Review of Technical Changes for Vendors & Data Providers

Proposed 2017 US GAAP Taxonomy

October 18, 2016



Agenda

- Introduction of speakers
- Typed dimensions
- Extensible enumerations
- Taxonomy disclosure template
- Taxonomy package
- Change Notes/Taxonomy Implementation Notes



Introduction of Speakers

- Walter Hamscher
 - Senior IT Program Manager, Office of Structured Disclosure,
 U.S. Securities and Exchange Commission
- Campbell Pryde
 - President and CEO, XBRL US
- Paul Warren
 - Technical Director, XBRL International
- Louis Matherne
 - Chief of Taxonomy Development, FASB
- David Shaw
 - XBRL Project Manager, FASB



Before We Begin...

- Purpose of today's webcast is primarily to discuss the "how" and not the "why"
- Additional information on the why
 - Release notes:
 - https://tinyurl.com/hbntm5g
 - Replay of FASB Webcast:
 - https://tinyurl.com/h46cqo2
- Additional information is included in the Technical Guide:
 - https://tinyurl.com/z8exmaj



Removing Ambiguity in Taxonomy Use

- Reducing and constraining dimension use
 - Use explicit dimensions for disaggregations and move properties to line items
 - Data aggregators prefer line items over dimensions
 - Could use stringItemType for properties as line items but extensible enumerations are more precise and constrained
 - Simplify XBRL contexts in instance
 - Use typed dimensions to associate related line item facts and properties
 - Associated Fact dimensions
 - Supports properties as line items
- Taxonomy disclosure templates further simplifies and constrains modeling choices



- Explicit dimensions use members defined in the definition linkbase; either base or extension taxonomy
- Typed dimensions are identified by the presence of the xbrldt:typedDomainRef attribute
 - Defines the simple data type that the members are reported as
 - Date
 - Year
 - String
 - Positive integer
 - •
 - Member values are specified in the instance document



Typed dimensions are defined by Dimensions specification

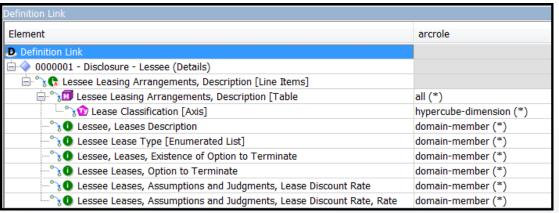
 https://specifications.xbrl.org/spec-group-index-groupdimensions.html



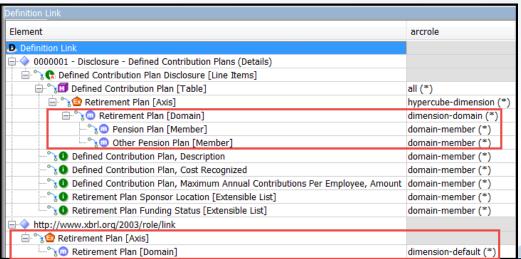
- Definition linkbase relationships not used
 - Dimension-domain
 - Domain-member (no dimension members)
 - Dimension-default
 - Dimension-domain
- Definition linkbase relationships used
 - All
 - Hypercube-dimension
 - Domain-member (for primary line items only)



Typed dimensions



Explicit dimensions



- Proposed Taxonomy includes positive integer data type
 - Constrains the members in the instance to only positive integers (1, 2, 3, 4, etc.)
- Positive integer members as used here do not have semantic meaning and are only used to associate related information
- Included in the relationship groups for Leases, Revenue, and Retirement Benefits



Example

```
<xs:element abstract="true" id="us-gaap_LeaseClassificationAxis" name="LeaseClassificationAxis" nillable="true" substitutionGroup="xbrldt:dimensionItem"
type="xbrli:stringItemType" xbrli:periodType="duration" xbrldt:typedDomainRef="#us-gaap_LeaseClassificationAxis.domain"/>
<xs:element name="LeaseClassificationAxis.domain" id="us-gaap_LeaseClassificationAxis.domain" nillable="true" type="xs:positiveInteger"/>
```

```
<xbrli:context id="FiscalYear Duration 01">
 <xbrli:entitv>
   <xbrli:identifier scheme="http://www.sec.gov/CIK">0000000000</xbrli:identifier>
   <xbrli:segment>
     <xbrldi:typedMember dimension="us-gaap:LeaseClassificationAxis">
       <us-gaap:LeaseClassificationAxis.domain>01
      </us-gaap:LeaseClassificationAxis.domain>
     </xbrldi:typedMember>
   </xbrli:seament>
 </xbrli:entity>
 <xbrli:period>
   <xbrli:startDate>2016-01-01
   <xbrli:endDate>2016-12-31
 </xbrli:period>
</xbrli:context>
<xbrli:context id="FiscalYear Duration 02">
 <xbrli:entity>
   <xbrli:identifier scheme="http://www.sec.gov/CIK">0000000000</xbrli:identifier>
   <xbrli:segment>
     <xbrldi:typedMember dimension="us-gaap:LeaseClassificationAxis">
       <us-gaap:LeaseClassificationAxis.domain>02
       </us-gaap:LeaseClassificationAxis.domain>
     </xbrldi:typedMember>
   </xbrli:seament>
 </xbrli:entity>
 <xbrli:period>
   <xbrli:startDate>2016-01-01
   <xbrli:endDate>2016-12-31
 </xbrli:period>
</xbrli:context>
```



Open items for Final 2017 Taxonomy

- May add additional data types
 - Retirement benefits may consider string
 - Revenue may consider different date data types
 - Year
 - Year-month
 - Duration
- Tool sets will need to accommodate typed dimensions with various data types



Typed Dimensions Effect of member data type on rendering

Numeric, date, duration: ordered as schema data type

Enumerated: enumeration order

Strings: lexical order

Element	pref. label
Presentation Link	
i → 1 - Document - Role 1 (http://edgar/role/role1)	
˰ № 1 Text Block	
i° <mark>%Ⅲ</mark> Table	
···· ° v û Pmt	terseLabel
⊟் 🥎 🖍 Info:	terseLabel
Cash Disbursement	

	3 Months Ended			
Role 1	Jul. 01, 2009 USD (\$)			
Pmt: 1				
Info:				
Cash Disbursement	\$ 12,345			
Pmt: 2				
Info:				
Cash Disbursement	23,456			
Pmt: 3				
Info:				
Cash Disbursement	34,567			
Pmt: 4				
Info:				
Cash Disbursement	\$ 45,678			



Questions



List of values that filers can augment

- Like any other line item but with "constrained flexibility"
- Base list is defined in the base taxonomy definition linkbase
- Filer adds values through their extension taxonomy
 - Additions may be base or extension elements
 - "Extensibility" is that the list of values can be added to—not that they are necessarily extension elements
 - So long as they fit the domain
- MUST reference base taxonomy linkrole, i.e., not in an extended linkrole (ELR)



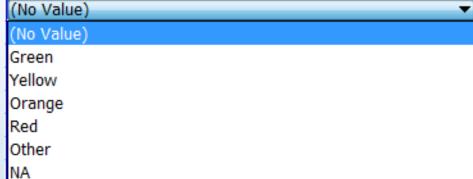
Contrast with enumerated list:

 Provide possible values defined in us-types-draft-2017-01-31.xsd:

- Any element with this data type can only report the values listed above

(No Value)

▼





- Filers ability to add possible values is made available by new attributes included:
 - enum:linkrole
 - enum:domain
- To use the Extensible Lists the extension taxonomy <u>must</u> reference the domain-member relationships:
 - http://xbrl.fasb.org/us-gaap/draft/elts/us-gaap-eedm-def-draft-2017-01-31.xml
- Preparers continue to add labels to the members used



- Extensible enumerations defined in the specification:
 - Specification
 - https://specifications.xbrl.org/spec-group-index-extensibleenumerations.html
 - Schema
 - http://www.xbrl.org/2014/extensible-enumerations.xsd
- XII is currently working on Extensible Enumerations 1.1
 - Allows multiple QName values to be reported

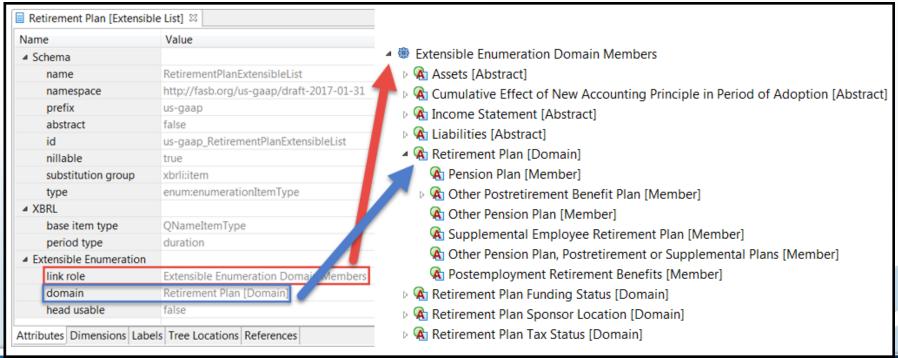


Illustration

us-gaap-draft-2017-01-31.xsd

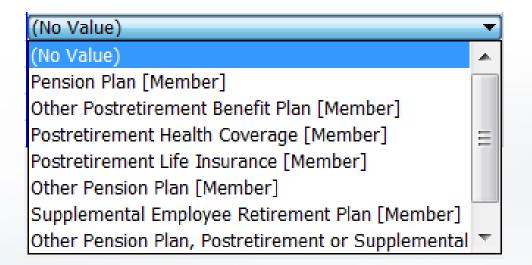
```
<xs:element id="us-gaap_RetirementPlanExtensibleList" name="RetirementPlanExtensibleList" nillable="true"
substitutionGroup="xbrli:item" type="enum:enumerationItemType" xbrli:periodType="duration"
enum:linkrole="http://fasb.org/us-gaap/role/eedm/ExtensibleEnumerationLists" enum:domain="us-gaap:RetirementPlanDomain"/>
<xs:element abstract="true" id="us-gaap_RetirementPlanSponsorLocationDomain" name="RetirementPlanSponsorLocationDomain"</pre>
```

us-gaap-eedm-def-draft-2017-01-31.xml





Illustration





Example

Benefit Obligation Outstanding:

Our funded plans have tax-exempt status.

Our unfunded plans are located in Europe.

Funded plans 50
Unfunded plans 60
Total 110



Example

- Before – properties as dimension-member pairs

Context			Fact Values	
RetirementPlanFundingStatusAxis	RetirementPlanTaxStatusAxis	Retirement Plan Sponsor Location Axis	Data	DefinedBenefitPlan
RetirementPlanFundingStatusAxis	RetirementPlanTaxStatusAxis	RetirementPlansponsorLocationAxis	Date	BenefitObligation
FundedPlanMember	QualifiedPlanMember	RetirementPlanSponsorLocationDomain	2016-12-31	50
UnfundedPlanMember	RetirementPlanTaxStatusDomain	EuropeMember	2016-12-31	60
RetirementPlanFundingStatusDomain	Retirement Plan Tax Status Domain	Retirement Plan Sponsor Location Domain	2016-12-31	110

- After – properties as line items

Context			Fact Values	
Dating an aut Dian Franchis a Status Avria	Date	DefinedBenefitPlan	RetirementPlanTaxStatusExtensi	RetirementPlanSponsorLocatio
RetirementPlanFundingStatusAxis		BenefitObligation	bleList	nExtensibleList
FundedPlanMember	2016-12-31	50	us-gaap:QualifiedPlanMember	
UnfundedPlanMember	2016-12-31	60		us-gaap:EuropeMember
RetirementPlanFundingStatusDomain	2016-12-31	110		



Open items for Final 2017 Taxonomy

- May include limited additions for Final Taxonomy
- Preference is to use Extensible Enumerations 1.1, which allows for multiple QName values to be reported
 - "The company maintained pension plans in Poland, France and Norway."
 - Fact would be:

```
<us-gaap:SponsorLocationExtensibleList>
country:PL
country:FR
country:NO
</us-gaap:SponsorLocationExtensibleList>
```



Questions



Set of base taxonomy presentation, calculation, and definition linkbase files that can be referenced in extension taxonomies.

- Differs from other linkbases in two important ways:
 - EDGAR will allow the linkbases to appear in the DTS of a submission (i.e., it will appear in edgartaxonomies.xml)
 - Arcs have priority=10, so that EDGAR will not allow filers to remove or override them if referenced
 - Preparers will continue to add labels



- One example has been included in the base taxonomy that can be referenced in a filer's extension taxonomy, based on an example in the Taxonomy Implementation Guide for Disposal Groups and Discontinued Operations
 - When a filer's disclosures matches one of the examples, the filer need not recreate the modeling in their extension taxonomy
 - Instead reference the template in the Taxonomy (LR 775100)
- Template can still be augmented in the extension taxonomy to more precisely match the filer's disclosure



Example from Implementation Guide

	As of December 31, 20X0
L1, A1:M1, A2:ExM5	\$ 530
L2, A1:M1, A2:ExM5	95
L3, A1:M1, A2:ExM5	120
L4, A1:M1, A2:ExM5	214
L5, A1:M1, A2:ExM5	18
L6, A1:M1, A2:ExM5	977
L6, A1:M2, A2:ExM5	187
L6, A2:ExM5	\$ 1,164
L7, A1:M1, A2:ExM5	\$ 67
ExL8, A1:M1, A2:ExM5	483
L9, A1:M1, A2:ExM5	72
L10, A1:M1, A2:ExM5	622
L10, A1:M2, A2:ExM5	84
L10, A2:ExM5	s 706
	L2, A1:M1, A2:EXM5 L3, A1:M1, A2:EXM5 L4, A1:M1, A2:EXM5 L5, A1:M1, A2:EXM5 L6, A1:M1, A2:EXM5 L6, A1:M2, A2:EXM5 L6, A2:EXM5 L7, A1:M1, A2:EXM5 EXL8, A1:M1, A2:EXM5 L9, A1:M1, A2:EXM5 L10, A1:M1, A2:EXM5 L10, A1:M2, A2:EXM5



File locations

- Schema
 - http://xbrl.fasb.org/us-gaap/draft/dis/us-gaap-dis-disopstmp01-draft-2017-01-31.xsd
- Definition linkbase
 - http://xbrl.fasb.org/us-gaap/draft/dis/us-gaap-dis-disopstmp01-def-draft-2017-01-31.xml
- Presentation linkbase
 - http://xbrl.fasb.org/us-gaap/draft/dis/us-gaap-dis-disopstmp01-pre-draft-2017-01-31.xml
- Calculation linkbase
 - http://xbrl.fasb.org/us-gaap/draft/dis/us-gaap-dis-disopstmp01-cal-draft-2017-01-31.xml



Linkbase references in filer extension schema

OR

Schema import

```
<xsd:import namespace="http://fasb.org/dis/disopstmp01/draft-2017-01-31" schemaLocation=
"http://xbrl.fasb.org/us-gaap/draft/dis/us-gaap-dis-disopstmp01-draft-2017-01-31.xsd"/>
```



Open items for Final 2017 Taxonomy

- For schema, change taxonomy import to http://xbrl.fasb.org/us-gaap/draft/elts/us-gaap-draft-2017-01-31.xsd so individual linkbase files do not have to all be referenced to be used
- Considering additions for Retirement Benefits
 - Utilize calculations
- Other implementation guides for 2018



Questions



Taxonomy Package

- Manifest file included with the ZIPPED draft Taxonomy that allows compliant tools to identify the entry points automatically
- Manifest file also provides mappings from public URLs (e.g. http://xbrl.fasb.org/us-gaap/...) to files in the ZIP
- Conforms to XBRL International Taxonomy Package 1.0 specification
 - https://specifications.xbrl.org/spec-group-index-taxonomy-packages.html



Taxonomy Package

Questions



Taxonomy changes were previously identified in the base taxonomy using Change Label, Deprecated Date Label and Deprecated Label.

- Starting with the proposed 2017 Taxonomy Update, all taxonomy changes are identified using the Change Note (CN) consistent with Taxonomy Implementation Notes (TIN) construct introduced with the 2016 Taxonomy Update.
- The information that was previously in the label section can be viewed in the reference section of the Taxonomy alongside the TINs and Accounting Standards Codification references.



Structure

 http://xbrl.fasb.org/us-gaap/draft/elts/us-parts-cn-draft-2017-01-31.xsd

Name	Type Local Name	Doc. (en)
TaxonomyVersion	gYear	Taxonomy Version in [CCYY] format
ChangeDate	gYearMonth	Taxonomy change date in [CCYY-MM] format
Source	string	Source for change label. Examples include: ASU - Extraordinary Items; ASU - Revenue Recognition
NewElement	boolean	Identifies new elements
ElementDeprecated	boolean	Identifies deprecated elements
ModifiedDeprecatedLabel	boolean	Identifies Modified Deprecated Label
ModifiedReferences	boolean	Identifies reference changes
ModifiedLabels	boolean	Identifies Modified Standard, Period Start, Period End, or Total Labels
ModifiedDocumentation	boolean	Identifies Modified Documentation Label
PreviousDocumentation	string	Modified Documentation Label. Originally read as follows
DeprecatedDate	date	Deprecation date in [CCYY-MM] format
DeprecatedLabel	string	Deprecation label
ModifiedBalanceType	boolean	Identifies Modified Balance Type Label
ModifiedPeriodType	boolean	Identifies Modified Period Type Label
ModifiedDataType	boolean	Identifies Modified Data Type Label



Rendering

bels	
Туре	Lang Label
Standard Label	en- US Deferred Policy Acquisition Costs, Period Increase (Decrease) {22}
Documentation	en- US Amount of increase (decrease) in deferred policy acquisition cost.
Total Label	en- US Deferred Policy Acquisition Costs, Period Increase (Decrease), Total {22}
References	
Туре	Reference
Change Notes	TaxonomyVersion 2017 ChangeDate 2016-07 ModifiedReferences true
Change Notes	TaxonomyVersion 2016 ChangeDate 2015-11 ModifiedDocumentation true Total net Increase or Decrease in changes to deferred policy acquisition costs due to one or more transactions, including amortization of costs and modifications or internal replacements of existing insurance contracts.
Taxonomy Implementati	PublishDate 2015-11 ion Positive_XBRL_Value



Open items for Final 2017 Taxonomy

- Add additional part to include the ASU number
 - Custom data type will be created
- Make deprecation information consistent across each of the covered Taxonomy years
- Attempt to pare down the parts included in the deprecation information



- TINs assist in appropriate element selection
 - "Element is modeled from the income statement perspective. Element may be used in the Statement of Operations."
- Provide guidance on adoption of new ASU's
 - "If Accounting Standards Update 2016-01 is adopted, this element may be appropriate for periods of and after adoption."
- Provide guidance on value polarity
 - "Enter a positive XBRL value for net increases."
 - "Enter a negative XBRL value for net decreases."



Structure

 http://xbrl.fasb.org/us-gaap/draft/elts/us-parts-tin-draft-2017-01-31.xsd

Name	Type Local Name	Doc. (en)	
PublishDate	gYearMonth	Publish date for Taxonomy Implementation Note in [YYYY-MM] format	
Source	string	Source for Taxonomy Implementation Note. Examples include: Taxonomy Implementation Guide [TIG]; Accounting Standards Update [
SourceName	string	Source name, example: Subsequent Events	
SourceVersion	string	Source version	
Positive_XBRL_Value	string	XBRL value to be entered as positive, when reported amount is present; examples include facts reported as [Gain] [Increase] [Accumul	
Negative_XBRL_Value	string	XBRL value to be entered as negative, when reported amount is present; examples include facts reported as [Loss] [Decrease] [Accum	
Note	string	Taxonomy implementation note.	
AlternateElement	QName	Potential alternate element name(s).	
AlternateElementForPeriodOfAndAfterAdo	QName	Potential alternate element names(s) for period of and after adoption.	
AlternateElementForPeriodsPriorToAdoption	QName	Potential alternate element names(s) for periods prior to adoption.	
TransitionOption	QName	Transition options for new ASU. Appropriate values include: [Retrospective] or [Prospective]	
URI	anyURI	URI link to Taxonomy Implementation Guide.	



Rendering

Business Combination, Recog	nized Identifiable Asse	ts Acquired and Liabiliti	es Assumed, Deferred Tax Liabilities {43}
Taxonomy Implementation Note	Note PublishDate Source SourceName TransitionOption		rds Update 2015-17 is adopted and applied retrospectively, this element may be appropriate for a deferred tax liability ss combination that previously would have been considered a deferred tax liability assumed in a business combination or noncurrent.
Taxonomy Implementation Note	Note PublishDate Source SourceName AlternateElementForPeriodsPriorToAdoption TransitionOption		If Accounting Standards Update 2015-17 is adopted and applied prospectively, this element may be appropriate for prospective periods for a deferred tax liability assumed in a business combination that previously would have been considered a deferred tax liability assumed in a business combination classified as current or noncurrent. 2015-11 ASU Taxes BusinessCombinationRecognizedIdentifiableAssetsAcquiredAndLiabilitiesAssumedDeferredTaxLiabilitiesNoncurrent Prospective
Taxonomy Implementation Note	Note PublishDate Source SourceName AlternateElementForPeriodsPriorToAdoption TransitionOption		If Accounting Standards Update 2015-17 is adopted and applied prospectively, this element may be appropriate for prospective periods for a deferred tax liability assumed in a business combination that previously would have been considered a deferred tax liability assumed in a business combination classified as current or noncurrent. 2016-02 ASU Taxes BusinessCombinationRecognizedIdentifiableAssetsAcquiredAndLiabilitiesAssumedDeferredTaxLiabilitiesCurrent Prospective



Open items for Final 2017 Taxonomy

- Change the TransitionOption part from QName to an enumerated list of options
 - Retrospective
 - Prospective
 - Modified Retrospective
 - Modified Prospective
- Add part to explain changes to the TIN from the previous
 Taxonomy version



Questions

