the necessity to have a 'true and fair' view of the financial status of an organization. To ensure that the rendered results are the same or nearly identical when created by different software applications, the aim is to set rules that will result in a comparable "Uniform Presentation" (UP). This UP must be usable for auditors for the 'true and fair' view and must be applicable for any XBRL Instance based on any taxonomy. A rendered instance created by any application based on the UP will have the same order and structure and will include exactly the same facts anywhere in the world. This document prescribes the exact rules and specification for the construction of the UP.

The UP does not provide any guidance on the expected output form in which the presentation is created. The output could be a web page (HTML), it also could be a PDF, a printed report or, if desired, it can be created as an iXBRL (Inline XBRL) report. The UP however does set rules how facts must be rendered, in which grouping, order and notation. The output format and styling are decided by software vendors.

## 1.1 Documentation conventions

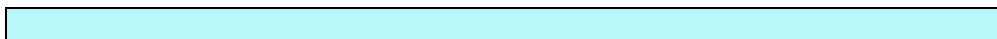
The following highlighting is used to present normative rules:

**UP This is a normative rule**

The following highlighting is used to present non-normative technical material in this document:



The following highlighting is used for non-normative commentary in this document:



Non-normative editorial comments are denoted by indentation and the prefix "**NOTE:**":

**NOTE:** This is a non-normative editorial comment.

*Italics* are used for rhetorical emphasis only and do not convey any special normative meaning.

## 1.2 Purpose

The UP specification is intended to create a generic, automated and common accepted presentation of XBRL instance reports. A standard approach in rendering XBRL instance reports is needed to ensure that preparers, filers and receivers all have the same overview of reported data in XBRL.

## 1.3 Relationship to other work

UP uses all relevant information in XBRL instances and the taxonomies they refer to. UP only takes into account specifications with the status RECOMMENDATION, to ensure the maturity and availability of solutions for the specification it relies on.

## 1.4 Terminology (non-normative except where otherwise noted)

The terminology used in XBRL frequently overlaps with terminology from other fields, and the following list is provided to reduce the possibility of ambiguity and confusion (see also the references in [Section 6](#) below). These definitions are non-normative except where marked otherwise by means of the word **(NORMATIVE)** appearing in the "Term" column.

TABLE 1: TERMS AND DEFINITIONS.

Term	Definition
<i>Display Group</i>	An UP defines constructs to group XBRL artefacts within a rendering with group attributes and group ordering.
<i>Period Set</i>	An UP defines to group XBRL time definitions in sequences with their own ordering and rendering.
<i>Most recent period</i>	The UP prescribes the ordering of columns representing a period or a period set to be the most recent period set first. Most recent period set first is defined based on normal calendar periods (e.g. years, month's, and quarters).
<i>Dimensional Label Concatenation Rule</i>	The UP prescribes that a label for a Z-axis with dimension(s) is constructed from the first standard label of the dimension followed by a fixed separator followed by the (first standard) label of the member (if explicit dimension) or value (if typed dimension).
<i>MUST, MUST NOT, REQUIRED, SHALL, SHALL NOT, SHOULD, SHOULD NOT, MAY, OPTIONAL (NORMATIVE)</i>	The key words <i>MUST, MUST NOT, REQUIRED, SHALL, SHALL NOT, SHOULD, SHOULD NOT, RECOMMENDED, MAY, and OPTIONAL</i> , in this specification, are to be interpreted as described in <a href="#">[IETF RFC 2119]</a> .

## 2 Uniform Presentation Specification

### 2.1 Initial assumptions

For the creation of a UP a number of assumptions or rules will be applied:

- UP 1** The XBRL instance **MUST** be valid and based on a XBRL taxonomy that **MUST** be valid. The UP will not perform any validation.
- UP 2** The UP **MUST** be based exclusively on XBRL specifications with the status 'Recommendation'.
- UP 3** All XII defined presentation definitions are part of the Discoverable Taxonomy Set (DTS). No other presentation definition will be considered or applied.
- UP 4** The DTS **MUST ONLY** be derived from entrypoint(s) present in the instance.
- UP 5** All and only rules in this document will be applied to create the UP.

### 2.2 The overall approach

The approach for creating a UP is based on determining the exact content in a provided XBRL Instance document. The determination of the content of the instance will result in step by step separation of the detected content for facts relating them to specific presentation definitions in the DTS. Presentation definitions are either table (table linkbase) or presentation (presentation link base) structures. Other structures and definitions in the DTS will not be used for the UP. Based on the detected table and/or presentation definitions the facts will be rendered in so-called 'Display Groups'. Display Groups will be created based on detected entities, periods, dimensions and member combinations. The order of the Display Groups will be prescribed to ensure all rendered Uniform Presentations will result in the same number of Display Groups and in exactly the same order. Display Groups will be explained in this document. All facts that do not have referenced presentation definitions in the DTS, plus all other (non)-XBRL data will be reported in additional Display Groups at the end of the rendered result. The UP SHALL include all facts from the instance.

### 2.3 Instances

Facts are reported in a XBRL Instance document. All facts must refer to an element in the taxonomy which is discovered based on the entrypoint(s) in the instance. Facts in the instance have additional context and unit aspects. Facts may also have attributes like decimal setting or language. The UP will use all facts, their related aspects in the taxonomy, the presentation definitions as well as the context, unit data and decimal values to derive a presentation.

### 2.4 Taxonomy

For the UP different presentation definitions in taxonomies are considered. Depending on the type of presentation, different rules in the UP will apply.

## 2.5 Taxonomy presentation frameworks

The UP addresses the presentation from the available presentation definitions as determined in the DTS, non-taxonomy presentation definitions will not be used. This means that it is assumed that the taxonomy does provide the information that is needed to present (parts of) the reports.

A grouping technique for presentable facts based on the XBRL 2.1 specifications is the use of an Extended Link Role (ELR). The UP uses ELR's to be the main binding technique for presentations. An ELR can organize presentation relations (TLB-links or P-links) into Display Groups containing XBRL facts. For the UP only the Table and Presentation definitions will be used. Other structural definitions in the taxonomy (e.g. Definition or Calculation) MUST NOT be used for the UP.

Some taxonomies provide an ordering for mechanism between ELR's in a structured way, this is not part of any of the XBRL recommended specifications and MUST therefore NOT be used. The consequence is that the ordering of ELR's in the UP is implementation dependent until XBRL International releases the appropriate specification.

The UP MUST NOT use such an ordering, but if an individual taxonomy author wants to provide guidelines to UP software creators he can provide an attachment to the UP how the proprietary ELR ordering is supposed to function in UP enabled software.

E.g. the kvk-generic-linkrole-order.xml in the Dutch Taxonomy uses the GenericLink technique to define the order of the ELR used in reports.

E.g. COREP and FINREP have the location and naming in the EBA taxonomy providing guidance, using proprietary acroles. On the highest level COREP and FINREP are referred to as frameworks. Tables are the logical grouping component defined by XBRL standards and are limited using one table per ELR. Tables are part of tablegroups which are part of modules which in turn are part of frameworks. These are modelled with proprietary acroles and allow labels on a table or its components using generic labels.

## 2.6 Table linkbases

Taxonomies can contain Table linkbases (TLB) as specified in REC 2014-03-18, <http://www.xbrl.org/specification/table-linkbase/REC-2014-03-18/table-linkbase-REC-2014-03-18.html>.

### **UP 6 The UP MUST use the TLB when discovered in the DTS.**

The UP limits the TLB specification in the sense that input tables are not supported. This means that the expansion process (see chapter 9.3.5 of TLB spec.) to allow for user input must not be supported.

### **UP 7 The process of elimination of empty slices (rows/columns) MUST be applied.**

See chapter 9.3.4 of TLB specification for clarification.

The TLB specification currently does not provide specific solutions to support tuples in the sense of repeating items carrying facts or complexContent inside a tuple (like xs:choice) or attributes as children of the tuple. However, the UP can use some of the tuples as used in tables.

### **UP 8 Tuples that appear only once inside an instance on root level, not containing repetitive children MUST BE supported when rendering tables.**

- UP 9 Repeating tuples or repeating children inside a tuple MUST NOT be handled by tables, they MUST be handled in the 'non presentable facts display group'.**

## 2.7 Presentation linkbases

Taxonomies can contain presentation linkbases (P-links) as specified in REC 2013-02-20, <http://www.xbrl.org/Specification/XBRL-2.1/REC-2003-12-31/XBRL-2.1-REC-2003-12-31+corrected-errata-2013-02-20.html>.

- UP 10 The UP MUST follow the Presentation links as discovered in the DTS.**

The UP uses the following assumptions related to the Presentation definitions:

- P-links provide a meaningful hierarchy for the ELR
- P-links are considered to be complete
- P-links can have redundancy

## 2.8 Hybrid: Table and Presentation Link bases

Some taxonomies can combine TLB relationships and Presentation relationships. The expected result in these taxonomies will be that some parts will be TLB driven and others will be P-link driven. This UP specification provides an ordering and priority of types of relationships. A fact's concept that is addressed in multiple relationships will appear multiple times in the rendering.

## 3 Display Groups

The rendering process for the UP is controlled by a determination and decision process. Depending on the determined facts the discovered and related presentation definitions (TLB-link or P-link) in the taxonomy and the available entities, periods, dimension/members and units, the UP process will result in a number and order of Display Groups. This UP determination process will set the rules when a Display Group must be created, in what order the Display Groups must be created and what the scope, content and structure of the Display Groups must be.

**UP 11 The UP MUST follow the determination and decision process for Display Groups as described.**

All facts without TLB-link or P-link references, all other XBRL data and all non-XBRL data will result in additional Display Groups.

### 3.1 Display Groups

The set of facts from the instance with the related taxonomy presentation structures (Tables and/or Presentation) combined with their context and unit information will be used to derive one or more subsets of data to render; Display Groups. For each unique group of facts a Display Group must be created based on the order described in this document. For each unique entity, for each unique table and each unique presentation link role separate Display Groups will be formed. Different sets of (context) period content can also result in separate Display Groups as well as for unique dimension/member combinations.

**UP 12 The UP MUST not have duplicate Display Groups.**

**UP 13 The UP MUST not have empty Display Groups.**

Ordering of Display Groups depends on the alphabetic sorting based on entity, (T or P) linkrole order, Period Sets, unit or dimension/member combinations. As the output of the UP does not necessarily result in a page oriented form, like print or pdf, a Display Group does not refer to pages. It is up to an application to decide to start each new Display Group on a different page.

Display Group:

A selection of facts from an instance which are grouped together based on content and the context information as well as the ELR (T and/or P) relationships the taxonomy provides.

Facts that are not represented in any T and/or P-link relationship are grouped in a container Display Group called 'Non Presentable Facts'. Specific context or unit information of facts may result in multiple Display Groups for the same T and/or P-Link definition.

Default Values for entity, unit, segment or scenario and scaling can be set on Display Group level. These values are identical for all facts in the Display Group with attributes that are not explicitly rendered. Exceptions to defaults may be expressed by explicitly rendering the attribute with the non-default value. For units and scaling default values may be used if two/third or more facts are reported with that attribute value.

**UP 14 The Display Group header MAY report the default values for entity, unit, dimension/member or segment or scenario and scaling.**

**UP 15 In each Display Group the UP MUST provide information for the specific entity, unit, segment dimension/member or scenario dimension/member when that information differs from the Default Values rendered in the Display Group header.**



The determination and decision process is based on the processing order in this table. The 'Result' column describes all steps in which a split into a new set of Display Groups is realized.

Step	Process steps	Determination	Result	Reference
1A	Discover Entity Set	Entities based on unique Entity/@Scheme + Entity/@Identifier combination	Display groups per entity	4.1.1
1B	Order Entity Set	1. Order on Entity/@Scheme UP Order 2. Order on Entity/@Identifier UP Order	Ordered list of Display Groups per unique entity	4.1.2
2A	Discover fact set in instance	All facts found in the instance get registered in the rendering solution.	Checklist for facts to be rendered	
2B	Discover all ELR's for discovered facts	Discover all Table and Presentation link roles and Other Link roles that refer to 1 or more facts in the instance	Checklist for ELR's to be rendered	
2C	Type ELR's (T, P or Other)	ALL discovered ELR's in step 2B are typed		4.2.2
2Ca	Type T	T-link present	Display Group per T-link	4.2.2
2Cb	Type P	P-link present	Display Group per P-link	4.2.2
2Cc	Facts not belonging to a type T or Type P	Other	Display Group Non Presentable Display Group for Other.	4.2.2
2D	Order ELR s	MUST apply Recommended Order Spec Solution [if available]  MUST NOT apply Custom Order Spec Solution when available  MUST apply Order based on URI ELR [Alphabetically, Ascending]	Ordered list of ELR's based on recommended, custom or URI order.	4.2.3
3A	Discover Periods for each entity- ELR	Period Set per Entity-ELR		4.5
3B	Type Periods			4.5
3Ba	Period Set Instant-Duration	Period Set for one Instant connecting one Duration (Instant = DurationStart)		4.5
3Bb	Period Set Instant-Duration-Instant	Period Set for movements (InstantFirst = DurationStart   DurationEnd = InstantLast)		4.5
3Bc	Period Set Duration -Instant	Period Set for one Duration connecting one Instant (DurationEnd = Instant)		4.5

3Bd	Period Set Instant	One single Instant period		4.5
3Be	Period Set Duration	One single Duration period		4.5
3C	Order and Group Period Sets or Periods	Group Period Set with overlapping start- and end dates into PeriodSetGroups  Max combine 2 Period Sets in a PeriodSetGroup.  Order PeriodSetGroup: PSG with Most Recent StartDate first.	Display Group per Period Set Group	4.5
4A	Discover Dimensions and members based on XDT	Determine for each entity, ELR (T-link, P-link, Other) per Period Set Group		4.6
4B	Order Dimensions/members	Order on Dimensions than on Members	> DisplayGroup per T-link > DisplayGroup per P-link > Non Presentable DisplayGroup for Other	4.6
4C	Discover Segments not based on XDT	Determine for each entity, ELR (T-link, P-link, Other) per Period Set Group		4.6
4D	Discover Scenarios not based on XDT	Determine for each entity, ELR (T-link, P-link, Other) per Period Set Group		4.6
4E	Order Segments and scenarios	Order on Segments, than on Scenarios	> DisplayGroup per T-link per unique Segment-Scenario combination > DisplayGroup per P-link per unique Segment-Scenario combination > DisplayGroup per unique Segment-Scenario combination for Other	4.6
5A	Render Display Groups	Determine generic Header info for all facts in DisplayGroup [Entity / PeriodGroup / Unit / ...]	Rendered Display Groups	5
6A	Discover facts not referring an ELR		Create Display Group: Non Presentable Facts	5.8.
7A	Discover Footnotes referring to single fact	Render in related Display Group		5.7.
7B	Discover Footnotes referring to multiple facts	Collect	Create Display Group Footnotes	5.7.
8Aa	Discover other XBRL data			6.
8Ab	Entry points	Show used taxonomies	Display Group; Other XBRL data	6.1
8Ba	Non used contexts	Order on EntityScheme, EntityIdentifier, Instant Period, Duration Period, Segment Dimension, Segment Member,	Add a list in Display Group; Non referenced contexts	6.2

		Scenario Dimension, Scenario Member		
8Bb	Non used Units	Order on UnitID	Add a list in Display Group; Non referenced Units	6.3
8C	Discover Orphan XLinks	Render in document order	Display Group; Random Xlink content	6.4
8D	Discover Non-XBRL data - Custom structures - ApplInfo - Annotation/Documentation	Render in document order	Display Group; Other XML content	6.5

## 3.2 Display Group Report Information

A first Display Group 'Report Information' MAY be created to display global information valid for all subsequent Display Groups. This Display Group can be considered as the front page of the report.

**UP 16 The UP MAY have a first Display Group; Report information for global information about the content of the report.**

The instance may contain only facts for a single entity or a single currency or a single dimension/member, segment or scenario.

**UP 17 The Display Group Report Information MAY report the default values for entity, unit, dimension/member or segment or scenario and scaling.**

The facts in the instance may be reported based on a scaling attribute (@decimal value).

## 3.3 Display Group quick Ordering

The result of the discovery and determination process MUST be a number of Display Groups with the following order:

- Display Group Report Information
- Display Groups per entity
  - o Display Groups for all tables
  - o Display Groups for all presentation links
    - Display Groups for Period Sets
      - Display Group for dimension/member
      - Display Group for custom segments
      - Display Group for custom scenario
  - o Display Group Footnotes
    - Footnotes referencing multiple facts
  - o Display Group non presentable facts
    - Filing Indicators
- Display Group Other XBRL Data
  - o Display Entry points
  - o Display Group Non referenced contexts
  - o Display Group Non referenced units
  - o Display Group Random Xlink content

- Display Group Other XML content
  - o Custom structures
  - o ApplInfo
  - o Comments
  - o Documentation

## 3.4 Display Grouping and ordering

The UP must result in a grouping of facts and ordering of Display Groups as described in this document.

## 4 Rendering

### 4.1.1 Entities

A key part of the context in an instance is the definition of the Entity. The Entity is discovered by `xbrli:entity/@scheme` and `xbrli:entity` as reported in the `xbrli:context`. For the UP each unique combination of entity scheme and entity identifier must be processed as unique entity information.

**UP 18 The UP MUST show facts for each unique entity in a separate Display Group.**

### 4.1.2 Entity Order

To ensure that the order is identical in every result for a UP the ordering of Display Groups needs to follow the rules of the UP.

**UP 19 Display Groups for entities MUST be ordered alphabetically ascending based on Entity scheme and subsequently on ascending Entity-Identifier.**

### 4.1.3 Entity Display

It is required to render the entity information in the UP. One Display Group can only hold facts for one single entity.

**UP 20 If the instance contains only contexts with a single entity the UP MAY show the entity information in the Display Group Report Information. The UP MAY show the entity information in each header of each new Display Group.**

**UP 21 If the instance has facts for multiple unique entities the entity information MUST NOT be shown in the Display Group Report Information, the entity information MUST be displayed in the header of each Display Group.**

**UP 22 THE UP MUST NOT show the entity on each row or column.**

## 4.2 Extended Link Roles

The UP uses Extended Link Roles (ELR's) to be the grouping mechanism for concepts. Therefore the UP will always use the scope of an ELR as a next level of boundary for a Display Group. UP will only use ELR's with a T-link or a P-link structure in rendering the content. Other structures are not supported because of the lack of rendering information. All facts that are not part of a T-link or P-link definition will be grouped in the Display Group Non-Presentable Facts.

## 4.2.1 Discover ELR's

UP will only use ELR's that refer to one or more facts in the instance.

**UP 23 The UP MUST NOT render an ELR if no facts are related to the ELR.**

In T-links the intersection in a structure known as a 'cell' is defined by defining its dimensional space. The dimensional aspects on the fact determine if the fact is part of the table the T-link defines. T-link based taxonomies force the UP software to inspect all T-link tables and check whether facts are rendered in the table or not. In the discovery process multiple tables can be found that point to the same fact. If any fact is found for a table, that table will become a Display Group.

T-link ELR's can use P/D/other linkbases to provide structure to the axes of a table. Supporting relationship structures that are discovered within the T-link, will not be rendered separately. The TLB specification limits an ELR to a single Table definition.

A P-link structure is a tree form that may have leafs that refer to a fact in the instance. If a fact is found in the instance that is part of that P-tree structure the P-link is rendered by UP.

All facts that are not rendered by T-link or P-link structures are grouped into the Display Group 'Non-Presentable Facts'.

**UP 24 The UP MUST render all T or P ELR's that refer to one or more facts in the instance.**

In case a fact is related to multiple ELR's the fact will be reported multiple times in different Display Groups. If any fact is related to a Table or P-link that specific ELR will result in a Display Group, intended or not.

## 4.2.2 ELR typing

The UP distinguishes 3 types of ELR's:

- T-link ELR
- P-link ELR
- Other ELR

Within every ELR only one type of rendering can be used: P-link or T-link based. An ELR that contains a table:table resource, will be typed a T-link. Although supporting Presentation, Definition or Other structures can be found, the T-link will dominate the rendering.

**UP 25 The UP MUST render ELR's with a T-link as a table using the T-link information provided, where needed integrating supporting Presentation, Definition or Other structures.**

An ELR that is not of the type Table and holds an arcrole <http://www.xbrl.org/2003/arcrole/parent-child>, will be typed as P-link ELR. If the P-link found in the ELR is the supporting structure for the T-link, the ELR MUST NOT be typed as P-link ELR.

**UP 26 The UP MUST NOT render P-structures separately if they are supporting a T-link structure.**

In a P-link ELR the hierarchical presentation structure is applied. Presentation structure can have a multitude of branches. UP rendering only renders branches that lead to rendering of a fact. Empty branches will not be rendered.

In other-link ELR's no assumptions are made about the structure, only the grouping of the ELR is supported.

**UP 27 The UP MUST NOT apply rendering structures in ELR's that do not hold a T-link of P-link.**

**UP 28 The UP MUST render facts that are referenced by Other ELR's in a fact-per-row way in the Display Group Non-presentable facts providing all 'discriminating' information within the row-scope.**

A fact-per-row way is displaying a single fact from the instance, with all its (identifying) required aspects, on a single line in the rendering.

### 4.2.3 Ordering of ELR's

The UP prescribes a structured ordering of Display Groups to guarantee identical ordering in different software solutions. However, since there is no recommended XBRL specification determining the order of technical equal ELR's, the order of P- or T- based ELR's is prescribed by this specification. DTS authors MAY specify an ELR ordering mechanism in an appendix which MAY be supported by the software.

**UP 29 The UP MUST order the ELR's based on their type.**  
- first process all Tables T-links  
- secondly process all Presentation P-links

**UP 30 Within each ELR type the UP MUST apply ordering alphabetically ascending based on ELR generic standard labels in the leading language, if available, else no label in the used language available use the ELR URI's alphabetically ascending.**

## 4.3 Rendering of facts based on T-links

Table linkbases may offer an axis with primaries and a dimensional axis. On the intersection of those axes the fact values can be presented. The media used for rendering can play a factor in deciding whether the dimensional information can be presented as column-axis or as row-axis despite the definition in the table linkbase. If the output is to be rendered on paper or pdf other constraints come into play then if rendering is done for a webpage or spreadsheet. The UP does not dictate what medium to choose. Viewers of the rendering must be made aware that different render media may need different orientations.

The UP demands that information is rendered in a logical way and according to the following rules:

**UP 31 Every table MUST be rendered in a separate Display Group.**

**UP 32 Table labels MUST be rendered in the header of the Display Group.**

**UP 33 Each table label MUST be rendered on its own line.**

**UP 34 The X and Y axes MUST be rendered according to the TLB specification.**

**UP 35 The X and Y axes headers MUST be clearly distinguishable from the fact carrying cells.**

**UP 36 X or Y axes labels not assigned to specific columns or rows, MUST be rendered on their appropriate axis and span the whole of its axis.**

**UP 37 The UP MUST render typed member content in a logical order:**  
**1. Numbers from 0-9 ascending**  
**2. Dates from oldest to newest**  
**3. Strings alphabetically ascending**

In tables a Z-axis is a common grouping method resulting in multiple table renderings, differing only on the Z-axis dimensional value(s). Rendering this third dimension upon a two-dimensional lay-out is realized by explicit rendering of the third dimensional value.

In a webpage approach, a dropdown can support the Z-axis presentation. In a spreadsheet environment the Z-axis can be used to represent sheets. In paper or pdf multiple table occurrences with a distinct header holding the Z-axis value(s) will suffice.

The UP 'Dimensional Label Concatenation Rule' prescribes that a label for a Z-axis with dimension(s) is constructed from the first standard label of the dimension followed by a fixed separator followed by the (first standard) label of the member (if explicit dimension) or value (if typed dimension).

**UP 38 The UP MUST render a Z-axis label following the UP Dimensional Label Concatenation Rule.**

**UP 39 For a Z-axis that consists of multiple dimensional values, the UP MUST render a concatenated Z-axis label constructed from ALL dimensional values labels that are constructed according to the UP Dimensional Label Concatenation Rule.**

A primary or typed dimension can have a typed element carrying an enumerated list or the typed element can refer to a closed set of explicit members  
(see: <http://www.xbrl.org/Specification/ext-enumeration/PR-2014-03-26/ext-enumeration-PR-2014-03-26.html>).

**UP 40 The UP MUST render labels that are discovered from enumerated values.**

Axes may use relationship filters to build their hierarchical structure. Any relationship can be referenced to structure the axis.

**UP 41 Axes that use relationship filters to build their content MUST use a tabular approach to render their parent-child relationships if placed on a row.**

**UP 42 The indentation in a tabular display solution on rows MUST be preserved without any compression. (E.g. tabs, whitespace blocks or spaces MAY be used as long as no information is lost about the tree structure).**

**UP 43 If used on a column, a parent MUST span the columns of its children.**

**UP 44 The UP MUST render parent labels as a span of their children in rows.**

If a table:table resource is discovered to be a child in any relationship, all parent relationships (and all of their ascendants) that are discovered starting from the table:table node (as a child) must be placed in a tree like hierarchy using standard (2.1 or generic) labels in the preferred language to display the inheritance of this table. The discovered arcroles and linkroles must not be displayed or explained. There is no requirement to build a tree from any of the parents (or their ascendants) downwards besides the table that started the tree. The table is the lowest leaf in the tree. This tree must be presented above the table itself.

**UP 45 The UP MUST render ALL parent relationships of a table:table in a tree structure preceding the table itself.**

**UP 46 Cells in the table that cannot carry values MUST be represented differently than cells that can or have values.**

**UP 47 Cells and headers MUST be separated from each other by –non-intrusive- lines, honouring any spanning when applicable.**



Example:

Display Group: ELR label(s)

Table label 1

Model label

Table label 2

Framework label

TableGroup label

Country: NL

Manager: Schenk

		Column spanning label		
		Column label	Column label	Column label
Row Parent				
	Row Child	value	value	value
	Row Child	value	value	value
Row Parent		Text		
	Row Child	date	date	date

## 4.4 Rendering of facts based on P-links

UP regards the presentation linkbase structure as trees with a certain order and hierarchy.

**UP 48 The UP MUST follow the hierarchy of the Presentation Linkbase.**

Presentation Linkbase structures can become large trees with a huge number of branches.

**UP 49 The UP MUST NOT show child elements for which no facts are reported in the instance.**

**UP 50 The UP MUST NOT show any branches for which no facts are reported in the instance.**

**UP 51 The UP MUST render ALL parent information in a P-link structure for every child fact it renders.**

**UP 52 'Empty' or 'nil' facts that are reported in the instance, MUST be rendered.**

The order within P-links is determined by the @order attribute. If the @order and @priority fail to be unique for a leaf the local name of the element is used for ordering.

**UP 53 The UP MUST apply the order attribute in ordering the elements in the hierarchy.**

**UP 54 The UP MUST alphabetically ascending order the child elements that have an identical order attribute value within the same branch.**

**UP 55 The UP MUST render all elements without an order attribute alphabetically ascending last after all the ordered elements.**

The hierarchical information in the P-links must be reflected in the rendering.

**UP 56 The UP MUST use indents from the parent to represent the child within P-links.**

**UP 57 The UP MUST render tuples according to the P-link structure.**

**UP 58 Tuple repetitions MUST be ordered in the same order as in the instance.**

## 4.5 Periods

Facts in the instance have context information about the related period. The period has either a value for instant period or for a duration period. An Instant period has only one date, duration has two dates: start date and end date.

A TLB layout should be used as intended by the designer and not be modified. Periods from the contexts are not defined in the Table Link base Specification. This means that period sets should not be created for Display Groups based on TLB's.

**UP 59 The UP MUST NOT apply the rules to create period sets for display groups based on TLB.**

In case the instance holds facts for an instant and duration period that are considered by humans as one calendar period, the UP uses a definition for "Period Sets". A Period Set is defined by the exact match of start-date instant, a duration and/or an end-date instant.

**UP 60 A Period Set is the combination of an instant date that is equal to the startDate of a duration and/or the endDate of duration is equal to an instant date.**

**UP 61 A instant is considered to be equal to an start/endDate if the difference in time is 0hrs or 24 hrs.**

**UP 62 A start/endDate is considered to be equal to another start/endDate if the difference in time is 0hrs or 24 hrs.**

A Period Set can have a start date value and an end date value. This means that three cases can occur, 1) start and duration, 2) start, duration and end, 3) duration and end.

Example:	
Start date instant	2013-01-01
Duration	2013-01-01/2013-12-31
End date instant	2013-12-31

**UP 63 The UP MUST render facts for the same Period Set in one Display Group.**

**UP 64 The UP MUST display the facts in one column from one period set where Instant date is equal to the end date of the duration.**

Example:	
Case 1: Start duration	First column facts with instant start date, second column facts with duration
Case 2: Start duration end	First Column facts with instant start date, second column facts with duration and facts for instant end date,
Case 3: Duration end	Single column with facts with duration and facts for instant end date

A Period Set can only be formed if only a unique combination of duration and instant is possible. If multiple candidates exist in the instance, all durations and instants that are part of the candidate set, **MUST** be treated as unique Periods on their own.

Example:	
A Start date instant	2013-01-01
B Duration	2013-01-01/2013-12-31
C Duration	2013-01-01/2013-03-31
D Duration	2013-04-01/2013-06-30
E Duration	2013-07-01/2013-09-30
F Duration	2013-10-01/2013-12-31
G End date instant	2013-12-31
In this sample a number of unique combination of instant and duration is possible (A+B, A+B+G, A+C, B+G, F+G). The quarters are subsequent durations.	

A XBRL instance may contain facts for more than one Period Set.

**UP 65 The UP MUST NOT render more than two subsequent Period Sets in one Display Group.**

**UP 66 Period Sets *in* and *over* Display Groups MUST be ordered with the most recent Period Set first.**

**UP 67 The UP MUST render Period Sets that are not subsequent in different Display Groups.**

The result of this is a maximum of four value columns per Display Group based on maximum of two Period Sets.

An instance can have facts for multiple periods for multiple period types (Duration, Instant) not part of a Period Set. These periods do not necessary are sub sequential or have a relationship to each other. E.g. a begin balance of a quarter and a duration of the third month and the end date of the quarter. In this case the UP provide instruction to put these periods not belonging to period sets six per display group.

**UP 68 Facts for periods not part of any Period Set MUST be rendered in different columns with a maximum of six fact columns.**

Instant date	Instant date most recent than start date duration
Duration	End date more recent than end date instant
Instant date	Instant date less recent than end date duration

It is required to render the period information in the header of the column.

**UP 69 The UP MUST render in the column header the period for which facts are reported using the notation of the period in the instance.**

**UP 70 The UP MUST show the value for instant period in case the period set is defined by an instant period equal to the end date of a duration.**

## 4.6 Segment and Scenario

When instances have context with segment and/or scenarios not being used in tables the rendering of Display Groups is based on the segment/scenario content.

**UP 71 Every unique segment/scenario content MUST result in a separate Display Group.**

**UP 72 The Rule for segment/scenario MUST not be applied when Display Group is based on the TLB.**

XBRL Dimensional Taxonomy (XDT) based segment/scenario content is ordered by its native XML content being the value of the @dimension in the <xbrldi:explicitDimension> or <xbrldi:typedDimension> and their children nodes. The local name is the only part used for the ordering.

Non-XDT based segment/scenario content is ordered by its native XML content. The header for a segment/scenario Display Group is formed by the standard labels that are tied to the QNames forming the content or the native XML node names or content if there are no labels.

**UP 73 The ordering of Display Groups for segment/scenario MUST be alphabetically ascending for the content of segment and subsequently for scenario. The order MUST be based on dimension first and sub order on member.**

## 5 Rendering of facts in Display Groups

### 5.1 Language and Labels

XBRL supports different ways to provide information about the language used. Concepts have labels which can be differentiated by labelRole and language. An instance can contain an intended language for the reporter on the root node (@xml:lang). String based facts can also contain the xml:lang attribute to express the language in which the value is represented. Instances can contain string based facts in multiple languages and the root node language can contradict the one on fact level.

#### 5.1.1 Language

The UP must show the labels of the elements from the taxonomy using a language in the following order:

**UP 74** If the instance has a xml:lang value on root level, the UP MUST use this language to represent the labels of the ELR's and elements.

```
<xbrl xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:s="http://mycompany.com/xbrl/taxonomy"
....
xsi:schemaLocation="http://www.someCompany.com/segment http://www.someCompany.com/segment/segment-
schema.xsd"
xml:lang="nl">
....
<bw2-i:SecuritiesPolicy contextRef="FY13d_Fiscal">De effecten worden gewaardeerd op de verkrijgingsprijs of lagere
marktwaarde.</bw2-i:SecuritiesPolicy>
...
<bw2-i:SharePremiumDisclosure contextRef="FY13d_Fiscal_Separate">Het agio is tot stand gekomen bij de uitgifte
van de 18.000 aandelen.</bw2-i:SharePremiumDisclosure>
<bw2-i:InventoriesDisclosure contextRef="FY13d_Fiscal_Separate">De voorraden bestaan uit diverse
kantoorartikelen en andere benodigdheden</bw2-i:InventoriesDisclosure>
...
<bw2-i:ReceivablesDisclosure contextRef="FY13d_Fiscal_Separate">De vorderingen hebben voor € 450.000 een
looptijd langer dan een jaar</bw2-i:ReceivablesDisclosure>
...<bw2-i:CashAndCashEquivalentsDisclosure contextRef="FY13d_Fiscal_Separate">De liquide middelen staan ter vrije
beschikking van de onderneming.</bw2-i:CashAndCashEquivalentsDisclosure>
...
</xbrl>
```

**UP 75** If the instance has one unique xml:lang value on all string based facts, the UP MUST use this language to represent the labels of the elements.

```
<xbrl xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:s="http://mycompany.com/xbrl/taxonomy"
....
xsi:schemaLocation="http://www.someCompany.com/segment http://www.someCompany.com/segment/segment-
schema.xsd"
....
<bw2-i:SecuritiesPolicy contextRef="FY13d_Fiscal" xml:lang="nl">De effecten worden gewaardeerd op de
ver verkrijgingsprijs of lagere marktwaarde.</bw2-i:SecuritiesPolicy>
...
<bw2-i:SharePremiumDisclosure contextRef="FY13d_Fiscal_Separate">Het agio is tot stand gekomen bij de uitgifte
van de 18.000 aandelen.</bw2-i:SharePremiumDisclosure>
<bw2-i:InventoriesDisclosure contextRef="FY13d_Fiscal_Separate">De voorraden bestaan uit diverse
kantoorartikelen en andere benodigdheden</bw2-i:InventoriesDisclosure>
....
```

```
<bw2-i:ReceivablesDisclosure contextRef="FY13d_Fiscal_Separate">De vorderingen hebben voor € 450.000 een
looptijd langer dan een jaar</bw2-i:ReceivablesDisclosure>
...<bw2-i:CashAndCashEquivalentsDisclosure contextRef="FY13d_Fiscal_Separate">De liquide middelen staan ter vrije
beschikking van de onderneming.</bw2-i:CashAndCashEquivalentsDisclosure>
...
</xbrl>
```

**UP 76** If the instance does not provide a value for `xml:lang` and the taxonomy contains more than one language the UP MUST use the first language based on the ISO language code system (e.g., DK, EN, NL).

```
<xbrl xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:s="http://mycompany.com/xbrl/taxonomy"
....
xsi:schemaLocation="http://www.someCompany.com/segment http://www.someCompany.com/segment/segment-
schema.xsd">
....
<bw2-i:SecuritiesPolicy contextRef="FY13d_Fiscal" xml:lang="nl">De effecten worden gewaardeerd op de
verkoopprijs of lagere marktwaarde.</bw2-i:SecuritiesPolicy>
...
<bw2-i:SharePremiumDisclosure contextRef="FY13d_Fiscal_Separate">Het agio is tot stand gekomen bij de uitgifte
van de 18.000 aandelen.</bw2-i:SharePremiumDisclosure>
<bw2-i:InventoriesDisclosure contextRef="FY13d_Fiscal_Separate" xml:lang="en">The stock consists of several
officesupplies and other supplies </bw2-i:InventoriesDisclosure>
...
<bw2-i:ReceivablesDisclosure contextRef="FY13d_Fiscal_Separate" xml:lang="dk"> De tilgodehavender har en
løbetid på mere end € 450.000 om året </bw2-i:ReceivablesDisclosure>
...<bw2-i:CashAndCashEquivalentsDisclosure contextRef="FY13d_Fiscal_Separate">De liquide middelen staan ter vrije
beschikking van de onderneming.</bw2-i:CashAndCashEquivalentsDisclosure>
...
</xbrl>
```

In case the elements for facts do not have a label for the display language than the following order of rules apply:

## 5.1.2 Labels and label roles

Multiple label (roles) can be present in the taxonomy. To provide consistency when to use which labelRole in the UP, the order for usage is provided:

**UP 77** The UP MUST use label roles in this specific order:

1. Preferred label;
2. Standard label;
3. Terse label;
4. Verbose label.

If elements do not have a label in the preferred label role but do have a label for the subsequent label role(s) than that label must be used.

If no label for the element is found, the local name of the element must be used.

**UP 78** Local names MUST be used if no Preferred, Standard, Terse or Verbose labels are present.

The UP must not use labels for label roles like: positive, negative, zero, total, periodStart, periodEnd, documentation or any other label role. These labels are all very case specific labels and can result in unreadable or un-understandable presentations.

## 5.2 Display of fact values

Other than when scaling is allowed, see below, monetary facts can be rendered differently than reported in the instance. All other facts or if no scaling is applied fact values must be displayed as reported in the instance.

**UP 79 The UP MUST not modify, calculate, convert or translate fact values in any form.**

All facts in the instance must be rendered at least once in the UP.

**UP 80 The UP MUST render ALL facts at least once.**

## 5.3 Unit

Numeric facts in an instance always have a reference to a unit of measure (e.g. meter, kilo, EUR). Units are important to comprehend the numeric fact value. Unit measures can be based on the xbrl.org UTR list (Unit Type Registry), but the unit can also be created by the reporter.

**UP 81 The UP MUST provide unit information for all numeric facts.**

If numeric facts are of the monetary data type, or derived from the monetary data type, the unit will be specified as values from the ISO4217 standard. XBRL hosts for convenience the <http://www.xbrl.org/2003/iso4217> namespace which may be used by reporters to reference ISO4217 currencies in their units.

For readability, the UP uses the <unitName> from the UTR referenced from the measure in the unit. The local name of the measure is being used when this element is not available in the UTR.

**UP 82 The UP MUST render the unitName for measures based on the UTR.**

**UP 83 The UP MUST render the local name of the measure(s) if not available in the UTR.**

The UP may show the currency name in the header of each individual Display Group.

If all numeric-monetary facts of the instance are reported in the same unique currency the UP may show the currency name in the Display Group Report Information.

**UP 84 The UP MAY render the currency name in the Display Group Report Information and/or the UP MAY render the currency name in the header of each Display Group.**

An instance can contain facts for multiple currencies. Depending on the situation per Display Group, the currency name can be rendered on the header of the Display Group or needs to be rendered on fact level.

**UP 85 The UP MUST NOT render the currency names in the Display Group Report Information when multiple currencies are being used.**

**UP 86 The UP MAY render the currency name in the header of each Display Group if all currencies in the Display Group are the same.**

A special situation on multiple currencies in a single Display Group may be used by software: if one of the used currencies is used by more than half of the monetary facts in the Display Group, this currency may be rendered on the header of the Display Group. All other currencies must then be rendered on fact level.

For tables rendering currencies in multiple columns (one currency per column, row or sheet), the currency name is rendered on the level of row, column or Display Group.



A fact can be reported other than in the currency as reported in the Display Group Report Information or is different from the currency as reported on each header of a Display Group.

**UP 87 The UP MUST render the local unit name of the measure before each fact value if multiple currencies are used in the Display Group.**

Numeric facts may be reported with non-currency based units from the UTR.

**UP 88 The UP MUST render the unitName for UTR non-currency based measures behind the fact value.**

**UP 89 The UP MUST render the local name of the measure if the measure is not available in the UTR.**

Facts may be reported as percentages or as per-mille, which may be specified as data type num:percentItemType on items.

**UP 90 Unit measures representing percentage or per-mille MUST be rendered as '%' or '‰' sign behind the fact value.**

## 5.4 Scaling

Facts may have an indication for accuracy and significance. XBRL provides the @decimal or @precision attributes on numeric facts to allow a reporter to express the absolute fact value accuracy in decimals, thousands, millions or billions.

Example:  
@decimal value of -3 means: read the fact value accuracy in thousands

**NOTE:** although it is common practice not to use @precision, but only @decimals for scaling both approaches can be used. UP assumes that both approaches are not mixed within one report. For simplicity UP is describing scaling for @decimals only.

**UP 91 The UP MUST provide information for the accuracy used on a fact.**

The UP will support scaling of the monetary facts applying the accuracy. Scaling will be applied on the level of Display Group where the majority of the monetary facts are defined with the same accuracy attribute. The majority is defined as two-thirds or more. Non-monetary facts will not be scaled. In case multiple Display Groups are scaled with the same scaling factor than the scaling information may be reporting in the Display group Report Information. Only scaling in thousands, million or billions will be applied.

**UP 92 The UP MAY use scaling monetary facts in Display Groups by rendering the facts based on the decimal attribute in case two-third of the facts in the Display group have an identical decimal value.**

**UP 93 The UP MUST only apply scaling of facts in a Display Group on thousands (decimal -3), millions (decimal -6) or billions (decimal -9).**

**UP 94 Scaling values MUST ONLY be rendered for numeric facts with a unit derived from the UTR with an ID ISO4217.**

The UP will only consider facts with decimal attribute for scaling.

**UP 95** If scaling is applied the UP MUST render in the header of each Display Group the applied scaling factor either in full words (amounts in thousands) OR by the indicator amounts in '000'<sup>1</sup>.

**UP 96** The UP MAY include the currency name in the scaling indicator (e.g amounts in thousands Euro or Euro '000').

If any fact has a scaling value decimal or precision that differs from scaling of the Display Group than the UP must not use scaling and show the absolute fact value with information about the accuracy in the format (decimal value) (/x, x is decimal value without '-').

**UP 97** The UP MUST NOT scale facts that have a different value for @decimals than that is used as default for the scaling of the facts in the Display Group.

It can be useful to report the scaling factor in the Display Group Report Information in case most or all Display groups use the same scaling factor.

**UP 98** The UP MAY display the most used scaling factor in the Display Group Report Information if two/third of the Display Groups are scaled based on the same scaling factor.

Scaling in the UP is based on removing the non-significant part of the value e.g. 12000 decimal -3 will be scaled to thousands and displayed as 12. Facts with a significant portion other than zero's also will be truncated for the non-significant portion e.g. the facts 12345 will also be rendered as 12 as the fact value 12999 will be scaled to 12.

**UP 99** The UP MUST NOT show the non-significant portion of a fact value beyond the significant portion based on the decimal attribute.

Scaling example		
Display Group (Amounts in € '000')		
Fact A	1.234	( fact value 1234000 decimal -3, scaling based on default)
Fact B	1.234 (/0)	( fact value 1234 decimal 0)
Fact C	1.234.000.000 (/6)	(fact value 1234000000 decimal -6)
Fact D	1.234	(fact value 1234567 decimal -3)

Note 1: All fact values not scaled based on a default scaling factor will have the indication (/x) behind the value indicating the decimal value of the fact where /0 = decimal 0, /3 = Decimal -3 (thousands), /6 = decimal -6 (millions), /9 = decimal -9 (billions).

Note 2: the scaled fact value for fact D will show the significant portion. The non-significant portion is truncated.

<sup>1</sup> <http://www.xbrl.org/RFC/PDU/PWD-2008-10-09/PDU-RFC-PWD-2008-10-09.html> chapter 6.3 handles inference of precision from decimals

## 5.5 Separators

A decimal separator is a symbol used to separate the integer part from the fractional part of a number written in decimal form. Different countries officially designate different symbols for the decimal mark. The choice of symbol for the decimal separator also affects the choice of symbol for the thousands separator used for thousands, millions, billions etc.

**UP 100 The UP MUST render the decimal separator for all facts where the decimal attribute is zero '0' or greater than zero '0'.**

**UP 101 The UP MAY render the thousands separator.**

**UP 102 The UP MAY use the local default separator notation.**

For non-Anglo-Saxon countries the comma ',' is used for decimals and the period '.' as thousands separator. For Anglo-Saxon countries the decimal separator is a period '.' and the thousands separator a comma ','.

## 5.6 Nil and empty fact values

Facts may have no value or an attribute xsi:nil with the value 'true' in the instance. Since the reporter has made these entries explicit, they must be rendered in the UP.

**UP 103 The UP MUST render 'nil' and empty value facts that have been reported.**

## 5.7 Footnotes

Footnotes are a basic XBRL 2.1 feature, for their identification see the XBRL 2.1 specification. Regarded for this document as being 'part of' a footnote is the

- locator pointing to a fact, ELR, table or axis
- arc connecting the fact, ELR, table or axis to a footnote
- resource containing the footnote content

If the locator is not referencing a fact in the same instance, the footnote is treated as 'random Xlink content' see elsewhere for handling Xlink content.

Facts that have a reference with a footnote should be using a superscript sign at the rendering of the fact that references the footnote.

**UP 104 If a footnote references a single fact then the footnote MUST be rendered at the bottom of each Display Group where the fact is reported.**

Footnotes that honour this exception are called 'Single fact footnotes'.

**UP 105 Footnotes that refer to more than one fact MUST be displayed in the Display Group 'Footnotes'.**

**UP 106 The Display Group 'Footnotes' MUST be placed directly after all entity Display Groups.**

Footnotes may have multiple languages expressed through @xml:lang. Multiple languages do not influence the status of being a single fact footnote.

Footnotes should be ordered in the Display Group Footnotes. All ordering is alphabetically ascending. If multiple facts are referred to by the footnote, the footnote is repeated as many times as there are facts referring to it;

1. In the way the facts they refer to are ordered;
2. If a single fact refers multiple footnotes, the @order and @priority on the arcs determine the order amongst the footnotes;
3. If a single arc addresses multiple footnote resources these are ordered on the bases of their @xlink:role content, then the @xml:lang content then the source content.

The header of section of a Display Group with single fact footnotes is '*Footnotes*'.

The header of the Footnote Display Group is '*Footnotes addressing multiple facts*'.

Each Display Group containing facts referencing multiple footnotes are displayed as parent of a tree. The name reflecting the name of the Display Group. Each 'parent' Display Group has the facts as children that reference footnotes. For Single fact footnotes the fact is the top level. Each fact lists all of its aspects (entity, period, segment/scenario content, unit, @xml:lang, @decimals, @precision, @xsi:nil, @custom attributes, in this order) as its children. The last child is the footnote resource including the @xml:lang and @xlink:role.

## 5.8 Non Presentable Facts Display Group

When the XBRL Instance hold facts that are not related to any T-link or P-link the taxonomy does not provide any usable structural information for the UP to render these facts. The UP provides a set of rules how to render these facts without taxonomy presentation information.

**UP 107 The UP MUST render all facts that are not included in any Display Group based on T-link or P-link into the Display Group Non Presentable Facts.**

**UP 108 For Display Group Non Presentable Facts the same rules MUST be applied as for Display Groups for Entity, Period Sets and Segment/Scenarios.**

## 6 Other XBRL related objects

### 6.1 Entrypoints

Entrypoints describe the access to the taxonomy from the viewpoint of the filer. That is the basis and starting point for presenting an instance. All entrypoint information must be accessible for the reader of a rendered instance for technical reference.

**UP 109 Entrypoints MUST be listed in Display Group 'Non-referenced XBRL content'.**

**UP 110 Display Group Non-referenced XBRL content MUST be listed after the Display Group Non Presentable Facts.**

### 6.2 Non referenced contexts

Non-referenced contexts are contexts present in the instance which do not get referenced by any fact.

**UP 111 Non-referenced contexts MUST be rendered in separate Display Group 'Not referenced contexts'.**

**UP 112 Non-referenced contexts MUST render the context information ordered by: context ID, entity scheme, entity identifier, period, segment-dimension, member, scenario-dimensions, member alphabetically ascending sorted.**

The header of the non-referenced contexts Display Group is '*Non-referenced XBRL Contexts*'.

### 6.3 Non referenced units

Non-referenced units are units present in the instance which do not get referenced by any fact.

**UP 113 Non-referenced units MUST be rendered in separate Display Group 'Not referenced units'.**

**UP 114 Non-referenced units MUST be alphabetically ascending sorted by their unit id.**

The header of the non-referenced units Display Group is '*Non-referenced XBRL Units*'.

## 6.4 Random Xlink content

Random Xlink content is formed by finding XML nodes in the instance file that are (derived) from the namespaces: <http://www.xbrl.org/2003/linkbase> or <http://www.w3.org/1999/xlink>.

**UP 115 Random Xlink content MUST have its own Display Group.**

Excluded are the nodes that are being part of a XBRL footnote structure that are referencing facts in the same instance (see elsewhere in this document) and the link:schemaRef and link:linkbaseRef nodes and their children.

The 'Random Xlink content Display Group' must be listed AFTER the 'non-referenced XBRL Units' Display Group. Within the random Xlink content Display Group the order is determined by ordering the nodes found alphabetically based on their parent node. The XML hierarchy in nodes is respected. Within equally named nodes the @xlink:label content is ordered alphabetically ascending.

**Note-1:** the aforementioned ordering mechanism means that Xlink relationships are not properly grouped around an arc, software may 'link' the arc to its resources and/or locators but this does not influence the ordering.

**Note-2:** the xlink:href attribute can address XML outside the instance. This content is not being retrieved.

**Note-3:** the xlink:href attribute can address facts from multiple Display Groups (entities, facts in different periods etc.), this does not result in any ordering changes. Software may create 'links' to other positions in the report as long as they are clearly indicated.

The header of the random Xlink content Display Group is '*Xlink content, not being footnotes*'.

The rendering of nodes is done by its native XML, there is no resolving in finding labels or other XML.

## 6.5 Other XML content

Identifying 'other' XML content: all XML nodes not described previously and not being the root node of the instance (or its attributes), end up in the 'Other XML content Display Group'.

Examples are:

- Processing Instructions <xs:appinfo> <? >
- XML comment <!-- -->
- Annotation/documentation <xs:annotation><xs:documentation>
- Simple/ComplexTypes not being XBRL specified
- Attribute(groups) not being XBRL specified
- Elements not being facts

**UP 116 Other XML content MUST have its own Display Group 'Other XML content'.**

Ordering 'other' XML content: the 'Other XML content Display Group' must be the last Display Group in the report. Within the other XML content Display Group XML nodes must be sorted alphabetically ascending on their local name. The XML hierarchy is honoured. Within the node, the XML document order applies.

The header of the other XML content Display Group is '*Other XML content*'.

The rendering of nodes is done by its native XML.

## 7 Appendix A: Document history (non-normative)

<b>Version</b>	<b>Date</b>	<b>Author</b>	<b>Details</b>
0.9.7.2	October 29, 2014	UP team	Draft release
0.9.7.4	October 30, 2014	UP team	Tables updated
0.9.7.5	October 31, 2014	Paul Snijders	Delivery PWD

## 8 Appendix B: Rule reference

UP 1	The XBRL instance MUST be valid and based on a XBRL taxonomy that MUST be valid. The UP will not perform any validation. ....	5
UP 2	The UP MUST be based exclusively on XBRL specifications with the status 'Recommendation'. ....	5
UP 3	All XII defined presentation definitions are part of the Discoverable Taxonomy Set (DTS). No other presentation definition will be considered or applied. ....	5
UP 4	The DTS MUST ONLY be derived from endpoint(s) present in the instance. ....	5
UP 5	All and only rules in this document will be applied to create the UP. ....	5
UP 6	The UP MUST use the TLB when discovered in the DTS. ....	6
UP 7	The process of elimination of empty slices (rows/columns) MUST be applied. ....	6
UP 8	Tuples that appear only once inside an instance on root level, not containing repetitive children MUST BE supported when rendering tables. ....	6
UP 9	Repeating tuples or repeating children inside a tuple MUST NOT be handled by tables, they MUST be handled in the 'non presentable facts display group'. ....	7
UP 10	The UP MUST follow the Presentation links as discovered in the DTS. ....	7
UP 11	The UP MUST follow the determination and decision process for Display Groups as described. ....	8
UP 12	The UP MUST not have duplicate Display Groups. ....	8
UP 13	The UP MUST not have empty Display Groups. ....	8
UP 14	The Display Group header MAY report the default values for entity, unit, dimension/member or segment or scenario and scaling. ....	8
UP 15	In each Display Group the UP MUST provide information for the specific entity, unit, segment dimension/member or scenario dimension/member when that information differs from the Default Values rendered in the Display Group header. ....	8
UP 16	The UP MAY have a first Display Group; Report information for global information about the content of the report. ....	11
UP 17	The Display Group Report Information MAY report the default values for entity, unit, dimension/member or segment or scenario and scaling. ....	11
UP 18	The UP MUST show facts for each unique entity in a separate Display Group. ....	13
UP 19	Display Groups for entities MUST be ordered alphabetically ascending based on Entity scheme and subsequently on ascending Entity-Identifier. ....	13
UP 20	If the instance contains only contexts with a single entity the UP MAY show the entity information in the Display Group Report Information. The UP MAY show the entity information in each header of each new Display Group. ....	13
UP 21	If the instance has facts for multiple unique entities the entity information MUST NOT be shown in the Display Group Report Information, the entity information MUST be displayed in the header of each Display Group. ....	13
UP 22	THE UP MUST NOT show the entity on each row or column. ....	13
UP 23	The UP MUST NOT render an ELR if no facts are related to the ELR. ....	14
UP 24	The UP MUST render all T or P ELR's that refer to one or more facts in the instance. ....	14
UP 25	The UP MUST render ELR's with a T-link as a table using the T-link information provided, where needed integrating supporting Presentation, Definition or Other structures. ....	14
UP 26	The UP MUST NOT render P-structures separately if they are supporting a T-link structure. ....	14
UP 27	The UP MUST NOT apply rendering structures in ELR's that do not hold a T-link of P-link. ....	14



UP 28 The UP MUST render facts that are referenced by Other ELR’s in a fact-per-row way in the Display Group Non-presentable facts providing all ‘discriminating’ information within the row-scope. .... 15

UP 29 The UP MUST order the ELR’s based on their type. - first process all Tables T-links - secondly process all Presentation P-links..... 15

UP 30 Within each ELR type the UP MUST apply ordering alphabetically ascending based on ELR generic standard labels in the leading language, if available, else no label in the used language available use the ELR URI’s alphabetically ascending..... 15

UP 31 Every table MUST be rendered in a separate Display Group..... 15

UP 32 Table labels MUST be rendered in the header of the Display Group. .... 15

UP 33 Each table label MUST be rendered on its own line. .... 15

UP 34 The X and Y axes MUST be rendered according to the TLB specification. .... 15

UP 35 The X and Y axes headers MUST be clearly distinguishable from the fact carrying cells. .... 15

UP 36 X or Y axes labels not assigned to specific columns or rows, MUST be rendered on their appropriate axis and span the whole of its axis. .... 15

UP 37 The UP MUST render typed member content in a logical order: 1. Numbers from 0-9 ascending 2. Dates from oldest to newest 3. Strings alphabetically ascending..... 15

UP 38 The UP MUST render a Z-axis label following the UP Dimensional Label Concatenation Rule. .... 16

UP 39 For a Z-axis that consists of multiple dimensional values, the UP MUST render a concatenated Z-axis label constructed from ALL dimensional values labels that are constructed according to the UP Dimensional Label Concatenation Rule. .... 16

UP 40 The UP MUST render labels that are discovered from enumerated values. .... 16

UP 41 Axes that use relationship filters to build their content MUST use a tabular approach to render their parent-child relationships if placed on a row. .... 16

UP 42 The indentation in a tabular display solution on rows MUST be preserved without any compression. (E.g. tabs, whitespace blocks or spaces MAY be used as long a no information is lost about the tree structure)..... 16

UP 43 If used on a column, a parent MUST span the columns of its children. .... 16

UP 44 The UP MUST render parent labels as a span of their children in rows. .... 16

UP 45 The UP MUST render ALL parent relationships of a table:table in a tree structure preceding the table itself..... 16

UP 46 Cells in the table that cannot carry values MUST be represented differently than cells that can or have values..... 16

UP 47 Cells and headers MUST be separated from each other by –non-intrusive- lines, honouring any spanning when applicable..... 16

UP 48 The UP MUST follow the hierarchy of the Presentation Linkbase..... 17

UP 49 The UP MUST NOT show child elements for which no facts are reported in the instance. .... 17

UP 50 The UP MUST NOT show any branches for which no facts are reported in the instance..... 17

UP 51 The UP MUST render ALL parent information in a P-link structure for every child fact it renders. .... 17

UP 52 ‘Empty’ or ‘nil’ facts that are reported in the instance, MUST be rendered. .... 17

UP 53 The UP MUST apply the order attribute in ordering the elements in the hierarchy. .... 17

UP 54 The UP MUST alphabetically ascending order the child elements that have an identical order attribute value within the same branch..... 17

UP 55 The UP MUST render all elements without an order attribute alphabetically ascending last after all the ordered elements..... 17

UP 56 The UP MUST use indents from the parent to represent the child within P-links..... 17

UP 57	The UP MUST render tuples according to the P-link structure.....	17
UP 58	Tuple repetitions MUST be ordered in the same order as in the instance.....	17
UP 59	The UP MUST NOT apply the rules to create period sets for display groups based on TLB. ....	18
UP 60	A Period Set is the combination of an instant date that is equal to the startDate of a duration and/or the endDate of duration is equal to an instant date.....	18
UP 61	A instant is considered to be equal to an start/endDate if the difference in time is 0hrs or 24 hrs. ....	18
UP 62	A start/endDate is considered to be equal to another start/endDate if the difference in time is 0hrs or 24 hrs. ....	18
UP 63	The UP MUST render facts for the same Period Set in one Display Group. ....	18
UP 64	The UP MUST display the facts in one column from one period set where Instant date is equal to the end date of the duration.....	18
UP 65	The UP MUST NOT render more than two subsequent Period Sets in one Display Group. ....	20
UP 66	Period Sets <i>in</i> and <i>over</i> Display Groups MUST be ordered with the most recent Period Set first. ....	20
UP 67	The UP MUST render Period Sets that are not subsequent in different Display Groups. ....	20
UP 68	Facts for periods not part of any Period Set MUST be rendered in different columns with a maximum of six fact columns.....	20
UP 69	The UP MUST render in the column header the period for which facts are reported using the notation of the period in the instance. ....	20
UP 70	The UP MUST show the value for instant period in case the period set is defined by an instant period equal to the end date of a duration.....	20
UP 71	Every unique segment/scenario content MUST result in a separate Display Group.....	21
UP 72	The Rule for segment/scenario MUST not be applied when Display Group is based on the TLB. ....	21
UP 73	The ordering of Display Groups for segment/scenario MUST be alphabetically ascending for the content of segment and subsequently for scenario. The order MUST be based on dimension first and sub order on member. ....	21
UP 74	If the instance has a xml:lang value on root level, the UP MUST use this language to represent the labels of the ELR's and elements.....	22
UP 75	If the instance has one unique xml:lang value on all string based facts, the UP MUST use this language to represent the labels of the elements. ....	22
UP 76	If the instance does not provide a value for xml:lang and the taxonomy contains more than one language the UP MUST use the first language based on the ISO language code system (e.g., DK, EN, NL).....	23
UP 77	The UP MUST use label roles in this specific order: 1. Preferred label; 2. Standard label; 3. Terse label; 4. Verbose label.....	23
UP 78	Local names MUST be used if no Preferred, Standard, Terse or Verbose labels are present. ....	23
UP 79	The UP MUST not modify, calculate, convert or translate fact values in any form. ....	24
UP 80	The UP MUST render ALL facts at least once.....	24
UP 81	The UP MUST provide unit information for all numeric facts.....	24
UP 82	The UP MUST render the unitName for measures based on the UTR.....	24
UP 83	The UP MUST render the local name of the measure(s) if not available in the UTR.....	24
UP 84	The UP MAY render the currency name in the Display Group Report Information and/or the UP MAY render the currency name in the header of each Display Group. ....	24
UP 85	The UP MUST NOT render the currency names in the Display Group Report Information when multiple currencies are being used. ....	24

UP 86	The UP MAY render the currency name in the header of each Display Group if all currencies in the Display Group are the same.....	24
UP 87	The UP MUST render the local unit name of the measure before each fact value if multiple currencies are used in the Display Group. ....	25
UP 88	The UP MUST render the unitName for UTR non-currency based measures behind the fact value.....	25
UP 89	The UP MUST render the local name of the measure if the measure is not available in the UTR. ....	25
UP 90	Unit measures representing percentage or per-mille MUST be rendered as ‘%’ or ‘‰’ sign behind the fact value.....	25
UP 91	The UP MUST provide information for the accuracy used on a fact. ....	25
UP 92	The UP MAY use scaling monetary facts in Display Groups by rendering the facts based on the decimal attribute in case two/third of the facts in the Display group have an identical decimal value. ....	25
UP 93	The UP MUST only apply scaling of facts in a Display Group on thousands (decimal -3), millions (decimal -6) or billions (decimal -9).....	25
UP 94	Scaling values MUST ONLY be rendered for numeric facts with a unit derived from the UTR with an ID ISO4217.....	25
UP 95	If scaling is applied the UP MUST render in the header of each Display Group the applied scaling factor either in full words (amounts in thousands) OR by the indicator amounts in ‘000’ .....	26
UP 96	The UP MAY include the currency name in the scaling indicator (e.g amounts in thousands Euro or Euro ‘000’).....	26
UP 97	The UP MUST NOT scale facts that have a different value for @decimals than that is used as default for the scaling of the facts in the Display Group.....	26
UP 98	The UP MAY display the most used scaling factor in the Display Group Report Information if two/third of the Display Groups are scaled based on the same scaling factor.....	26
UP 99	The UP MUST NOT show the non-significant portion of a fact value beyond the significant portion based on the decimal attribute.....	26
UP 100	The UP MUST render the decimal separator for all facts where the decimal attribute is zero ‘0’ or greater than zero ‘0’ .....	27
UP 101	The UP MAY render the thousands separator.....	27
UP 102	The UP MAY use the local default separator notation. ....	27
UP 103	The UP MUST render ‘nil’ and empty value facts that have been reported.....	27
UP 104	If a footnote references a single fact than the footnote MUST be rendered at the bottom of each Display Group where the fact is reported. ....	27
UP 105	Footnotes that refer to more than one fact MUST be displayed in the Display Group ‘Footnotes’. ....	27
UP 106	The Display Group ‘Footnotes’ MUST be placed directly after all entity Display Groups.....	27
UP 107	The UP MUST render all facts that are not included in any Display Group based on T-link or P-link into the Display Group Non Presentable Facts. ....	28
UP 108	For Display Group Non Presentable Facts the same rules MUST be applied as for Display Groups for Entity, Period Sets and Segment/Scenarios.....	28
UP 109	Entrypoints MUST be listed in Display Group ‘Non-referenced XBRL content’ .....	29
UP 110	Display Group Non-referenced XBRL content MUST be listed after the Display Group Non Presentable Facts. ....	29
UP 111	Non-referenced contexts MUST be rendered in separate Display Group ‘Not referenced contexts’. ....	29

UP 112 Non-referenced contexts MUST render the context information ordered by: context ID, entity scheme, entity identifier, period, segment-dimension, member, scenario-dimensions, member alphabetically ascending sorted..... 29

UP 113 Non-referenced units MUST be rendered in separate Display Group 'Not referenced units'. .... 29

UP 114 Non-referenced units MUST be alphabetically ascending sorted by their unit id..... 29

UP 115 Random Xlink content MUST have its own Display Group. .... 30

UP 116 Other XML content MUST have its own Display Group 'Other XML content'. .... 30