

xBRL EUROPE

xBRL IT

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Hosted by



UNIONCAMERE



ESEF Validations

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- Arelle[®] Open Source XBRL

ESEF Reporting Manual

- Guidance for compliance with RTS on ESEF
 - 4 warning messages, 31 error messages
- BPTG augmented manual



Current ESEF-manual Validations in Arelle

2.4.1.xmlBaseUsed	3.3.2.anchoringRelationshipsDefinedInElrContainingDimensionalRelationships
2.5.1.embeddedImageNotUsingBase64Encoding	3.4.1.extensionTaxonomyLineItemNotLinkedToAnyCube
2.5.1.executableCodePresent	3.4.2.closedNegativeHypercubeInDefinitionLinkbase
2.5.1.imageFileCannotBeLoaded	3.4.2.notAllArcroleUsedInDefinitionLinkbase
2.5.3.fractionElementUsed	3.4.2.openPositiveHypercubeInDefinitionLinkbase
2.5.3.targetAttributeUsed	3.4.3.extensionTaxonomyDimensionNotAssignedDefaultMemberInDedicatedPlaceholder
2.5.3.tupleElementUsed	3.4.3.extensionTaxonomyOverridesDefaultMembers
3.1.1.extensionTaxonomyWrongFilesStructure	3.5.1.inlinXbrlContainsExternalReferences
3.1.1.linkbasesNotSeparateFiles	missingRequiredElements
3.2.1.extensionTaxonomyElementNameDoesNotFollowLc3	transformRegistry
3.2.2.domainMemberWrongDataType	fileNameExtension
3.2.3.typedDimensionDefinitionInExtensionTaxonomy	instanceShallBeInlineXBRL
3.2.5.abstractConceptDefinitionInExtensionTaxonomy	

Need for additional validations

- Instance

- Multi-html IXDS
- Duplicates & hidden
- Packaging
- Multi-authority filings
- Self-closed tags
- Data Quality

- Taxonomy

- Dimensions
 - Calculations
 - Labels and Names
 - Linkbases
 - Anchoring
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Multi-html Inline Document Sets (IXDS)

- Required for SEC filers (e.g., IBM's financial stmts are attachments)
 - Link together with inline viewers
 - Consider style sharing
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Duplicates

- XBRL WGN on duplicates
- Distinguish by @lang for strings & text-blocks



Hidden facts

- Prohibit or warn for transformable data types in hidden section
 - Hidden allows non-transformables: duration, token
 - Link hidden facts to corresponding display text (SEC uses @style)
 - Needed for inline viewer
 - Support audit functions
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Prohibitions

- `<base>` important to prohibit (affects `<a>`, ``, `css`)
 - Also affects disallowed elements: `script`, `form`, ...
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Instance packaging for submission

- XII Report Package (zip with manifest, instances, extension)



Multi-authority filings

- ESEF – SEC joint filings
 - Multi-document hierarchical report package structure
 - Common financial statements
 - Would require common treatment for:
 - Duplicate facts
 - Hidden fact links to visible text
 - Style
 - Renderability (e.g., Pre LB for SEC)
 - Multi-lang reporting (e.g., SEC requires EN labels)
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Self-closed tags (reported in Dubai)

- Self closed tags (loaded as html) warp siblings into children

```
<div style="display: none">↓  
  <ix:header>↓  
    <ix:hidden>↓  
      <ix:nonNumeric name="dei:Fact1" contextRef="d" xsi:nil="true"/> ↓  
      <ix:nonNumeric name="dei:Fact2" contextRef="d" xsi:nil="true"></ix:nonNumeric>↓  
      <ix:nonNumeric name="dei:AmendmentFlag" contextRef="d">>false</ix:nonNumeric>↓  
      <ix:nonNumeric name="dei:DocumentPeriodEndDate" contextRef="d">2008-12-31</ix:nonNumeric>↓
```

Elements Console Sources Network Performance Memory Application Security Au

```
▼ <div style="display: none">  
  ▼ <ix:header>  
    ▼ <ix:hidden>  
      ▼ <ix:nonnumeric name="dei:Fact1" contextref="d" xsi:nil="true"> == $0  
        <ix:nonnumeric name="dei:Fact2" contextref="d" xsi:nil="true"></ix:nonnumeric>  
        <ix:nonnumeric name="dei:AmendmentFlag" contextref="d">>false</ix:nonnumeric>  
        <ix:nonnumeric name="dei:DocumentPeriodEndDate" contextref="d">2008-12-31</ix:nonnumeric>
```

Guidance on self-closed tags

- Sigh, sorry, this is serious
 - File naming as .html (vs .xhtml) causes loading as text/html
 - File system always loads .html as text/html
 - Servers can do dynamic content headers
 - Search sites, republishers and aggregators won't do dynamic content headers
 - Resistance to renaming inline files to “.xhtml”
 - Data maybe misinterpreted in 3rd party viewers after publishing
 - Recommendation is to warn on risky self-closed tags.
 - Now in Arelle “efm-preview” mode
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Data Quality Checks (no mandate)

Rule	Name
DQC_0001	Axis with Inappropriate Members
DQC_0004	Element Values Are Equal
DQC_0005	Context Dates After Period End Date
DQC_0006	DEI and Block Tag Date Contexts
DQC_0008	Reversed Calculation
DQC_0009	Element A must be less than or equal to Element B
DQC_0011	Dimensional Equivalents
DQC_0013	Negative Values with Dependence
DQC_0014	Negative Values with No Dimensions
DQC_0015	Negative Values
DQC_0018	Deprecated Element is Used in the Filing

Rule	Name
DQC_0033	Document Period End Date Context
DQC_0036	Document Period End Date Context / Fact Value Check
DQC_0041	Axis with a Default Member that Differs from the Base Taxonomy
DQC_0043	Incorrect Calculation Weights in Operating Cash Flows
DQC_0044	Accrual Items used in Investing/Financing Cash flow Reconciliation
DQC_0045	Movement of Concepts between Calculation Trees
DQC_0046	Inappropriate Calculation Descendant
DQC_0047	Calculation Descendants with No Balance Type
DQC_0048	Required Calculation Parent Element in the Cash Flow Statement
DQC_0049	Single Calculation Tree for Change in Cash Flows
DQC_0051	Before Tax Items
DQC_0052	Member Values

This is a subset of the checks... see <https://xbrl.us/data-quality/rules-guidance/>

Dimensions

- Restrictions on extensions
 - No change to default
 - No ineffective relationships (SEC)



Calculations

- Used by analysts to deduce extension semantics
 - Not validated by SEC
 - Could be run by countries or ESMA(?)
 - SEC sends letters in some cases even though “not run”
 - Calc 2 advantage
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Labels and Names

- Preferred labels required for total, beginning, end
 - Commonly used for terse, total, negation roles
 - @lang attribute inherited for labels, footnotes
 - Clarify mixed content in labels and footnotes (xhtml?)
 - LC3 naming with local languages, local break words
 - Not validated at SEC, will ESMA validate?
 - Some think English names are needed
 - References for local break words (a, an, the...)
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Wider/Narrower and Calc 2

- Wider/Narrower has to do with accounting meaning
 - Calc 2 has an extensible modeling and validation approach
 - Specifies sections and their facts
 - Calculations based on section assignment
 - Subtotals inferred
 - Calc referred to for accounting meaning by 3rd party tools
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Presentation Linkbase

- Provide guidance on use
 - Not expecting an “EdgarRenderer” requirement from ESEF
 - Join SEC filings may yet require Pre LB(?)
 - Is presentation useful?
 - Use for presenting dimensions, members
 - Other uses (roll forwards vs calc 2)
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Formula linkbase

- Not usually part of financial filing
 - Extension filers not expected to be formula-geeks
 - SEC uses patterns (signwarnings and axiswarnings.json)
 - Allows for extensions to fit patterns
 - DQC uses xule (adapt to formula LB)
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Public ESEF Test Suite

- ESEF suite (like SEC's EFM suite)
 - Public availability for all providers
 - Full coverage of requirements and warnings
 - Match of inline extractions to expected results
 - Best Practice suite
 - Data quality tests
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