FASB Requirements for Extensible Enumerations

Changes for 2021 Taxonomies

Campbell Pryde, David Shaw

The views expressed in this presentation are those of the presenter.
Official positions of the FASB are reached only after extensive due process and deliberations
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Agenda

- Summary
- Data Type Registry (DTR)
- Extensible Enumerations 2.0 (EE 2.0)
Summary

- Technical changes planned for 2021 US GAAP and SRT taxonomies
  - Implement DTR & EE 2.0

- Impact processes and software
  - Break instance documents that are not syntactically valid
  - Software developers of service providers need to be ready
Data Type Registry

Recommendation Status

- Codifies num and nonnum schemas into a single schema
  - Change of location and namespace for data types such as domainItemType, perShare, etc.
- Adds datatypes for certain GAAP Taxonomy-defined datatypes
  - Removal of datatypes from elts/us-types-2021-01-31.xsd
    o “Change” of datatypes from GAAP Taxonomy-defined datatypes to DTR
      » gYearListItemType
      » flowItemType
- Adds new datatype of noLangTokenItemType, base type for EE 2.0
  - Necessary for implementation
Data Type Registry

- **Recommendation Status**
  - Registry:
    - http://www.xbrl.org/dtr/2020-01-21/dtr.html
  - Schema:
    - https://www.xbrl.org/dtr/type/2020-01-21/types.xsd

- **Impact to software**
  - Items hard-coded in software may be impacted
  - Extension elements could utilize DTR
  - Important for technical/developer staff
Enumerations 2.0

Extensible List elements

- Introduced with the 2017 US GAAP Taxonomy
- Custom US GAAP Taxonomy data type
  • Designed to imitate REGEX pattern initially proposed in EE 2.0
    o Allow for multiple values to be reported in a fact
  • Did not include any other validation provided for in XII-defined data type
    o Facts must be a value identifying a member or members included in the domain of allowed values
- Intended to convert to EE 2.0-defined data type once specification reached Recommendation status; reached February 12, 2020
Enumerations 2.0

Recommendation Status

- Specification:

- Schema:
  • https://www.xbrl.org/2020/extensible-enumerations-2.0.xsd

- Requirements:
  • http://www.xbrl.org/REQ/extensible-enumerations-1.1/REQ-2016-10-12/extensible-enumerations-requirements-1.1-REQ-2016-10-12.html
Enumerations 2.0

Recommendation Status

- Implement with 2021 US GAAP and SRT taxonomies
  - Change the 282 elements from the SRT-defined type to the EE 2.0-defined type
  - New ones created as EE 2.0-defined type
  - Declared with @type equal to enum2:enumerationSetItemType
    » Attributes new to the Taxonomy:
      - enum2:linkrole
      - enum2:domain
Enumerations 2.0

Included TINs on the Extensible List elements

<table>
<thead>
<tr>
<th>Taxonomy Implementation Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Note</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PublishDate</th>
<th>extensibleListDomain</th>
<th>extensibleListLinkroleLocation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RetirementPlanTaxStatusDomain</td>
<td></td>
</tr>
</tbody>
</table>

- TINs will be simplified for 2021
  - Element parts contain information for validation
Enumerations 2.0

Element structure

- Element parts contain domain of allowed values
Enumerations 2.0

Validation (Impact to software)
- Validation of the instance document requires three primary conditions for the reported facts
  - Proper format of value
  - Element reported as a fact must exist in a schema
  - Element must be present in the domain-member relationships defined in the US GAAP and SRT taxonomies
- Additional validation
  - Space-separated list of values
  - Listed facts must be unique
  - Lexicographically ordered
Enumerations 2.0

Proper value format
- The values require URI-based notation
  - Differs than REGEX pattern provided in the custom data type

```
(15) Employee Benefit Plan

The Company established a discretionary 401(k) plan effective January 2005. The 401(k) plan was amended and restated in May 2006. The 401(k) plan covers substantially all employees who have attained age 21. The participants may elect to defer a percentage of their compensation as allowable by law. The Company can make discretionary matching contributions but has not done so through December 31, 2019.
```

- 2020 and before:

<table>
<thead>
<tr>
<th>Primary Items</th>
<th>31-Dec-2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postemployment Benefits [Abstract]</td>
<td></td>
</tr>
<tr>
<td>401(k) plan - Defined Contribution Plan, Sponsor Location [Extensible List]</td>
<td>country:US</td>
</tr>
<tr>
<td>401(k) plan - Defined Contribution Plan, Tax Status [Extensible List]</td>
<td>us-gaap:QualifiedPlanMember</td>
</tr>
</tbody>
</table>
Enumerations 2.0

Proper value format

- The values require URI-based notation
  - Differs than REGEX pattern provided in the custom data type

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- Format of the facts using Enumerations 2.0:

<table>
<thead>
<tr>
<th>Element Label</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>us-gaap:DefinedContributionPlanTaxStatusExtensibleList</td>
<td><a href="http://fasb.org/us-gaap/2020-01-31#QualifiedPlanMember">http://fasb.org/us-gaap/2020-01-31#QualifiedPlanMember</a></td>
</tr>
</tbody>
</table>
Enumerations 2.0

Proper value format

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Employee Benefit Plan

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</tr>
</tbody>
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Enumerations 2.0

Element reported as a fact must exist in a schema
- For the elements in US GAAP, SRT and SEC taxonomies, not an issue
- Extension elements must be created in the extension taxonomy in order to be valid

```
Element Name: TypeOfRevenueExtensibleList
Company Name: ADAPT IMMUNE THERAPEUTICS PLC
Period: 1H, 2019
Filing Date: 2019-08-01

Filing Link: http://www.sec.gov/Archives/edgar/data/162122
```

adap:DevelopmentAndServiceMember
Enumerations 2.0

Element must be present in the domain-member relationships defined in the US GAAP and SRT taxonomies

- Relationships included in the DTS of us-gaap-2020-01-31.xsd
  - Include with 2021 schema
Enumerations 2.0

Element must be present in the domain-member relationships defined in the US GAAP and SRT taxonomies

- Domain-member relationships that can be augmented
Enumerations 2.0

Element must be present in the domain-member relationships defined in the US GAAP and SRT taxonomies

- Augmented in registrants’ extension definition linkbase files
Enumerations 2.0

Element must be present in the domain-member relationships defined in the US GAAP and SRT taxonomies

- Augment the list of members to tag facts
Example with multiple values

In addition, the Company maintained defined benefit pension plans for employees in The Netherlands, Poland, France and Norway, a defined contribution plan for employees in Ireland, the United Kingdom, Canada, Slovakia, Denmark, Finland, Sweden, Germany and India, and defined contribution postretirement plans in Italy, Belgium, China, Korea, Japan, Singapore, Thailand and Taiwan resulting in contributions charged to operations of $5.9
Enumerations 2.0

Example with multiple values
## Enumerations 2.0

### Example with multiple values

<table>
<thead>
<tr>
<th>Retirement Benefits Abstract</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Other Postretirement Benefit Plans Member</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Retirement Benefits Abstract</th>
</tr>
</thead>
</table>
Another issue identified in facts reported using Extensible List elements

- Fact should not be an extensible list element

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>XBRL</td>
<td></td>
</tr>
<tr>
<td>Label</td>
<td>Other real estate owned, Measurement Input [Extensible List]</td>
</tr>
<tr>
<td>Concept</td>
<td>OtherRealEstateOwnedMeasurementInputExtensibleList</td>
</tr>
<tr>
<td>Value</td>
<td>us-gaap:OtherRealEstateOwnedValuationTechniqueExtensibleList</td>
</tr>
<tr>
<td>Period</td>
<td>2019-09-30</td>
</tr>
<tr>
<td>Entity Identifier</td>
<td>0000357301</td>
</tr>
<tr>
<td>Identifier Scheme</td>
<td><a href="http://www.sec.gov/CIK">http://www.sec.gov/CIK</a></td>
</tr>
<tr>
<td>Footnotes</td>
<td>None</td>
</tr>
</tbody>
</table>
Thank You