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# XBRL Filing Rules COREP and FINREP Taxonomy v2



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# Change History

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Version	Date	Changes
1		Baseline
2	March 2014	<p>Included missing bibliographic references</p> <p>Reordered auxiliary sections</p> <p>Slight expansion of rules around filing indicators, and inclusion of illustrative examples</p> <p>Further elaboration of the scope of applicability of these rules, highlighting discretion of the competent regulatory authorities as to format and mechanism of reporting (i.e. EBA XBRL not compulsory at first level reporting).</p> <p>Added requirement for pre-registered LEI code to be used as entity identifier in 2<sup>nd</sup> level remittance, and recommendation of scheme URI to use for LEI (and other) entity codes</p> <p>Emphasize @xml:lang is not generally required by EBA</p>

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# Abbreviations

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UML	Unified Modeling Language
W3C	World Wide Web Consortium
XBRL	eXtensible Business Reporting Language
XML	eXtensible Markup Language

# Normative references

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The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

[XBRL 2.1](#)

[XBRL Dimensions 1.0](#)

[XBRL Registry specification 1.0](#)

[XBRL Formula specification 1.0](#)

# Bibliography

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[CWA] CEN Workshop Agreement “European Filing Rules” working draft<sup>1</sup>

[GFM11] Global Filing Manual (Interoperable Taxonomy Architecture Project)

[EFM13] EDGAR Filer Manual. U.S. Securities and Exchange Commission

[FRIS04] Financial Reporting Instance Standards 1.0

[SBR13] SBR FRIS rules 2013

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<sup>1</sup> draft as of 19/11/2013, see [www.wikixbrl.info/index.php?title=European\\_Filing\\_Rules](http://www.wikixbrl.info/index.php?title=European_Filing_Rules)

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# Terms and definitions

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For the purposes of this document, the following terms and definitions apply.

NOTE XBRL specific terms like context, unit, period, entity, s-equal, v-equal see XBRL 2.1

## applicable taxonomy

an XBRL taxonomy recognised to use as a base for filings in a given filing system

## data point

a Data Point is an information component that is defined by a supervisory authority to be sent in an instance document

Note: In XBRL a data point is represented by a fact, its value and related dimensional combinations.

## dimension

a Dimension is an xs:element in the substitutionGroup of xbrldt:dimensionItem; it relates to the ability to express multidimensional information

## entrypoint

a schema or linkbase in the applicable taxonomy that represents the filing requirements and gets mentioned in the instance by the filer.

## fact

a fact is an occurrence in an instance document of an element with a mandatory contextRef attribute and optional attributes like unitRef, xml:lang or xsi:nil

## filer

an entity responsible for submission of a filing.

## filing

a filing is the fundamental unit of information that is transmitted to a filing system for receipt, validation and acceptance

Note: a filing is conveyed in an XBRL instance document or series of XBRL instance documents.

## filing system

a system in which XBRL instance documents are filed, received, analysed and redistributed

## reporter

a reporting entity – described by instance(s)

## reporting unit

set of facts in a filing which are conceptually either reported or not reported together as a unit.

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template

a (usually tabular) visible representation of a set of facts, typically identified with/as a single reporting unit.

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# Introduction

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The eXtensible Business Reporting Language (XBRL) specification provides a high degree of flexibility in the creation of XBRL instance documents. Part of this flexibility stems from the nature of the syntax: XML, and part stems from the XBRL specification itself.

## Scope of Application

The European supervisory reporting process is conceptually a two stage process, first institutions report supervisory data to their relevant national or supranational regulatory authorities (“first level reporting”), and subsequently those authorities remit that data to the European Banking Authority (“second level reporting”).

These filing rules represent a collection of additional rules and guidance specifically applicable to the second level remittance of XBRL instances for regulatory filings of COREP and FINREP by relevant national and supranational authorities to the European Banking Authority. These rules constrain the full flexibility of XBRL, to enable effective interaction between transmitter and recipient/consumer of regulatory reports.

The listed filing rules are influenced by the EBA Taxonomy Architecture in cases where the instance creation is affected.

**N.B these rules are not necessarily those that are applicable at the level of reporting by individual institutions or groups of institutions. Guidance should be sought from the reporter’s competent authority as to their reporting format and requirements for that reporting.**

## Basis in harmonized “European Filing Rules” guidance

In order to promote and enhance interoperability, these rules are largely drawn from the CEN Workshop Agreement “European Filing Rules” working draft document (as of 19/11/2013, see [www.wikixbrl.info/index.php?title=European\\_Filing\\_Rules](http://www.wikixbrl.info/index.php?title=European_Filing_Rules)), which “represent a collection of recommendations to be seen as guidance to be implemented in the European supervisory reporting process”. This draft should be read in conjunction/comparison with that document.

For ease of comparison, rules are numbered as per the CEN document (hence some numbers are omitted where the corresponding CEN rule is not applicable/not included, and some additional rules are inserted).

## Target Audience

This document is intended for a technical audience and assumes that the reader has a working knowledge of the XBRL 2.1 and the XBRL Dimensions 1.0 Specifications and has a basic understanding of XML, Namespaces, and XML Schema.

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To readers with XML knowledge, many of the guidelines in this document will be familiar however, others originate from features that are XBRL-specific and therefore the reasoning behind them may be less obvious.

To ease the understanding by software developers implementing these guidelines in their reporting system, an UML model is included to show the relationships between the different XBRL objects mentioned in this document.

Some of the filing rules are accompanied by constraints defined in the Object Constraint Language (OCL). OCL is part of the UML and allows description of constraints based on the UML objects of the class model. OCL is not a programming language; it just supports the definition of technical specifications. OCL eases the understanding of the rules by using a formal language to provide an unambiguous and consistent.

XML attribute names are preceded by the "@" character in this document, as in XPath syntax.

## Relationship to Other Work

The guidelines in this document pertain to XBRL filings. Parts of this document reiterate for expository clarity certain syntactic and semantic restrictions imposed by XBRL, but this document does not modify XBRL. In the event of any conflicts between this document and XBRL, XBRL prevails. This document does place additional restrictions beyond those prescribed by XBRL.

The rules are based closely on the recommendations of the CEN Workshop Agreement on European filing rules developed by the CEN WS/XBRL project (<http://cen.eurofiling.info/>).

For harmonization and explanatory purposes, where similar filing rules are used in other jurisdictions, references are indicated.

## Use of Language

In the rules that follow, the use of the verb "MUST" implies an obligation, and the preparation of instance files not following these rules will generally result in rejection of the instance file.

The use of "SHOULD" implies an indication of preference or best practice, but also a degree of tolerance, following the principle of "comply or explain"). The rule must be respected unless there are good reasons not to do so. Failure to follow the rule will in general not result in rejection of an instance file.

The use of "MAY" implies permission, and describes actions that can be taken or constructs that can be used. Utilising these options will not result in rejection of an instance file.



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# 1. Filing syntax rules

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## 1.1 — Filing naming

Common practice is to use the extension `.xbrl` for instance documents. Detailed file naming requirements should be confirmed with the intended recipient of an instance file (i.e. credit institutions should confirm with their relevant competent authority for reporting, CAs should confirm with the EBA for remittance).

## 1.4 — Character encoding of XBRL instance documents

The XML and XBRL specifications place no restrictions on the character encodings that may be used in instance documents. In order to avoid using a character encoding that is not supported by a receiving processor, all instances should use the UTF-8 character encoding.

**XBRL instance documents MUST use "UTF-8" encoding. [GFM11, p. 11]**

```
context xmlDocument inv: self.encoding = 'UTF-8'
```

## 1.5 — Taxonomy entry point selection

A taxonomy is loaded through a reference to one or more URLs, with other files in the taxonomy being included through the process of DTS Discovery. Although technically a user can reference any file in the taxonomy, a taxonomy publisher will typically nominate specific URLs which are intended to be referenced by users of the taxonomy. These URLs are called entry points, and allow users to import the correct modules from the taxonomy, with different modules including different templates and different associated validation rules.

The EBA taxonomy defines multiple specific entry points (“modules”), suitable for different reports. The taxonomy also contains multiple tables, these are not to be treated as entry points. Through the 'filing indicators' it is communicated which tables are reported in an instance.

**Reporting entities MUST reference only one entry point schema (“module”, `link:schemaRef` element), as specified in the applicable taxonomy, per XBRL instance. [SBR13, p. 6]**

**The `schemaRef` element MUST refer to a URI appropriate to the reference date of an instance, drawn from the list of entry points published by the EBA<sup>2</sup>.**

## 1.6 — Missing Filing indicators

Each reported fact in a filing is assigned to one or more reporting units (also known as “templates”) of the specific domain of reporting.

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<sup>2</sup> or competent authority for first level reporting.

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A filing indicator element (`filingIndicator`), grouped (potentially with other such elements) within a containing element (`fIndicators`), containing a code associated with a particular reporting unit, is used to indicate the intention of a reporter to report that reporting unit, or by its absence (or alternatively presence with an attribute of `filed="false"`) to indicate the intention *not* to report that reporting unit (see example under the heading “Filing indicator examples” for illustration). Filing indicators also trigger the appropriate taxonomy formulae checks. Missing filing indicators can lead to inconsistencies because facts for unindicated reporting units may not be validated.

**Reported XBRL instances MUST include appropriate positive (either with `@filed="true"` or without an `@filed` attribute) filing indicator elements to express which reporting units (“templates”) ARE intended to be reported in the instance.**

**Instances MAY include appropriate negative (`@filed="false"`) filing indicator elements indicating reporting units which are intended NOT to be reported in the instance, or these MAY be omitted (for clarity of intent, inclusion of such negative indicators is preferred).**

#### 1.6.1 — Multiple filing indicators for the same reporting unit

There is no benefit in filing several filing indicators for the same reporting unit. Inconsistent occurrences might occur (different values of `@filed` attribute).

**Reported XBRL instances MUST contain only one filing indicator element for a given reporting unit (“template”).**

#### 1.6.2 — Filing indicators in several tuples

Reporting filing indicator elements spread across several separate `fIndicators` tuples is a more complex approach than using a single containing element, and is likely to be more complex to handle by receivers.

However this construction may be useful for generating large instances (generation in a single pass or *streaming*), by allowing e.g. a tuple containing a single filing indicator to immediately precede (or follow) the data items for each reporting unit.

**For flexibility, reported XBRL instances MAY include (different) filing indicators in several separate `fIndicators` tuple elements, for simplicity this SHOULD in general be avoided where not necessary.**

#### 1.7 — Implication of no facts for an indicated template

If a filing indicator is given in the XBRL instance, appropriate consistency checks may be processed by the recipients’ reporting system. If no facts appear for an indicated template, the filing could be rejected because the system requires an appropriate set of fact values for the checks.

If there are no facts reported that match an indicated template, this conveys that the template is intended to be explicitly reported and every cell on that template is intended to be reported as blank, not that the template as a whole is intended to be unreported (In practice, this is unlikely to be the intent of a filer, and may indicate an error in instance preparation).

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Reported XBRL instances **MUST** include appropriate positive filing indicator elements to express which reporting units (“templates”) are intended to be reported in the instance, and they **MUST NOT** include positive filing indicator elements indicating a reporting unit is filed (i.e. @filed=true) for reporting units which are **NOT** intended to be reported in the instance.

#### 1.7.1 — No facts for non-indicated templates

Reported XBRL instances **MUST NOT** include facts which are not contained in any of the templates indicated by filing indicators as reported.

*EBA Advice: Note that the combination of Rules 1.6 to 1.7.1 does NOT imply that there must be no facts in an instance which could be located on a template for which there is no positive filing indicator to indicate the template is reported. This IS possible in the specific situation that the fact is also included in a template which is indicated as reported (by a positive filing indicator) – i.e. where the same data point is present in multiple templates, at least one, but not all, of which are reported.*

#### 1.09 — Valid XML-XBRL

In order to increase the likelihood that instance documents pass validation, filers must validate their compliance with the XBRL 2.1 and Dimensional 1.0 specification prior to submission.

**Instance documents MUST be XBRL 2.1 and XBRL Dimensions 1.0 valid. [EFM11, p. 6-8]**

#### 1.10 — Valid according to the defined business rules

XBRL allows the definition of business rules which can be discovered by XBRL software when opening the respective module referenced in the instance document. These business rules are applied on the content of the instance document to check the data quality. Test that result in an error need to be corrected by the sending reporting entity.

**Instance documents MUST be valid with regards to XBRL Formula as defined in the taxonomy, and discoverable from the referenced entry point, with the exception of any formula listed in any list of “formula to be ignored/disabled” which the EBA may publish.**

**Instance documents MUST also be valid with regards to validation rules published in the applicable ITS, including those not implemented by the XBRL Formula, again with the exception of formula listed as “to be ignored/disabled” which the EBA publishes.**

```
context Instance::isValidationValid() : Boolean post: result = true
```

#### 1.11 — Taxonomy extensions by reporters

XBRL Taxonomies can be extended by anybody with the proper technical knowledge. Filings to European Banking Authority are 'closed form' i.e. all data points allowed by the regulator are in the taxonomy. There can be no extension of the taxonomy by reporters to report more (or less) data points to the regulator. However

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national supervisors may extend European taxonomies. For reporters the combination of base and extension taxonomies is regarded as a single taxonomy.

**Instances MUST reference only the taxonomy entry points specified by the relevant authority, and reporters MUST NOT provide their own extension taxonomies.**

#### **1.12 — Completeness of the instance**

In case corrections are needed on filings that already have been sent, it is required to resubmit the complete filing, rather than partial data with just the corrected facts. Non-complete submissions could lead to invalid instance documents (according to either XBRL 2.1, XDT 1.0 or appropriate Formulae), might raise conflicts with already processed data in the reporting system of the receiver, and may lead to significant errors if sender and receiver disagree as to the list and sequence of historical submissions.

**In the event of an amendment being required, instances MUST contain the full report – no content/values from previous instances may be assumed.**

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## 2. Instance syntax rules

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### 2.1 — @xml:base

XBRL processors interpret this attribute differently, and there is no semantic need for this attribute.

*XML-XBRL*: The attribute `xml:base` may be inserted in XML documents to specify a base URI other than the base URI of the document or external entity.

**The attribute `@xml:base` MUST NOT appear in any instance document. [EFM13, p. 6-7]**

```
context xmlDocument inv:
self.element->select (xml:base) ->isEmpty ()
```

### 2.2 — xbrli:xbrl/link:schemaRef content

The taxonomy which is used by an XBRL report is identified by the URL(s) referenced by `link:schemaRef` elements. Although it is often convenient to work with local copies of the relevant taxonomies, it is important that `link:schemaRef` elements resolve to the published endpoint locations. XBRL software typically provides functionality to “remap” references to URLs of published endpoints to local copies of the taxonomy.

**The `link:schemaRef` element in submitted instances MUST resolve to the full published entry point URL.**

### 2.3 — xbrli:xbrl/link:schemaRef

Under the XBRL standard, the element `link:schemaRef` can occur several times in an instance. In the EBA taxonomy however only a single entry point schema needs to be referred to in any instance. This entry point will specify all required data points, and is the definition of a particular report.

**Any reported XBRL instance document MUST contain only one `xbrli:xbrl/link:schemaRef` node.**

```
context Instance inv: self.SchemaReference->size () = 1
```

### 2.4 — xbrli:xbrl/link:linkbaseRef

Endpoints will be defined by means of a schema. There is no use for `link:linkbaseRef`.

**Reference from an instance to the taxonomy MUST only be by means of the `link:schemaRef` node.**

### 2.5 — XML comment and documentation

Comments inside the instance that do not get reported as a fact will be ignored by the EBA.

**Relevant data MUST only be contained in contexts, units, schemaRefs and facts.**

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## Context related rules

### 2.6 — `xbrli:xbrl/xbrli:context/@id`

The `id` attribute is meant as a unique technical key within a XML document. Conveying semantics in the `id` attribute will likely be lost when the XML content is processed, e.g. stored in a database (which generally works with database specific surrogate keys), any semantics are unlikely to be available to a (human) consumer of the instance data. Even though there is no limitation on the length of an `id` attribute it is recommended to keep it as short as possible.

**Semantics SHOULD NOT be expressed in the `xbrli:context/@id` node.**

### 2.7 — Unused `xbrli:xbrl/xbrli:context`

Unused contexts (contexts which are not referred to by facts) clutter the instance and add no value to either regulator or reporter [GFM11, p. 12].

**Unused `xbrli:context` nodes SHOULD NOT be present in the instance. [FRIS04]**

```
context Context inv: self.Fact.allInstances()->notEmpty()
```

### 2.8 — Identification of the reporting entity

The `xbrli:identifier` node combined with the `@scheme` allows the identification of the reporting entity by the receiver. The `@scheme` provides a URI which uniquely identifies the type of identifier used in the `xbrli:identifier` node (see section 3.7 *LEI and other entity codes* below).

**Instances MUST use a scheme that is prescribed by the by the receiving regulator. [GFM11, p. 11]**

**Instances MUST use an identifier acceptable to the receiving regulator (likely to be one recognized in their reporting system), and that corresponds to the `@scheme` attribute used. [GFM11, p. 11]**

**For remittance of data by competent authorities to the EBA, the entity identifier used should be a (pre)Legal Entity Identifier code, and must have been registered with the EBA by the CA prior to remittance.**

### 2.9 — One reporter

There can only be one reporter of an instance. Even if the content of the instance deals with a group of companies, there is only one entity reporting the instance to the regulator.

**All `xbrli:identifier` content and `@scheme` attributes in an instance MUST be identical. [EFM13, p. 6-8]**

```
context Context inv: self.Identifier.allInstances()->forall(i1, i2 |  
i1 = i2 implies i1.value = i2.value)
```

---

## 2.10 — xbrli:xbrl/xbrli:context/xbrli:period/\*

The xbrli:startDate, xbrli:endDate and xbrli:instant elements all have data type which is a union of the xs:date and xs:dateTime types. European regulators will only allow periods to be identified using whole days, specified without a timezone.

**All xbrli:period date elements MUST be valid against the xs:date data type, and reported without a timezone. [GFM11, p. 16]**

## 2.11 — xbrli:xbrl/xbrli:context/xbrli:period/xbrli:forever

The extreme version of duration is 'forever'. The XBRL specification has created this to solve problems with dates starting 'at the beginning' and ending 'never'. E.g. the name of the filer has in general no end date. The EBA is only interested in data for the reported time segment, that has a defined starting and ending date.

**The period 'xbrli:forever' MUST NOT be used. [GFM11, p. 19]**

```
context Context inv: self.Period.forever->isEmpty()
```

## 2.13 — XBRL period consistency

XBRL requires all facts to be associated with a “period” (either a duration or instant of time). Where there are multiple relevant date/period like concepts related to a fact (as is often the case), it may be unclear which of these concepts is expressed by the XBRL period.

A common approach is to associate the XBRL period with some variation of a “real-world date of the event” for a fact. Use of varying “event” dates for facts in a regulatory reporting instance may however lead to complexity, confusion, and practical difficulties (e.g. for selecting facts for table linkbase axes, validating dates, identifying related facts etc.), particularly where the relationship between reporting periods and current and prior conceptual dates (e.g. accounting periods) is unclear, complex, and/or time-varying, such as in jurisdictions allowing non-calendar financial periods.

For simplicity therefore, the European Banking Authority has instead chosen to associate the “reference date” of an instance with the XBRL period concept.

The flow vs stock nature of a fact can be determined via a naming convention for the primary item, if the second character of the primary item name is “i” the fact is a stock (point in time measure), if “d” it is a flow or change.

Logical distinctions between other date-like aspects of a fact, such as the “event date”, “applicable period”, “date offset from reporting date” are conveyed via dimensional attributes of a fact.

All xbrl periods in a report instance refer to the (same) reference date instant. All xbrl periods MUST be instants.

```
context Context inv: self.Period.allInstances()->forall(p1, p2| p1 =  
    p2 implies  
    p1.instant = p2.instant)
```

---

## 2.14 — `xbrli:xbrl/xbrli:context/xbrli:entity/xbrli:segment` and `xbrli:xbrl/xbrli:context/xbrli:scenario`

The XBRL Dimensions specification allows taxonomies to specify dimensions for use within either the segment or the scenario of the context. For consistency reasons and simplification of processing, the European Banking Authority only uses the `xbrli:scenario` node.

## 2.15 — `xbrli:xbrl/xbrli:context/xbrli:entity/xbrli:segment` and `xbrli:xbrl/xbrli:context/xbrli:scenario`

The `xbrli:scenario` or `xbrli:segment` element MUST NOT be used for anything other than for explicit or typed members. Custom reporter XML schema content may create problems with the regulatory system.

*XML-XBRL*: The XBRL specification allows `xs:any` content. This means that all XML schema content can be stored (not just XBRL Dimensions).

**If an `xbrli:scenario` (or `xbrli:segment`) element appears in a `xbrli:context`, then its children MUST only be one or more `xbrldi:explicitMember` and/or `xbrldi:typedMember` elements, and MUST NOT contain any other (reporter custom) content. [EFM13, p. 6-8]**



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## Fact related rules

### 2.16 — Duplicate facts

An instance document must not have duplicated fact items. Item X and item Y are duplicates if and only if all the following conditions apply:

1. X is not identical to Y, and
2. the element local name of X is S-Equal to the element local name of Y, and
3. X and Y are defined in the same namespace, and
4. X is P-Equal to Y, and
5. X is C-Equal to Y, and
6. X is U-Equal to Y, and
7. X and Y are dimensionally equivalent (d-equal in all dimensions of each of X and Y), and
8. X and Y have S-Equal xml:lang attributes.

*XML-XBRL*: Duplicate facts are XML-XBRL syntax valid. However, the semantic meaning may be unclear.

**Instances MUST NOT contain duplicate facts. [FRIS04],[EFM13, p. 6-10]**

### 2.17 — @precision

The XBRL standard provides two methods of communicating the precision of a numeric fact: precision and decimals attributes. This makes it possible to have two attributes expressing the same semantic information on a fact (and possibly conflicting). Humans seem to have an easier time reading a document that uses the decimals attribute, probably because the decimals value is likely to be only one of e.g. 2, 0, -3, -6, -9 or INF. Moreover, given a decimals value the precision can always be computed, but this is not symmetric.

**@decimals MUST be used as the only means for expressing precision on a fact. [FRIS 2.8.1.1, EFM13, p. 6-12]**

### 2.18 — @decimals

The @decimals attribute indicates the accuracy of the reported fact value. If a numeric fact has an @decimals attribute with the value n then it is known to be “correct to n decimal places”, which is defined as the absolute difference between the value of the number and its representation (known as the “absolute error” of the representation -  $e_{abs}$ ) being less than or equal to  $0.5 \times 10^{-n}$ .

See <http://www.xbrl.org/Specification/XBRL-RECOMMENDATION-2003-12-31+Corrected-Errata-2008-07-02.htm# 4.6.7.2>.

The EBA XBRL validation rules use interval arithmetic for validation. To enable XBRL Formula calculations to be best performed on instance values for validation purposes, no truncations or rounding or any other kind of change should apply to the numeric facts in the instance. See the explanatory RFC at <http://www.xbrl.org/RFC/PDU/PWD-2008-10-09/PDU-RFC-PWD-2008-10-09.html>

**The accuracy of a numeric fact MUST be expressed using @decimals**

There **SHOULD** be no truncation, rounding or any change in the original fact value, which should be reported as known.

*EBA Note: In particular, if numbers are truncated or rounded for reporting, they should not be “adjusted” so that they “appear” to be visually consistent (i.e. so that they “foot” or “cast”), but should instead be simply reported with the appropriate @decimals value – the validation checks will take into account the declared accuracy to determine if reported values are (could be) valid.*

Accuracy Requirements			
Data Type	Decimals attribute	Note	Representation
Monetary	>= -3		42563.26
Percentage	>= 4	Must be expressed as a ratio in instances – i.e. typical values between 0 and 1	0.1234 (=12.34%)
Integer	0	Must of course be reported without any decimal part	126

N.B. INF (meaning exact as written) is of course acceptable for the decimal attribute of all numeric types.

*EBA Note: This, combined with the definition of the @decimals property, means that monetary values may not be truncated to thousands (since the reported value might then be up to 1000 from the true value, which is more than the 500 implied by @decimals=-3, requiring instead decimals=-4 to be consistent), but may be rounded to thousands.*

The decimals attribute is not a scale factor. The decimals attribute is not a formatting code; it does not indicate that the digits in the instance must subsequently be presented to a user in any particular way.

The @decimals attribute influences how numbers are interpreted. Use the following table to select the correct value of the @decimals attribute for a fact so that it corresponds to the accuracy to which the value is known.

Accuracy of the amount	Value of decimals attribute
Exact monetary, percentage, basis point or any other	INF
Accurate to thousands	-3
Accurate to hundreds	-2
Accurate to units	0
Accurate to cents	2
Accurate to a hundredth of a percentage point (i.e. a <i>basis point</i> )	4

Examples: The table below illustrates correct use.

Data	Reported Value	Value of @decimals attribute	Range of value considered in interval arithmetic
A percentage (ratio) of (exactly) 46%	0.46	INF	0.46
A profit margin of 9.3% (minimum accuracy)	0.093	4	0.09295 to 0.09305
Monetary amount “in thousands”	100000	-3	99500 to 100500
Monetary amount “in hundreds”	100200	-2	100150 to 100250
Monetary amount, precision units	100205.23	0	100204.73 to 100205.73

[EFM13, p. 6-28], [GFM11, p. 45f.]

*EBA NOTE: For clarification - this guidance applies only to the representation of the values in the transmission XBRL instance file, it of course places no constraints on the display of information to any user or preparer of the data. Tools may choose to display values however they (and their user’s) desire, so long as when instance files are produced the canonical representation is used.*

## 2.19 — zero value, empty, nil value @xsi:nil

Data related to white cells could be reported with a non-zero value, as zero or unreported. The table below shows the different possible scenarios:

<b>Zero or Non-zero value</b>	The value of the fact is known.	<code>&lt;eba_met:mi53 unitRef="uEUR" decimals="2" contextRef="c2"&gt;1025.25&lt;/eba_met:mi53&gt;</code>
<b>Missing fact</b>	The fact is not applicable to the reporter / no template including this fact is reported	The fact doesn't appear in the instance.
<b>nil value</b>	MUST NOT be used	

Inapplicable information need not be included in an instance; inapplicable facts MAY be left out.

*EBA Note: For validation purposes, unreported numeric facts belonging to a template indicated as “reported” by an instance (using filing indicators) will be treated as equivalent to zero in the evaluation of certain rules – see the details of individual rules.*

*EBA Note: Zero values SHOULD be reported where they are interesting supervisory reporting information. “Uninteresting zeros” (i.e. large swathes/permutations of trivially zero or simply inapplicable information, for*

---

*example the large bulk of countries, currencies, lines of activity etc. in which a reporter has nothing relevant to report) SHOULD NOT be reported for obvious practical reasons.*

## **2.20 — @xml:lang**

The language used on string based facts may need to be identified. This can be done by declaring the @xml:lang on the xbrli:xbrl element just once, or on every string based fact individually. No restrictions are places on language used in reporting string facts (such as entity names), however some strings are required to have specific values by the ITS which are not language specific, and should be the same whatever language is marked.

In practice, the @xml:lang attribute is in general not required in instances remitted to the EBA and may be omitted. It is compulsory to use the attribute in the specific case of distinguishing otherwise identical string facts, where an individual fact is reported in more than one language (i.e. with translation). This is expected to be a relatively rare situation as there is no requirement to submit translations of string facts.

---

## Unit related rules

### 2.21 — Duplicates of `xbrli:xbrl/xbrli:unit`

Units are equivalent if they have equivalent measures or equivalent numerator and denominator. Measures are equivalent if their contents are equivalent QNames. Numerators and Denominators are equivalent if they have a set of equivalent measures. Duplicated units do not express extra semantics and potentially disturb comparison of facts that point to any of the duplicated occurrences [EFM13, p. 6-10].

**An XBRL instance SHOULD NOT, in general, contain duplicated units, unless required for technical reasons, e.g. to support XBRL streaming.**

### 2.22 — Unused `xbrli:xbrl/xbrli:unit`

Unused units (units which are not referred to by facts) clutter the instance and add no value to either regulator or reporter.

**An XBRL instance SHOULD NOT contain unused `xbrli:unit` nodes. [FRIS04]**

### 2.23 — `xbrli:xbrl/xbrli:unit/*` content

XII has released a standard numeric data type registry: it has a schema with numeric type declarations, and each numeric data type is associated with consistent unit declaration measures, numerators and denominators. Use of this registry that contains all the usual units eases implementation in software and simplifies validation (<http://www.xbrl.org/utr/utr.xml>).

**`xbrli:unit` children SHOULD refer to the XBRL International Unit Type Registry (UTR). [EFM13, p. 6-17]**

### 2.24 — `xbrli:xbrl/xbrli:unit/xbrli:measure`

Facts that represent amounts in any currency must be of an item that is derived from `xbrli:monetaryItemType`, and must thereby follow the restriction in XBRL 2.1, section 4.8.2, regarding `monetaryItemType` (i.e., unit measure is an ISO 4217 currency designation). Such facts may not have unit measures that express any scaling (which would interfere with the expression of accuracy by the `@decimals` attribute).

**Units representing currencies MUST represent the actual physical value of these currencies, i.e. in basic units, not including any scaling factor in the unit.**

---

## 3. Additional Guidance

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### 3.1 - One Currency

**An instance MUST express its monetary values using a single currency.<sup>3</sup>**

### 3.2 - Non-monetary numeric units

An instance MUST express its non-monetary numeric values using the “pure” unit, a unit element with a single measure element as its only child. The local part of the measure MUST be "pure" and the namespace prefix MUST resolve to the namespace: <http://www.xbrl.org/2003/instance>.

Rates, percentages and ratios MUST be reported using decimal notation rather than in percentages where the value has been multiplied by 100 (e.g. 9.31% must be reported as 0.0931).

### 3.3 - Decimal representation

The value of numeric facts must be expressed in the specified units, without any change of scale and should be expressed without rounding or truncation.

The content of a numeric fact must therefore not include any scale factors like “%”. Specifically, Monetary values must be expressed in units, not in thousands or millions.

i.e. the value €2,560,561.43 may be transmitted as, amongst others, any of

Acceptable representations of €2,560,561.43		
Value	Value of decimals	Implies
2560561.43	INF	Exact
2560561.43	2	+/- 0.005
2560561.43	0	+/- 0.5
2560561.43	-3	+/- 500
2560561	0	+/- 0.5
2561000	-3	+/- 500

Note that although the last two representations (rounding the transmitted value) are acceptable, they should be avoided where a better estimate for the value is known, and this should be transmitted without rounding or truncation as in the first four examples.

---

<sup>3</sup> For clarity – where providing a breakdown by currency, the value of an item in the non-reporting currency should be converted to the equivalent value in the reporting currency (e.g. 2USD -> 1.44 EUR) for submission (the data item being identified as corresponding to an exposure in the breakdown currency by its dimensional attributes).

---

But, for example, €2,560,561.43 MAY NOT be transmitted as “2561”

Unacceptable representation of €2,560,561.43	
Value	Value of decimals
2561	-3

As this represents €2,561 (+/-500), rather than the intended €2,561,000.00 (+/-500)

### 3.4 Unused namespace prefixes

Declaring unused namespaces is uncalled for and clutters the instance document.

Namespace prefixes that are not use SHOULD not be declared in the instance document. [FRIS04]

### 3.5 Re-use of canonical namespace prefixes

Most schema authors provide a namespace prefix for their targetNamespace. It is common practice to re-use these prefixes in other XML documents when needed. It may lead to confusion to human readers to see common understood prefixes used on a different namespace. E.g. prefix 'xs' for the <http://xbrl.org/2003/xbrl-instance-2033-12-31> namespace.

Namespace prefixes declared in instance documents SHOULD mirror the namespace prefixes as defined by their schema author(s). [FRIS04]

### 3.6 Filing indicator examples

Consider a report containing information for templates X1, and X2, but not X3. The typical approach to indicating this with filing indicator elements would be:

---

```
<find:fIndicators>
  <find:filingIndicator contextRef="c1">X1</find:filingIndicator>
  <find:filingIndicator contextRef="c1">X2</find:filingIndicator>
</find:fIndicators>
```

...some data...

---

Here there is a single “fIndicators” element grouping two filing indicator elements, which indicate the intention to report X1 and X2.

Some **acceptable variations** of this include using the filed attribute:

---

```
<find:fIndicators>
  <find:filingIndicator contextRef="c2">X1</find:filingIndicator>
  <find:filingIndicator contextRef="c2" filed="true">X2</find:filingIndicator>
</find:fIndicators>
```

...some data...

---

Or utilising more than one containing “fIndicators” element:

---

```
<find:fIndicators>
```

---

```
<find:filingIndicator contextRef="A" filed="true">X1</find:filingIndicator>
</find:fIndicators>
...some data...
<find:fIndicators>
  <find:filingIndicator contextRef="A">X2</find:filingIndicator>
</find:fIndicators>
...some more data...
```

---

It is also acceptable (and possibly advisable) to explicitly indicate that the X3 template is NOT reported, e.g.

---

```
<find:fIndicators>
  <find:filingIndicator contextRef="c1">X1</find:filingIndicator>
  <find:filingIndicator contextRef="c1">X2</find:filingIndicator>
  <find:filingIndicator contextRef="c1" filed="false">X3</find:filingIndicator>
</find:fIndicators>
...some data...
```

---

**Unacceptable variations** include, for example:

**Not indicating that a reported template is reported (X2 is missing):**

---

```
<find:fIndicators>
  <find:filingIndicator contextRef="c1">X1</find:filingIndicator>
</find:fIndicators>
...some data...
```

---

**Indicating that an unreported template is reported (X3 is not reported):**

---

```
<find:fIndicators>
  <find:filingIndicator contextRef="c1">X1</find:filingIndicator>
  <find:filingIndicator contextRef="c1">X2</find:filingIndicator>
  <find:filingIndicator contextRef="c1">X3</find:filingIndicator>
</find:fIndicators>
...some data...
```

---

**Duplicating a filing indicator (here both X1 and X2 appear twice, either repetition is an error):**

---

```
<find:fIndicators>
  <find:filingIndicator contextRef="A" filed="true">X1</find:filingIndicator>
  <find:filingIndicator contextRef="A">X1</find:filingIndicator>
  <find:filingIndicator contextRef="A">X2</find:filingIndicator>
</find:fIndicators>
...some data...
<find:fIndicators>
  <find:filingIndicator contextRef="A">X2</find:filingIndicator>
</find:fIndicators>
...some more data...
```

---

### 3.7 LEI and other entity codes

#### Practical Considerations

For second level remittance to the EBA, the entity code used will be pre-registered with the EBA by the appropriate NSA. The EBA will only consider the code content of the entity identifier, and will ignore the scheme value, so in practical terms the scheme URI is irrelevant for remittance.

In (rare) cases where an LEI is not used, the EBA suggests a preference order of MFI ID if available, followed by national regulatory identifier.



---

## Guidance on representation of codes as entity identifier

### LEIs

Having noted that the scheme URI will be ignored by the EBA, it is still worth providing guidance on a suitable form of the scheme URI for consistency.

The EBA suggests the use of “<http://standard.iso.org/iso/17442>” as the scheme identifier for pre-LEIs, i.e.

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

where LEIIDENTIFIERABCDEFG is replaced with the appropriate pre-LEI code for the entity.

### Other Identifiers

For MFI IDs a scheme URI of "<http://www.ecb.eu/stats/money/mfi>" should be used. Where a proprietary national id is used the scheme URI should be determined by the responsible competent authority, the EBA suggests a scheme URI referring to the corresponding national central bank, e.g. <http://www.kredittilsynet.no>.

# European Filing Rules: UML model

