



XBRL MODERNISATION AND SIMPLIFICATION

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"XBRL is too complicated!"

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News

GLEIF Annual Report Demonstrates ESEF Taxonomy, InDesign Conversion

GLEIF Annual Report demonstrates conversion from Adobe Indesign, ESEF taxonomy multi-lingual capabilities.

[ESEF](#) [GLEIF](#) [INLINE XBRL](#) [INLINE XBRL VIEWER](#) [XII NEWS](#)

[←](#) [→](#)

STANDARDS NEEDED TO RENDER A WEBPAGE

HTML5

CSS

PNG

ECMA-262 (Javascript)

RFC 5246 (TLS)

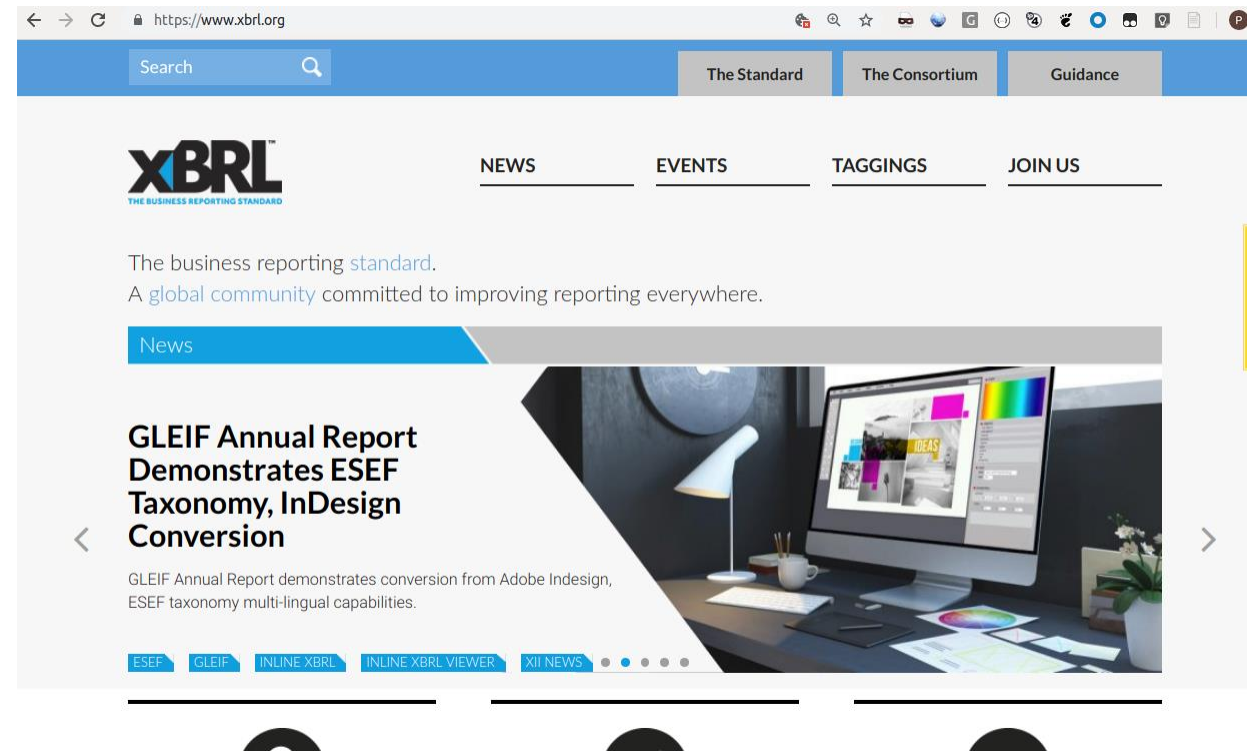
RFC 793 (TCP)

RFC 791 (IP)

IEEE 802.11 (WiFi)

RFC 1035 (DNS)

...





XBRL IS TOO COMPLEX? (1)

Complex standards don't have to be hard to use.

but XBRL has not done a great job of hiding complexity



THE OPEN REPORTING CHALLENGE

"If I were you, I wouldn't start from here."

THE OPEN REPORTING CHALLENGE

If you were designing a system for collecting high-quality, structured financial data, it wouldn't look much like financial reporting as we know it today.

Inline XBRL and extensions allow us to migrate a system designed for humans to a system that can be used by computers too.





XBRL IS TOO COMPLEX? (2)

We're solving some complex problems



KEY INITIATIVES

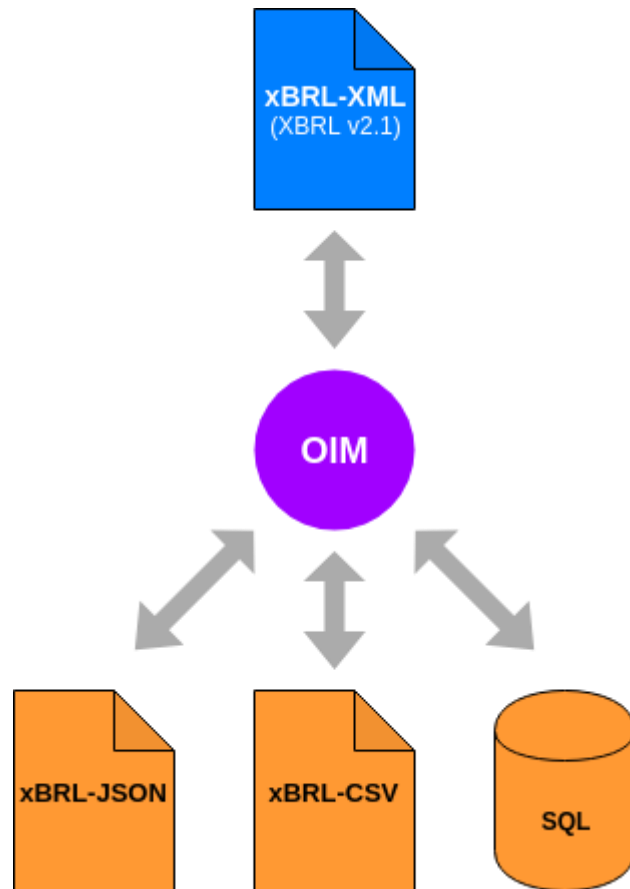
Open Information Model

Calculations v2

XF

Guidance

THE OPEN INFORMATION MODEL



OIM: A syntax-independent model of an XBRL report

Work with XBRL data in the format that makes most sense



OIM: CHOOSE THE RIGHT TOOL FOR THE JOB

xBRL-XML

- Existing market of mature validators: good for regulatory collection systems

xBRL-JSON

- Easier for developers to work with
- Good for (re)publication of XBRL data

xBRL-CSV

- Very compact for bulk, record-based data
- Good for granular reporting

CALCULATIONS V2

$$V_{Rd,c} = \left(\max \left\{ C_{Rd,c} \cdot K \cdot (100 \cdot \rho_L \cdot f_{ck})^{\frac{1}{3}}; v_{min} \right\} + k_1 \cdot \sigma_{cp} \right) \cdot b_w \cdot d$$

$$C_{Rd,c} = \frac{0,18}{\gamma_c} = \frac{0,18}{1,5} = 0,12$$

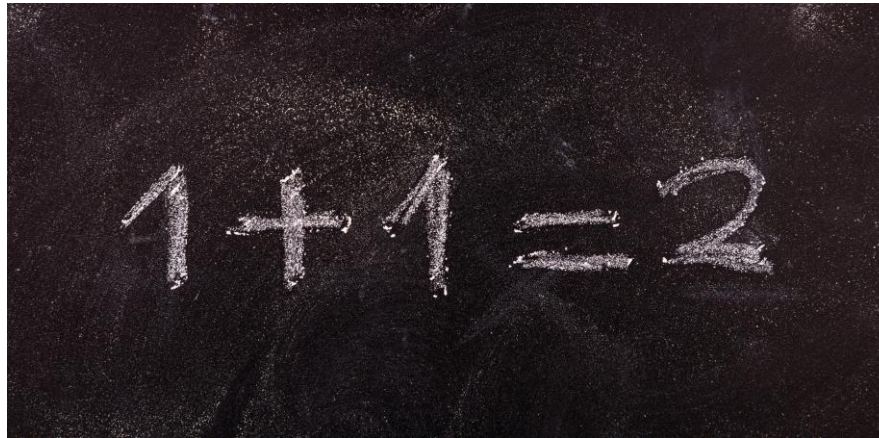
$$K = 1 + \sqrt{\frac{200}{d}} = 1 + \sqrt{\frac{200}{650}} = 1,55 \leq 2,0$$

$$\rho_L = \frac{A_{sL}}{b_w d} = \frac{9,42 \cdot 10^{-4}}{0,3 \times 0,65} = 4,83 \cdot 10^{-3} \leq 0,02$$

$$v_{min} = \frac{0,053}{\gamma_c} \cdot k_2 \cdot \rho_L^{\frac{1}{2}} = \frac{0,053}{1,5} \times 1,55^{\frac{3}{2}} \times 25^{\frac{1}{2}} = 0,34 \text{ MPa}$$

CALCULATIONS V2

Modernise calculation functionality



Express the calculation relationships present in financial reports

Improve the consistency and utility of XBRL data



XF

XBRL Formula provides powerful validation capabilities

Ability to embed validation rules in a taxonomy is a major strength of XBRL

XBRL Formula is hindered by a complex syntax

XF – TEXT BASED FORMULA

XF provides a simple, text-based syntax for the existing XBRL Formula language

```
namespace eg = "http://example.com/taxonomy";
assertion PositiveValueAssets {
  unsatisfied-severity WARNING;
  variable $PositiveItems {
    or {
      concept-name eg:CurrentAssets;
      concept-name eg:NonCurrentAssets;
    };
  };
  test { $PositiveItems ge 0 };
};
```

XF – TEXT BASED FORMULA

XF provides a simple, text-based syntax for the existing XBRL Formula language

Freely convert between XF and standard XBRL Formula syntax

Useful for generating and reviewing formula rules

*Has enabled us to write an XBRL Formula tutorial –
xbrl.org/guidance*



GUIDANCE

We should reduce the number of people reading our specifications.

... because users should have access to guidance materials



GUIDANCE

Simplify the use of XBRL by promoting consistent adoption of best practice.

<https://xbrl.org/guidance>



GUIDANCE – XBRL GLOSSARY

<https://xbrl.org/glossary>

~~Instance document~~

XBRL Report

~~Presentation linkbase~~

Presentation tree

Open reporting

Closed reporting

Extension taxonomy

FUTURE OF CORPORATE REPORTING

Inline Viewer

GLEIF Annual Report 2018

Display Options ▼

Cash Flow Statement

for the Period from January 1 to December 31, 2018

	Notes	Jan. to Dec. 2018	Jan. to Dec. 2017
		US\$	US\$
Surplus		8,349,395	252,867
Amortization and depreciation expense		344,735	214,955
Increase (decrease) of provisions		1,686	27,174
(Gains)/losses from the disposal of fixed assets		-17,061	0
Financial income/expense		-12,470	300
Other non - cash expenses and income		336,162	-251,063
Decrease/increase of receivables and other current assets		2,305,145	-3,276,455
Increase/decrease of liabilities to vendors and other operating liabilities		-4,007,682	1,265,472
Interest received		13,635	1,624
Cash flow from operating activities		7,313,545	-1,765,126

Fact Properties

Concept

- (ifrs) Autres ajustements au titre d'éléments sans effet de trésorerie

Ajustements au titre d'éléments sans effet de trésorerie destinés à rapprocher le résultat et le flux de trésorerie net provenant (utilisé dans le cadre) des activités opérationnelles que l'entité ne communique pas séparément dans les mêmes états ou notes. [Voir: Résultat]

Dimensions

Date 31 Dec 2018 [W](#)

Fact Value US \$ 336,162

Accuracy 0 (ones)

Powered by [workiva](#)



WHAT'S NEXT?

Rethink

... Taxonomies

... Data Discovery

... Standards Interoperability



WHAT'S NEXT: TAXONOMIES?

Rethink Taxonomies & Data Discovery

- The building blocks for understanding
- Currently:
 - Little or no reuse
 - Comparison assertions are extremely difficult
 - Taxonomy architecture varies widely: impairs analysis, adds to complexity
 - Programmatic access tends to be vendor-specific
 - Difficult to link to/leverage other first class metadata



SHIFT TOWARDS API SIGNATURES

Take advantage of new approaches to digitization, platforms and service oriented thinking

- Develop standardization in ways to make calls on (and from there, to manage) relevant aspects of taxonomies
- Do so in a way that respects ownership and governance
- Do so in a manner that encourages reuse
- Do so in a way that radically simplifies definition re-use
- Do so in a way that radically simplifies ways to assert comparability
- Do so in a way that constrains certain existing flexibility



NOT JUST METADATA

Taxonomies:

GET THE FRENCH LABEL FOR PROFIT UNDER IFRS

Returns “Résultat”

BUT

GET THE ifrs:ProfitLoss VALUES FOR TECHNOLOGY COMPANIES IN EUROPE FOR FY2021, MAKE THE LABEL FRENCH....

Will be vastly more interesting!

Our API Signatures work needs to encourage both.



RETHINK INTEROP

Before long... we should be able to expand our horizons!

Why can't a taxonomy in the cloud link to:

- ISO Reference Data
- ISO Message Definitions
- BIRD dictionaries

And vice versa?



IS THIS THE RIGHT WAY FORWARD?

We need your ideas, your initiative and your effort to make this a reality

And quickly!

Thank you!