

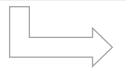
### Tutorial for software vendors





#### **POLICY UPDATE**

- EC Publication(s)
- Timeline for updates of the taxonomy (RTS & taxonomy files)
- Future updates of the Reporting Manual



#### **ESEF TAXONOMY**

- Relation to/dependency on other taxonomies
- Structure: folders and files content and relations
- · XBRL specifications applied
- Validation rules (assertions)
- Translations to EU languages





#### **EXTENSION TAXONOMY**

- Reference to ESEF taxonomy and representation as a package
- Structure and content of files
- Declaration of extension concepts and ELRs
- Definition of extension relationships



#### **INLINE XBRL REPORT**

- Relation to the extension taxonomy and representation in a package
- · Contexts and units definition
- Construction of facts and footnotes

### OUT OF SCOPE (FOR TODAY)

- Audit
- Collection/validation/storage
- Distribution/publication
- Analysis

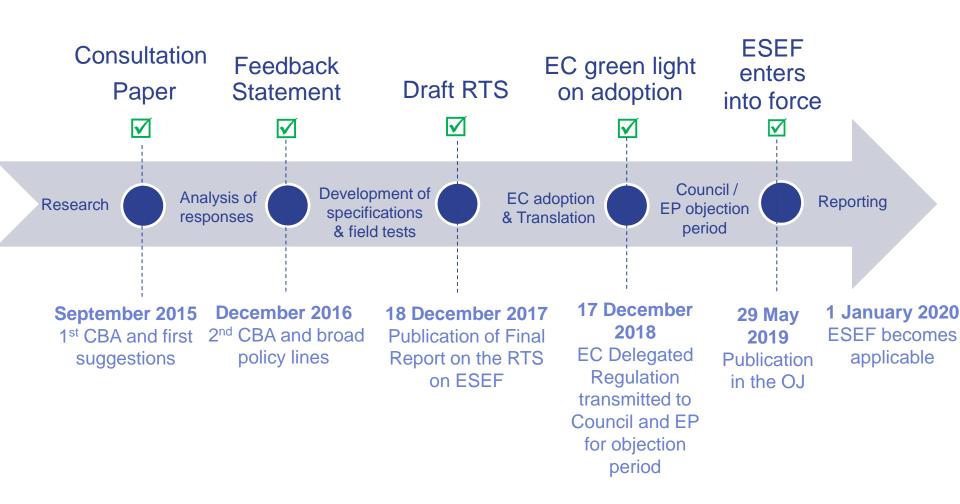


- EC Publication(s)
- Timeline for updates of the taxonomy (RTS & taxonomy files)
- Future updates of the Reporting Manual

## **POLICY UPDATE**



### An overview of the development process





### Key requirements set out in the RTS

- From 2020, all annual financial reports shall be prepared in xHTML format
- Consolidated IFRS Financial Statements shall be marked-up with XBRL tags
- 1 document, 2 views: Tags embedded in human readable doc. via InlineXBRL
- **ESEF Taxonomy** = IFRS Taxonomy incl. limited ESMA customisation
- Extensions: only if no existing IFRS tag reflects the intended accounting meaning
- Anchoring: extensions shall be linked to the closest taxonomy element
- Level of tagging: detailed tagging of primary statements, block tagging of notes



## The ESEF taxonomy

IFRS taxonomy **IFRS Standards Common reporting** practice **ESEF** taxonomy **ESMA Limited technical** Core taxonomy schema customisation (Annex VI of the RTS) XBRL Taxonomy files



#### **RTS on ESEF**

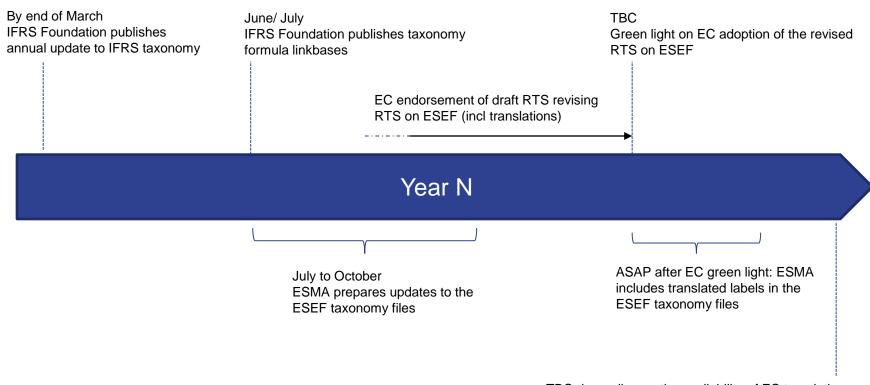
#### Target process for future updates of the core taxonomy

By end of March IFRS Foundation publishes annual update to IFRS taxonomy EC / Council / Parliament : EU endorsement of draft RTS revising RTS on ESEF Year N April to June ESMA prepares draft RTS revising the RTS on ESEF (Annex VI) on the basis of the IFRS Taxonomy update By June ESMA submits draft RTS to the European Commission



#### **ESEF** taxonomy

#### Target process for future updates of taxonomy files



TBC depending on the availability of EC translations: ESMA incorporates translated labels in ESEF taxonomy files and publishes them on ESMA's website



### The ESEF Reporting Manual

#### Upcoming revision and future updates

- Update of the ESEF Reporting Manual expected for publication in July 2019
- Some updates related to Guidance for issuers, including (amongst other)
  - Clarifications on the use of taxonomy elements corresponding to IFRS standards or interpretations that are not yet adopted in the EU (only provided for third country IFRS issuers)
  - Clarification on the anchoring requirements for extensions of the Notes
  - Clarifications on block tagging requirement
- Other technical updates related to Guidance for software firms taking into account feedback received from members of the XBRL Europe and other members of the XBRL community
- Future updates may be published in 2020 if deemed necessary, on the basis of feedback received (esef@esma.europa.eu)





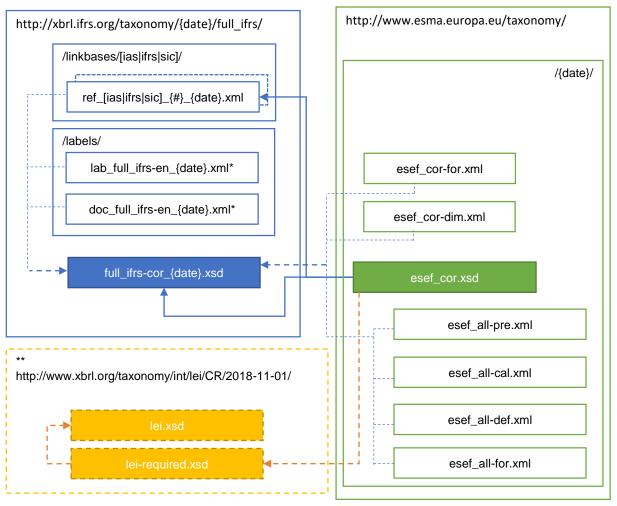


- Relation to/dependency on other taxonomies
- Structure: folders and files content and relations
- XBRL specifications applied
- Validation rules (assertions)
- Translations to EU languages

## **ESEF TAXONOMY**



#### Relation to other taxonomies



<sup>\*</sup> Referenced indirectly for each language or combination of languages by means of Taxonomy Packages

<sup>\*\*</sup> To be updated to REC when available



#### Relation to other taxonomies: IFRS

https://www.ifrs.org/issued-standards/ifrs-taxonomy/ifrs-taxonomy-2017

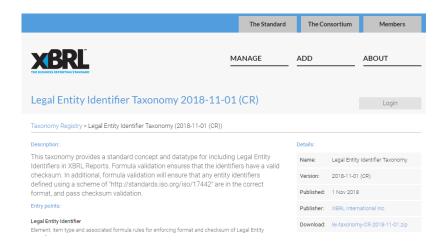


- ESEF taxonomy imports IFRS taxonomy artefacts and recreates IFRS taxonomy structure and content
- from implementation standpoint
  - need for support of XBRL specifications and constructs applied by the IFRS taxonomy (means of declaring elements, types
    of labels applied, reference parts used)
  - IFRS taxonomy not embedded in the package: tools shall discover from official location or a package published on IFRS website/listed in taxonomies registry
  - tools may need to enable discovering newer versions of the IFRS taxonomy or deprecated concepts that may be relevant in some jurisdiction

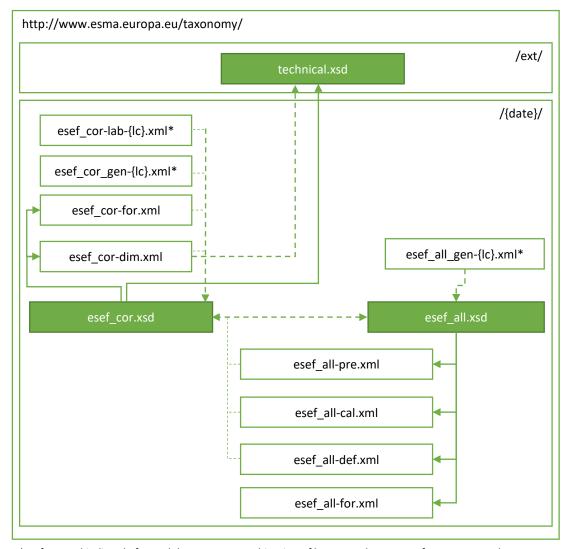


#### Relation to other taxonomies: LEI

https://taxonomies.xbrl.org/taxonomy/68



- Imports XBRL LEI taxonomy to:
  - enable use of LEI element
  - execute validation of pattern and checksum of LEI element, as well as
  - enforce LEI scheme and check on identifier value (pattern and checksum)
- From implementation standpoint
  - support for XBRL functions and implementation of custom function
  - note that there are a few LEIs which don't follow the checksum.
  - need to switch to REC when available



File name	Content and role
technical.xsd	<ul> <li>It was definiting an arcrole for anchoring of extension concepts (now in XBRL LRR)</li> </ul>
	<ul> <li>Defines roles, hypercube and dimensions to prevent default use of line items for segment and scenario (applied in esef_cor-dim.xml)</li> <li>Defines guidance item type used on element definitions in each cor. yed.</li> </ul>
	definitions in esef_cor.xsd

 $<sup>\</sup>hbox{* Referenced indirectly for each language or combination of languages by means of Taxonomy Packages}$ 



File name	Content and role
esef_cor.xsd	■ Imports IFRS core schema (full_ifrs-cor_20YY-MM-DD.xsd) containing FULL IFRS Taxonomy concepts declaration;
	■ Links all FULL IFRS taxonomy reference linkbase files (e.g. ref_ias_1_20YY-MM-DD.xml);
	■ Imports LEI XBRL Taxonomy;
	■ Imports ESEF Taxonomy technical schema file (technical.xsd);
	■ Defines ESEF extension concepts (guidance elements, placeholders, etc.) and extended link roles used in referred definition linkbase;
	<ul> <li>Refers to a definition linkbase file esef_cor-dim.xml and a linkbase file with assertions esef_cor-for.xml,</li> </ul>
	<ul> <li>Serves as an entry point importing the necessary IFRS and ESEF Taxonomy content to be applied as a starting point for issuers' extension;</li> </ul>
esef_all.xsd	Defines roles to be applied on extended links of the ESEF Taxonomy linkbases documenting relationships between elements and supporting browsing of the taxonomy content;
	• Refers to ESEF Taxonomy linkbases: presentation (esef_all-pre.xml), calculation (esef_all-cal.xml), definition (esef_all-def.xml) and assertions (esef_all-for.xml);
	<ul> <li>Serves as a reference entry point to be used by issuers' or the supporting software for browsing the entire content of the ESEF Taxonomy;</li> </ul>
esef_cor-lab-{lg}.xml	■ Contains labels of ESEF Taxonomy concepts defined in esef_cor.xsd schema file;
	■ To be referenced indirectly by means of XBRL Taxonomy Packages specification;
	• {lg} is ISO 639-1 language code (e.g. "en" for English); it is foreseen that standard and documentation labels are available in all official EU languages;
esef_cor-gen-{lg}.xml	• Contains labels of ESEF Taxonomy role types defined in esef_cor.xsd schema file and error messages for assertions declared in esef_cor-for.xml linkbase;
	■ To be referenced indirectly by means of XBRL Taxonomy Packages specification;
	• {lg} is ISO 639-1 language code (e.g. "en" for English); it is foreseen that standard and documentation labels are available in all official EU languages;
esef_all-gen-{lg}.xml	<ul> <li>Contains labels of ESEF Taxonomy role types defined in esef_all.xsd schema file and error messages for assertions declared in esef_all-for.xml linkbase;</li> </ul>
	■ To be referenced indirectly by means of XBRL Taxonomy Packages specification;
	• {lg} is ISO 639-1 language code (e.g. "en" for English); it is foreseen that standard and documentation labels are available in all official EU languages;
esef_cor-dim.xml	<ul><li>Referenced from esef_cor.xsd;</li></ul>
	<ul> <li>Contains an extended link role defining default members for dimensions;</li> </ul>
	• Contains extended link roles preventing all non-abstract items from being reported (unless dimensionally qualified in the extension taxonomy) by linking them to a
	hypercube referring to an empty dimension for scenario and segment containers;
	<ul> <li>Provides a placeholder to attach in the filer's extension taxonomy line items used to tag data that are not dimensionally qualified;</li> </ul>
esef_all-pre.xml,	<ul><li>Referenced from esef_all.xsd;</li></ul>
esef_all-cal.xml,	<ul> <li>Contain relationships - counterparts of the IFRS linkbases with application of guidance concepts and any other ESMA extension concepts;</li> </ul>
esef_all-def.xml	<ul> <li>esef_all-pre.xml includes a section (extended link role) identifying elements that must be used in tagging when corresponding data is present in the report;</li> </ul>
esef_cor-for.xml	<ul><li>Referenced from esef_cor.xsd;</li></ul>
	<ul> <li>Defines XBRL assertions that can be performed on a report for some quality check and compliance tests with filing manual rules;</li> </ul>
esef_all-for.xml	<ul><li>Referenced from esef_all.xsd;</li></ul>
	<ul> <li>Assertions providing additional documentation (not included in esef_cor-for.xml) on relations between taxonomy concepts (as per the IFRS Taxonomy formulas);</li> </ul>



- esef cor and referred linkbases:
  - import IFRS taxonomy artefacts (elements' declarations, references to bound volume, standard and documentation labels)
  - import XBRL LEI taxonomy to allow use of LEI element and validation of pattern and checksum as well as enforce LEI scheme and checksum on identifier value (pattern and checksum)
  - define guidance concepts to facilitate browsing of the taxonomy content (may be used by tools as a "hyperlink" or a "tool-tip"):
    - Items are further detailed in section [800100] Subclassifications of assets, liabilities and equities
    - Items are further detailed in section [800200] Analysis of income and expense
    - Items are further detailed in section [800300] Statement of cash flows, additional disclosures
    - Items are further detailed in section [800400] Statement of changes in equity, additional disclosures
  - define element to be used in esef\_all relationships to list mandatory tags (NotesAccountingPoliciesAndMandatoryTags: "Notes, accounting
    policies and mandatory tags this item MUST be used as a starting point for markups of disclosures in the notes to the financial
    statements"
  - define constructs to ensure all line items are dimensionally qualified:
    - role: http://www.esma.europa.eu/xbrl/role/cor/esef\_role-999999: "[999999] Line items not dimensionally qualified"
    - hypercube: LineItemsNotDimensionallyQualified: "Line items not dimensionally qualified"
    - placeholder: ELR above applied in definition linkbase using the above hypercube linked to "Consolidated [member]" of "Consolidated and separate financial statements [axis]" dimension
  - copy relations of dimension-default members from the IFRS taxonomy (to ensure it is applied by issuers)
  - provide certain assertions (TBD later)
- esef all and referred linkbases:
  - recreate IFRS taxonomy structure and content (due to copyright and EU adoption/endorsement of standards) in a simplified manner without "modularization" (one file per linkbase type)
  - list mandatory concepts:
    - role: http://www.esma.europa.eu/xbrl/role/all/esef\_role-000000: "[000000] Tags that must be applied if corresponding information is present in a report"
    - starting element: NotesAccountingPoliciesAndMandatoryTags (defined in esef\_cor.xsd)
    - presentation linkbase relationships linking 242 mandatory tags from the ESEF taxonomy
  - provide certain assertions (TBD later)



#### **Specifications applied**

- XBRL 2.1
  - items only no tuples, not even fractions
  - typical use of presentation, calculation (documentation purposes only) and label linkbases (standard roles, arcroles, etc)
- XBRL Dimensions 1.0
  - simple use of definition linkbase: no targetRole, no notAll arcrole, no typed dimensions
  - note: applies empty dimension to prevent use of line items unless dimensionally qualified in the extension taxonomy
- Generic link 1.0: to provide support for Generic Labels and Formula
- Generic Labels 1.0: labels for ELRs
- Formula 1.0:
  - variables: both fact and generic,
  - validation: value assertion and existence assertion only,
  - various filters: concept, dimensions, general, ...)
  - Generic messages, Validation messages
- Taxonomy Packages 1.0 (and taxonomy registry to discover IFRS taxonomy files)
- LRR, DTR, Functions registry
- In order to support extensions and reports:
  - Inline XBRL
  - UTR
  - Report Packages (WGN)



# The XBRL Standard	XBRL Specifications
Specification Index	# The XBRL Standard / XBRL Specifications
XBRL Specifications	
All Documents by Area All Documents by Status	Recommendations
Recent releases	> XBRL
FAO	> Dimensions
TAX	> Extensible Enumerations
Out for Review	> Financial Reporting Guidance
Specifications recently published for public	> Formula
comment	> Generic Links
	> Generic Preferred Label
	> Global Ledger
	> Infrastructure
	> Inline XBRL
	> Registries
	> Table Linkbase
	> Taxonomy Packages
	> Versioning



### Validation rules (assertions): Scope and types

esef\_cor: to be executed on reported data

- ESEF specific assertions (applied in esef\_cor) resulting from RTS and reporting manual:
  - a) Context validations (identification, periods, use of segment)
  - b) Fact and footnote validations (use of decimals and fraction items, xml:lang on text concepts, no tuples, standard footnote arc, ...)
  - Mandatory mark-up validations (warnings for all tags that must be reported if present in the document – currently only for 2020)
- 2. LEI assertions (applied in esef\_cor)
  - a) Scheme value and identifier pattern and checksum
  - b) LEI concept pattern and checksum
- IFRS assertions
  - a) Fact equivalence (line item vs line item + dimension members)
  - b) Positive, negative values and percentage constraint
  - c) Technical validations (duplicated facts)
  - d) Cross period validations (beginning balance + changes in period = ending balance)
  - e) Axis aggregation validations (total member = sum of children)
  - f) Earnings per share validations

esef\_all: for documentation purposes only



### Validation rules (assertions): Purpose

- Severity: mostly warnings, few classified as errors
- Messages defined for each rule (currently in English)
- Example:
  - Reference: Draft Regulatory Technical Standards on European Single Electronic Format / Annex IV: Marking up and filing rules / Paragraph 1 + ESEF Reporting Manual / Guidance 2.1.4: The Inline XBRL instance document should only contain data of the issuer

```
<va:valueAssertion</pre>
  id="con IdentifierValueMustBeIdentical"
  test="count(distinct-values($identifier)) eq 1" (...)/>
<variable:generalVariable</pre>
  id="gv 002" select="(//xbrli:identifier)" bindAsSequence="true" (...)/>
<gen:arc
  xlink:arcrole="http://xbrl.org/arcrole/2016/assertion-unsatisfied-severity"
  xlink:from="valueAssertion" xlink:to="error" (...) />
<link:loc xlink:href="esef cor-for.xml#con IdentifierValueMustBeIdentical" xlink:label="valueAssertion" (...)/>
<msg:message
  xlink:label="message"
  xlink:role="http://www.xbrl.org/2010/role/message" xml:lang="en" (...)>
According to the Regulatory Technical Standards on European Single Electronic Format, all issuers shall ensure that the
Inline XBRL instance document contains data of a single issuer. Therefore all entity identifiers in contexts shall have
identical content. Please make sure all XBRL context entity identifiers are provided with the identical value.</msg:message>
<gen:arc
  xlink:arcrole="http://xbrl.org/arcrole/2010/assertion-unsatisfied-message" xlink:from="valueAssertion"
xlink:to="message" (...) />
```



### Translations to EU languages

- New set of files for 22 languages (apart from previously available English labels)
- Three new files per language esef\_cor-lab-{lg}.xml, esef\_cor-gen-{lg}.xml, esef\_all-gen-{lg}.xml
- Contain only standard labels (contextual labels such as period start, total, etc available only in English)
- Some translators include technical terms translated (like Domain/Axis/...), other not
- Referenced by means of taxonomy packages (always including EN):

```
<tp:entryPoint>
   <tp:name>ESEF taxonomy relationships [to be translated to pl]</tp:name>
   <tp:description>Entry point to be used by filers for browsing ESEF taxonomy (as a reference). [to be translated to pl]</tp:description>
   <tp:entryPointDocument href="http://www.esma.europa.eu/taxonomy/2017-03-31/esef_all.xsd"/>
   <tp:entryPointDocument href="http://www.esma.europa.eu/taxonomy/2017-03-31/esef all-gen-en.xml"/>
   <tp:entryPointDocument href="http://www.esma.europa.eu/taxonomy/2017-03-31/esef_cor-lab-en.xml"/>
   <tp:entryPointDocument href="http://www.esma.europa.eu/taxonomy/2017-03-31/esef_cor-gen-en.xml"/>
   <tp:entryPointDocument href="http://xbrl.ifrs.org/taxonomy/2017-03-09/full_ifrs/labels/lab_full_ifrs-en_2017-03-09.xml"/>
   <tp:entryPointDocument href="http://xbrl.ifrs.org/taxonomy/2017-03-09/full_ifrs/labels/doc_full_ifrs-en_2017-03-09.xml"/>
  <tp:entryPointDocument href="http://www.esma.europa.eu/taxonomy/2017-03-31/esef_all-gen-pl.xml"/>
   <tp:entryPointDocument href="http://www.esma.europa.eu/taxonomy/2017-03-31/esef_cor-lab-pl.xml"/>
   <tp:entryPointDocument href="http://www.esma.europa.eu/taxonomy/2017-03-31/esef_cor-gen-pl.xml"/>
   <tp:languages>
     <tp:language>en</tp:language>
     <tp:language>pl</tp:language>
   </tp:languages>
</tp:entryPoint>
```







- Reference to ESEF taxonomy and representation as a package
- Structure and content of files
- Declaration of extension concepts and ELRs
- Definition of extension relationships

## **EXTENSION TAXONOMY**



### Reference to ESEF taxonomy and packaging (1)

- Reference to ESEF taxonomy from issuer's schema file:
  - imports esef\_cor.xsd
  - links to ESEF label linkbase files in report languages (modification of ESEF taxonomy content by means of XBRL relations overriding/prohibition is disallowed)
- Exchanged as Taxonomy Package
  - mind that root folder must follow archive folder name
  - META-INF
    - catalog.xml shall contain remapping for extension taxonomy including report information in order to avoid clashes
    - taxonomyPackage.xml shall apply all sensible fields
- RTS does not impose any naming convention of the package (subject to further NCA/OAM decision or left for issuer to decide)
- no obligation to publish extension taxonomy files in their official location (however it may be useful for data users)



### Extension taxonomy package

#### catalog.xml example:

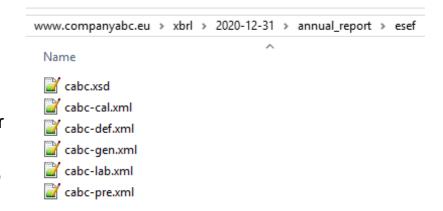
```
<rewriteURI
    rewritePrefix="../www.companyabc.eu/xbrl/2020-12-31/annual_report/esef/
    uriStartString="http://www.companyabc.eu/xbrl/2020-12-31/annual_report/esef/"/>
```

#### taxonomyPackage.xml example:

```
<tp:identifier>http://www.companyabc.eu/xbrl/2020-12-31/annual report/esef/</tp:identifier>
<tp:name>Company ABC Annual Report 2020 XBRL Taxonomy for ESEF</tp:name>
<tp:description>Company ABC XBRL Taxonomy representing Annual Report for year 2020 prepared according to
the European Standard Electronic Format requirements.</tp://description>
<tp:version>Submmited to OAM on 2021-04-02/tp:version>
<tp:publisher>Company ABC</tp:publisher>
<tp:publisherURL>http://www.companyabc.eu/</tp:publisherURL>
<tp:publisherCountry>DE</tp:publisherCountry>
<tp:publicationDate>2021-03-31/tp:publicationDate>
<tp:entryPoints>
  <tp:entryPoint>
     <tp:name>ESEF Annual Report 2020 Entry Point</tp:name>
     <tp:description>Entry point to Company ABC Annual Report 2020 XBRL Taxonomy for ESEF
        </tp:description>
     <tp:entryPointDocument
        href="http://www.companyabc.eu/xbr1/2020-12-31/annual report/esef/cabc.xsd"/>
     <tp:languages>
        <tp:language>en</tp:language>
     </tp:languages>
  </tp:entryPoint>
</tp:entryPoints>
```



- e.g. cabc.xsd
- Imports esef\_cor.xsd and standard labels in a given language
- RTS does not impose any naming convention for files nor for namespaces, roles, etc (subject to further NCAs/OAM decision or left for issuer to decide)
  - suggestion for root component of a namespace, role URIs, etc, e.g.: issuer's domain + report information
  - suggestion for prefix: company abbreviated name
  - exception: role to be used for Anchoring
- Contains declarations of:
  - extended link roles applied in extension linkbases
  - extension elements (line items, hypercubes, dimensions, domain members)
- References linkbase files





- Enable browsing of ESEF taxonomy discovered through esef\_all.xsd
  - search elements by all their properties (as discoverable from esef\_all entry point)
  - browse IFRS taxonomy concepts in more recent versions than applied by ESEF as well as deprecated concepts (for early adopters of IFRSs or obsolete standards still in use in some jurisdictions)
- Extension concepts
  - to be defined where no match is available among concepts discoverable from the ESEF taxonomy
  - shall have meaningful labels, preferably defined according to a style guide (if available for a given language)
    - element names may be created automatically from labels using L3C, removing diacritic signs and disallowed characters
    - ids usually follow the pattern: {target namespace prefix}\_{element name}
  - use of data types defined in XBRL specifications and registered in DTR (it is rather unlikely that issuers need to define new data types)
  - shall properly apply period type attribute
  - monetary items shall include balance attribute when possible in order to inform on the meaning and enable consistent application of positive/negative values

<xsd:element name="AdjustmentsForSocialLiabilities" id="cabc\_AdjustmentsForSocialLiabilities" type="xbrli:monetaryItemType"
substitutionGroup="xbrli:item" abstract="false" nillable="true" xbrli:balance="debit" xbrli:periodType="duration"/>

use values for attributes of abstracts items, domain members, dimensions, etc consistently



- Typically organise relationships by section of the annual report i.e. at least one for each PFS and note (if notes tagged in details)
- URIs usually follows the namespace with 'role' suffix and L3C representation of a label (the latter may also be used as id)
- Apply usedOn on all link types
- Ordering may be applied by use of numbers, e.g.

```
<link:roleType
    roleURI="http://www.companyabc.eu/xbrl/2020-12-31/annual_report/esef/role/01/StatementOfFinancialPosition"
    id="StatementOfFinancialPosition">
        <link:definition>01 - Statement of financial position</link:definition>
        <link:usedOn>link:presentationLink</link:usedOn>
        <link:usedOn>link:calculationLink</link:usedOn>
        <link:usedOn>link:definitionLink</link:usedOn>
        <link:usedOn>gen:link</link:usedOn>
</link:roleType>
```



- Suggestion for name: {schema file name}-pre.xml
- Organizes the taxonomy by each PFS and note(s)
- Contains hierarchies of/relationships between line items
- Shall start with dedicated placeholders as defined in RTS and ESEF taxonomy
  - StatementOfFinancialPositionAbstract: "Statement of financial position placeholder this item MUST be used as a starting point for the statement of financial position"
  - IncomeStatementAbstract: "Profit or loss placeholder this item MUST be used as a starting point for the statement of profit or loss if the statement of profit or loss is separately"
  - StatementOfCashFlowsAbstract: "Statement of cash flows placeholder this item MUST be used as a starting point for the statement of cash flows"
  - StatementOfComprehensiveIncomeAbstract: "Statement of comprehensive income placeholder this item MUST be used as a starting point for the statement of comprehensive income if it is
    disclosed separately or when the statement of profit or loss and other comprehensive income
    statements are combined in a single statement"
  - StatementOfChangesInEquityAbstract: "Statement of changes in equity placeholder this item MUST be used as a starting point for the statement of changes in equity"
  - NotesAccountingPoliciesAndMandatoryTags: "Notes, accounting policies and mandatory tags –
    this item MUST be used as a starting point for markups of disclosures in the notes to the financial
    statements"



#### Definition, calculation, label and other linkbases

#### Definition

- suggestion for name {schema file name}-def.xml
- contains dimensional contextualisation of line items.
  - tables such as Statement of changes in equity
  - dedicated ELR for
    - dimensional qualification of all line items not included in any table
    - dimension default members
- contains anchoring relationships in a dedicated ELR

#### Calculation

- suggestion for name {schema file name}-cal.xml
- documents basic arithmetic relationships

#### Label

- suggestion for name {schema file name}-lab.xml
- enable providing labels for each extension concept in (at least) one or more languages
- may add but must not override labels for IFRS and ESEF concepts
- enable creation of contextual (periodStart/End/Total) labels
- Optional: generic labels
  - suggestion for name {schema file name}-gen.xml
  - defines labels for ELRs in one or more languages
- Other linkbases must not be used

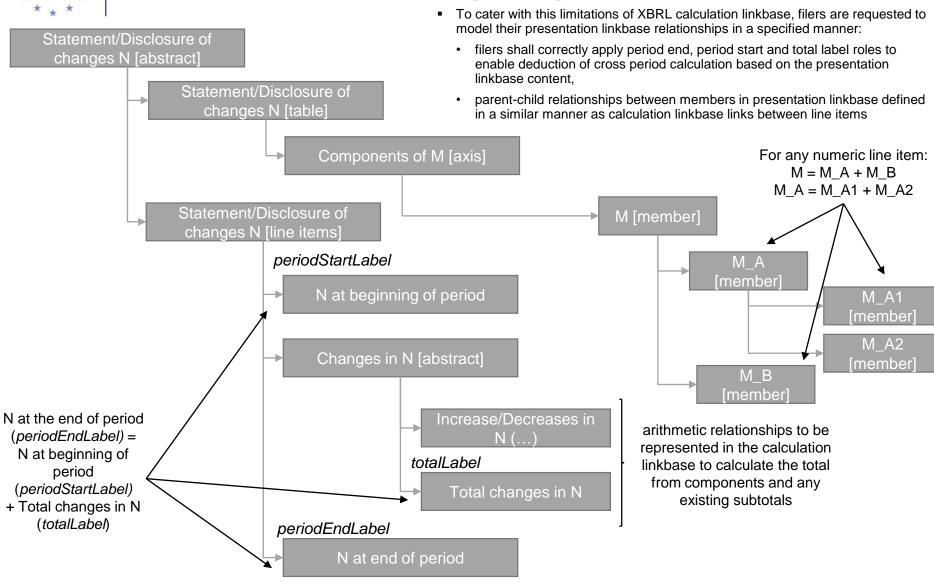


### Linkbases in UI - suggestions

- Preferably a single view to enable creation of hierarchical structure of relations between elements which usually follows the way information is presented in reports
- not dimensionally qualified structures output in presentation linkbase
- dimensionally qualified structures output in both, presentation and definition linkbases
  - automatically apply dimensional arcroles in definition linkbase
  - close hypercubes and use xbrli:scenario as container
- prompt for default memeber when entity specific dimension is created and output in the dedicated ELR in the definition linkbase
- mark extension concepts not used in linkbases or missing labels
- support easy edition of contextual labels
- use the same view to define arithmetical relationships but output as calculation linkbase
  - typically only +1/-1 weights shall be sufficient
  - validate calculations with regard to sign and balance attribute
- link all items that are not dimensionally to LineItemsNotDimensionallyQualified hypercube in http://www.esma.europa.eu/xbrl/role/cor/esef\_role-999999 ELR discovered from esef\_cor



### Arithmetical relationships in presentation linkbase





- When presenting content of the ESEF taxonomy enable flagging concepts or placing bookmarks that may be used to determine exact or close matches
- For each extension concept enable identification of
  - closest wider in scope and meaning ESEF taxonomy concept
  - one or more narrower in scope and meaning ESEF taxonomy concepts
- The above is not necessary for subtotals: when the wider and narrower concepts are the same that applied as parent and children (respectively) in presentation/calculation linkbase then don't create anchoring relationship for such extension concept



Define (in issuer's extension schema file) a dedicated ELR to store anchoring relationships, e.g.

```
<link:roleType
    roleURI="http://www.companyabc.eu/xbrl/2020-12-31/annual_report/esef/role/99/Anchoring"
    id="Anchoring">
        link:definition>Anchoring</link:definition>
        link:usedOn>link:definitionLink</link:usedOn>
        link:usedOn>gen:link</link:usedOn>
</link:roleType>
```

Define (in issuer's extension definition linkbase) anchoring relationships in definition linkbase:

```
<link:roleRef</pre>
  roleURI="http://www.companyabc.eu/xbrl/2020-12-31/annual report/esef/role/99/Anchoring"
  xlink:type="simple" xlink:href="cabc.xsd#Anchoring"/>
<link:arcroleRef</pre>
  arcroleURI="http://www.esma.europa.eu/xbrl/esef/arcrole/wider-narrower"
  xlink:type="simple" xlink:href="http://www.xbrl.org/lrr/arcrole/esma-arcrole-2018-11-21.xsd#wider-narrower"/>
<link:definitionLink xlink:type="extended"</pre>
        xlink:role="http://www.companyabc.eu/xbr1/2020-12-31/annual report/esef/role/99/Anchoring">
      <link:loc xlink:type="locator"</pre>
        xlink:href="http://xbrl.ifrs.org/taxonomy/20YY-MM-DD/full ifrs/full ifrs-cor 20YY-MM-DD.xsd#
        ifrs-full_IncreaseDecreaseInWorkingCapital" xlink:label="IncreaseDecreaseInWorkingCapital"/>
      <link:loc xlink:type="locator"</pre>
        xlink:href="cabc.xsd#cabc AdjustmentsForTradeAndOtherTeceivablesAndPrepaidExpenses"
        xlink:label="AdjustmentsForTradeAndOtherTeceivablesAndPrepaidExpenses"/>
      <link:definitionArc xlink:type="arc" xlink:arcrole="http://www.esma.europa.eu/xbrl/esef/arcrole/wider-narrower"</pre>
        xlink:from="IncreaseDecreaseInWorkingCapital" xlink:to="AdjustmentsForTradeAndOtherTeceivablesAndPrepaidExpenses"/>
</link:definitionLink>
```

 Theoretically more than one ELR may be necessary if two or more elements anchor to the same concept (e.g. from different perspectives and hence mutually exclusive)







- Relation to the extension taxonomy and representation in a package
- Contexts and units definition
- Construction of facts and footnotes

# **INLINE XBRL REPORT**



### Reference to schema, contexts and units

schemaRef to issuer's extension schema file using full path, e.g.

- Only one reporting entity per report
  - use http://standards.iso.org/iso/17442 as scheme and a valid LEI to identify reporting entity, e.g.

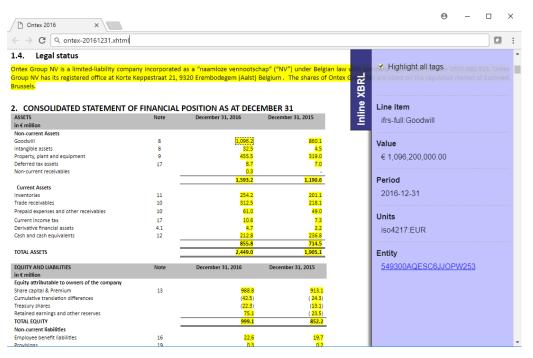
- Enable automatic generation of periods for previous years based on dates of annual report tagged
  - disallow time component
- Enable selection of units defined by XBRL specification or listed in the UTR
  - do not use scale on units
- Disable segment container



- Enable marking which section of a report covers each PFS and notes
- If possible detect tables and highlight numbers to support tagging (and ensure complete tagging)
- Try to provide hints on tags to used based on headers of rows/column
- Suggest application of the same tag where title of row/column matches already tagged information (also from previous periods)
- Try to use information on scale and period to suggest default tagging options
- Enable tagging footnotes and content inside footnotes (e.g. when part of a PFS)
- For tagging of notes support for continuation may be necessary
- Suggest potential Transformation Rules (mind new Transformation Rules to cover EU languages for dates and numbers representation)
- Enable execution of checks based on information from calculation linkbase and ESEF assertions: provide useful results preferably visually identifying facts involved
- Ensure that
  - all defined extension concepts were used to tag data
  - all tags used in a report are applied in at least one hierarchy of presentation/definition linkbase of the extension taxonomy
  - all footnotes are linked to facts
  - numeric facts use @decimals for accuracy
  - all text tags contain xml:lang (preferably set on tag, not inherited from parents)
  - inline XBRL does not contain any executable code (scripts, applets, etc)
- Make it easy to moving to annual report the following year



- Single xhtml file or many files (with one target linking to all others) e.g. index.html referring to pfs.html, notes.html, other.html
  - use CSS and store in a separate file if shared
  - images
    - embed as base64 if tagged
    - preferably store in single folder (e.g. img)
- Apply scripts for highlighting tags for internal review





http://www.xbrl.org/WGN/report-packages/WGN-2018-08-14/report-packages-WGN-2018-08-14.html

#### Example 1: Example file structure







- What kind of suggestions do you have from implementation/preparation of solutions so far?
  - Anything difficult to comply with?
  - Anything that could make ESEF more aligned with other iXBRL projects you support world wide?
- What other kind of materials you would find useful:
  - FAQ/QA?
  - More examples?
- How to reach and educate the user community?



## Thank you for your participation!

