European Securities and Markets Authority

ESEF Reporting Manual

Preparation of Annual Financial Reports in ESEF format

24 August 2022| ESMA32-60-254rev

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I. Introduction

[Last updated: July 2022]

Background

1. The RTS on ESEF[1] specifies that all issuers subject to the requirements contained in the Transparency Directive to make public Annual Financial Reports shall prepare annual financial reports in the Extensible Hypertext Markup Language (XHTML) format. Where the issuer prepares IFRS consolidated financial statements, it shall mark up these IFRS consolidated financial statements using the XBRL markup language. The markups shall be embedded in the XHTML document version of the annual financial report using the Inline XBRL format.

Purpose

2. This document has been produced by ESMA to assist issuers and software vendors in creating ESEF documents that are compliant with the RTS on ESEF. It provides guidance on common issues that may be encountered when creating ESEF documents and explains how to resolve them. The purpose of this document is to promote a harmonised and consistent approach for the preparation of annual financial reports in the format specified in the RTS on ESEF. This document is issued under Article 29(2) of the ESMA Regulation.

3. The content of this document is aimed at issuers who are required to prepare annual financial reports in ESEF format in accordance with Article 4(7) of the Transparency Directive (TD)[2] and the RTS on ESEF, and at software firms developing software used for the preparation of annual financial reports in Inline XBRL. The aim of the guidelines defined in this document is to facilitate the analysis and comparison of the XBRL data contained in Inline XBRL documents by investors and other users. In particular, this document provides guidance on the expected syntax and structure of Inline XBRL documents and issuers' XBRL extension taxonomies. This document contains parts that are of a highly technical nature, especially sections IV.2 and IV.3. These sections are intended for a technical audience and assume that the reader has a working knowledge of the XBRL 2.1, XBRL Dimensions 1.0, Inline XBRL 1.1 and other XBRL specifications[3], is familiar with the IFRS Taxonomy and has a basic understanding of XML, Namespaces and XML Schema.

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[1] Commission Delegated Regulation (EU) 2019/815 of 17 December 2018 supplementing Directive 2004/109/EC of the European Parliament and of the Council with regard to regulatory technical standards on the specification of a single electronic reporting format

[2] Directive 2004/109/EC of the European Parliament and of the Council of 15 December 2004 on the harmonisation of transparency requirements in relation to information about issuers whose securities are admitted to trading on a regulated market and amending Directive 2001/34/EC, as amended by Directive 2013/50/EU

[3] https://specifications.xbrl.org/

4. This document is fully aligned with the technical rules and constraints defined in the referenced XBRL technical specifications. Some guidelines may however be more restrictive and precise to address the specifics of the ESEF format. Therefore, this Manual contains some additional validation rules that ESMA recommends for software vendors to implement within their solutions used to produce ESEF inline XBRL reports. In case no specific guidance is provided in this Manual, XBRL specifications must be followed. Furthermore, if any aspect or mechanism covered by the XBRL specifications is not specifically mentioned in this Manual, it does not mean that such aspect or mechanism cannot be used in the ESEF inline XBRL report.

5. Each guidance item presented in this document is provided with an indication of criticality. ESMA considers that all items marked as 'MUST' or 'SHALL' are critical to facilitate the consumption and comparability of an ESEF inline XBRL document. Items marked as 'SHOULD' do not generally impact the overall usability of an ESEF file, although this may need to be assessed on a case-by-case basis.

6. The content of this document is not exhaustive and it does not constitute new policy. This document is intended to be continually edited and updated as and when the need to do so arises.

7. Stakeholders are encouraged to follow the guidance provided in this document as soon as possible but no later than for financial reporting periods starting on or after 1 January 2022.

Providing feedback on the Reporting Manual

8. Stakeholders wishing to provide feedback or raise questions / concerns with regards to the content of the ESEF Reporting Manual or any of the materials published by ESMA on ESEF are invited to direct such queries to the ESEF support mailbox: esef@esma.europa.eu. Depending on the nature of such queries, ESMA will assess whether it is relevant and/or necessary to provide further clarity or guidance to the public and whether a further revision of the Reporting Manual and/or to other ESEF-related material is deemed appropriate.

II. Summary table of updates

[Last updated: July 2022]

Guidance number / section	Topic of the Question	Last update
Glossary		July 2022
Guidance 1.0.1	Presentation of AFRs in the ESEF format	July 2022 [new]
Guidance 1.0.2	Presentation of AFRs in other formats than ESEF	July 2022 [new]
Guidance 1.1.1	Language of labels	December 2017
Guidance 1.1.2	AFRs presented in more than one language	July 2022
Guidance 1.2.1	Issuers incorporated in third countries that apply IFRS standards or interpretations that are not yet adopted in the EU	July 2019
Guidance 1.2.2	Use of elements available in the IFRS Taxonomy that were not yet included in the ESEF taxonomy	July 2020
Guidance 1.3.1	Use of labels to select appropriate elements	July 2021
Guidance 1.3.2	Markup of disclosures if the ESEF taxonomy only contains an element that is wider in scope or meaning	December 2017
Guidance 1.3.3	Tagging elements of Annex II	July 2022
Guidance 1.4.1	Anchoring of extension elements to elements in the ESEF taxonomy that are wider in scope or meaning	July 2019
Guidance 1.4.2	Anchoring of extension elements that are combinations	July 2021
Guidance 1.5.1	Determination of whether a disclosure should be marked up with a line item or a domain member	July 2021
Guidance 1.6.1	Use of positive and negative values	July 2022
Guidance 1.7.1	Use of standard units of measure	July 2019

Guidance 1.8.1	Marking up footnotes	July 2019
Guidance 1.9.1	Marking up notes and accounting policies	July 2022 [new]
Guidance 1.9.2	Granularity of block tagging of notes and accounting policies	July 2022 [new]
Guidance 1.9.3	Other considerations for block tagging of notes and accounting policies	July 2022 [new]
Guidance 2.1.1	Use of the LEI to identify the issuer	July 2021
Guidance 2.1.2	Formatting of the period element in the context of the Inline XBRL document	July 2019
Guidance 2.1.3	Use of segment and scenario containers in the context elements of Inline XBRL documents	July 2021
Guidance 2.1.4	The Inline XBRL document shall only contain data of the issuer	July 2021
Guidance 2.2.1	Attributes to define the accuracy of numeric facts	July 2021
Guidance 2.2.2	Representation of rates, percentages and ratios	July 2019
Guidance 2.2.3	Transformation of facts	July 2021
Guidance 2.2.4	Facts duplication	July 2022
Guidance 2.2.5	Tagging of dashes or empty fields	July 2022 [new]
Guidance 2.2.6	Technical construction of a block tag	July 2022 [new]
Guidance 2.3.1	Appropriate use of XBRL footnotes in the reports	July 2021
Guidance 2.4.1	Inline XBRL constructs that shall be avoided	July 2021
Guidance 2.4.2	Other constructs that shall be avoided	July 2021
Guidance 2.5.1	Inclusion of content other than XHTML and XBRL in the Inline XBRL document	July 2022
Guidance 2.5.2	Indication of the language used in textual mark ups	July 2019
Guidance 2.5.3	Use of more than one target XBRL document for an Inline XBRL Document Set (IXDS)	July 2020

Guidance 2.5.4	Use of the Cascading Style Sheet (CSS) language to style Inline XBRL documents	July 2021
Guidance 2.5.5	Application of ix:continuation and ix:exclude elements	July 2019
Guidance 2.6.1	Including Inline XBRL document in taxonomy packages	July 2021
Guidance 2.6.2	Including multi-html Inline XBRL documents and multiple Inline XBRL document sets in taxonomy packages	July 2021
Guidance 2.6.3	Naming convention for report packages	July 2021
Guidance 2.7.1	Ensuring report validity against XBRL specifications	July 2020
Guidance 3.1.1	Required components of extension taxonomies	July 2021
Guidance 3.1.2	Taxonomy files published by ESMA	July 2021
Guidance 3.1.3	Taxonomy packages	July 2019
Guidance 3.1.4	Ensuring taxonomy validity against XBRL specifications	July 2020
Guidance 3.1.5	Naming conventions for extension taxonomy files	July 2021
Guidance 3.2.1	~~Naming conventions for extension taxonomy elements~~	July 2022 [deleted]
Guidance 3.2.2	Data types to be used on extension concepts	July 2021
Guidance 3.2.3	Use of typed dimensions in issuers' extension taxonomies	July 2021
Guidance 3.2.4	Identification of extension taxonomy element	July 2020
Guidance 3.2.5	~~Definition of abstract concepts in extension taxonomies~~	July 2022 [deleted]
Guidance 3.3.1	Relationships to anchor extension taxonomy elements to elements in the ESEF taxonomy	July 2022
Guidance 3.3.2	Where to define the anchoring relationship	July 2020

Guidance 3.4.1	Modelling of the issuers' extension taxonomies' linkbases	December 2017
Guidance 3.4.2	Defining the dimensional validity of line items in the definition linkbase	July 2021
Guidance 3.4.3	Definition of default members of extension taxonomy dimensions	July 2020
Guidance 3.4.4	Use of preferred labels on presentation links in extension taxonomies	July 2019
Guidance 3.4.5	Use of labels on elements in extension taxonomies	July 2022
Guidance 3.4.6	Restrictions on taxonomy relationships	July 2022
Guidance 3.4.7	Definition of extended link roles in extension taxonomies	July 2020
Guidance 3.5.1	References pointing to resources outside the reporting package	July 2021
Guidance 4.1.1	Reporting of stand-alone of xHTML files	July 2022
Guidance 4.1.2	Tagging obligations for Investment Entities exempted from consolidation	July 2021
Guidance 4.1.3	Inclusion of content other than XHTML in a stand-alone XHTML file	July 2022
Guidance 4.1.4	Use of the Cascading Style Sheet (CSS) language to style XHTML stand-alone documents	July 2021
Guidance 4.1.5	Naming convention for stand-alone XHTML documents	July 2021
Guidance 4.1.6	References pointing to resources outside the XHTML document	July 2021

III. Glossary

[Last updated: July 2022]

abstract	An attribute of an element to indicate that the element is only used in a hierarchy to group related elements together. An abstract element cannot be used to tag data in an instance document.
abstract concept	A taxonomy element that has an *abstract* attribute set to "true" and that is not used to defined hypercubes, dimensions and members. It can also be referred to as *header.*
AFR(s)	Annual financial report(s). Regulated information defined in Article 4 of the Transparency Directive.
arcrole	Technical construct used in XBRL linkbases to identify the type of relationship between elements.
attribute	A property of an element such as its name, balance, data type, period type and whether the element is abstract.
axis (pl. axes)	An instance document contains facts; an axis differentiates facts and each axis represents a way that the facts may be classified. For example, revenue for a period might be reported along with a business unit axis, a country axis, a product axis, and so forth.
balance	An attribute of a monetary item type element designated as debit, credit, or neither; a designation, if any, should be the natural or most expected balance of the element - credit or debit - and thus indicates how calculation relationships involving the element may be assigned a weight attribute (-1 or +1).
block tag	A single fact that contains the content of an entire or a part of a section of a report. A block tag may include text, numeric values, tables and other data.
calculation relationships	Additive relationships between numeric items expressed using as summation-item arcrole (as defined by the XBRL 2.1 specification) and weight attribute.
concept	A taxonomy element that provides the meaning for a fact. Concept in this context excludes abstract concepts, and elements that are used to define hypercubes, dimensions and members.

context	Entity and fact-specific information (reporting period, segment/scenario information, and so forth) required by XBRL that allows tagged data to be understood in relation to other information.
dimension	XBRL technical term for axis.
domain	An element that represents a set of members sharing a specified semantic nature; the domain and its members are used to classify facts along the axis of a table. For example, "Lithuania" is a domain member in the domain "Member States," and would be used to classify elements such as revenues and assets in Lithuania as distinct from other Member States. When a fact does not have any domain member specified, that means it applies to the entire domain or to a default member of a domain set in the taxonomy.
domain member	An element representing one of the possibilities within a domain.
element	XBRL components (items, domain members, dimensions, and so forth). The representation of a financial reporting concept, including: line items in the face of the financial statements, important narrative disclosures, and rows and columns in tables.
ELR	Extended Link Role, a set of relations representing a particular piece of a report indicated by a role. Extended link roles are used in taxonomies to separate linkbases into smaller logical chunks.
extension taxonomy *or* extension	A taxonomy that allows users to add to a published taxonomy in order to define new elements or change element relationships and attributes (presentation, calculation, labels, and so forth) without altering the original.
ESEF taxonomy	The taxonomy to be used for the ESEF. It includes the ESEF core taxonomy, which is defined by the RTS on ESEF.
fact	The occurrence in an instance document of a value or other information tagged by a taxonomy element.
Footnote	Explanatory and supplementary information for various portions of financial statement, often presented at the bottom of a given statement.
hypercube	XBRL technical term for a table.

Inline XBRL	Technology that provides a mechanism for embedding XBRL tags in HTML documents. This allows the XBRL benefits of tagged data to be combined with a human-readable presentation of a report.
Inline XBRL document	A single document that combines structured, computer-readable data with the issuer's human-readable presentation of a business report using the Inline XBRL standard.
Inline XBRL document set	A group of one or more Inline XBRL documents which when comprising sufficient metadata results in one or more target XBRL document when transformed according to the mapping rules prescribed in the technical specification.
label	Human-readable description for an element. Each element has a standard label that normally corresponds to the element name, and is unique across the taxonomy. Elements may have also other labels, in particular documentation labels containing more elaborate descriptions of the element's definition, meaning, scope and application.
line item	Line items normally represent the accounting concepts being reported. They are used to mark up numeric accounting information as well as qualitative (non-numeric) disclosures. Line items can be used either individually or in a table (in combination with axis and axis members).
linkbase	XBRL technical term for a relationships file.
namespace	A namespace is the "surname" of an element represented as a Universal Resource Identifier (URI) identifying the organization that maintains the element definition and its version. For example http://xbrl.ifrs.org/taxonomy/2017-03-09/ifrs-full is a namespace of the 2017 version of the FULL IFRS taxonomy defined by the IFRS Foundation.
parent-child relationship	Relationship between elements that indicates subordination of one to the other as represented in a print listing or financial statement presentation. Relationships files use parent-child hierarchies to model several different relationships, including presentation, particular cases of summation of a set of facts, and membership of concepts within a domain used as the axis of a table.
period type	An attribute of an element that reflects whether it represents a stock ('instant' in XBRL terminology) that is reported at a particular date or a flow ('duration') reported in a time period.

Primary Financial Statements	The statement of financial position, the statement(s) of profit or loss and other comprehensive income, the statement of changes in equity and the statement of cash flows.
segment/ scenario	Components of contexts containing additional information to be associated with facts in an instance document; this information encompasses in particular the dimensional classifications or breakdowns defined by axes and domain members in taxonomies.
standard label	The default label for an element defined in a taxonomy.
table	An element that organizes a set of axes and a set of line items to indicate that each fact of one of the line items could be further characterized along one or more of its axes. For example, if a line item is 'Revenues' and an axis is 'Segments' and this axis has the following two domain members 'Reportable segments' and 'All other segments', the XBRL instance document and Inline XBRL document could include facts representing revenues with break-downs for 'Reportable segments' and 'All other segments'.
tag or mark up (verb)	To use taxonomy elements to identify disclosures reported in an annual financial report.
target XBRL document	The XBRL-valid XBRL instance document represented by metadata in the Inline XBRL document set.
taxonomy, taxonomies	Electronic dictionary of business reporting elements used to report business data. A taxonomy is composed of a schema file or files (with extension .xsd) and relationships linkbase files (with extension .xml) directly referenced by that schema. The taxonomy schema files together with the relationships files define the concepts (elements) and relationships that form the basis of the taxonomy. The set of related schemas and relationships files altogether constitute a taxonomy.
transformation rule	Set of instructions which when applied to a string used in the issuer's report outputs a value in an XBRL-valid format and in a predefined data type.
type *or* data type	Data types (monetary, string, share, decimal, and so forth) define the kind of data to be tagged with the element name.
URI	Uniform Resource Identifier, is a string of characters used to identify a resource.

validation	Process of checking that instance documents and taxonomies correctly meet the rules of the XBRL specification.
XBRL instance document	A business report prepared using the XBRL standard. It refers to a specific taxonomy entry point and it is the combination of the XBRL instance document and the taxonomy that enables the contents of an XBRL instance document to be fully understood.

IV. Guidance

1 Guidance for issuers

1.0 Presentation of Annual Financial Reports (AFRs) in ESEF and in other formats than ESEF [new]

Guidance 1.0.1 Presentation of AFRs in the ESEF format [last updated: July 2022] [new]

AFRs prepared in the ESEF format are the only "official ESEF version" of the AFRs to discharge the TD obligations, are considered "regulated information" and are to be filed with the OAMs[4].

The absence of presentation of the AFRs in the ESEF format within the deadline (at the latest four months after ending the financial year – FY) is subject to possible enforcement actions and if deemed necessary, to TD sanctions.

Guidance 1.0.2 Presentation of AFRs in other formats than ESEF [last updated: July 2022] [new]

Issuers can also prepare AFRs in other formats than ESEF (e.g. Pdf). AFRs prepared in other formats than ESEF do not discharge the TD obligations and are not to be considered the AFR "official ESEF version"[5].

The publication of these AFRs in other formats than ESEF can take place before[6] or at the same time or later than the disclosure in the ESEF format:

a) *AFRs published in other formats before the disclosure in the ESEF format (during the four months following the end of FY and before publication in the ESEF format)*

The publication of AFRs in other formats before the publication in the ESEF format should be duly justified by "inside information" considerations[7], other "legal requirements" or "third country requirements". If requested, the justification should be provided to the regulator.

When publication is duly justified, the information is to be considered "regulated information" and thus, should comply with the obligation of regulated information (including dissemination). However, issuers are required to present the AFRs in the ESEF format within the deadlines. Should national legislation allow, it is also recommended to highlight and clearly state that AFRs published in other formats than

[4] In addition to the ESEF format, requirements at national level could additionally require the presentation of AFRs in other formats than ESEF.
[5] i.e. They are not the official AFR necessary to comply with the obligation set up in article 4 of the Transparency Directive.
[6] Provided early publication in other formats is allowed by the transposition of the Transparency Directive in the relevant jurisdiction
[7] In particular, considering Regulation 596/2014 of the European Parliament and the Council of 16 April 2014 on market abuse.

ESEF are not the official ESEF version[8] of the AFRs and that the ESEF version prevails in case of any questions or conflicts.

b) Simultaneous (or later) publication of AFRs in other formats than the ESEF format

Issuers can provide AFRs in other formats than ESEF at the same time or later than the AFRs presented in the ESEF format. However, subject to national legislation, they are to be considered as "voluntary information[9]" (and not per se regulated information).

Should AFRs be published in other formats than ESEF, for instance on the issuer's website, it is recommended to highlight and clearly state that they are not the official ESEF version of the AFRs. Furthermore, it is also recommended to include a reference or link to the official version of the AFRs in ESEF and if national legislation allows, to clearly state that the ESEF version prevails in case of any questions or conflicts.

1.1 Use of languages

Guidance 1.1.1 Language of labels [last updated: December 2017]

The RTS on ESEF does not alter the language regime set out in Article 20 of the TD. Therefore, the labels of the elements used for marking up the annual financial report including the issuers' extension taxonomy elements should be in the same language in which the annual financial report is prepared. Issuers are not required to provide labels in other languages. However, ESMA encourages issuers to provide, for the extension taxonomy elements, labels in a language customary in the sphere of international finance, as it would be highly beneficial for users.

Guidance 1.1.2 AFRs presented in more than one language ~~Multi-language reports~~ [last updated: July 2022]

a) *Mandatory/legal requirement to provide AFRs in two (or more) languages*

Article 20 of the TD requires the presentation of the AFRs in different languages in some circumstances. Where there is a legal requirement to present the AFRs in two (or more) languages, the AFRs should be prepared in ESEF format (same requirements as the first language) and should be tagged (if containing consolidated IFRS financial statements).

From a technical standpoint, a different language version of the AFR will be considered as a separate XHTML report contained within a separate ESEF report package. Those two or more reports should be submitted as two or more separate ~~zip~~ files. Please refer to Guidance 2.6.1 for indications about the file structure of each report package including consolidated IFRS financial statements and to Guidance 4.1.1 for indication about reports not subject to tagging obligations. Such XHTML reports shall be tagged in the exact same way, regardless of the language in which they were prepared. Specifically, all language versions of the AFRs should be consistent in terms of the

[8] They are not the official AFR necessary to comply with the obligation set up in article 4 of the Transparency Directive.
[9] As indicated in Q23 "Additional periodic information" of the ESMA Q&As on TD (ESMA 31-67-127).

report contents, and such contents shall be tagged with the use of the same core taxonomy elements and/or extension elements as defined in an issuer's extension taxonomy (which should be shared across the report presented in different languages).

ESMA expects that the extension elements defined in a report are consistent with the extension elements defined in other language versions of the same report, i.e. those extension elements must be defined with the same element name and underlying XBRL characteristics (e.g. type, balance, period, etc.)

b) *Voluntary/contractual provision of the AFRs in additional language(s)*

Where there is not a legal requirement to present the AFRs in two (or more) languages, the additional language version(s) of the AFRs can be presented in another format than ESEF format (ex. pdf format). If this is the case, it is recommended that the additional language version should be clearly marked/labeled as non-official version and could also be marked as "translation".

In case the voluntary/contractual presentation in other languages is done in ESEF format, the AFRs should follow the official version and should be tagged (in the same way as the official version of ESEF). AFRs voluntary/contractually provided in other languages in the ESEF format should be presented and published, if tagged, in a separate zip file than the official ESEF AFRs and it is recommended to indicate that they are non-official versions and translations.

1.2 Use of elements that are available in the IFRS Taxonomy but are not included in the ESEF taxonomy

Guidance 1.2.1 Use of taxonomy *elements corresponding to IFRS standards or interpretations*[10] *that are not yet adopted in the EU* [last updated: July 2019]

The ESEF taxonomy contains all elements of the IFRS taxonomy regardless of the endorsement status of the IFRSs in the European Union.

Taxonomy elements corresponding to IFRS not endorsed by the EU, but considered equivalent to IFRS on the basis of Commission Decision 2008/961/EC are exclusively provided for facilitating compliance with the ESEF Regulation by third country issuers listed in the EU which may prepare their consolidated financial statements in accordance with IFRS as issued by the International Accounting Standards Board ('IASB'), whereby such issuers could apply standards or interpretations that are not yet endorsed for use in the Union.

European issuers are reminded that under no circumstances they should use taxonomy elements corresponding to IFRS not endorsed by the EU for tagging their consolidated financial statements because doing so would, by definition, breach the requirements contained in Annex IV.3 of the RTS on ESEF.

[10] Correspondence is established on the basis of the reference provided in the Schema of the core taxonomy (Annex VI of the RTS on ESEF)

Guidance 1.2.2 Use of elements available in the IFRS Taxonomy that were not yet included in the ESEF taxonomy [last updated: July 2020]

The IFRS Foundation regularly updates the IFRS Taxonomy. If an issuer determines that the IFRS Taxonomy includes an element that corresponds to a disclosure of the issuer in its IFRS financial statements and that this element is not yet included in the ESEF taxonomy, then the issuers should define an extension taxonomy element whose name and label corresponds to name and label of the element in the IFRS Taxonomy.

As soon as a new element that can substitute an entity-specific disclosure is included in the ESEF core taxonomy (i.e. in the RTS on ESEF as published in the EU Official Journal), issuers should adopt that new ESEF taxonomy element. ESMA highlights that such new ESEF taxonomy elements should be used also to tag comparative figures from previous reporting periods in the current report. In this regard, issuers are reminded that Annex III.1 of the RTS on ESEF requires to mark-up *all* numbers in a declared currency presented in the Primary Financial Statements, which means that all comparative figures included therein need to be marked-up.

1.3 Selection of appropriate elements to mark up disclosures

Guidance 1.3.1 Use of labels to select appropriate elements [last updated: July 2021]

Element labels provide human-readable descriptions of the accounting meaning of a taxonomy element. Each element in the taxonomy has a standard label. Standard labels normally match the wording of the Standards. For common practice content, the standard label of an element normally reflects the wording that is most commonly used in practice or alternatively describes the accounting meaning of an element more precisely.

The standard label of an element is often longer and more detailed or may be phrased differently to the label being reported in practice within IFRS financial statements. This by itself is not a sufficient reason for an issuer to decide against using a particular taxonomy element. A preparer has to consider the accounting meaning of a taxonomy element when making this judgement. For example, a disclosure described by an entity as 'issue of share capital' and presented in the Statement of cash flows as a cash inflow could be marked up using the taxonomy line item with the standard label 'Proceeds from issuing shares'. It should also be highlighted that as part of the accounting meaning of an element, consideration should be given to the period attribute (instant or duration) of the concept being selected, i.e. all line items of the Statement of Financial Position should be tagged using concepts that use the "instant" attribute.

Furthermore, the line items, axes and members of the taxonomy files made available on ESMA's website have a documentation label, which provides a definition of the element. Moreover, they contain at least one cross-reference to the relevant Standard(s). The documentation label and the reference to the relevant Standard(s)

should be considered to determine whether the accounting meaning of an element corresponds to a specific disclosure.

Guidance 1.3.2 Markup of disclosures if the ESEF taxonomy only contains an element that is wider in scope or meaning [last updated: December 2017]

It is possible and recommended to use an element in the ESEF taxonomy that is wider in scope or meaning than the marked up information if the marked up report does not contain another disclosure that fully or partially corresponds to the respective taxonomy element. For example, an issuer which discloses in its statement of cash flows an item that represents cash outflows relating to the purchase of property, plant and equipment and intangibles other than goodwill can use the taxonomy element 'purchase of property, plant and equipment, intangible assets other than goodwill, investment property and other non-current assets' to mark up the disclosure, even though the cash outflows do not relate to investment property or other non-current assets. This however is only appropriate if the issuer does not disclose in a separate item in the statement of cash flows cash outflows relating to the purchase of investment property or other non-current assets.

Guidance 1.3.3 Tagging elements ~~of Table 1 and 2~~ of Annex II[11] [last updated: July 2022]

The RTS on ESEF requires that issuers shall mark up all disclosures that correspond to the elements in ~~Table 1 and Table 2 of~~ Annex II if those disclosures are present in the issuer's financial statements. If those disclosures are not present in the issuer's financial statements, they should not be tagged. Moreover, issuers shall neither specifically include those disclosures, nor shall they add an indication that such disclosures are not present in their financial statements, solely for the purpose of tagging such information with use of elements listed in the tables of Annex II.

1.4 Anchoring

Guidance 1.4.1 Anchoring of extension elements to elements in the ESEF taxonomy that are wider in scope or meaning [last updated: July 2019]

Annex IV of the RTS on ESEF sets out that extension taxonomy elements marking-up the IFRS consolidated financial statements' statement of financial position, statement of profit or loss and other comprehensive income, statement of changes in equity and statement of cash flows have to be anchored to elements of the ESEF taxonomy, except for elements corresponding to subtotals. This principle can be illustrated with an example. An issuer issued equity and it received one part of the capital increase in kind and another part in cash. It disclosed in its statement of changes of equity the two components separately. The ESEF taxonomy includes an element 'issue of equity' but it does not include separate elements for capital increases in kind and capital increases

[11] Before the 2022 amendment to the ESEF RTS, Annex II of the ESEF RTS contained Table 1 and 2 with the list of mandatory elements of the core taxonomy. The 2022 amendment to the ESEF RTS, applicable to financial years beginning on after 2023 only includes one table with the full list of mandatory elements of the core taxonomy.

in cash. Therefore, the issuer creates extension taxonomy elements ‘capital increases in kind’ and ‘capital increases in cash’. Capital increases in kind and in cash are narrower in scope than the element ‘issue of equity’ and represent disaggregations of it. Therefore, the two extension elements are anchored to the wider base taxonomy element ‘issue of equity’. It is not necessary to anchor the two extension taxonomy elements to narrower elements in the ESEF taxonomy except for the case outlined in Guidance 1.4.2.

Please note that the RTS on ESEF does not set an anchoring requirement for the Notes to the financial statements. Therefore, if issuers decide on a voluntary basis to create detailed tag extension elements to mark-up their Notes, there is no obligation to anchor such extension elements.

Guidance 1.4.2 Anchoring of extension elements that are combinations [last updated: July 2021]

Annex IV of the RTS on ESEF sets out that where an extension taxonomy element combines a number of elements of the ESEF taxonomy, issuers shall anchor that extension taxonomy element to each of the elements in the ESEF taxonomy it combines, except where these elements are reasonably deemed insignificant.

This principle is best illustrated with an example. An issuer discloses in its IFRS statement of financial position an item ‘issued capital and share premium’. The ESEF taxonomy does not include such an item. Therefore, it is necessary to create an extension taxonomy element. However, the taxonomy includes the elements ‘issued capital’ and ‘share premium’. The extension taxonomy element represents a combination of the two elements that are available in the ESEF taxonomy. The extension taxonomy element ‘issued capital and share premium’ shall be anchored to these two elements, indicating that it is wider in scope than these two elements.

The obligation to anchor to “narrower” elements exists not only where the extension is *exclusively* a combination of core taxonomy, but rather *whenever* there is a combination of two or more taxonomy elements. For instance, if the issuer needs to create an extension for 'Share capital, Share Premium and [other entity specific reserve for which there is no tag available in the core taxonomy]', it is mandatory to anchor that extension to 'Issued capital' and 'Share premium'.

1.5 Use of line items or domain members

Guidance 1.5.1 Determination of whether a disclosure should be marked up with a line item or a domain member [last updated: July 2021]

XBRL taxonomies contain line items and domain members which are both elements used to mark up disclosures. Line items normally represent the accounting concepts being reported. They are used to mark up numeric accounting information as well as qualitative (non-numeric) disclosures. Line items are stand alone, but can be used either individually or in a table (in combination with axis and axis members).

Axes and domain members (also sometimes referred to as 'axis members' or 'members') are elements that are mainly used to disclose information for line items from different aspects, such as the disaggregation of the information for line items into different product types, categories, classes and maturities. The axis is the specific aspect being considered. An axis includes one or more components (called members) which share the common accounting or economic meaning defined by that axis.

For example, 'revenue' as a line item can be used to tag numbers that refer to various operating segments. In this case the 'segments [axis]' dimension can be applied to differentiate between revenues of the cars segment, using the element 'cars [member]' and of the motorcycles segment using the element 'motorcycles [member]'. It is important to note that members and axes cannot be used on their own, but are used together with line items to mark up disclosures. Moreover, the same piece of information can be tagged using a line item only or a line item together with a dimension member. For example, the item 'land and buildings' in the statement of financial position can be marked up using the line item 'land and buildings' or using the line item 'property, plant and equipment' in conjunction with the domain members 'land and buildings [member]' of the axis 'classes of property, plant and equipment [axis]'.

In order to facilitate consistent use of line items and domain members despite the flexibility offered by the XBRL standard, extension elements should be defined as line items unless the applicable taxonomy envisages in a particular statement or disclosure the use of domain members.

For example, the ESEF taxonomy contains two elements with the name 'issued capital', one is a line item and one is a domain member. The applicable taxonomy envisages that in the statement of financial position the line item is used, while in the statement of changes in equity the domain member should be applied.

The intention of the above provision is not to strictly disallow the use of dimensions and domain members in certain financial statements where application of such constructs is not envisaged by the ESEF taxonomy. Issuers are allowed to define and use dimensions and domain members where there is a specific need to introduce them to better communicate the information in the report to users. However, when making this judgement preparers should consider XBRL calculations.[12]

One scenario where the use of an existing ESEF axis or of an extension axis is appropriate is when the axis is applicable to all (or most) of the line items. For example, when a preparer's report contains the income statement broken down by three columns (for example, 'profit before fair value adjustment', 'fair value adjustment' and 'profit after fair value adjustment'), the IFRS taxonomy does not prescribe the use of dimensions and domain members nor does it provide relevant elements to cover the columns. In such case the issuer may define extension dimension and domain members and apply

[12] XBRL calculations tell a user of tagged data how line items roll up to (sub)totals presented in the Primary Financial Statements.

them in its income statement if this better reflects the information presented in the report. Notwithstanding this flexibility in tagging, ESMA reminds issuers of the obligation to tag every number in a declared currency (Annex II paragraph 1 of the RTS on ESEF): such obligation exists also for disclosures in tabular or column format.

1.6 Use of positive and negative values (signage)

Guidance 1.6.1 Use of positive and negative values [last updated: July 2022]

Line items should be assigned with an appropriate signage and balance attribute in order to correctly convey the meaning of the particular element. Most XBRL numeric elements are designed to be 'normally' reported with a positive value. A negative value is only used when the opposite meaning is required, e.g. loss rather than profit. By appropriately submitting XBRL numeric disclosures as positive values, issuers can ensure the accuracy of their calculation relationships.

In particular, elements representing assets should be assigned with the debit balance attribute value and reported as a positive figure. Similarly, the credit balance attribute value should be used for elements that represent equity and liabilities.

Revenue and other income should be defined using the credit balance attribute value and reported as a positive number. Elements representing costs and expenses should be assigned with the debit balance attribute value and reported as positive figures. In the calculation linkbase, costs and expenses should be subtracted from revenues and other income.

Cash inflows reported in the cash flow statement should be defined as debit items and cash outflows as credit items and in both cases reported as positive figures. ESMA would like to draw attention in this regard to section 5 of the Preparer's Guide published by the IFRS Foundation[13] regarding the expression of tagged values as positive or negative in XBRL filings.

It should be noted that there are some limited scenarios where numeric elements (specifically elements of monetaryItemType) need to be defined without a balance attribute because of the restrictions on calculation weights and balances, such as for example ~~tags for basic or diluted Earnings Per Share~~[14] Net cash flows from (used in) operations. ESMA deems that these should be assessed on a case-by-case basis and, provided that the no balance attribute is appropriate, they should be deemed acceptable.

1.7 Units of measure

Guidance 1.7.1 Use of standard units of measure [last updated: July 2019]

[13] https://www.ifrs.org/-/media/feature/resources-for/preparers/xbrl-using-the-ifrs-taxonomy-a-preparers-guide-january-2019.pdf?la=en

[14] Please refer to the Preparers' Guide, paragraph 184, for further explanations and examples https://www.ifrs.org/content/dam/ifrs/resources-for/preparers/xbrl-using-the-ifrs-taxonomy-a-preparers-guide-january-2019.pdf

As per the XBRL 2.1[15] and Inline XBRL 1.1[16] specifications, each numeric tag must be associated with a unit of measure. To achieve consistency in the use of units of measure (e.g. EUR for Euro, GW for Gigawatt, km for Kilometre, etc.) in Inline XBRL documents, issuers should check in the XBRL specifications and unit registry[17] whether a required unit exists before defining a custom unit. Custom unit measures should not be created if a standard unit defined in the XBRL Specification or XBRL unit registry can be used. Preparers are discouraged to define and use units that imply a scale factor on a given measure (e.g. millions of EUR) because the Inline XBRL specifications already provides a *scale* attribute which indicate the required scaling value.

1.8 Footnotes

Guidance 1.8.1 Marking up footnotes [last updated: July 2019]

If an issuer discloses numbers in a declared currency in a footnote to the Primary Financial Statements, on the basis of the requirements set out by Annex II.1 of the RTS on ESEF, those numbers shall be marked-up with the appropriate tag available in the ESEF taxonomy, or with an extension taxonomy element, since they effectively belong to the Primary Financial Statements. If an extension element is created, then such extension shall be anchored as per the requirements set out by Annex IV.8 of the RTS on ESEF.

Please note that the term “footnote” is not understood in this context to be a synonym of the term “Notes”, which is used to indicate exclusively the Notes to the Primary Financial Statements. The figure below illustrates the numbers, including numbers disclosed in the footnotes, that must be tagged in a consolidated statement of cash flows (highlighted in yellow):

[15] 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#_4.6.2
[16] http://www.xbrl.org/specification/inlinexbrl-part1/rec-2013-11-18/inlinexbrl-part1-rec-2013-11-18.html#sec-nonFractions
[17] https://www.xbrl.org/utr/utr.xml

Consolidated statement of cash flows
for the year ended 31 December

	Notes	2016 €000	2015 €000
Operating activities			
Profit before tax			
Adjustments to reconcile profit before tax to net cash flows:			
Depreciation and impairment of tangible assets.	11		
Amortization and and impairment of intangible assets	12		
Disposal of fixed assets	11		
Deferred revenue recognition	22		
Finance income	9.6		
Finance costs	9.5		
Share of profit of an associate	6		
Capitalised revenue (test period)	11		
Working capital adjustments:			
Decrease (increase) in trade and other receivables*	16,17, 18, 22		
Increase in inventories			
Increase (decrease) in trade and other payables	22,23		

*Restricted Escrow account from bond issue in amount of EUR thousand (2015: EUR thousand), aimed at specific investments, has been excluded from the year-end cash amount.

FIGURE 1: EXAMPLE OF NUMBERS TAGGED IN A CONSOLIDATED STATEMENT OF CASH FLOW, INCLUDING NUMBERS DISCLOSED IN FOOTNOTES

In addition, issuers may apply on a voluntary basis XBRL footnotes to mark up the entire text of a footnote related to any portion of their financial statements or of the annual financial report (see rules defined in Guidance 2.3.1.).

1.9 Block tagging [new]

Guidance 1.9.1 Marking up notes and accounting policies [last updated: July 2022] [new]

Annex II of the RTS on ESEF includes a number of elements defined with the "*textBlockItemType"* which are expected to be used for marking up (following the block tagging approach) larger pieces of information contained in the IFRS consolidated financial statements such as explanatory notes and accounting policies. Those elements are of different granularity. Therefore, preparers have to consider the accounting meaning of a taxonomy element when selecting the appropriate block tag for marking up such disclosure. This is particularly important for cases where there are multiple block tags that can match a given disclosure.

ESMA is of the opinion that issuers shall, as a minimum, mark up information contained in the IFRS consolidated financial statements (including headers/titles) with the elements of Annex II.

In case of a disclosure corresponding to more than one element of different granularity (with narrower and wider elements), preparers should use each of them and multi tag the information to the extent that corresponds with the underlying accounting meaning of the information.

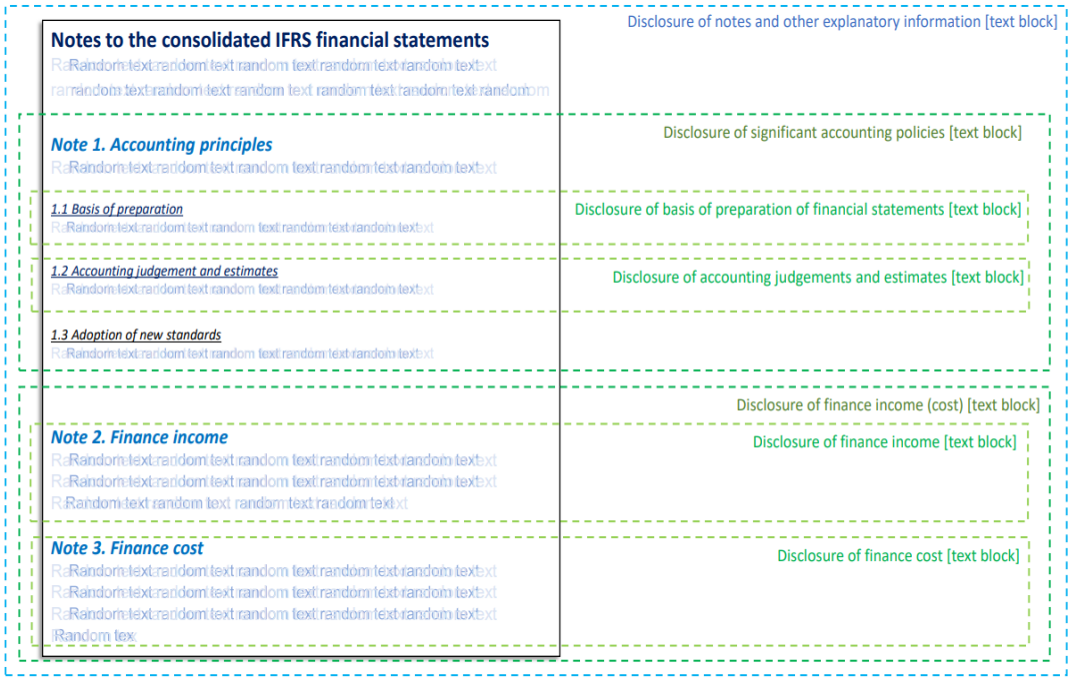

FIGURE 2: EXAMPLE OF MULTI TAGGING THE NOTES TO THE CONSOLIDATED IFRS FINANCIAL STATEMENTS WITH THE ELEMENTS OF ANNEX II

Guidance 1.9.2. Granularity of block tagging [last update: July 2022] [new]

In certain cases, content of tables (i.e. selected columns or rows) presented in issuer's financial statements may correspond to multiple elements listed in the Annex II Table. Taking into consideration technical complexity and the fact that tags applied within such tables could not be understandable without layout information. ESMA recommends that the lowest level of granularity for block tagging the IFRS consolidated financial statements be individual tables contained within a single note. Therefore, issuers are not required to apply "*textBlockItemType"* elements from Annex II on selected rows or columns of such table, and instead shall apply corresponding elements on the entire table.

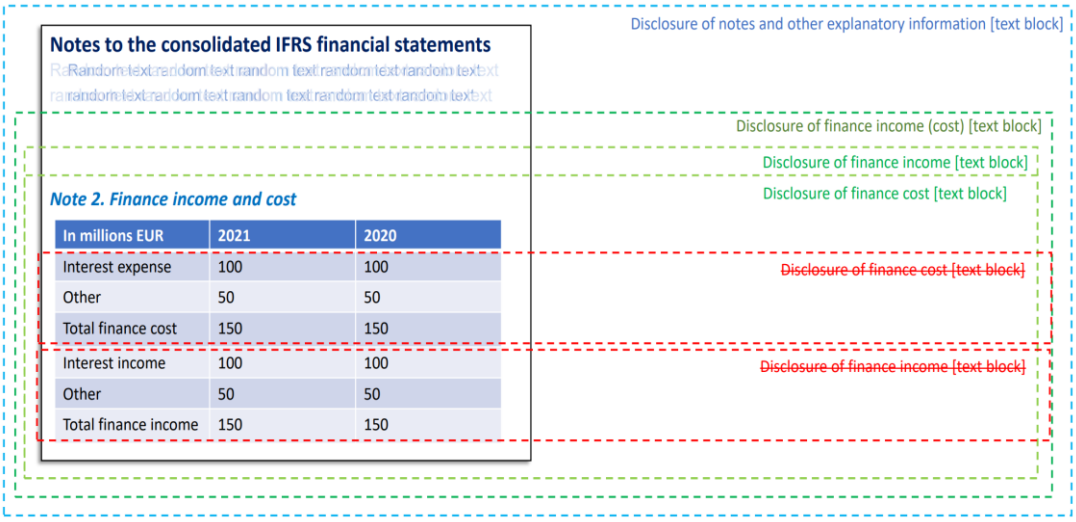

FIGURE 3: EXAMPLE OF THE GRANULARITY TO TAG A TABLE IN THE NOTES TO THE CONSOLIDATED IFRS FINANCIAL STATEMENTS

Guidance 1.9.3 Other considerations for block tagging of notes and accounting policies [last updated: July 2022] [new]

Whenever an issuer discloses information in an explanatory note or accounting policy (or its section or subsection) that does not correspond to any of the elements in Annex II, such disclosure (or part of it) is not required to be block tagged. Consequently, there is also no obligation to create an extension element to block tag such notes and accounting policies. Nevertheless, ESMA encourages issuers to apply core taxonomy elements listed in the Annex VI which are not part of Annex II, or to create extension elements to block tag such disclosures since this information is useful to end users. As noted in Guidance 1.4.1, there is also no obligation to anchor such extensions in the notes to the financial statements.

As highlighted by recital 10 of the RTS on ESEF, “the requirement for block tagging should not limit the discretion of issuers to mark-up notes to IFRS consolidated financial statements with a higher level of granularity”. ESMA highlights in this regard that when tagging additional information, issuers need to ensure consistency across reporting periods to the maximum possible extent.

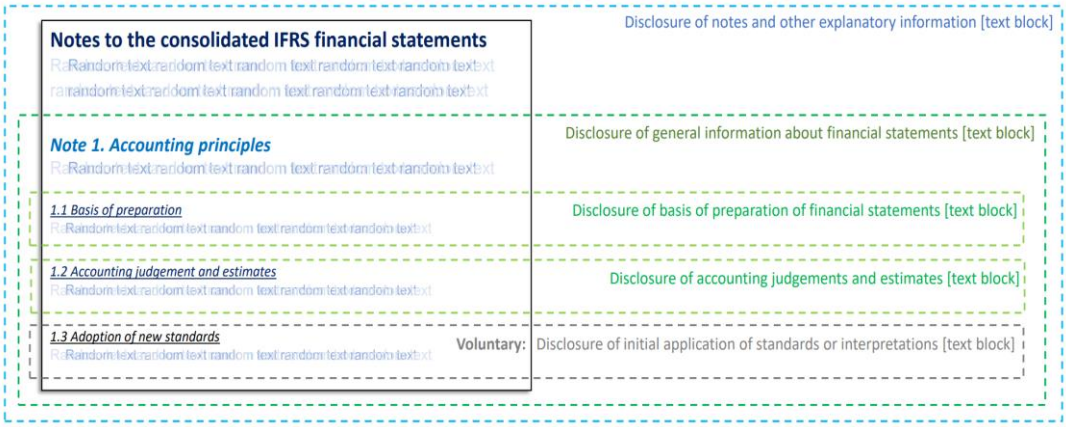

FIGURE 4: EXAMPLE OF MULTI TAGGING THE NOTES TO THE CONSOLIDATED IFRS FINANCIAL STATEMENTS WHEN INCLUDING VOLUNTARY ELEMENTS

In instances where multiple pieces of text corresponding to one block tag are disclosed in different sections of the notes, issuers should tag such disclosures with one block tag by using the Inline XBRL constructs which allow the concatenation (or exclusion) of text content within a document (see Guidance 2.5.5).

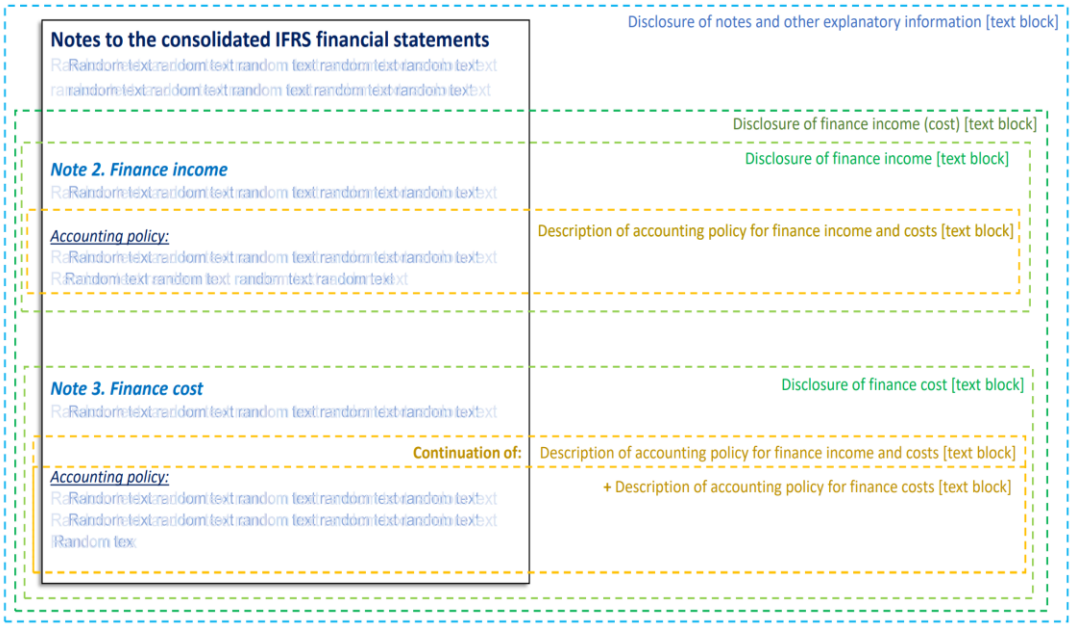

FIGURE 5: EXAMPLE OF TAGGING A DISCLOSURE IN DIFFERENT SECTIONS OF THE NOTES TO THE CONSOLIDATED IFRS FINANCIAL STATEMENTS

2 Guidance for software firms to ensure technical validity

In the following section, ESMA provides software firms with recommendations on technical aspects and rules that should be supported by their tools to facilitate harmonised reporting by issuers. Furthermore, ESMA provides software firms with recommendations on which messages could be used to warn that a recommended rule is violated. To arrange the content of this document clearer, the recommended rules and messages were identified in grey boxes and with red font.

2.1 Contexts

Guidance 2.1.1 Use of the LEI to identify the issuer [last updated: July 2021]

According to Annex IV of the RTS on ESEF, issuers shall identify themselves in the Inline XBRL document using ISO 17442 legal entity identifiers.

This shall be implemented in such way that an xbrli:identifier element has a valid Legal Entity Identifier (LEI) as its content. The taxonomy files prepared by ESMA include validity checks of pattern and check sum digit of the LEI.

The scheme attribute of the xbrli:identifier element shall have "http://standards.iso.org/iso/17442" as its content.

Example (from http://codes.eurofiling.info/):

```
<xbrli:entity>
    <xbrli:identifier scheme="http://standards.iso.org/iso/17442">
    KGCEPHLVVKVRZYO1T647
    </xbrli:identifier>
<xbrli:entity>
```

ESMA recommends that software firms include appropriate validations in their tools. The following messages are recommended to be used:

Messages: “invalidIdentifierFormat” and “invalidIdentifier”

Guidance 2.1.2 Formatting of the period element in the context of the Inline XBRL document [last updated: July 2019]

ESMA recommends presenting the period element in the yyyy-mm-dd format, i.e. without the time component (an example of a period element including a time component would be: 2017-01-01T00:00:00:00). A time component is not expected to be necessary to tag annual reports. Moreover, it may result in inappropriate application and invalidity of defined calculation checks.

ESMA recommends that software firms include appropriate validations in their tools ensuring that:

The xbrli:startDate, xbrli:endDate and xbrli:instant elements MUST identify periods using whole days (i.e. specified without a time content and time zone).

In case of violation, the following messages are recommended to be used:

Violantion: “periodWithTimeContent”, “periodWithTimeZone”

Guidance 2.1.3 Use of segment and scenario containers in the context elements of Inline XBRL documents [last updated: July 2021]

The XBRL 2.1 specification defines two open containers in context elements of XBRL instance documents. These are xbrli:segment and xbrli:scenario. According to the XBRL Dimensions 1.0 specification, a taxonomy prescribes which of the two shall be applied in XBRL instance documents to contain dimension members.

ESMA recommends to use xbrli:scenario for this purpose, therefore ESMA encourages software firms to include in their tools appropriate validations ensuring:

Extension taxonomy MUST set xbrli:scenario as context element on definition arcs with *http://xbrl.org/int/dim/arcrole/all* and *http://xbrl.org/int/dim/arcrole/notAll* arcroles.

xbrli:segment container MUST NOT be used in contexts.

In case of violation, the following message is recommended to be used:

Violation: “segmentUsed”

When using the xbrli:scenario in contexts, it shall not contain any content other than that defined in XBRL Dimensions specification. Consequently, custom XML shall not be used in xbrli:scenario.

ESMA recommends software firms to include in their tools appropriate validations ensuring:

xbrli:scenario in contexts MUST NOT contain any other content than defined in XBRL Dimensions specification.

The following messages are recommended to be used:

Messages: “scenarioContainsNonDimensionalContent”

Guidance 2.1.4 The Inline XBRL document shall only contain data of the issuer [last updated: July 2021]

It shall be ensured that the Inline XBRL document contains data only of a single issuer. ESMA recommends software firms to include in their tools appropriate validations ensuring:

All entity identifiers and schemes in contexts MUST have identical content

In case of violation, the following message is recommended to be used:

Violation: “multipleIdentifiers”

2.2 Facts

Guidance 2.2.1 Attributes to define the accuracy of numeric facts [last updated: July 2021]

There shall be consistent use of a single attribute describing the precision of facts, as indicated in the Working Group Note published by XBRL International[18]. Therefore ESMA recommends software firms to include in their tools appropriate validations ensuring:

The accuracy of numeric facts MUST be defined with the 'decimals' attribute rather than the 'precision' attribute.

The following messages are recommended to be used:

Messages: "precisionAttributeUsed"

As indicated in guidance from XBRL International[19], it should be noted that the scale factor used in iXBRL is separate from the XBRL "accuracy" mechanism (expressed using "decimals" or "precision"). For example, the value "$12.34 million" is expressed in millions (a scale factor of "6"), but is accurate to the nearest $10,000 (which would be denoted by a decimals value of "-4"). Additional examples on the application of the 'scale' and 'decimals' attributes can be found at https://www.xbrl.org/guidance/ixbrl-tagging-features/#3-scaling-numeric-values .

Guidance 2.2.2 Representation of rates, percentages and ratios [last updated: July 2019]

Issuers should ensure a consistent XBRL representation of rates, percentages and ratios in decimal notation. For that purpose, ESMA recommends following the provisions of XBRL 2.1 specification published by XBRL International[20].

As an example following the above-mentioned specifications, if an issuer wants to tag a percentage value of 81%, this shall be tagged with ix:nonFraction element with a unit of *pure*[21] and a scale attribute set to -2, resulting in XBRL representation of the value correct notation, i.e. as 0.81.

Guidance 2.2.3 Transformation of facts [last updated: July 2021]

[18] http://www.xbrl.org/WGN/precision-decimals-units/WGN-2017-01-11/precision-decimals-units-WGN-2017-01-11.html#inconsistent-levels-of-accuracy
[19] https://www.xbrl.org/guidance/ixbrl-tagging-features/#3-scaling-numeric-values
[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#_4.8.2
[21] 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#_5.1.1.3.1

Whenever a string or numeric text used in an issuer's report does not follow the format based on the predefined data type of taxonomy element used to mark up such string or numeric text, a transformation rule shall be applied.

For that purpose, ESMA recommends applying the Transformation Rules Registry 4, as published by XBRL International on the dedicated website[22] or any more recent versions of the Transformation Rules Registry provided with a 'Recommendation' status at XBRL International. ESMA recommends that software firms include appropriate validations in their tools ensuring:

Transformation rule applied on facts in ESEF document MUST be defined either in https://www.xbrl.org/Specification/inlineXBRL-transformationRegistry/REC-2020-02-12/inlineXBRL-transformationRegistry-REC-2020-02-12.html or a more recent version of the Transformation Rules Registry provided with a 'Recommendation' status.

In case of violation, the following message is recommended to be used:

Violation: incorrectTransformationRuleApplied

Guidance 2.2.4 Facts duplication [last updated: July 2022]

According to the Working Group Note on handling duplicate facts[23] published by XBRL International, there are four ~~three~~ classes of duplicates for numeric and non-numeric facts:

- Complete duplicates;
- Consistent duplicates (numeric only);
- Multi-language duplicates (string only)
- Inconsistent duplicates.

Annex IV of the RTS on ESEF sets out that issuers shall not use numeric taxonomy elements to mark up different values for a given context unless the difference is a result of rounding related to presentation of the same information with different scale in more than one place in the same annual financial report. Based on the above definitions of duplicates and relevant provisions of the RTS on ESEF, it is required that issuers shall not report inconsistent duplicates within the content of an inline XBRL document.

Therefore, ESMA recommends that software firms include appropriate validations in their tools ensuring:

Inconsistent duplicate numeric facts MUST NOT appear in the content of an inline XBRL document.

In case of violation, the following message is recommended to be used:

Violation: inconsistentDuplicateNumericFactInInlineXbrlDocument

[22] https://specifications.xbrl.org/work-product-index-inline-xbrl-transformation-registry-4.html
[23] http://www.xbrl.org/WGN/xbrl-duplicates/WGN-2018-04-19/xbrl-duplicates-WGN-2018-04-19.html

Inconsistent duplicate non-numeric facts SHOULD NOT appear in the content of an inline XBRL document.

In case of violation, the following message is recommended to be used:

Violation: inconsistentDuplicateNonnumericFactInInlineXbrlDocument

Guidance 2.2.5 Tagging of dashes or empty fields [last updated: July 2022] [new]

Annex II of the RTS on ESEF sets out that issuers shall mark up all numbers in a declared currency presented as part of their IFRS consolidated primary financial statements. Since a dash symbol is not a number, there is no requirement for issuers to tag such a symbol.

ESMA acknowledges that empty fields or dash symbols in the human readable version of the AFR are normally considered to be a "zero" or a "nil value" and that these are subject to audit. ESMA also acknowledges that tagging positions appearing as an empty field or a dash may be common practice, although not required by Annex II of the RTS. Therefore, ESMA recommends that issuers tag such symbols as a result of which the economic substance of empty fields, dashes or likewise symbols in the machine-readable version of the annual financial report are similar to the human readable version. Moreover, issuers should in such cases, use appropriate transformation functions as defined by the Transformation Registry referenced by Guidance 2.2.3. In particular, ESMA recommends to apply the ixt:fixed-zero (transforming dash to '0')or ixt:fixed-empty (transforming dash to a nil value) functions.

Guidance 2.2.6 Technical constructions of a block tag [last updated: July 2022] [new]

ESMA is of the opinion that block tagging in ESEF should be able to designate meaningful fragments of a well-formed XHTML that are extracted into XBRL for processing. That means that the extracted information, when displayed outside the context of the original document, resembles the original document as the semantic structure but not necessarily the style is maintained.

Due to mechanics of producing XHTML documents, some narrative blocks extracted from such documents to an XBRL instance may not be formatted in a manner that is exactly the same as the full document when looked at in isolation (such as, but not limited to, lost table structures, applied styles, different line breaks). The limitations in these transformation mechanics are known and understood by the XBRL community who will be monitoring the evolution and possible improvements in these mechanics.

Until transformation mechanics are further improved, ESMA recommends that issuers follow the below guidance to ensure better resemblance of the tagged facts with the human readable report.

Issuers shall set the iXBRL @escaped attribute to "true", if the human readable content contains a "<" or "&" character to ensure that the resulting fact value is always valid for

its data type. In all other cases, the @escaped attribute may be set to either “false” or “true” to result in valid XHTML string.

Additionally, issuers should ensure that the text content of the tag:

- presents the words and numbers in the same order as the human readable report; and
- where there is space between words and numbers in the source text, there is at least some space retained in the text block (i.e. “intangible assets 3m EUR” should not become “intangibleassets3mEUR” after extraction)

Each block tag MUST use escape=”true” in the tag attribute if the human readable content contains a “<” or “&” character.

In case of violation, the following message is recommended to be used:

Violation: escapedHTMLUsedInBlockTagWithSpecialCharacters

2.3 Footnotes

Guidance 2.3.1 Appropriate use of XBRL footnotes in the reports [last updated: July 2021]

XBRL footnotes may be used to provide additional information about the tagged data. The XBRL Specification and the XBRL Link Roles Registry define syntactical constructs and explain the semantics in the context of applying footnotes in instance documents. It is not expected that any other syntax and semantics will be needed to provide footnotes included in the financial statements. To ensure the expected syntax and semantics are applied for footnotes in a target XBRL document, the issuers shall use the *footnote* mechanism as defined by Inline XBRL 1.1 specification and shall not specify attributes for footnotes that are not defined in XBRL 2.1 specification.

Orphaned footnotes (i.e. footnotes that are not linked to any tagged data) may cause interpretation problems. ESMA therefore recommends that software firms include appropriate validations in their tools ensuring:

Every nonempty link:footnote element SHOULD be linked to at least one fact.

In case of violation, the following message is recommended to be used:

Violation: “unusedFootnote”

Moreover, to enable automatic checks on whether all footnotes in the report are provided in at least the language of the report, ESMA recommends that software firms include appropriate validations in their tools ensuring:

Each footnote MUST have or inherit an ‘xml:lang’ attribute whose value corresponds to the language of content of at least one textual fact present in the inline XBRL document and each footnote relationship MUST have at least one footnote in the language of the report.

In case of violation the following messages are recommended to be used:

Violation: “footnoteInLanguagesOtherThanLanguageOfContentOfAnyTextualFact”

Violation: “footnoteOnlyInLanguagesOtherThanLanguageOfAReport”.

2.4 Restrictions on Inline XBRL and other constructs

Guidance 2.4.1 Inline XBRL constructs that shall be avoided [last updated: July 2021]

It is expected that neither tuples nor fraction items be required to reflect the content of financial statements. Therefore, these items shall not be used. ESMA recommends that software firms include appropriate validations in their tools ensuring:

Tuples or items with xbrli:fractionItemType data type MUST NOT be defined in extension taxonomy

The ix:tuple and ix:fraction element MUST NOT be used in the Inline XBRL document.

In case of violation, the following messages are recommended to be used

Violation: “tupleElementUsed”

Violation: “fractionElementUsed”

Moreover, ESMA is of the opinion that in the ESEF reporting scenario only facts that are not eligible for transformation can be included in the *ix:hidden* section (i.e. where content is not intended for display). Therefore only if there is no transformation rule in the latest recommended *Transformation Rules Registry* that can be applied to the fact’s value (e.g. for *enumeration(Set)ItemType*[24] or *durationItemType* facts) can such fact be included in the *ix:hidden* section.

The Inline XBRL specification does not permit XHTML markup (e.g. <xhtml:span>) to be included within numeric facts. ESMA is of the opinion that XHTML within numeric values is not necessary, and any such elements should be removed in order to enable tagging. The *ix:hidden* should not be used as a workaround to tag such values.

In such case, the visible text in the report corresponding to the hidden fact shall have applied a custom style property “-esef-ix-hidden” which value follows the *id* attribute of that fact. Unlike other style properties, the value of ‘-esef-ix-hidden’ is not inherited.

For example:

TEXT

[24] https://www.xbrl.org/Specification/extensible-enumerations-2.0/REC-2020-02-12/extensible-enumerations-2.0-REC-2020-02-12.html#sec-enumeration-items

where ‘abc’ is the value of *id* attribute on the fact in the hidden section and TEXT corresponds to its value in the report (that would have been transformed to the fact value should a transformation rule be available).

ESMA recommends that software firms include appropriate validations in their tools ensuring:

The ix:hidden section of Inline XBRL document MUST not include elements eligible for transformation.

The ix:hidden section contains a fact whose *id* attribute is not applied on any “-esef-ix-hidden” style.

“-esef-ix-hidden” style identifies *id* attribute of a fact that is not in ix:hidden section.

In case of violation, the following messages are recommended to be used

Violation: “transformableElementIncludedInHiddenSection”

Violation: “factInHiddenSectionNotInReport”

Violation: “esefIxHiddenStyleNotLinkingFactInHiddenSection”

Guidance 2.4.2 Other constructs that shall be avoided [last updated: July 2021]

Application of the HTML <base> element or ‘xml:base’ attribute makes the processing of the Inline XBRL document more complex and may impact references to other files, images or CSS styles. Therefore, these items shall not be used. ESMA recommends that software firms include appropriate validations in their tools ensuring:

The HTML <base> elements and xml:base attributes MUST NOT be used in the Inline XBRL document.

In case of violation, the following messages are recommended to be used

Violation: “htmlOrXmlBaseUsed”

2.5 Other content of Inline XBRL documents

Guidance 2.5.1 Inclusion of content other than XHTML and XBRL in the Inline XBRL document [last updated: July 2022]

The inclusion of executable code in an ESEF file is a potential threat and may cause security issues. Software firms shall therefore inspect resources embedded or referenced by the XHTML document and its inline XBRL to ensure that no malicious content or executable code is included in the “machine-readable layer” of the document, i.e. in images, headers of images, style properties, or other resources which make up the content of a document and which would be retrieved as part of its rendering.

Since ESEF is a format requirement and is not expected to impact the “human readable layer” of a report, this guidance should not be seen as limiting the inclusion of links to

external websites, ~~to specific e-mail addresses (i.e. mailto links),~~ to other documents or to other sections of the annual financial report. In case of inclusion references to e-mail addresses, these should be provided in form of a non-linked text, i.e. stripped of the 'mailto' link.

ESMA recommends that software firms include appropriate validations in their tools ensuring:

Resources embedded or referenced by the XHTML document and its inline XBRL MUST NOT contain executable code (e.g. java applets, javascript, VB script, Shockwave, Flash, etc).

In case of violation, the following message is recommended to be used:

Violation: "executableCodePresent"

This also applies to embedding script-based inline XBRL viewers as part of Inline XBRL documents.

ESMA is of the opinion that images should either be included in the XHTML document or be held inside the report package as separate files. ESMA encourages preparers to ensure that their file size does not exceed support of browsers.

Images embedded in the XHTML document as a base64 encoded string shall specify media type as defined by MIME RfC 2045 (hereinafter referred to as MIME type) whose content corresponds to the MIME specified. In case of images that are not embedded in the XHTML (and only referenced by the XHTML) where the MIME type is not specified, such files shall match their file extension.

ESMA therefore recommends that software firms include appropriate validations in their tools ensuring:

Images embedded in the XHTML document as a base64 encoded string MUST have the correct MIME type specified.

In case of violation, the following message is recommended to be used:

Violation: "incorrectMIMETypeSpecified"

Violation: "MIMETypeNotSpecified"

Images not embedded in the XHTML document where MIME type is not specified MUST match their file extensions.

In case of violation, the following message is recommended to be used:

Violation: "imageDoesNotMatchItsFileExtension"

To avoid any potential threats that may be brought by specific formats used for saving images included in the XHTML document, issuers shall only use PNG, GIF, SVG or JPG/JPEG graphic files.

ESMA therefore recommends that software firms include appropriate validations in their tools ensuring:

Images included in the XHTML document MUST be saved in PNG, GIF, SVG or JPG/JPEG formats.

In case of violation, the following message is recommended to be used:

Violation: “imageFormatNotSupported”

Preparers shall not embed images carrying financial information in ESEF report. Images can only be used for content such as branding information, graphical layout, photographs, etc.

Guidance 2.5.2 Indication of the language used in textual mark ups [last updated: July 2019]

ESMA recommends to apply the ‘*xml:lang*’ attribute identifying the language of the report on the root html element of the XHTML file. Additionally it is recommended to apply it also on the *ix:references* tag from which it shall be transformed to the root *xbrli:xbrl* element of the resulting XBRL instance document.

Each tagged text fact[25] should have an ‘xml:lang’ attribute that is assigned to the fact or inherited e.g. from the root element. Its value must correspond to the language of text in the content of a tag.

To enable automatic checks on whether all tags in the report are provided in at least the language of the report, ESMA recommends that software firms include appropriate validations in their tools ensuring:

Each tagged text fact MUST have the ‘xml:lang’ attribute assigned or inherited and all tagged text facts MUST be provided in at least the language of the report

In case of violation, i.e. missing ‘xml:lang’ attribute, the following message is recommended to be used:

Violation: “undefinedLanguageForTextFact”

Violation: “taggedTextFactOnlyInLanguagesOtherThanLanguageOfAReport”.

Guidance 2.5.3 Use of more than one target XBRL document for an Inline XBRL Document Set (IXDS) [last updated: July 2020]

Only one ESEF XBRL instance document is expected in a filing. Therefore, ESEF content must be in a default target document (i.e. without the target attribute) and other target documents must not be used unless explicitly required or allowed by local jurisdictions.

[25] As defined in http://www.xbrl.org/Specification/oim/CR-2020-05-06/oim-CR-2020-05-06.html#term-text-fact.

This is particularly important for local jurisdictions which have additional reporting requirements that could be submitted as part of the ESEF submission and would reduce the burden on issuers as they would only need to prepare a single report.

Therefore, ESMA recommends that software firms include the following rule in their tools ensuring:

Target attribute SHOULD not be used unless explicitly required by local jurisdictions.

In case of violation, the following message is recommended to be used:

Violation: "targetAttributeUsedForESEFContents"

Guidance 2.5.4 Use of the Cascading Style Sheet (CSS) language to style Inline XBRL documents [last updated: July 2021]

CSS may be used to format the reports. However, the transformations need to be used appropriately. For example, they must not be used to hide information by making it not visible e.g. by applying *display:none* style on any tagged facts. Moreover, it is recommended to apply styles globally, rather than define them separately for each part of the report.

In order to limit the number of files submitted and encourage the reuse of styles in case of multi-html Inline XBRL document sets, ESMA recommends that software firms include rules in their tools ensuring:

Where an Inline XBRL document set contains a single document, the CSS SHOULD be embedded within the document.

In case of violation, the following message is recommended to be used:

Violation: "externalCssFileForSingleIXbrlDocument"

Where an Inline XBRL document set contains multiple documents, the CSS SHOULD be defined in a separate file.

In case of violation, the following messages are recommended to be used:

Violation: "embeddedCssForMultiHtmlIXbrlDocumentSets"

Furthermore, in case of multi-html Inline XBRL document sets, the CSS file should be physically stored within the report package.

Guidance 2.5.5 Application of ix:continuation and ix:exclude elements [last updated: July 2019]

Further to Guidance 1.3.3, ESMA recommends that application of *ix:continuation* or *ix:exclude* element should be applied for marking-up multiple pieces of text to a single text block tag.

In this regard, ESMA draws preparers' attention to the existing provisions on application of *ix:continuation* (Section 4 of the Inline XBRL 1.1 specification) and of *ix:exclude* (Section 5 of the Inline XBRL 1.1 specification)[26].

2.6 Report packages

Guidance 2.6.1 Including Inline XBRL document in taxonomy packages [last updated: July 2021]

ESMA recommends that issuers follow the recommendations of XBRL International Working Group Note[27], which indicates how Inline XBRL documents are to be included within a taxonomy package. Furthermore, the Inline XBRL document can have either a .html or .xhtml extension when submitted as a packaged report. Therefore, ESMA recommends software firms to ensure that:

Inline XBRL document MUST be included within an ESEF report package as defined in http://www.xbrl.org/WGN/report-packages/WGN-2018-08-14/report-packages-WGN-2018-08-14.html

In case of violation, the following messages are recommended to be used:

Violation: "reportIncorrectlyPlacedInPackage"

Inline XBRL document included within a ESEF report package MUST have a .html or .xhtml extension.

In case of violation, the following messages are recommended to be used:

Violation: "incorrectFileExtension"

Guidance 2.6.2 Including multi-html Inline XBRL documents and multiple Inline XBRL document sets in taxonomy packages [last updated: July 2021]

For multiple Inline XBRL documents within a taxonomy package it is recommended to follow the approach proposed in the Working Group Note on report packages. Therefore, ESMA recommends software firms to ensure that:

Multiple Inline XBRL documents MUST be included within a ESEF report package as defined in http://www.xbrl.org/WGN/report-packages/WGN-2018-08-14/report-packages-WGN-2018-08-14.html

In case of violation, the following messages are recommended to be used:

Violation: "reportIncorrectlyPlacedInPackage"

[26] http://www.xbrl.org/specification/inlinexbrl-part1/rec-2013-11-18/inlinexbrl-part1-rec-2013-11-18.html#d1e1605
[27] http://www.xbrl.org/WGN/report-packages/WGN-2018-08-14/report-packages-WGN-2018-08-14.html

Guidance 2.6.3 Naming convention for report packages and report file [last updated: July 2021]

The report packages, as well as all the files included in those report packages, should ideally follow predefined naming conventions to facilitate the processing of issuers' reports by end-users.

Whilst ESMA did not define in the RTS on ESEF a unique naming convention for ESEF files, unless the relevant Officially Appointed Mechanism and / or National Competent Authorities provide indications of any specific naming conventions which are required at national level, ESMA encourages issuers to adopt a naming convention which match {base}-{date}-{lang}.zip, whereby:

- The {base} component of the filename should indicate the LEI of the issuer or the issuer's name (or an abbreviation of it); it should be of no more than 20 characters in length.
- The {date} component of the filename should indicate the ending date of the reporting period of reference. The {date} component should follow the YYYY-MM-DD format.
- The {lang} component of the filename should indicate the language of the report contained within the report package. The {lang} component should follow ISO 639-1 format (two-letter code).

The above naming convention is recommended both for the report package files (with .zip extension) and for any report file (with .html or .xhtml extension) present within the package. For the naming convention of the taxonomy files that are part of the report package, please refer to Guidance 3.1.5.

Whenever Officially Appointed Mechanism and / or National Competent Authorities provide indications of different naming conventions which are required at national level, issuers must follow such national naming conventions.

2.7 Technical validity of reports

Guidance 2.7.1 Ensuring report validity against XBRL specifications [last updated: July 2020]

Annex III of the RTS on ESEF sets out that the issuers must ensure that the Inline XBRL document is valid with respect to a set of listed XBRL specifications. Furthermore, ESMA is of the opinion that it would be beneficial to issuers to also validate their reports against the assertions (validation rules) defined in the ESEF taxonomy, prepared according to the Formula 1.0 specification and its modular extensions[28]. Therefore, ESMA recommends software firms to ensure that:

[28] https://specifications.xbrl.org/work-product-index-formula-formula-1.0.html

Target XBRL document MUST be valid against the assertions specified in ESEF taxonomy with severity set to http://www.xbrl.org/2016/severities.xml#ERROR appearing as target of generic arc with *http://xbrl.org/arcrole/2016/assertion-unsatisfied-severity* arcrole.

Target XBRL document SHOULD be valid against the assertions specified in ESEF taxonomy with severity set to http://www.xbrl.org/2016/severities.xml#WARNING appearing as target of generic arc with http://xbrl.org/arcrole/2016/assertion-unsatisfied-severity arcrole.

In case of violation, the following messages are recommended to be used:

Violation: "targetXBRLDocumentWithFormulaErrors"

Violation: "targetXBRLDocumentWithFormulaWarnings"

3 Technical guidance for issuers and software firms on extension taxonomies and other topics

The following technical guidance is aimed at both issuers and software firms.

3.1 Extension taxonomy

Guidance 3.1.1 Required components of extension taxonomies [last updated: July 2021]

According to the RTS on ESEF, issuers shall ensure that XBRL extension taxonomies contain the following structures:

- Presentation and calculation linkbase, which group the elements and express arithmetic relationships between the used elements;
- Label linkbase, which describes the meaning of each applied element;
- Definition linkbase, which ensures dimensional validity of the resulting XBRL instance document against the taxonomy and stores anchoring relationships.

ESMA recommends that software firms include rules in their tools ensuring:

Extension taxonomies MUST consist of at least a schema file and presentation, calculation, definition and label linkbases.

Each linkbase type MUST be provided in a separate linkbase file.

In case of violation, the following messages are recommended to be used:

Violation: "extensionTaxonomyWrongFilesStructure"

Violation: "linkbasesNotSeparateFiles"

Guidance 3.1.2 Taxonomy files published by ESMA [last updated: July 2021]

As set out in Article 7 of the RTS on ESEF, ESMA should facilitate the implementation of ESEF by providing XBRL taxonomy files that are compliant with all relevant technical and legal requirements in the RTS. Issuers are expected to use the published ESEF taxonomy as a starting point to create their extension taxonomies. The XBRL taxonomy with accompanying supportive documentation and list of available entry points for use by issuers in their taxonomies is freely available for download at: https://www.esma.europa.eu/policy-activities/corporate-disclosure/european-single-electronic-format under the section "ESEF XBRL Taxonomy files".

ESMA regularly updates the XBRL taxonomy files to reflect relevant updates of the IFRS Taxonomy and the translations of the core taxonomy into all EU languages. The RTS on ESEF specify which taxonomy version preparers are allowed to apply for each reporting period.

ESMA recommends that software firms include rules in their tools ensuring:

The issuer's extension taxonomies MUST import the entry point of the taxonomy files prepared by ESMA.

The issuer's extension taxonomies MUST import the applicable version of the taxonomy files prepared by ESMA.

In case of violation, the following messages are recommended to be used:

Violation: "requiredEntryPointNotImported"

Violation: "incorrectEsefTaxonomyVersionUsed"

Guidance 3.1.3 Taxonomy packages [last updated: July 2019]

Annex III of the RTS on ESEF sets out that the issuers shall submit the Inline XBRL document and the issuer's XBRL extension taxonomy files as a single reporting package, where XBRL taxonomy files are packaged according to the Taxonomy Packages specifications. ESMA recommends applying the latest version of the Taxonomy Packages specification, marked with 'Recommendation' status, as published by XBRL International on the dedicated website[29]. Moreover, issuers should follow the specification Working Group Note on report packages in the preparation of the taxonomy package for submission.

Guidance 3.1.4 Ensuring taxonomy validity against XBRL specifications [last updated: July 2020]

[29] http://specifications.xbrl.org/spec-group-index-taxonomy-packages.html

Annex III of the RTS on ESEF sets out that issuers must ensure that their extension taxonomy is valid with respect to a set of listed XBRL specifications.

Guidance 3.1.5 Naming conventions for extension taxonomy files [last updated: July 2021]

Issuers' extension taxonomy file names should match {base}-{date}_{suffix}.{extension} as presented in the table below:

XBRL document	**Name format**
Schema file	{base}-{date}.xsd
Presentation linkbase	{base}-{date}_pre.xml
Definition linkbase	{base}-{date}_def.xml
Calculation linkbase	{base}-{date}_cal.xml
Label linkbase	{base}-{date}_lab-{lang}.xml
Reference linkbase	{base}-{date}_ref.xml

The {base} component of the filename shall indicate the LEI of the issuer or the issuer's name (or an abbreviation of it); it should be of no more than 20 characters in length.

The {date} component of the filename shall indicate the ending date of the reporting period of reference. The {date} component shall follow the YYYY-MM-DD format.

The {lang} component of the filename should indicate the language of the report contained within the report package. The {lang} component should follow ISO 639-1 format (two-letter code).

ESMA recommends that software firms include rules in their tools ensuring:

Extension taxonomy document file name SHOULD match the {base}-{date}_{suffix}.{extension} pattern.

In case of violation, the following messages are recommended to be used:

Violation: "extensionTaxonomyDocumentNameDoesNotFollowNamingConvention"

Violation: "baseComponentInNameOfTaxonomyFileExceedsTwentyCharacters"

3.2 Extension taxonomy elements

Guidance 3.2.1 ~~*Naming conventions for extension taxonomy elements*~~ [Deleted[30] July 2022]

~~Extension taxonomy element names should represent the standard label of this element in the Label CamelCase Concatenation [LC3] convention unless it violates XML element naming rules. If multiple standard labels exist for extension taxonomy elements (i.e. in various languages), then any of those labels may be used as the basis for constructing the extension taxonomy element name. This is to follow the conventions applied in the ESEF taxonomy and the underlying IFRS Taxonomy.~~

Guidance 3.2.2 Data types to be used on extension concepts [last updated: July 2021]

The type attribute value of an extension concept shall reflect the type of information that is marked up in the Inline XBRL document.

To ensure consistency in the use of data types in issuers' extension taxonomies, extension taxonomy schemas should not define and apply on elements a custom type if a suitable type is already defined by the XBRL Specifications or in the XBRL data types registry[31]. Issuers should check the XBRL data types registry to see whether a required date type exists before they define a custom data type.

ESMA recommends that software firms include validation messages in their tools to facilitate the adherence to the following rule:

Extension taxonomy MUST NOT define a custom type if a matching type is defined by the XBRL Specifications or in the XBRL data types registry[32].

Specifically, domain members in extension taxonomies shall be defined using the 'domainItemType' data type.

ESMA recommends that software firms include rules in their tools ensuring:

Domain members MUST have domainItemType data type as defined in *http://www.xbrl.org/dtr/type/nonNumeric-2009-12-16.xsd*

In case of violation, the following messages are recommended to be used:

Violation: "domainMemberWrongDataType"

Guidance 3.2.3 Use of typed dimensions in issuers' extension taxonomies [last updated: July 2021]

[30] *Rationale for deletion:* The guidance seemed to introduce unnecessary complexities and additional burden on stakeholders in following and validating the proper application of LC3 convention, specifically in the context of variety of languages that may be used in preparation of ESEF reports.
[31] http://www.xbrl.org/dtr/dtr.xml
[32] http://www.xbrl.org/dtr/dtr.xml

As it is allowed to extend the ESEF taxonomy, ESMA does not deem that it is necessary to define typed dimensions. Therefore, ESMA recommends not defining typed dimensions in the extension taxonomy, but creating explicit elements to tag information in the annual financial report instead.

ESMA recommends that software firms include rules in their tools ensuring:

Extension taxonomy MUST NOT define typed dimensions.

In case of violation, the following messages are recommended to be used:

Violation: "typedDimensionDefinitionInExtensionTaxonomy"

Guidance 3.2.4 Identification of extension taxonomy element [last updated: July 2020]

Every element is defined in a namespace represented as a Universal Resource Identifier (URI) that identifies the organization that maintains the element definitions. The elements included in the taxonomy files prepared by ESMA therefore include ESMA's namespace for ESEF-specific extension elements and IFRS's namespace for elements imported from the IFRS taxonomy. Also, the creator of the extension taxonomy elements of an issuer should be identified by the issuer's namespace.

Issuers may refer to their Officially Appointed Mechanism and / or National Competent Authorities for indications of any extension taxonomy namespace.

Guidance 3.2.5 ~~*Definition of abstract concepts in extension taxonomies*~~ [Deleted[33] July 2022]

~~In general, it is not required and ESMA therefore discourages issuers to define abstract concepts in their extension taxonomy. The abstract concepts included in the applicable taxonomy should be sufficient to structure the relationships in the presentation or definition linkbases. Nevertheless, should another grouping item be needed to better reflect the structures of elements used to tag information in the annual financial report, issuers might define abstract headers in the extension taxonomy.~~

~~ESMA recommends that software firms include rules in their tools ensuring:~~

~~Extension taxonomy SHOULD NOT define abstract concepts.~~

~~In case of violation, the following messages are recommended to be used:~~

~~Violation: "abstractConceptDefinitionInExtensionTaxonomy"~~

[33] *Rationale for deletion*: Deleted to allow for more flexibility of issuers in organising presentation and definition linkbase hierarchies in their extension taxonomies.

3.3 Extension taxonomy anchoring

Guidance 3.3.1 Relationships to anchor extension taxonomy elements to elements in the ESEF taxonomy [last updated: July 2022]

The RTS on ESEF sets out that extension taxonomy elements should be anchored to elements (excluding abstract concepts) in the ESEF taxonomy and that the relationship between the extension taxonomy elements should be identified.

The RTS on ESEF distinguishes two different relationships:

- An extension taxonomy element has a narrower accounting meaning or scope than an element in the ESEF taxonomy. The issuer shall identify the relationship of the extension taxonomy element concerned with the element in the ESEF taxonomy concerned in the issuer's XBRL extension taxonomy's definition linkbase. The extension taxonomy element shall appear as the target of the relationship.

- An extension taxonomy element has a wider accounting meaning or scope than an element in the ESEF taxonomy. The issuer shall identify the relationship of the extension taxonomy element concerned with the element in the ESEF taxonomy concerned in the issuer's XBRL extension taxonomy's definition linkbase. The extension taxonomy element shall appear as the source of the relationship or relationships.

The anchoring relationships shall be constructed as follows:

- For the purpose of anchoring extension taxonomy *concepts*, issuers should use the definition linkbase *link:definitionArc* with the arcrole attribute set to *'http://www.esma.europa.eu/xbrl/esef/arcrole/wider-narrower'* as defined in the Link Role Registry 2.0 [34] . Issuers shall ensure that the *'http://www.xbrl.org/lrr/arcrole/esma-arcrole-2018-11-21.xsd'* schema with definition of the 'wider-narrower' arcrole is imported directly or referenced through *arcroleRef* in their extension taxonomies.

- For the purpose of anchoring extension taxonomy domain members, issuers should use the definition linkbase *link:definitionArc* with the arcrole attribute set to '*http://xbrl.org/int/dim/arcrole/domain-member'* as defined in the Dimensions 1.0 specification.

- For the purpose of anchoring the issuer's extension taxonomy dimension elements, issuers should use the definition linkbase *link:definitionArc* with the arcrole attribute set to '*http://xbrl.org/int/dim/arcrole/hypercube-dimension'* as defined in the Dimensions 1.0 specification pointing to the hypercube element.

- For the purpose of anchoring the issuer's extension taxonomy hypercube elements, issuers should use the definition linkbase *link:definitionArc* with the arcrole attribute set to '*http://xbrl.org/int/dim/arcrole/all*' as defined in the

[34] https://specifications.xbrl.org/registries/lrr-2.0/#arcrole-wider-narrower

Dimension 1.0 specification pointing to the anchored line item that identifies what is being broken down.

ESMA therefore recommends that software firms include rules in their tools ensuring:

Anchoring relationships for elements other than concepts MUST not use 'http://www.esma.europa.eu/xbrl/esef/arcrole/wider-narrower' arcrole.

In case of violation, the following message is recommended to be used:

Violation:
"anchoringRelationshipsForDomainMembersDefinedUsingWiderNarrowerArcrole"

"anchoringRelationshipsForDimensionsDefinedUsingWiderNarrowerArcrole"

Guidance 3.3.2 Where to define the anchoring relationships [last updated: July 2020]

Anchoring relationships shall be defined within the definition linkbase of issuer-specific extension taxonomy. It should be ensured that the anchoring relationships do not interfere with other content in the definition linkbase.

For example, the following structure of the anchoring relationships for extension taxonomy concepts can be provided in the definition linkbase (all relationships are using *wider-narrower* arcrole):

[000099] Anchoring (http://company.eu/xbrl/2020/role/Anchoring):

- Issue of equity (IFRS)
  - Capital increases in kind (EXT)
  - Capital increases in cash (EXT)
- Equity (IFRS)
  - Issued capital and share premium (EXT)
    - Issued capital (IFRS)
    - Share premium (IFRS)
- […]

For example, the following structure of the anchoring relationships for extension taxonomy dimension and domain members can be provided in the definition linkbase in a statement-dedicated extended link (all relationships are using standard arcrole defined in Dimensions 1.0 specification):

Statement of X:

- Abstract
  - Line items
    - Line item 1 (*domain-member* arcrole)
    - Line item 2 (*domain-member* arcrole)
  - Hypercube Y (*all* arcrole)

Dimension Z (*hypercube-dimension* arcrole)
Member 1 (*dimension-domain* arcrole)
Member 2 (*dimension-domain* arcrole)
Member 3 (dimension-domain arcrole)
Extension member (*domain-member* arcrole)
Member 4 (*domain-member* arcrole)
Extension dimension N (*hypercube-dimension* arcrole)
Member 99 (*dimension-domain* arcrole)

In the above example Extension member is anchored against Member 3 which is wider in scope and meaning and Member 4 which is narrower.

ESMA therefore recommends that software firms include rules in their tools ensuring:

Anchoring relationships for concepts MUST be defined in a dedicated extended link role (or roles if needed to properly represent the relationships), e.g. http://{issuer default pattern for roles}/Anchoring

In case of violation, the following message is recommended to be used:

Violation: "anchoringRelationshipsForConceptsDefinedInElrContainingDimensionalRelationships"

3.4 Extension taxonomy linkbases

Guidance 3.4.1 Modelling of the issuers' extension taxonomies' linkbases [last updated: December 2017]

XBRL 2.1 specification enables to document in the calculation linkbase arithmetic relationships between elements referring to the same context, i.e. same period and identical dimensional qualifiers. Therefore, the calculation linkbase is limited to calculations with a single context.

However, the Primary Financial Statements contain a number of cross-period arithmetic relationships that cannot be reflected in the calculation linkbase. An example for cross-period arithmetic relationships is the statement of cash flows where the sum of inflows and outflows of the period corresponds to the change of the cash balance from the beginning of the period to the end of the period. Another example is the statement of changes in equity that contains reconciliations between the carrying amount at the beginning and the end of the period for each component of equity.

As the calculation linkbase cannot be used to effectively define data quality checks on such cross-period relationships, the presentation linkbase should be used to document these cross-period and cross-dimension arithmetical dependencies which shall enable the execution of at least semi-automated validations.

The presentation linkbase should therefore, where possible, be constructed as follows:

Statement/Disclosure of changes in X [line items]
X at beginning of period **(preferred period start label)**

Changes/Adjustments in X [abstract]
Increases/decreases in …
…
Total changes/adjustments in X **(preferred total label, if reported in the AFR)**
X at end of period **(preferred period end label)**

This applies in particular to the statement of changes in equity and the statement of cash flows, which typically contain cross period information and are required to be mandatorily tagged.

For example, the structure of the statement of changes in equity in the presentation linkbase may look as follows:

Statement of changes in equity [line items]
equity at beginning of period (periodStartLabel)
changes in equity [abstract]
comprehensive income
issued capital
dividends paid

equity at end of period (periodEndLabel)

This enables to carry out the following calculation check:

<u>Equity at end of period = equity at beginning of period + comprehensive income + issued capital - dividends paid.</u>

Mind that the sign of the operation depends on the values of the line items' balance attributes. In the example above, elements with their balance attribute set to credit are added to 'equity' (which is also credit) while debit elements (e.g. 'dividends paid') are subtracted. The plus sign is used in case a line item has no balance attribute (e.g. 'cash flows from (used in) operating activities').

Furthermore, parent-child relationships between domain members in presentation linkbases should be defined as if they were calculation linkbase links between line items (i.e., lower level elements contribute to upper level element with weight +1). If different weights apply, all domain members should be presented on the same level.

For example, the following structure in the presentations linkbase:

Equity [member]
equity attributable to owners of parent [member]
issued capital [member]
share premium [member]
retained earnings [member]
non-controlling interests [member]

informs that a line item (e.g. 'issued capital') referring to 'equity [member]' of 'components of equity [axis]' dimension equals the sum of this line item value for 'equity attributable to owners of parent [member]' and 'non-controlling interests [member]', etc.

This rule concerns only the presentation linkbase. Definition linkbase relationships between domain members are used solely for dimensional validation purposes.

If different weight applies in calculation between domain members (e.g. '-1'), all domain members should be presented on the same level so that this check is not executed.

Guidance 3.4.2 Defining the dimensional validity of line items in the definition linkbase [last updated: July 2021]

Dimensional validation may be defined using 'all' and 'notAll' arcroles linking to positive and negative hypercubes respectively. In all cases, positive hypercubes are sufficient to define the dimensional validation. To follow the recommendations of the XBRL Working Group note http://www.xbrl.org/WGN/dimensions-use/WGN-2015-03-25/dimensions-use-WGN-2015-03-25.html#sec-open-hypercube-validation-issues and http://www.xbrl.org/WGN/dimensions-use/WGN-2015-03-25/dimensions-use-WGN-2015-03-25.html#sec-negative-open-hypercubes, ESMA recommends that software firms include rules in their tools ensuring:

Extension taxonomies MUST NOT define definition arcs with *http://xbrl.org/int/dim/arcrole/notAll* arcrole.

Hypercubes appearing as target of definition arc with *http://xbrl.org/int/dim/arcrole/all* arcrole MUST have xbrldt:closed attribute set to "true".

Hypercubes appearing as target of definition arc with *http://xbrl.org/int/dim/arcrole/notAll* arcrole MUST have xbrldt:closed attribute set to "false".

In case of violation, the following messages are recommended to be used:

Violation: "notAllArcroleUsedInDefinitionLinkbase"

Violation: "openPositiveHypercubeInDefinitionLinkbase"

Violation: "closedNegativeHypercubeInDefinitionLinkbase"

Furthermore, each line item used in the report to tag data should be valid according to at least one hypercube in the extension taxonomy's definition linkbase. In particular, the ESEF taxonomy provides a dedicated extended link role *[999999] Line items not dimensionally qualified* that shall be used to link items that do not require any dimensional information to tag data in the issuer's report to a predefined hypercube, i.e. *esef_cor:LineItemsNotDimensionallyQualified.*

All ESEF core taxonomy line items by default cannot be reported with dimensional qualification i.e. their application in a report that uses ESEF taxonomy as-is would result in their invalidity against XBRL Dimensions specification. This is achieved by linking all ESEF core line items to a hypercube with null dimension for both scenario and segment containers. In order to enable reporting of any of these line items, they need to appear in at least one hypercube in an issuer's extension taxonomy.

Additionally, in order to ensure Full dimensional validity of the target XBRL document, as recommended in the *Technical Considerations for the use of XBRL Dimensions*

1.0[35] Working Group Note published by XBRL International, all issuer extension line items shall also participate in at least one hypercube.

There are a number of scenarios where a line item is being linked to a hypercube:

- Scenario 1: Line item is used in a report with the intention to be dimensionally qualified, i.e. linking to a hypercube or hypercubes but not intended to be used in any dimension-less statement (e.g. typically a balance sheet).
- Scenario 2: Line item is used in a report with the intention to be dimensionally qualified and at the same time intended to be used in one or more dimension-less statement, where:
    - Scenario 2a: any of dimensional qualifications in which line item is used contains a default member,
    - Scenario 2b: none of dimensional qualifications contains a default member.

The intention of the above guidance is to ensure that issuers will link each line item used in tagging that falls under Scenario 2b in a dedicated placeholder as otherwise it would be dimensionally invalid. Additionally, such linkage will allow for Full dimensional validity of issuer extension concepts that appear in dimension-less statements only.

This guidance does not prevent issuers from linking the line items in a dedicated placeholder under Scenario 1 and Scenario 2a.

For example, the following structure may be created in the definition linkbase:

[999999] Line items not dimensionally qualified

Line items not dimensionally qualified placeholder
    Line items not dimensionally qualified
        Consolidated and separate financial statements [axis]
            Consolidated [member]
    Issuer's extension element used for tagging 1
    Issuer's extension element used for tagging 2
    Assets
    Liabilities
    […]

In order to follow the recommendations of the XBRL Working Group Note http://www.xbrl.org/WGN/dimensions-use/WGN-2015-03-25/dimensions-use-WGN-2015-03-25.html#sec-open-hypercube-recommendation ESMA recommends that software firms include rules in their tools ensuring:

Line items that do not require any dimensional information to tag data MUST be linked to the dedicated "*Line items not dimensionally qualified*" hypercube in *http://www.esma.europa.eu/xbrl/role/cor/esef_role-999999* declared in esef_cor.xsd.

[35] https://www.xbrl.org/WGN/dimensions-use/WGN-2015-03-25/dimensions-use-WGN-2015-03-25.html#term-fdv

In case of violation, the following messages are recommended to be used:

Violation: “extensionTaxonomyLineItemNotLinkedToAnyHypercube”

Guidance 3.4.3 Definition of default members of extension taxonomy dimensions [last updated: July 2020]

Issuers are required to assign a default member for each dimension defined in the issuer extension taxonomy. For this purpose, the ESEF taxonomy provides a dedicated extended link role *[990000] Axis – Defaults* to be used to link default members to a particular dimension with use of *dimension-default* arcrole[36]. Moreover, a set of default members is globally assigned in the ESEF taxonomy for each ESEF taxonomy dimension item defined and must not be modified in issuer extension taxonomy.

For example, the following structure may be created in the definition linkbase:

[990000] Axis – Defaults

Components of equity [axis]
    Equity [member]
Consolidated and separate financial statements [axis]
    Consolidated [member]
Issuer’s extension dimension [axis]
    Issuer’s extension default [member]

To ensure the appropriate definition of default members, ESMA recommends that software firms include rules in their tools ensuring:

The extension taxonomy MUST not modify (prohibit and/or override) default members assigned to dimensions by the ESEF taxonomy.

Each dimension in an issuer specific extension taxonomy MUST be assigned to a default member in the ELR with role URI *http://www.esma.europa.eu/xbrl/role/cor/ifrs-dim_role-990000* defined in *esef_cor.xsd* schema file.

In case of violation, the following messages are recommended to be used:

Violation: “extensionTaxonomyOverridesDefaultMembers”

Violation: “extensionTaxonomyDimensionNotAssignedDefaultMemberInDedicatedPlaceholder”

Guidance 3.4.4 Use of preferred labels on presentation links in extension taxonomies [last updated: July 2019]

Extension taxonomies should apply preferred labels on presentation links when applicable. This concerns in particular total and period start and end labels. Labels

[36] http://www.xbrl.org/specification/dimensions/rec-2012-01-25/dimensions-rec-2006-09-18+corrected-errata-2012-01-25-clean.html#sec-default-values-for-dimensions

defined in other label roles (e.g. terse, net, negated etc.) may be assigned to preferred labels. Extension concepts may be defined with and assigned to preferred labels.

Guidance 3.4.5 Use of labels on elements in extension taxonomies [last updated: July 2022]

It is possible for an element in the extension taxonomy of an issuer to be assigned with multiple label resources defined with different 'xlink:role' attributes, as listed by the XBRL 2.1 specification[37] or Link Role Registry[38]. Custom roles are not recommended to be used for labels, unless strictly necessary. Each element (both core and extension) in an issuer's extension taxonomy shall be defined with at most one label for any combination of 'xlink:role' and 'xml:lang' attribute.

ESMA recommends applying at least one label defined in the standard label role, i.e. http://www.xbrl.org/2003/role/label, for each taxonomy ~~extension~~ element. Moreover, according to paragraph 8 of Annex IV of the RTS on ESEF, issuers shall not override or replace standard labels (i.e. labels defined in the standard label role) of core taxonomy elements. This means that in cases where the standard labels of the core taxonomy are used, no standard label for such core taxonomy element should be presented in an issuer's extension taxonomy label linkbase (standard labels for core taxonomy elements are referenced from the ESEF core taxonomy label linkbase files).

The above recommendation should not prevent issuers from defining issuer-specific labels for core taxonomy elements to better align with the human readable layer, providing that they are defined in 'xlink:role' other than already defined labels in the ESEF core taxonomy (e.g. verboseLabel). Issuers may apply such issuer-specific labels through @preferredLabel attribute assigned in the presentation linkbase of their extension taxonomies.

Guidance 3.4.6 Restrictions on taxonomy relationships [last updated: July 2022]

The presentation linkbase ~~shall~~ should mirror (to the extent possible) the structure of the human-readable layer of the issuer's report. That means that a line item ~~must~~ should only appear in the presentation linkbase if it is associated with a reported value in the year of reference (i.e. it ~~must~~ should not appear, for example, if it was used in the past but it is no longer used) and that the order of elements in the extension taxonomy should be identical (or close to identical) to the order in the human readable layer of the report. To the contrary, the labels defined in the extension taxonomy for existing IFRS concepts need not be identical to the line item used in the human readable layer of the report.

Reportable (i.e. non-abstract) concepts that are not used for tagging the financial statements ~~shall~~should not be applied in presentation, calculation or definition (with exception of anchoring) linkbases of an issuer-specific extension taxonomy.

[37] 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#_5.2.2.2.2
[38] https://specifications.xbrl.org/registries/lrr-2.0/

Therefore, ESMA recommends that software firms include the following rules in their tools:

All usable concepts in extension taxonomy relationships SHOULD be applied by tagged facts. In case of violation, the following messages are recommended to be used:

Violation: “UsableConceptsNotAppliedByTaggedFacts”

Guidance 3.4.7 Definition of extended link roles in extension taxonomies [last updated: July 2020]

ESMA recommends that for each section of the Primary Financial Statements a new extended link role is created in extension taxonomy to store the hierarchy of elements representing this particular section of an issuer’s report.

Each extended link role created by the issuer shall clearly identify the particular section of the Primary Financial Statements with human readable description provided in the <link:definition> element of <link:roleType> declaration.

3.5 Other issues

Guidance 3.5.1 References pointing to resources outside the reporting package [last updated: July 2021]

The Inline XBRL document must be a standalone, self-explanatory and complete set of information. Issuers shall not include references pointing to resources outside the reporting package, except for standard taxonomy components which are necessary to create the issuer’s extension taxonomies (i.e. schema and linkbase files). This includes in particular references to the taxonomy files provided by ESMA on its website or to XBRL specification files hosted on XBRL International website.

Since ESEF is a format requirement and is not expected to impact the “human readable layer” of a report, this guidance should not be seen as limiting the inclusion of links to external websites, to other documents or to other sections of the annual financial report.

Therefore, ESMA recommends that software firms include rules in their tools ensuring:

Inline XBRL documents MUST NOT contain references pointing to resources outside the reporting package.

In case of violation, the following messages are recommended to be used:

Violation: “inlineXbrlDocumentContainsExternalReferences”

4 Guidance for preparers of ESEF reports not subject to tagging obligations

4.1 Additional guidance for XHTML stand-alone files

Guidance 4.1.1. Reporting of stand-alone XHTML files [last updated July 2022]

Preparers not subject to any tagging obligations are only required to prepare their report in XHTML format. ESMA recommends that such files are submitted as stand-alone XHTML files (with either .xhtml or .html file extension). ~~and are not packaged into zip files.~~

ESMA also acknowledges that in certain scenarios (e.g. including images of size exceeding the support of browsers as mentioned in Guidance 4.1.3) issuers may not be able to submit a stand-alone XHTML file. In such cases, an issuer is allowed to submit multiple files separately or packaged into zip archive, unless such submission is strictly forbidden at the national level as indicated by the respective Officially Appointed Mechanism and / or National Competent Authority.

It should be highlighted that Article 4 paragraph 1 requires that issuers mark up their annual financial reports *only* when those include IFRS consolidated financial statements. Therefore issuers preparing only non-consolidated financial statements (in IFRS or in national GAAP) are not subject to the obligation to tag their financial statements as per Annex II paragraph 2 (i.e. using the tags included in ~~table 1 of~~ Annex II) since tagging needs to be applied only by issuers preparing consolidated IFRS Financial statements.

Guidance 4.1.2 Tagging obligations for Investment Entities exempted from consolidation [last updated July 2021]

The RTS on ESEF requires preparers of annual financial reports that include IFRS consolidated financial statements to mark up those consolidated statements.

Investment entities that fall under the consolidation exception as per IFRS 10 *Consolidated Financial Statements* and that only prepare individual IFRS financial statements are therefore not required to tag their IFRS financial statements.

Guidance 4.1.3 Inclusion of content other than XHTML in a stand-alone XHTML file [last updated: July 2022]

The inclusion of executable code in an ESEF file is a potential threat and may cause security issues. Software firms shall therefore inspect resources embedded or referenced by the XHTML document to ensure that no malicious content or executable code is included in images, headers of images, style properties, or other resources which make up the content of a document and which would be retrieved as part of its rendering.

Since ESEF is a format requirement and is not expected to impact the "human readable layer" of a report, this guidance should not be seen as limiting the inclusion of links to external websites, to other documents or to other sections of the annual financial report.

ESMA recommends that software firms include appropriate validations in their tools ensuring:

Resources embedded or referenced by the XHTML document MUST NOT contain executable code (e.g. java applets, javascript, VB script, Shockwave, Flash, etc).

In case of violation, the following message is recommended to be used:

Violation: "executableCodePresent"

ESMA is of the opinion that it would be beneficial to include images in the XHTML document unless their size exceeds the support of browsers, in which case they may be included as separate files, except if it is strictly forbidden at the national level as indicated by the respective Officially Appointed Mechanism and / or National Competent Authority.

ESMA therefore recommends that software firms include appropriate validations in their tools ensuring:

Images SHOULD be included in the XHTML document as a base64 encoded string unless their size exceeds support of browsers in which case they may be contained in separate files in the package.

In case of violation, the following message is recommended to be used:

Violation: "embeddedImageNotUsingBase64Encoding"

Violation: "imageIncludedAndNotEmbeddedAsBase64EncodedString"

Moreover, the images embedded in the XHTML document as a base64 encoded string shall specify media type as defined by MIME RfC 2045[39] (hereinafter referred to as MIME type) whose content corresponds to the MIME specified. In case of images that are not embedded in the XHTML (and only referenced by the XHTML) where the MIME type is not specified, such files shall match their file extension.

ESMA therefore recommends that software firms include appropriate validations in their tools ensuring:

Images embedded in the XHTML document as a base64 encoded string MUST have the correct MIME type specified.

In case of violation, the following message is recommended to be used:

Violation: "incorrectMIMETypeSpecified"

Violation: "MIMETypeNotSpecified"

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Images not embedded in the XHTML document where MIME type is not specified MUST match their file extensions.

In case of violation, the following message is recommended to be used:

Violation: “imageDoesNotMatchItsFileExtension”

To avoid any potential threats that may be brought by specific formats used for saving images included in the XHTML document, issuers shall only use PNG, GIF, SVG or JPG/JPEG graphic files.

ESMA therefore recommends that software firms include appropriate validations in their tools ensuring:

Images included in the XHTML document MUST be saved in PNG, GIF, SVG or JPG/JPEG formats.

In case of violation, the following message is recommended to be used:

Violation: “imageFormatNotSupported”

Preparers shall not embed images carrying financial information in a XHTML stand-alone document. Images can only be used for content such as branding information, graphical layout, photographs, etc.

Guidance 4.1.4 Use of the Cascading Style Sheet (CSS) language to style XHTML stand-alone documents [last updated: July 2021]

CSS may be used to format the reports. However, the transformations need to be used appropriately. For example, they must not be used to hide information by making it not visible e.g. by applying *display:none* style on contents of the report. Moreover, it is recommended to apply styles globally, rather than define them separately for each part of the report.

Therefore, ESMA recommends that software firms include rules in their tools ensuring:

For XHTML stand-alone documents, the CSS SHOULD be embedded within the document.

In case of violation, the following message is recommended to be used:

Violation: “externalCssFileForXhtmlDocument”

Guidance 4.1.5 Naming convention for stand-alone XHTML documents [last updated: July 2021]

A stand-alone XHTML document should follow predefined naming conventions to facilitate the processing of issuers’ reports by end-users.

Whilst ESMA did not define in the RTS on ESEF a unique naming convention for ESEF files, unless the relevant Officially Appointed Mechanism and / or National Competent

Authorities provide indications of any specific naming conventions which are required at national level, ESMA encourages issuers to adopt a naming convention which match {base}-{date}-{lang}.xhtml or {base}-{date}-{lang}.html, whereby:

- The {base} component of the filename should indicate the LEI of the issuer or the issuer's name (or an abbreviation of it); it should be of no more than 20 characters in length.
- The {date} component of the filename should indicate the ending date of the reporting period of reference. The {date} component should follow the YYYY-MM-DD format.
- The {lang} component of the filename should indicate the language of the report contained within the report package. The {lang} component should follow ISO 639-1 format (two-letter code).

Whenever Officially Appointed Mechanism and / or National Competent Authorities provide indications of different naming conventions which are required at national level, issuers must follow such national naming conventions.

Guidance 4.1.6 References pointing to resources outside the XHTML document [last updated: July 2021]

The XHTML document must be a standalone, self-explanatory and complete set of information. Issuers shall not include references pointing to resources outside the XHTML document, where such resources would make up the content of a document and which would be retrieved as part of its rendering.

Since ESEF is a format requirement and is not expected to impact the "human readable layer" of a report, this guidance should not be seen as limiting the inclusion of links to external websites, to other documents or to other sections of the annual financial report.

Therefore, ESMA recommends that software firms include rules in their tools ensuring:

XHTML documents MUST NOT contain references pointing to resources outside the reporting package.

In case of violation, the following messages are recommended to be used:

Violation: "xHTMLDocumentContainsExternalReferences"