



Financial Reporting Council

# **FRC Lab report: Structured digital reporting**

Improving quality  
and usability

September 2022

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## This report

This report has been prepared by the Financial Reporting Council Lab (the Lab). The Lab focuses on innovation and best practice but has no regulatory role and any suggestions in the report should not be considered a requirement. The FRC supports UK digital reporting by providing taxonomies to report to HMRC, Companies House, FCA and Irish Revenue. The FRC is not the lead regulator for digital reporting and companies should consider interaction with any guidance provided by such regulators.

This report assumes the reader has some understanding of XBRL (eXtensible Business Reporting Language). Those who are not familiar with XBRL may wish to review the [appendix](#) to this report and the XBRL glossary and background information at <https://www.xbrl.org/the-standard/>. For the latest information and requirements for the UK market, please refer to the FCA webpages on structured reporting [here](#) and [here](#).

The report highlights aspects of some companies' reporting, but this should not be considered an evaluation of a company's annual report as a whole.

If you have any feedback, or would like to get in touch with the Lab, please email us at: [FRCLab@frc.org.uk](mailto:FRCLab@frc.org.uk).

# Quick read

## The need for high-quality, usable digital reporting

Companies admitted to trading on UK regulated markets are required to produce their annual financial report in a structured digital format ('structured reports').<sup>1</sup> The availability of corporate reporting in a usable and comparable format enhances transparency and supports the effective functioning of capital markets.

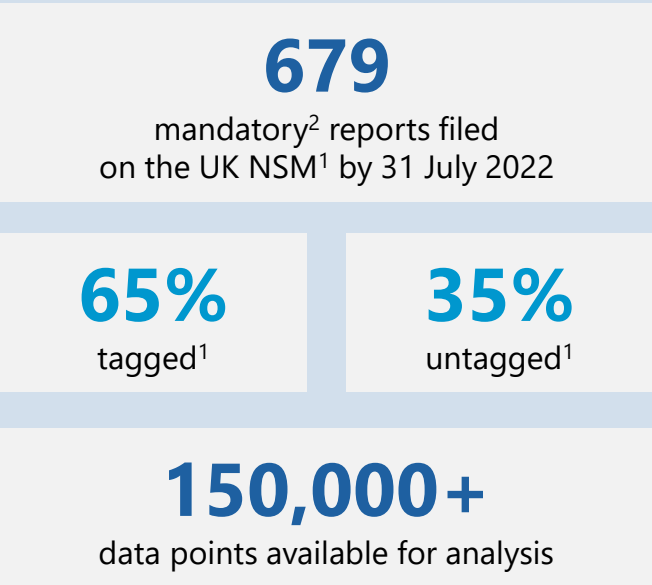
The introduction of structured digital reporting brings corporate reporting into the digital era. However, it will only achieve its intended objective if the resulting structured reports are of high quality and are usable in practice.

The UK has been a leader in requiring UK entities to report digitally to tax authorities since 2011. The UK also has voluntary digital reporting to Companies House. However, this report focuses on digital reporting under the DTR requirements.<sup>1</sup> Nevertheless, some of our findings may also be relevant to other digital reporting mandates.

1 See background and glossary in the Appendix  
2 See notes on page 15

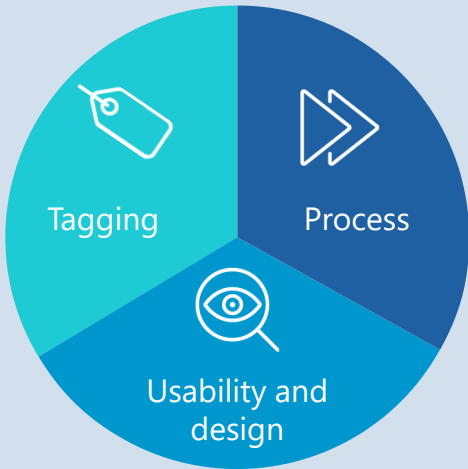
## The first year of mandatory reporting

With the first mandatory structured reporting year now almost complete (see stats below), the FRC Lab has analysed a sample of UK filings, using public data and data made available by the FCA. We have also gathered feedback from companies, tagging software and service providers, design agencies, assurance providers and other stakeholders. Our review builds on our [early implementation study](#) of voluntary practice conducted last year.






We found that there has been some progress since last year, with many companies rising to the challenge. However, much remains to be done as data quality and usability are below the level expected for companies in a leading capital market.

This report sets out some areas of focus for companies and suggestions to optimise reporting to meet the needs of investors and other users in the following areas:



The report also highlights some upcoming changes that companies will need to focus on, including note tagging and timetables.

	We were pleased to see...	Many companies need to improve...	Better practice would be to...
<b>Process</b> 	<ul style="list-style-type: none"> <li>companies rising to the challenge to produce a report in line with the new requirements.</li> <li>high use of the FCA's test facility to iron out issues ahead of the final submission.</li> <li>some examples of companies providing disclosures about their governance and internal and external assurance process.</li> </ul>	<ul style="list-style-type: none"> <li>the naming and structure of the file(s) submitted to the National Storage Mechanism.<sup>3</sup> This was the cause of many rejected filings.</li> <li>their review and governance processes – more engagement and education is needed, including at management and Board level.</li> </ul>	<ul style="list-style-type: none"> <li>focus on data quality and consider internal or external assurance.</li> <li>consider structured reporting as an integral part of the annual reporting process, rather than a bolt-on.</li> <li>adopt a continuous improvement mindset and ensure the annual reporting process is future-proof.</li> <li>keep the filings submitted in different jurisdictions as consistent as possible and clearly label the different versions.</li> </ul>
<b>Usability &amp; design</b> 	<ul style="list-style-type: none"> <li>improvement in the design of the structured reports – most issues with fonts and images displaying incorrectly have been addressed.</li> <li>some companies filed their structured report relatively early in the reporting season.</li> <li>many companies put the structured report on their website.</li> </ul>	<ul style="list-style-type: none"> <li>the usability of the report, by making a validated report available on the company's website with an inline viewer<sup>3</sup>.</li> <li>the timing of their report – the deadline is reverting to 4 months after year-end, which means many companies may need to speed up the process from this year.</li> </ul>	<ul style="list-style-type: none"> <li>minimise the time lag between the results announcement and the filing of the structured report.</li> <li>minimise the report loading time.</li> <li>go beyond the limits of the paper report and design with digital users in mind.</li> <li>ensure the structured report meets accessibility standards.</li> </ul>
<b>Tagging</b> 	<ul style="list-style-type: none"> <li>the use of 'concealed' tags<sup>4</sup> has largely disappeared.</li> </ul>	<ul style="list-style-type: none"> <li>their selection of tags, including by focusing on the accounting meaning of their disclosures and by avoiding unnecessary extensions.</li> <li>the selection of appropriate anchors for extensions.</li> <li>the completeness of calculations.</li> </ul>	<ul style="list-style-type: none"> <li>start testing text block tagging of the notes now.</li> <li>review peers' tagging.</li> <li>voluntarily tag some notes in detail that may be of interest to users.</li> <li>respond to relevant taxonomy consultations.</li> </ul>

<sup>3</sup> See background and glossary in the Appendix

<sup>4</sup> See page 11



# Process

## Context

We were pleased to see companies rising to the challenge to prepare a structured report in line with the new requirements. However, there are opportunities for companies to enhance their processes in the longer term.

## Company involvement, ownership and governance

Our outreach indicated that the level of companies' involvement in the preparation of structured annual reports varied, including at management and Board level. Tagging and assurance providers expressed concerns that some companies were not taking ownership for the quality of the file and were not sufficiently involved in reviewing the tagging. We heard that many companies continue to focus on producing their annual report in PDF format, while the structured report remains an afterthought.

The structured report should be subject to appropriate review and governance processes, as it is the official version for the purpose of the Disclosure and Transparency Rules.<sup>5</sup> Companies should spend time educating their management and Board. We suggest they develop a review process that is suitable for a non-technical audience and draws the Board's attention to the most important aspects for their review (see possible approach opposite).

It is helpful if companies provide disclosures explaining their governance approach – see example opposite.

In addition, companies may find it valuable to document their processes and controls, so that knowledge is retained in case of staff changes.

<sup>5</sup> See background and glossary in the Appendix

## Airtel Africa plc

### [Annual Financial Report 2022](#), Audit and Risk Committee report:

"We paid special attention to the preparation of our consolidated financial statements in digital form under the European Single Electronic Format regulatory technical standard (ESEF). As this was the first report in this format, we made sure the necessary procedures had been completed by all parties, including our technical accounting team, a specialist IT provider and our external auditor."

## Possible approach to the audit committee's review

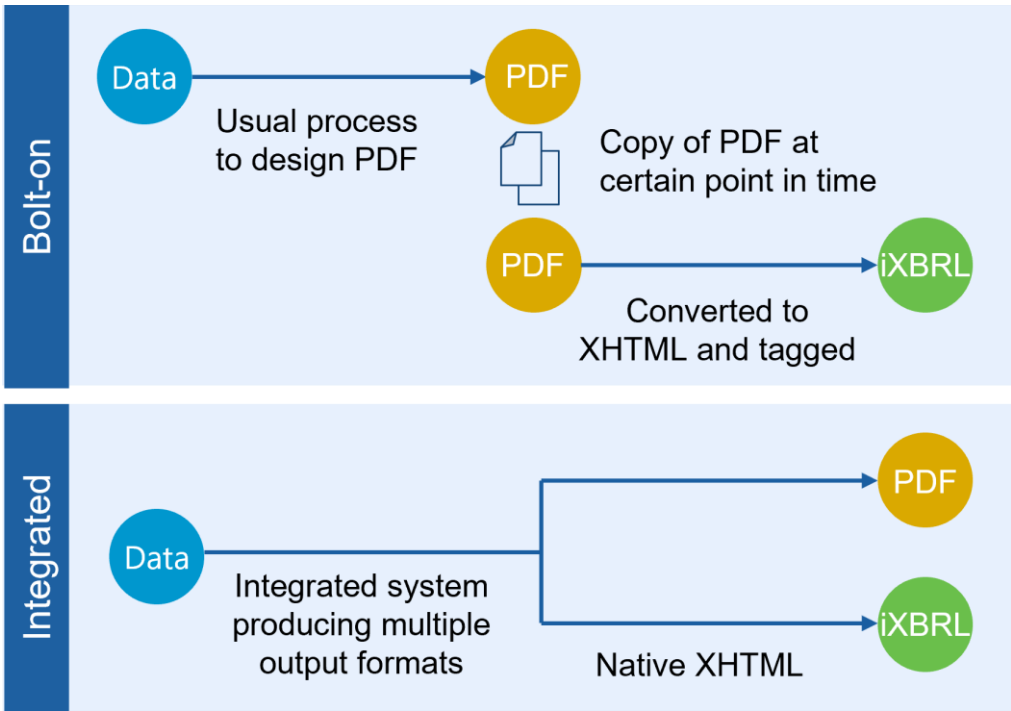
1. Set up an education session, covering topics such as 'What does a tagged report look like?', 'What is an extension?' and 'What do validation warnings and errors mean?'.<sup>5</sup>
2. Share a version of the report with an Inline XBRL viewer<sup>5</sup> for the committee's review. Explain how to open the report in a web browser, view the tags and identify extensions. If a company uses a cloud platform to share documents with the Board, make sure it can handle the file size and format.
3. Provide an accompanying note explaining:
  - the judgements made in the selection of tags and in the creation of extensions. A comparison to peers' tagging could also be provided, highlighting any differences. Ask whether the committee agrees with the judgements made.
  - the process for preparing the structured report and the controls and any internal or external assurance in place. Ask whether the committee is comfortable with the approach.



## Workflow

Broadly speaking, companies can choose between two workflow approaches to prepare a structured report:

- Applying a **bolt-on** approach, a company prepares its annual report in PDF as before – for example the report is first designed in a tool like InDesign. Then, a copy of the PDF report at a particular point in time is converted into XHTML<sup>6</sup> and tagged.
- **Integrated** disclosure management and design tools can allow the tagging to be applied in parallel to the finalisation of the annual report content and the design process. Such tools may be able to produce annual reports directly in different formats, such as PDF and XHTML, rather than through a conversion process.



6 See background and glossary in the Appendix  
7 See notes on page 15

From our outreach, we understand that most companies continue to use a bolt-on approach applying a PDF-to-XHTML conversion, to minimise changes to their existing process and costs. However, we have also heard some companies have found it valuable to move to an integrated approach.

We expect that over time, as tagging expands to the notes and potentially other sections of the annual report, an integrated approach may become preferable. With a bolt-on approach, last-minute changes to any part of the PDF (even the untagged sections) may mean that the report needs to be re-tagged and re-checked, depending on the tool. PDF-to-XHTML conversions also have disadvantages in terms of report usability and design – see page 10. Companies may want to adopt a continuous improvement mindset and consider how to make the annual reporting process future-proof.

### Submitting the report to the National Storage Mechanism

The last step in the UK structured reporting process is uploading the report in the FCA’s Electronic Submission System (ESS) to get it filed on the [National Storage Mechanism](#) (NSM). Automated checks are applied to the report on submission, with tagged reports subject to more checks than untagged reports. Reports will only get filed if the validations do not result in any errors.

The FCA provides a test facility, allowing reports to be validated without filing them. We were pleased to see the test facility has been widely used, with about 700 test files submitted by the end of July 2022.<sup>7</sup>

FCA data shows many submitters needed more than one attempt to successfully file a structured report. Most errors were due to incorrect file naming and structure. The next page sets out a few tips for a successful submission and explains how to troubleshoot any errors.

# Submitting your report to the FCA – tips for submitters

The tips below are aimed at those authorised to submit to the FCA system on behalf of a company (e.g. the company secretary). The tips are based on FCA guidance and reflect common validation issues.

## Understand what to submit and in what format

There are two options in the FCA submission system: 'ZIP' and 'XHTML'. You need to select the correct option, which depends on the type of report you are submitting (also see [Appendix](#)):

If the annual report contains consolidated (group) IFRS financial statements:

Tagged



ZIP incl. XHTML file and other files

- You should submit an XBRL report package in ZIP format, containing an XHTML file with embedded XBRL tags and accompanying taxonomy files. This package should follow specific folder structure and naming requirements (see [FCA guidance](#)).
- Choose the 'ZIP' option on the FCA system.
- Usually your tagging provider or tool produces an XBRL report package with the correct structure, so there is no need to unzip, rezip or add folders before submission. Ensure you do not 'double zip' by accident.
- Make sure you submit the right ZIP – your tagging provider may send you a ZIP package that *includes* the XBRL report package to upload plus some extra files for your review.

If the annual report contains *only* non-consolidated or non-IFRS financial statements:

Untagged



XHTML file (single unzipped file)

- You should submit a single XHTML file, with a specified file name (see [FCA guidance](#)).
- Choose the 'XHTML' option on the FCA system.
- The XHTML file should not be zipped and should not contain any XBRL tags.

## How to handle errors

Structured reports submitted to the FCA must pass a number of automated checks to be filed on the NSM.

Ideally, companies should ensure their report meets the requirements ahead of submission to the FCA. Companies should familiarise themselves with the [guidance materials](#) on the FCA website. As an authorised submitter, you can also test tagged reports in advance. However, note that reports submitted for testing cannot contain any inside information.

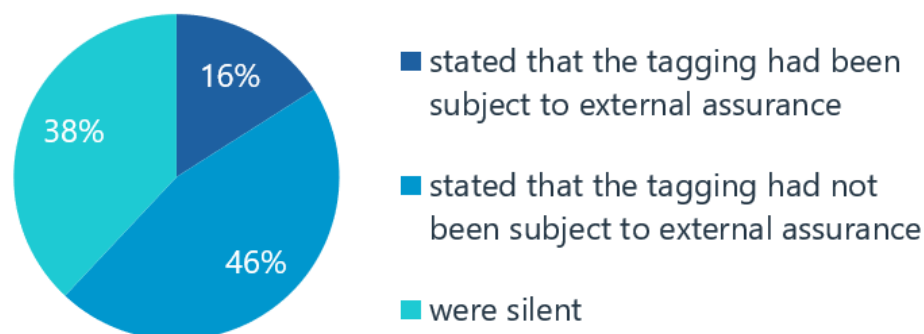
If you do get an error message on submission:

1. Make sure you have selected the correct option ('ZIP' or 'XHTML') and submitted the file in the correct format – see guidance on the left. This is the most common source of issues.
2. Have another look at the guidance materials on the FCA website, including the [FAQs](#).
3. Reach out to your tagging software or service provider for errors that require further technical expertise.
4. If none of the methods above resolve your issue, [submit a support ticket](#).

## Assurance

In the UK, assurance over tagging is currently not required ([see BEIS position](#)). However, UK companies may consider seeking external assurance and the FRC has adopted ISAE (UK) 3000 to support the delivery of these voluntary engagements. In a sample of 50 tagged reports on the NSM, we found:

### Assurance of structured reports



Whether or not the report included an explicit statement about assurance of the tagging seemed to be largely driven by which accounting firm was involved. In our view, clear disclosure on the approach taken is valuable.

In our outreach, some preparers and tagging providers said discussions with assurance providers could be challenging, especially in areas where judgement is involved. However, they said improved understanding of the requirements and processes led to better discussions and ultimately to higher-quality structured reports.

For example, see the last page of [Tesco plc's 2022 structured report](#) for the independent auditor's reasonable assurance report on compliance with the structured reporting requirements.

## Filing in multiple jurisdictions

Companies with multiple listings may be required to submit structured reports in different jurisdictions – for example in the UK, in an EU member state and in the US:

- **UK and EU filings**

We analysed a set of reports for 44 companies who submitted a structured report in the UK as well as in the EU. While the requirements remain largely aligned in the UK and the EU, we found 36% of those companies filed different versions of their structured report in the UK and the EU. Some differences are inevitable due to different language or content requirements. In addition, the EU version of the report was usually subject to audit or assurance. In some cases, the section of the audit or assurance report relating to ESEF was omitted in the UK version of the report.

- **UK/EU and US filings**

The requirements in the US are aligned with those in the UK and EU to some extent, in that the Inline XBRL<sup>8</sup> format is used and the same underlying taxonomy is used (the IFRS Taxonomy). However, we understand different technical and content requirements mean it may not be possible to prepare a single filing that would be accepted by both systems. In our outreach, we heard that many companies appear to have separate processes to prepare the UK/EU and US versions of their structured reports. Companies may want to explore whether software tools can help to optimise these processes.

The existence of different versions of the same report may be confusing to investors – especially when they use repositories that pull together filings from different jurisdictions. It is helpful if companies:

- keep the filings submitted in different jurisdictions as consistent as possible, within the constraints of the local requirements; and
- clearly label the different versions on their website.

8 See background and glossary in the Appendix





# Usability and design

## Visual design

In last year's voluntary files, we identified issues with the design of the human-readable layer, such as fonts and images not displaying correctly. These issues now seem to be largely resolved. Where PDF-to-XHTML conversion is used, companies may find it helpful to make their design agencies aware of particular font, colour and other settings to use in PDFs to avoid issues in the conversion to XHTML. We also suggest companies include the front half of their report in any dry run – that is where more complex design may cause issues in XHTML.

## Availability on company website

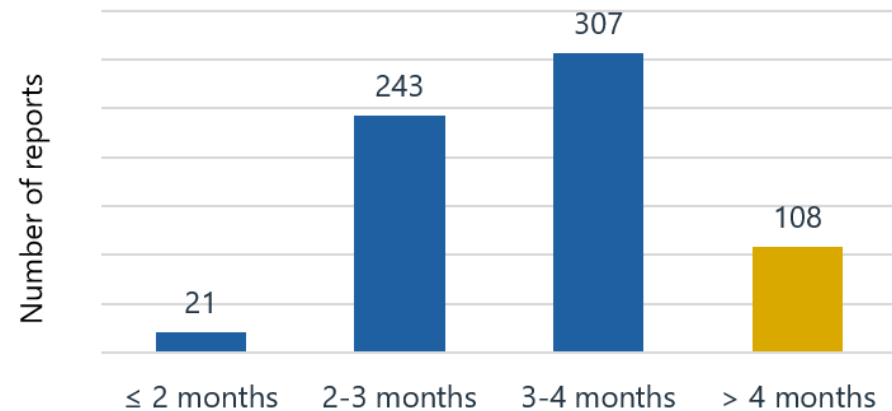
We found that, in a sample of 50 companies that filed a tagged report to the NSM, 32 made the XBRL report package available on their own website.<sup>9</sup> However, some of the packages had an incorrect folder structure – we suggest the package companies put on their website should be the filed version that has passed the FCA validations (see page 7). We found 21 out of 50 companies made the file available with an Inline XBRL viewer, [as recommended in last year's report](#).

## Timing of the structured report

Over 99% of the reports that were filed were submitted within the 6-month period allowed by the FCA's [covid-related timetable extension](#).<sup>9</sup> A small number of companies appear to have made submissions outside of this period, which we understand the FCA is considering further. Companies should be aware that FCA rules are [reverting back](#) to 4 months for year-ends on or after 28 June 2022. All companies need to reconsider the viability of their timetable for next year, considering that the upcoming note tagging requirements (see page 14) may increase time and effort required.

<sup>9</sup> See notes on page 15

## Submission timing (months after year-end)<sup>9</sup>



In last year's report, we suggested that reducing the time lag between the results announcement and the publication of the structured report is likely to enhance the value of the structured report to investors and other users.

We were pleased to see some companies (including some that have large, complex operations) managed to file their structured report relatively early in the reporting season. As processes and tools evolve, we hope that more companies will be able to follow suit.

Most companies continue to publish their annual financial report in PDF format as well. Such PDF reports do not satisfy a company's obligations under the Disclosure and Transparency Rules (DTRs). It is helpful if companies clarify in the PDF and on the company's website that the structured report is the official version for the purpose of the DTRs.

## File size and loading time

The average tagged report size was 21MB, with some below 6MB and some over 70MB. We found some tagged structured reports were slow to open once downloaded. As explained by XBRL International [here](#) and [here](#), slow load times and large file sizes are often caused by inefficient XHTML. PDF-to-XHTML conversion tools translate PDFs to XHTML almost pixel-by-pixel, resulting in messy and inefficient XHTML code behind the scenes, without the proper HTML tags for headings, tables etc. We suggest companies test their reports in different browsers and viewers, and ask their tagging provider to optimise report loading – simple technical changes can make a big difference.

## Embracing XHTML as a web-based format

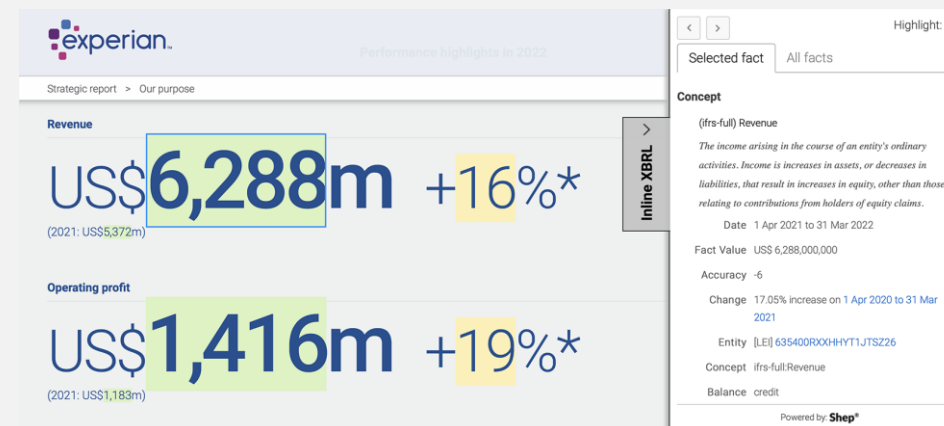
While many companies' structured report looks exactly the same as the PDF with pages in A4 format, this is not a requirement. Unlike PDF, XHTML is a web-based format rather than a print-based format. Companies could instead start thinking of their structured report as a (collection of) webpage(s), which can be:

- **responsive** to different screen sizes.
- **interactive** – for example using dynamic graphs, videos and improved navigation features. Although executable code is not permitted in reports filed to the NSM, some interactive features can still be achieved.
- **accessible** – for example allowing text to be enlarged and making the report suitable for screen readers.
- **optimised for search engines**.
- enabling better **web analytics** and **integration** with the rest of the company website.

We have seen a few companies taking advantage of the structured reporting requirements to rethink their annual report format.

## Experian plc

Experian plc has developed a [prototype interactive annual report](#) that complies with the structured reporting requirements and demonstrates some of the features described on the left.



"As a global leader in digital data services, we are taking this step to visibly lead on the inevitable transition to digital-first reporting – to enhance our reporting, and shape the agenda on digital, communications innovation, XBRL tagging and the IFRS taxonomy." **Mark Pepper, Global Financial Controller, Experian**

However, such truly 'web-based' structured reports can only be created using a new generation of 'native XHTML' reporting tools. Tools using PDF-to-XHTML conversion cannot achieve the features listed on the left. We appreciate companies may be unable to change their processes in the short term. Also, PDF and print will continue to have a role – the Companies Act requires companies to provide a printed copy of the annual report if requested. However, companies may want to consider how to get the best of both digital and PDF/print formats when thinking about the annual report in the longer term.



# Tagging

## Context

In this year's review of tagged reports submitted to the NSM, we continued to observe some tagging errors. Improving data quality is crucial – otherwise, investors will remain reluctant to use structured reports. Companies should also consider that investors, regulators and other stakeholders may see poor tagging quality as an indicator of poor underlying processes, which may influence their decisions.

Most of the tagging guidance we provided last year remains applicable, including guidance on:

- [Using the correct sign](#).
- [Avoiding concealed facts](#) (tags not attached to the human-readable layer), although this issue is largely resolved in this year's filings.
- [The meaning of warnings and errors](#) – warnings should be investigated but not all warnings must be resolved.
- [Avoiding changes to the standard labels of tags](#) (also see [ESEF manual Guidance 3.4.5](#))

However, there are a few points worth highlighting and reiterating.

## Selecting the right tag and creating extensions

Selecting the right tag requires a thorough understanding of the company's report and the available tags in the core taxonomy<sup>10</sup>. Companies should ensure technical accounting staff, who have familiarised themselves with the taxonomy, are involved in the review of the tags. Reviewing peers' tagging may also be helpful.

The process for tagging information in the primary financial statements is summarised on the right. The requirements for tagging information in the notes is different – see page 14.

<sup>10</sup> See background and glossary in the Appendix

<sup>11</sup> See page 13

## Tagging the primary financial statements

**START:** Make sure you understand the **accounting meaning** of the information you are reporting – which IFRS requirement does it originate from and what amounts are included/excluded?

Is there a tag in the core taxonomy<sup>10</sup> with the same meaning?

Yes

Apply the matching core taxonomy tag(s)

No

Create an extension tag<sup>10</sup>

Is it a subtotal?

Yes

No anchoring<sup>11</sup> required

No

Anchor the extension to the core taxonomy tag with the closest wider meaning

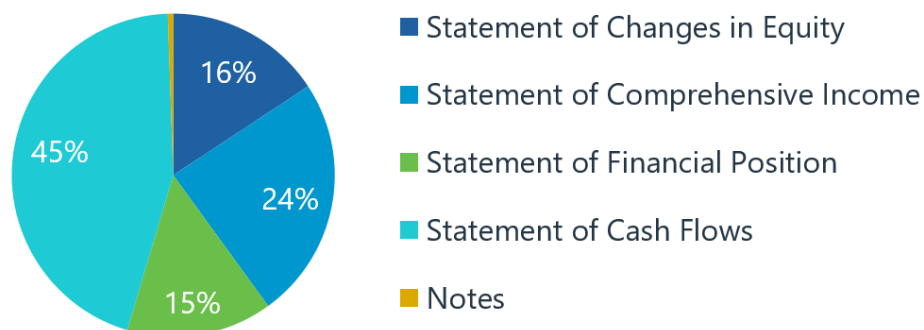
Is the reported information an aggregation of core taxonomy tags?

Yes

Anchor the extension to those narrower core taxonomy tags as well

In the mandatory tagged reports filed on the NSM by 31 July 2022, we found that companies' reports contained about 400 tagged facts on average, of which on average 14% were extensions (custom tags) and 86% were tags from the core taxonomy. These rates varied by industry. We found most extensions occurred in the statement of cash flows, followed by the statement of comprehensive income:

#### Extensions by statement



In a sample of 50 tagged reports on the NSM, we continued to observe that some companies:

- **created unnecessary extensions** when a suitable core taxonomy tag was available. For example, one company created an extension for 'environmental liabilities' even though the accounting meaning appeared to match the core taxonomy tag 'Provision for decommissioning, restoration and rehabilitation costs'.
- **used core taxonomy tags when a different core taxonomy tag should have been used instead.** Companies should make sure they carefully consider the definition (i.e. the 'documentation label') of a tag, its references to the related requirements in IFRS Standards and any additional guidance labels. See examples in the box on the right.

- **used core taxonomy tags when an extension should have been created instead.** For example an industrial company presented a subtotal called 'trading profit' that was calculated as operating profit before intangible amortisation. It tagged this subtotal with the core taxonomy tag 'trading income and expense'. However, the taxonomy implies this tag is intended to be used for income and expenses from trading financial instruments.

#### Tagging observations by statement

##### Statement of comprehensive income:

- There were some scaling errors in earnings per share (e.g. EPS of 60 pence reported as £60).

##### Balance sheet:

- Investments in associates and joint ventures are often tagged incorrectly with the tag intended for separate financial statements. The correct tag is: 'Investments accounted for using equity method'.
- Provisions excluding provisions for employee benefits are often tagged incorrectly as 'provisions'. The correct tag is: 'other provisions'.

##### Statement of cash flows:

- We commonly found extensions for deferred and contingent consideration related to business combinations.

##### Statement of changes in equity:

- We commonly found extensions relating to the settlement of share-based payments.

##### Mandatory tags:

- Some companies failed to use the mandatory 'principal place of business' tag, even though they disclosed the information.

## Anchoring

Extensions are required to be linked to closely related tags from the core taxonomy ('anchored'), to help users understand their meaning. We found some extensions for which the wider anchor chosen was a very generic tag, while other core taxonomy tags were available that were closer in meaning. For example, we found some extensions for income or expenses were anchored to 'profit (loss) before tax', which does not provide any additional information about the extension.

We also found some extensions did not have any 'narrower' anchors, even though they were an aggregation of core taxonomy tags.

Companies may want to have a look at the [guidance](#) and [examples](#) on anchoring produced by the dedicated XBRL International working group.

## Taxonomy choice

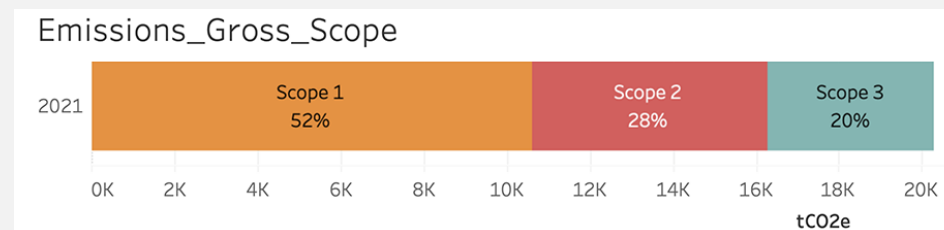
As described further in the [appendix](#), at this time, companies have a choice between using the ESEF or UKSEF taxonomy. Among the 679 mandatory reports submitted to the NSM by 31 July 2022, we identified 3 UKSEF filings (see Aviva example opposite), none of which have been filed to Companies House. All other files used the ESEF taxonomy. As [BEIS proposes](#) to move to mandatory digital filings to Companies House, more companies may look to use UKSEF in future.

## Calculations

Companies are required to specify in their structured report how numbers add up to subtotals and totals using the 'calculations' mechanism. Calculations help users to understand the relationships between data points. In addition, calculations allow companies to spot errors with the scaling and signs of numbers in their structured report. We found some reports with incomplete calculations. Companies should ensure that, to the extent possible, they have calculation relationships in their primary financial statements.

### Aviva plc [Annual Financial Report 2021](#)

Aviva plc used UKSEF and tagged its streamlined energy and carbon reporting and pay ratio information with tags from the FRC taxonomy suite. [XBRL International](#) created a [dashboard](#) based on the Aviva plc report, demonstrating how the data could be visualised and analysed.



## Further voluntary tagging

Companies may want to go beyond the block tagging requirements and tag some notes in detail that are of interest to users, including:

- notes that provide a complete disaggregation or roll-forward of amounts presented in the primary financial statements – for example segment reporting. Detailed tagging would allow users to 'drill down' to the detail in the notes through calculation relationships.
- if a company has retrospectively restated its prior-period financial statements, this will not be apparent from the tagging of the primary financial statements (except in the statement of changes in equity). In such cases, we think it is helpful for investors' understanding if companies voluntarily tag in detail the disclosure of the adjustments to each financial statement line item affected (IAS 8, paragraphs 28(f), 29(c) and 49(b)).
- if companies tag their alternative performance measures, we suggest they also tag the reconciliation to the closest IFRS measure.



# Looking forward

## Text block tagging of the notes

In the first year of mandatory structured reporting, tagging was limited to the primary financial statements and a few mandatory note tags. For financial years starting on or after 1 January 2022, companies are also required to tag the notes, including accounting policies.

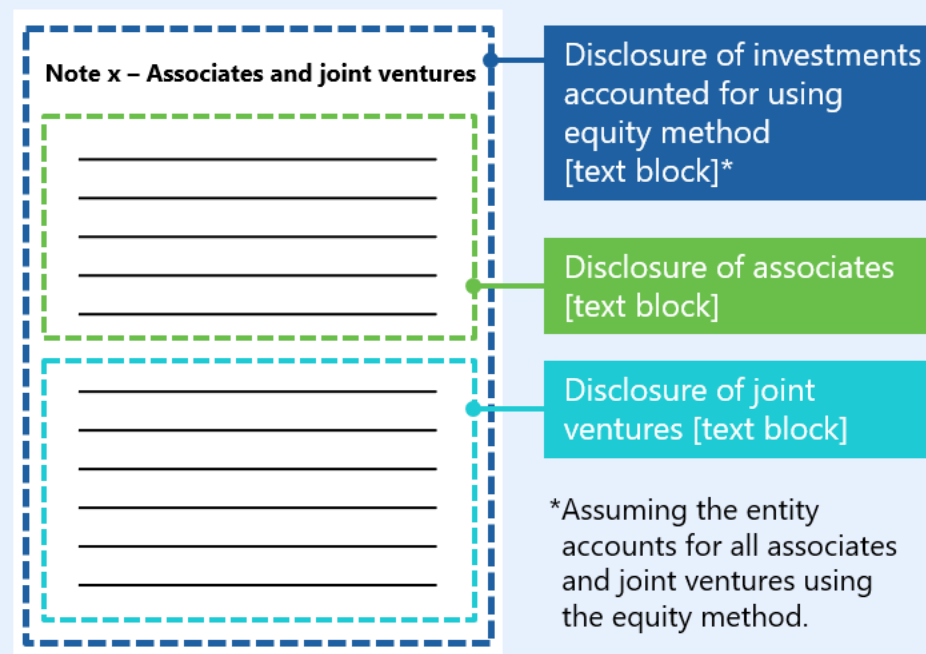
The requirements for note tagging are different from those for the primary financial statements – notes should be tagged using bigger ‘text blocks’ from a specified list (see [Annex II of the TD ESEF regulation](#)). There is no requirement to create extensions for the notes. Such tagging could be thought of as mapping the notes to a standardised table of contents. It facilitates navigation in tagged reports and automated text analysis of the notes.

Companies should test text block tagging well ahead of their year-end. They will need to spend time mapping the mandatory tags to their notes, which will involve judgement. Companies should also test whether their tools can correctly apply text block tagging. In particular, companies should:

- take into account ESMA’s recent clarification ([ESEF manual Guidance 1.9](#)) that a tag from the list of mandatory tags must be applied if a corresponding disclosure is present in a report. This means a single piece of information may need to be tagged with more than one text block tag (‘nested’ tagging) – see example opposite. We suggest companies test how to apply such tagging in their tool.
- ensure the information contained within a particular tag is complete and not misleading. If one text block tag corresponds to multiple pieces of information in different places in the report, the Inline XBRL continuation or exclusion mechanisms should be used to merge the relevant sections. Companies should test this feature in their tool.

- make sure that in the machine-readable layer of the report, words are in the same order as in the human readable layer, and that spaces between words are not lost (see [ESEF manual Guidance 2.2.6](#)). This may be an issue for tools that rely on PDF-to-XHTML conversion.
- if their report is subject to external assurance, agree their approach to note tagging in advance with their assurance provider.

### Example of ‘nested’ tagging



\*Assuming the entity accounts for all associates and joint ventures using the equity method.

## What else is on the horizon for companies?

In preparing for next year's report, companies should assess whether changes to the core taxonomy they use have any impact on their tagging. For example, those companies changing from using the ESEF/IFRS 2020 taxonomy to the ESEF/IFRS 2021 taxonomy may want to have a look at the changes made (see this IFRS Foundation [webinar](#) and [slides](#)).

Tagging requirements may expand in future. In particular in sustainability reporting, new standards are being developed with structured reporting in mind. For example, the IFRS Foundation staff is [seeking feedback](#) on a draft taxonomy reflecting the two ISSB Exposure Drafts. The FRC has submitted its [own response](#), but we also encourage companies to get involved and provide feedback, to ensure developing taxonomies meet their needs.

## Next steps for the Lab

We plan to do further work on the use of XBRL data – that is:

- how investors, regulators and other stakeholders are using or may use the data;
- what tools are available to analyse the data; and
- what challenges investors and other stakeholders face in using the data and how those could be resolved.

This year, we have done some limited experimentation with extracting and analysing data from structured reports using Python scripts. For example, this allowed us to extract the data on page 12.

In addition, as the FRC Taxonomy team is now incorporated into the Lab, we will continue to improve the feedback loop between practice and taxonomy development.

## Acknowledgements and notes

Participants joined our outreach by responding to a [public call](#) or being approached by the Lab. Many thanks to all of the outreach participants for their time and valuable feedback. We would also like to thank the FCA for their contribution to this report.

Data sources for this report include:

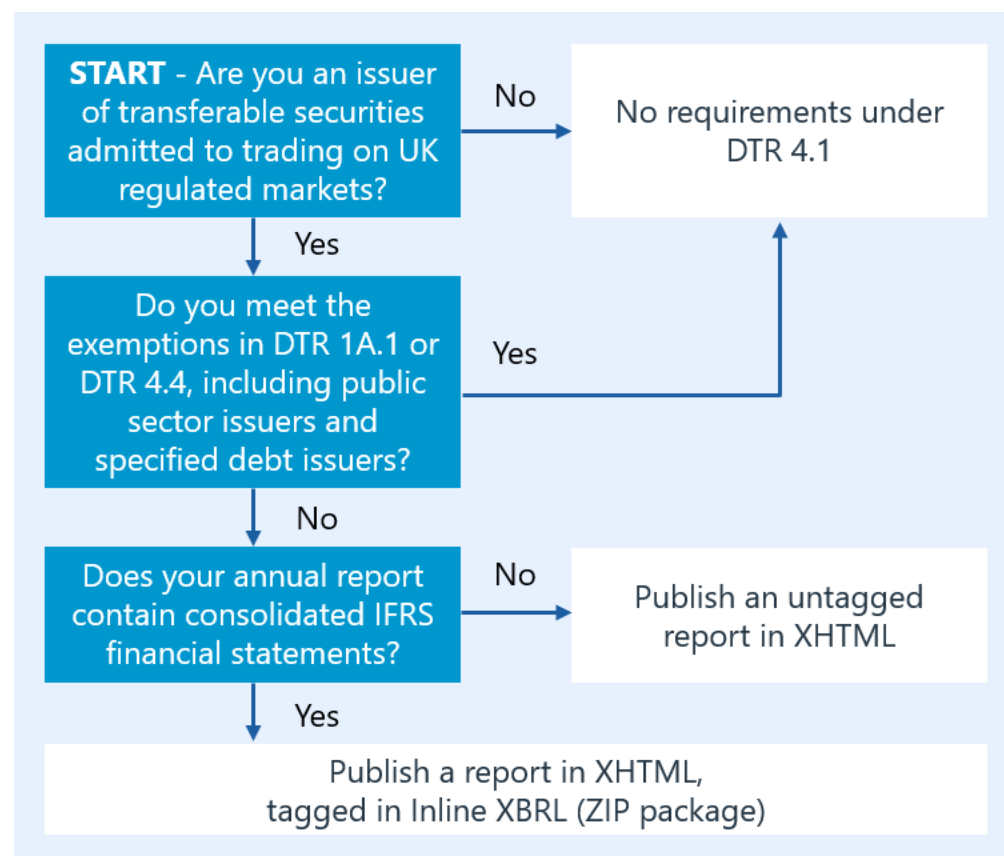
- Public data available on the FCA's [National Storage Mechanism](#):
  - the 679 reports described on page 3 and 13 are those successfully filed on the NSM by 31 July 2022 for financial years starting on or after 1 January 2021, excluding those withdrawn. This includes some duplicate submissions. The 'Submission timing' chart on page 9 is based on the same sample.
  - the extensions analysis on page 12 and analysis of file sizes on page 10 are based on the 443 tagged files within the sample of 679 reports described above.
  - the analysis on assurance (page 8), website availability (page 9) and our detailed tagging review is based on a subsample of 50 tagged files from the sample of 443 reports described above.
- Aggregated data made available by the FCA on:
  - submission dates ('Submission timing' chart on page 9). Note that submission dates to the NSM may differ from the 'Publication date/time' displayed on the NSM, which is supplied by the company.
  - validations and test filings (page 6).

# Appendix: Background and glossary

## Requirements

[DTR 4.1.14R](#) requires companies in scope to produce their annual financial reports in the electronic reporting format specified in the [TD ESEF regulation](#), the UK's on-shored version of the ESEF Regulatory Technical Standard. The structured electronic format is mandatory for reporting periods starting on or after 1 January 2021.

## Who and what?



## Glossary (also see XBRL glossary [here](#))

- By **tagging** we mean the marking up of information in reports with machine-readable labels using the eXtensible Business Reporting Language (**XBRL**).
- **XHTML** is a human-readable format that looks like a webpage and can be opened in a web browser. **Inline XBRL** (iXBRL) allows XBRL tags to be embedded in XHTML documents. **iXBRL viewers** allow such embedded tags to be displayed within a report.
- A **taxonomy** is a list of tags and the relationships between them. A '**core**' or '**base**' **taxonomy** is a standard taxonomy like the ESEF or FRC taxonomy. Companies create their own **extension taxonomies** using a core taxonomy as the starting point.
- An **extension** is a custom tag, created by a company.
- The FCA's **National Storage Mechanism** (NSM) is the UK repository for regulated information (incl. structured reports).

## Permitted taxonomies

The FCA maintains a list of permitted core taxonomies for use in the UK in the [TD ESEF regulation](#). At this time, companies have a choice between using the ESEF or UKSEF taxonomy.<sup>12</sup> UKSEF provides a mechanism to use tags from the ESEF Taxonomy with other tags from the FRC taxonomies suite, including:

- tags for voluntary tagging of Streamlined Energy and Carbon Reporting, TCFD reporting and Gender Pay Gap reporting; and
- tags required for companies that choose to submit their structured reports to Companies House (e.g. Company Registration Number).

12 Further information about UKSEF 2023 will be available later this year



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8th Floor, 125 London Wall, London EC2Y 5AS

**Financial  
Reporting Council**

8th Floor  
125 London Wall  
London EC2Y 5AS  
+44 (0)20 7492 230

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