# iXBRL, xBRL-JSON & xBRL-CSV

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- XBRL International

# iXBRL
## is a solution to the challenge of
# Open Reporting

# What is Open Reporting?

# https://xbrl.org/glossary

# What is Open Reporting?

**Open reporting**

An environment where a preparer must make their own decisions about exactly which data points are to be reported. This is commonly found in financial reporting where the reporting requirements are expressed as a set of principles that must be followed, rather than a specific set of data points that must be reported. Open reporting environments may allow preparers to provide an extension taxonomy that defines any additional data points needed, although there are other approaches to implementing open reporting with XBRL.

# Open Reporting is…

- The opposite of "fill in the boxes" template-based reporting*

- Not form-based reporting

- Financial reporting with no fixed chart of accounts

*"Insert more rows as required" is still "Closed Reporting"*

# Open Reporting is…

- What you'd invent if you wanted to make structured, electronic reporting as difficult as possible…

… but we're stuck with modelling the world as it is.

# Presentation in an Open Reporting world

- Open Reporting puts preparers in control of the presentation of their reports

- Different preparers reporting different data points means it's often desirable to view facts in the context in which they were "originally" presented

# Presentation

*"Just send us the data, we'll render it"*

This works very well in a Closed Reporting world

XBRL + Table Linkbase works well for this

| (mln EUR) | 31/12/2015 | | | | | | |
|---|---|---|---|---|---|---|---|
| | Gross carrying amount | | | | Accumulated impairment, accumulated changes in fair value due to credit risk and provisions | | Collaterals and financial guarantees received on non-performing exposures |
| | | Of which performing but past due >30 days and <=90 days | Of which non-performing | | On performing exposures[2] | On non-performing exposures[3] | |
| | | | | Of which: defaulted | | | |
| Debt securities (including at amortised cost and fair value) | | | | | | | |
| Central banks | | | | | | | |
| General governments | | | | | | | |
| Credit institutions | | | | | | | |
| Other financial corporations | | | | | | | |
| Non-financial corporations | | | | | | | |
| Loans and advances(including at amortised cost and fair value) | | | | | | | |
| Central banks | | | | | | | |
| General governments | | | | | | | |
| Credit institutions | | | | | | | |
| Other financial corporations | | | | | | | |
| Non-financial corporations | | | | | | | |
| Households | | | | | | | |
| DEBT INSTRUMENTS other than HFT | | | | | | | |
| OFF-BALANCE SHEET EXPOSURES | | | | | | | |

# Presentation

*"Just send us the data, we'll render it"*

This works much less well in an Open Reporting world

| (In millions) | Gross Carrying Amount | | Accumulated Amortization | | Net Carrying Amount | | Gross Carrying Amount | | Accumulated Amortization | | Net Carrying Amount |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | December 31, 2016 | | | | | | June 30, 2016 |
| Technology-based (a) | $ | 7,619 | $ | (3,604) | $ | 4,015 | $ | 5,970 | $ | (3,648) | $ | 2,322 |
| Marketing-related | | 3,983 | | (691) | | 3,292 | | 1,869 | | (616) | | 1,253 |
| Contract-based | | 801 | | (709) | | 92 | | 796 | | (718) | | 78 |
| Customer-related | | 4,023 | | (421) | | 3,602 | | 465 | | (385) | | 80 |
| Total | $ | 16,426(b) | $ | (5,425) | $ | 11,001 | $ | 9,100 | $ | (5,367) | $ | 3,733 |

"Original" HTML presentation

vs

Rendered XBRL

| Finite-Lived Intangible Assets (Detail) - USD ($) $ in Millions | | Dec. 31, 2016 | Jun. 30, 2016 |
|---|---|---|---|
| Finite-Lived Intangible Assets [Line Items] | | | |
| Gross Carrying Amount | | $ 16,426 [1] | $ 9,100 |
| Accumulated Amortization | | (5,425) | (5,367) |
| Net Carrying Amount | | 11,001 | 3,733 |
| **Technology-based** | | | |
| Finite-Lived Intangible Assets [Line Items] | | | |
| Gross Carrying Amount | [2] | 7,619 | 5,970 |
| Accumulated Amortization | [2] | (3,604) | (3,648) |
| Net Carrying Amount | [2] | 4,015 | 2,322 |
| **Marketing-related** | | | |
| Finite-Lived Intangible Assets [Line Items] | | | |
| Gross Carrying Amount | | 3,983 | 1,869 |
| Accumulated Amortization | | (691) | (616) |
| Net Carrying Amount | | 3,292 | 1,253 |

# Open Reporting Presentation

Much better to send a presentation view (e.g HTML), annotated with structured information (e.g. XBRL)

HTML + XBRL = iXBRL

# https://xbrl.org/ixbrl

# 5.4.1 Consolidated statement of income

| (in millions of euros) | Notes | 2014 | 2013 restated[7] |
|---|---|---|---|
| **SALES** | *4.1* | **12,725** | **11,662** |
| **Cost of sales** | 4.3 | **(10,522)** | (9,653) |
| **GROSS MARGIN** | 4.3 | **2,203** | **2,009** |
| *% of sales* | | 17.3% | 17.2% |
| **Research and Development expenditure, net** | *4.51* | (685) | (614) |
| **Selling expenses** | | (207) | (193) |
| **Administrative expenses** | | (449) | (436) |
| **OPERATING MARGIN** | | **862** | **766** |
| *% of sales* | | 6.8% | 6.6% |
| **Share in net earnings of equity-accounted companies** | 4.5 3.1 | **51** | **26** |
| **OPERATING MARGIN INCLUDING SHARE IN NET EARNINGS OF EQUITY-ACCOUNTED COMPANIES** | *4.5* | **913** | **792** |

**XBRL**
THE BUSINESS REPORTING STANDARD

These samples have been prepared by XBRL International as a technology demonstration, and the accuracy of figures and information contained within this sample should not be relied upon for any purpose whatsoever.

**Inline XBRL**

**Highlight all tags**

**Line item**
ifrs-full:CostOfSales

**Value**
€ 10,522,000,000.00

**Period**
2014-01-01 to 2014-12-31

**Units**
iso4217:EUR

**Entity**
5493006IH2N2WMIBB742

☑ Highlight all tags

**Inline XBRL**

| NOTE 4 | INFORMATION BY OPERATING SEGMENT |
|--------|----------------------------------|

For internal reporting purposes the Group is structured into the following four business units based on the type of products and services provided:

- Automotive Seating (design of vehicle seats, manufacture of seating frames and adjustment mechanisms, and assembly of complete seating units);
- Emissions Control Technologies (design and manufacture of exhaust systems);
- Interior Systems (design and manufacture of instrument panels, door panels and modules, and acoustic components);

- Automotive Exteriors (design and manufacture of front ends and safety modules).

These business units are managed on an independent basis in terms of reviewing their individual performance and allocating resources. The tables below show reconciliation between the indicators used to measure the performance of each segment - notably operating income - and the consolidated financial statements. Borrowings, other operating income and expense, financial income and expense, and taxes are monitored at Group level and are not allocated to the various segments.

## 4.1    Key figures by operating segment

### 2014

| (in € millions) | Automotive Seating | Emissions Control Technologies | Interior Systems | Automotive Exteriors | Other | Total |
|---|---|---|---|---|---|---|
| **Sales** | 5,318.9 | 6,749.6 | 4,737.0 | 2,069.7 | 337.3 | 19,212.5 |
| Inter-segment eliminations | (9.8) | (2.2) | (27.7) | (6.6) | (337.3) | (383.6) |
| **Consolidated sales** | 5,309.1 | 6,747.4 | 4,709.3 | 2,063.1 | 0.0 | 18,828.9 |

Operating income (loss)

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**Line item**

ifrs-full:Revenue

**Value**

€ 5,318,900,000.00

**Period**

2014-01-01 to 2014-12-31

**ifrs-full:SegmentConsolidationItemsAxis**

ifrs-full:OperatingSegmentsMember

**ifrs-full:SegmentsAxis**
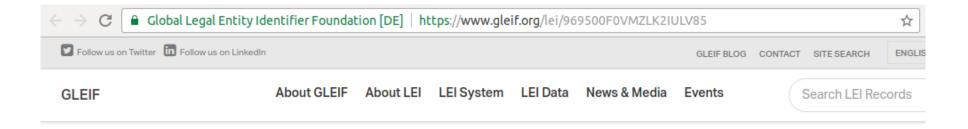
faurecia:AutomativeSeatingMember

**Units**

iso4217:EUR

**Entity**

969500F0VMZLK2IULV85

# Using iXBRL

- iXBRL is rapidly becoming the default choice for Open Reporting

- Expecting ESD-TF to recommend its use in such environments

- Can be used with or without extensions
  - Can reduce reliance on extensions *in some environments*

# iXBRL and Entity Specific Disclosures (ESDs)

- Neither iXBRL nor XBRL are magic
- If you don't require comparable data, you won't get it
- Accounting standards were developed for a paper-based world with human consumers
- Need to find a better balance between consumer desire for consistent data, and the need for a true and fair view of an entity's financial performance

# OIM, xBRL-JSON
# & xBRL-CSV

# OIM, xBRL-JSON & xBRL-CSV: Why?

Problem 1:

- XML has not aged well

- Developers see working with XML as a burden

- XBRL v2.1, as currently drafted, is wedded to XML

# OIM, xBRL-JSON & xBRL-CSV: Why?

Problem 2:

- XBRL v2.1 has evolved through addition of modules

- Later modules have made some features of earlier specs redundant

- Some of XBRL's most complex features are the least used

# Open Information Model: Goals

- **Simplification**: supports a subset of what is possible in XBRL v2.1

- **Syntax independence**: allow simple, lossless transformation to different formats

# xBRL-JSON & xBRL-CSV

- Additional, alternative formats for XBRL data
- A test for the OIM

# xBRL-JSON

- Goal: make XBRL data easier to work with

- Primary use case: publication of received, validated XBRL data

- Key features:
  - Developer-friendly JSON syntax
  - Standalone facts (no contexts, no units)
  - Simplicity of representation

- Published as Candidate Recommendation

# xBRL-CSV

- Goal: efficient representation of large, tabular reports

- Primary use case: collection of high-volume, record-based data

- Key features:
  - Leverages output of W3C's CSV-on-the-Web Working Group
  - Completely standard CSV file(s), accompanied by JSON metadata file
  - Comprehensible CSV files (for the right kind of data)

- Internal Working Draft

# Summary

- Extending the power of XBRL, not replacing XBRL v2.1
- Future proofing the specification
- An opportunity for simplification

# Get involved

- Join the Working Group, review the specs
- Steer your use of XBRL towards the OIM subset
- Publish some XBRL data in JSON

# https://specifications.xbrl.org

# pdw@xbrl.org