Collaborate | Advocate | Standardise

Working Groups Update

XBRL International

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@xbrlint

Overview

- Open Information Model, xBRL-JSON & xBRL-CSV
  - Software Certification
  - Taxonomies
  - Filing Manuals
- Calculations v1.1 and v2.0
- Formula
  - Assertion severities v2.0
  - OIM
  - Tables

Open Information Model

- Open Information Model + xBRL-JSON + xBRL-CSV reached **Recommendation** in **October 2021**
- New formats are now stable and ready for use
- Five vendors now offer xBRL-JSON and xBRL-CSV Certified Software (https://software.xbrl.org)
- More than 3,500 xBRL-JSON documents are now available on https://filings.xbrl.org

OIM – what next?

- OIM will form the basis for future work
- e.g. Calculation v1.1 leverages OIM definitions, and uses xBRL-JSON for conformance suite tests
- Supervisors and regulators are encouraged to write filing rules using OIM definitions, rather than syntactic details...

Improving Filing Rules

Edgar Filer Manual example

6.5.12 **Fact duplication**

An instance must not have more t
attributes, and if they are present
values, respectively, unless their v
distinct facts are consolidated into

For numeric facts, all such values
value. Where the decimals attribu
numerically equal. Where the dec
considering a closed interval cent
of the decimals attribute, and chec
500 with a decimals attribute of -2
550 with decimals attribute of -1 results in an interval of 545 to 555. These values are considered consistent as the intervals overlap; they are both consistent with having been rounded from a value in the range 545 to 550. The use of a closed interval means that intervals are inclusive of the end values.

Consistent numeric facts are consolidated into a single fact having the value of the fact with the maximum specified decimals value for purposes of validation and rendering.

For non-numeric facts, the values are consistent only if they are V-Equal.

The xml:lang attribute effective value is relevant only for types derived from normalizedStringItemType or stringItemType. A fact is an occurrence in an instance of an element with a contextRef attribute. The values of the id attributes are not relevant to detection of duplicate facts. Other rules forbidding equivalent xbrli:context and xbrli:unit elements ensure that duplicate values of the contextRef and unitRef attributes can be detected without dereferencing.

The predicate V-Equal is defined in XBRL 2.1 section 1.4, and specifies that non-numeric values are compared after whitespace normalization.

Calculation inconsistencies have no impact on the validity of EDGAR submissions, and therefore the effect of numeric fact duplication in XBRL 2.1 section 5.2.5.2 is moot.

6.5.12 **Fact duplication**

An instance must not have more than one fact having S-Equal element names, equal contextRef attributes, and if they are present V-Equal unitRef attributes and xml:lang attributes effective values, respectively, unless their values are consistent, as described below, in which case the distinct facts are consolidated into a single fact for all other validations.

OIM-based alternative

6.5.12 Fact duplication

A report [OIM] MUST NOT contain inconsistent duplicate facts [OIM].

xBRL-CSV and **xBRL-JSON** have a built-in "allowed duplicates" feature to simplify this one even further!

Improving Filing Rules

- Use OIM definitions to improve filing rules.
- *If you can't write the rule using OIM definitions, it probably shouldn't be a rule*!*
- e.g. a rule constraining context IDs is constraining *irrelevant syntactic detail*

> XII BPB Guidance:
>
> Whilst filing rules are essential to ensure that XBRL reports meet the collector's requirements, unnecessary filing rules create a burden for software developers, and can create interoperability issues.
>
> **BEST PRACTICE**
> - Minimise the number of filing rules.
> - Avoid unnecessary syntax-level constraints in the filing rules.

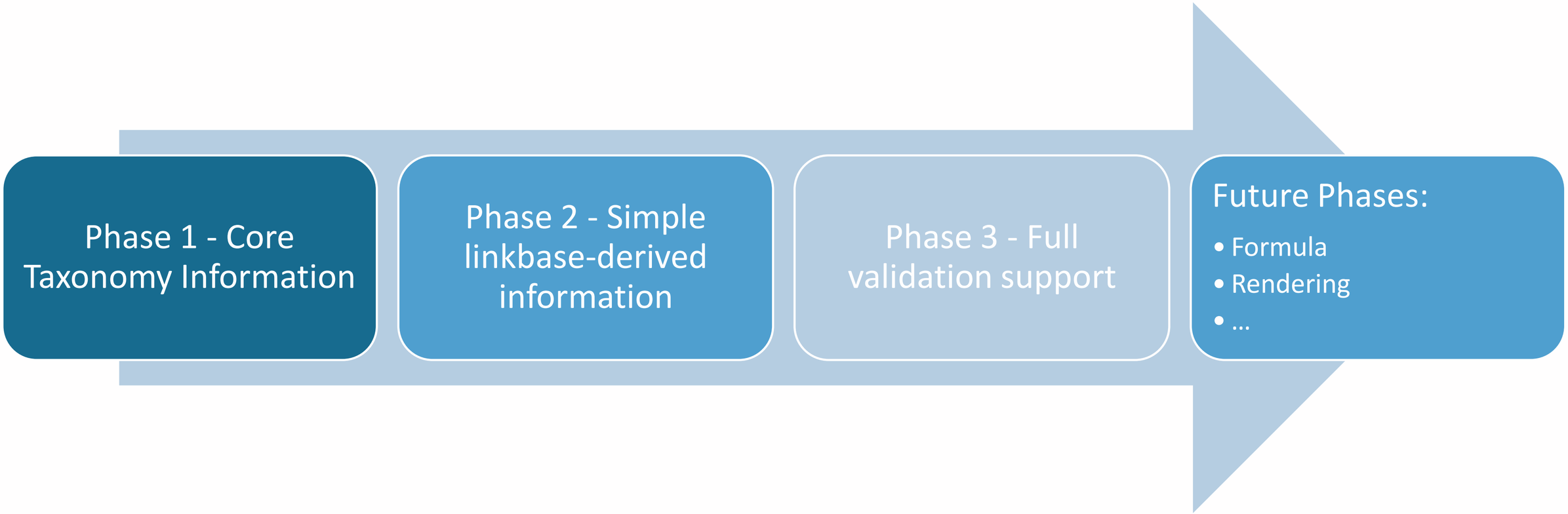
* OIM currently only covers reports, so doesn't yet help with taxonomy-level rules

OIM for Taxonomies

- OIM currently provides a syntax-independent model for XBRL Reports, along with two alternative representations (xBRL-JSON and xBRL-CSV)
- Next step for OIM Working Group is the development of a model for XBRL Taxonomies
- Taxonomies support a broad range of functionality: planning a phased approach

OIM for Taxonomies

Taxonomy Model Phased Implementation Plan



Full details on https://specifications.xbrl.org

Calculations

XBRL v2.1 provides a **summation-item** relationship that can be used to define and check simple calculations in XBRL reports.

- Equity = Assets – Liabilities
- Assets = Current Assets + Non-current Assets
- Profit = Revenue - Costs

Calculations

Problems:

- It can't document all relationships (e.g. cross-period, cross-dimension) Hard to fix
- False positives due to incomplete calculations Really hard to fix
- False positives due to rounding Easy to fix – and causing lots of confusion
- Missed calculations due to duplicate facts (common in iXBRL) Really easy to fix

Calculations v2.0 will solve all of these problems!

Calculations v1.1 will solve *some* of these problems much sooner.

Calculations v1.1

milj. euroa	Liite	2020	2019
Liikevaihto	6	49 015	5 447
Muut tuotot	8	4 802	110
Materiaalit ja palvelut	9	-44 298	-2 721
Henkilöstökulut	10	-1 195	-480
Poistot	6, 16, 17	-1 090	-575
Muut kulut	8	-5 890	-591
Vertailukelpoinen liikevoitto	6	1 344	1 191
Vertailukelpoisuuteen vaikuttavat erät [1)]	7	255	-72
Liikevoitto	6	1 599	1 118

Presented values don't add up exactly, but are perfectly consistent within their stated accuracy. This is very common.

Calculations v1.1

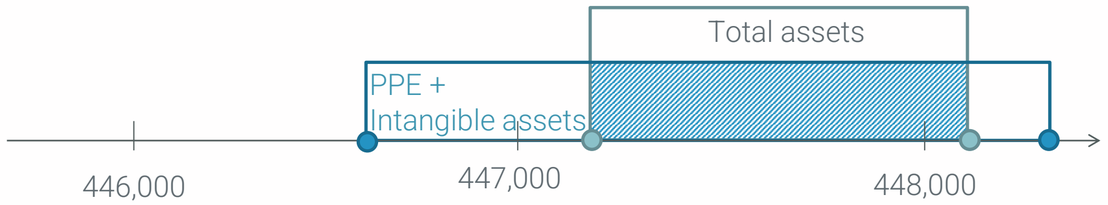
Aim:	• to ensure calculations work on rounded numbers
Why:	• to provide a short-term fix to remove a large number of the false positives that are happening, particularly in ESEF filings
How:	• has a relatively small impact on taxonomies resulting in a large benefits for users
Status:	• second, hopefully final, Candidate Recommendation now published

	In ths' USD
PPE	123
Intangible assets	324
Total assets	448

but 123 + 324 = 447!

	Exact number	As interval (+/-500) min	max
PPE	$ 123,300	$ 122,800	$ 123,800
Intangible assets	$ 324,400	$ 323,900	$ 324,900
Total assets	$ 447,700	$ 447,200	$ 448,200

PPE + Intangible assets = [122,800+323,900;123,800+324,900] = [446,700;448,700]



https://en.wikipedia.org/wiki/Interval_arithmetic

Calculations v1.1

How it works

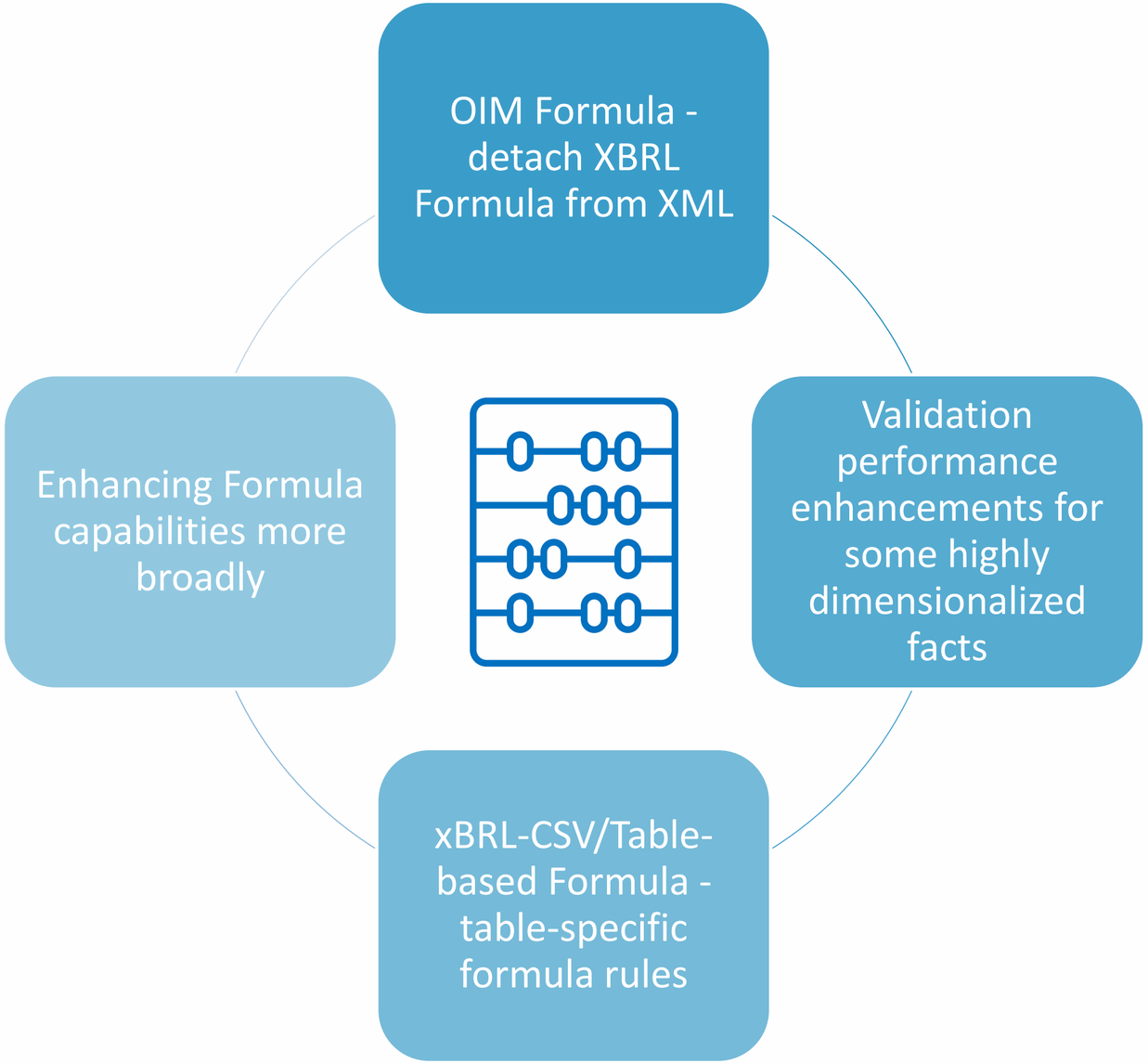
- Calculations performed using **interval arithmetic**
- Separate modes to support:
  - Rounding
  - Truncation
- Consistent duplicates fully supported (e.g. €1.1m vs €1,064,000)
- New summation-item arcrole => requires new behaviour
- New behaviour *may* be applied to XBRL v2.1 summation-item arcrole

Calculations v1.1

Adoption plan

- Tools can apply new behaviour to existing taxonomies today
  - *Specification requires tools use a new error code, and distinguish Calculations v1.1 inconsistencies from XBRL v2.1 inconsistencies*
- When specification reaches Recommendation:
  - Taxonomy authors should switch XBRL v2.1 relationships to be Calculations v1.1 relationships
  - Regulators should update filing manuals to require Calculations v1.1 relationships

Formula


OIM Formula - detach XBRL Formula from XML
Validation performance enhancements for some highly dimensionalized facts
xBRL-CSV/Table-based Formula - table-specific formula rules
Enhancing Formula capabilities more broadly

OIM Formula

- Restricted subset of XBRL Formula that can be reliably evaluated without an XML report
- Prohibit "node navigation" operations in XPath expressions
- Prohibit certain Formula functions that require an XML document
- Add new Formula functions to replace any lost functionality

Approvals

- Assertion Severity 2.0 (Rec imminent)
  - Dynamic formula assertion severity
- TRR v5
  - Additional date and number formats
- Units & Data Type Registries
  - New data types for environmental reporting
- Calculations v1.1 (CR)

Get Involved!

- XBRL Working Group participation is open to all XBRL members, including XBRL Europe members
- Join with no minimum attendance requirement
- Access to internal issue tracker and internal drafts

Sign-up via XBRL website

https://xbrl.org/members