December 2021

Proposed IFRS® Taxonomy Update PTU/2021/2

IFRS Taxonomy 2021

Proposed Update 2 Technology Update

Comments to be received by 3 January 2022



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Proposed Update 2

Technology Update

Comments to be received by 3 January 2022

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IFRS TAXONOMY 2021—TECHNOLOGY UPDATE

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Introduction

Why is the IFRS Foundation proposing changes to the IFRS Taxonomy?

This proposed IFRS Taxonomy update sets out changes to the IFRS Taxonomy's 'technology'.

The IFRS Taxonomy 'technology' (in contrast to its 'content') refers to taxonomy features including, but not limited to, the syntax employed to publish and express the content of the IFRS Taxonomy, and the taxonomy architecture used. The architecture relates to taxonomy characteristics such as, for example, how the IFRS Taxonomy content is organised into files and naming protocols. The IFRS Taxonomy technology does not—in the context of the IFRS Taxonomy due process—include the internal systems used by the Foundation to manage and generate the IFRS Taxonomy files.

The changes set out in this document are proposed in order to reflect developments in the technology (in its more general sense) that underlies or relates to the IFRS Taxonomy. The proposed changes are also necessary, or beneficial, in order to reflect developments in standards and practices, and in the usage of the IFRS Taxonomy or comparable taxonomies in various regulatory environments.

IFRS Taxonomy due process

Changes to the IFRS Taxonomy technology, of the kind proposed in this document, may affect the way in which the IFRS Taxonomy can be implemented by its users. However, in accordance with the IFRS Taxonomy due process, because the proposed changes only affect the technology of the IFRS Taxonomy, the IFRS Taxonomy Consultative Group has reviewed the changes this document proposes, but has not approved them.¹

Who needs to know about these proposed changes?

This document is primarily intended to inform (and seek feedback from) developers and maintainers of XBRL software (such as XBRL processors, report creators or review and consumption tools) about changes that may affect such software.

IFRS Taxonomy files

The illustrative IFRS Taxonomy files for this proposed IFRS Taxonomy update are based on the IFRS Taxonomy 2021, published in March 2021.

Next steps

Comments received on this proposed IFRS Taxonomy update will be analysed and any necessary amendments will be made. After the IFRS Taxonomy Consultative Group has reviewed any amendments, we intend to release a final version of this document and to incorporate the consequent technology changes into the IFRS Taxonomy 2022.

The Board's IFRS Taxonomy Consultative Group (ITCG) operates under the general principles set out for consultative groups and has terms of reference that set out its objectives and its workings. The technical staff consults the ITCG during the development of IFRS Taxonomy changes. For more details, please refer to the *Due Process Handbook*.

Invitation to comment

We invite comments on this proposed IFRS Taxonomy update, particularly on the questions set out below. Comments are most helpful if they:

- (a) address the questions as stated;
- (b) contain a clear rationale; and
- (c) include any alternative we should consider, if applicable.

Comments on the IFRS Taxonomy as a whole, or on any aspect of it, are also welcome. However, IFRS Taxonomy amendments resulting from such comments may be included in a subsequent update.

Questions for respondents

Question 1—Proposed changes

(a) Do you agree with the proposed technology changes to the IFRS Taxonomy 2022?

If you disagree with any of the proposals, please explain why, and specify what alternative (if any) you would suggest and why.

- (b) Do you have any concerns or comments about the proposed technology changes?
- (c) Do you foresee any specific problems that might result from implementing the proposed changes?

Question 2—Further changes

Are any further technology changes needed for inclusion in the IFRS Taxonomy 2022, or for future taxonomy releases? If yes, what are those changes and why would they be beneficial?

Deadline

We will consider all comments received in writing by 3 January 2022.

How to comment

Please submit your comments electronically:

Online https://www.ifrs.org/projects/open-for-comment/

By email commentletters@ifrs.org

Your comments will be on the public record and posted on our website unless you request confidentiality and we grant your request. We do not normally grant such requests unless they are supported by a good reason, for example, commercial confidence. Please see our website for details on this policy and on how we use your personal data. If you would like to request confidentiality, please contact us at commentletters@ifrs.org before submitting your letter.

XBRL specification updates

- Two recently finalised minor updates to the XBRL specifications are relevant to the IFRS Taxonomy and its supporting materials; both of them are being adopted or recommended by regulatory authorities who use the IFRS Taxonomy.
- 2 From the perspective of the IFRS Taxonomy technology, there are two principal benefits from adopting these proposals. First, doing so would ensure that the IFRS Taxonomy technology is up to date with evolving XBRL specifications; and, second, their adoption would minimise the costs of software providers who might otherwise need to support a range of specification versions.

Data Type Registry 1.1

- 3 The XBRL Data Type Registry (DTR) provides a centralised list of common data types to be used in XBRL taxonomies, such as the IFRS Taxonomy, which go beyond the data types provided in the base XBRL specification.
- The IFRS Taxonomy currently uses Version 1.0 of the Data Type Registry specification. Version 1.1 of this specification reached Recommendation status on 8 May 2019. This registry is found at http://www.xbrl.org/dtr/2020-01-21/dtr.html, and the xml schema file that provides the data types described in the registry is found at https://www.xbrl.org/dtr/type/2020-01-21/types.xsd.
- Version 1.1 contains some technical differences from the 1.0 registry; notably it combines the num and nonnum schemas of DTR 1.0 into a single schema, changing the location and namespace for several data types used by the IFRS Taxonomy (such as domainItemType and perShare).
- 6 At the XML level, the specific changes required in the IFRS Taxonomy are:
 - (a) namespace references xmlns:nonnum='http://www.xbrl.org/dtr/type/non-numeric' and xmlns:num='http://www.xbrl.org/dtr/type/numeric' be replaced by xmlns:dtr-types='http://www.xbrl.org/dtr/type/2020-01-21';

- (b) xsd:import elements referring to these two namespaces be changed to import the http://www.xbrl.org/dtr/type/2020-01-21 namespace from the file https://www.xbrl.org/dtr/type/2020-01-21/types.xsd; and
- (c) uses of the num and nonnum prefixes be changed to the dtr-types prefix.
- Although there is no significant functional or semantic difference between DTR 1.1 and DTR 1.0 for the IFRS Taxonomy (in that all the same data types that were used from DTR 1.0 exist in the DTR 1.1 schema with the same local names, details, and equivalent underlying meaning), the change from one to the other does entail a technical break in continuity at a detailed XML level.
- Whether this transition would have any impact on any particular software implementation, and how significant that impact would be, will depend on the fine detail of the implementation of software and may vary between different products. But we expect any required changes to mitigate any resulting issues to be relatively straightforward.
- 9 For the IFRS Annual Taxonomy 2022 the Foundation proposes to reference DTR 1.1 in place of DTR 1.0. We would expect any filings whose preparation was based on the IFRS Taxonomy 2022 also to align to DTR 1.1 where relevant if they define extension elements using DTR data types, for example.
- The Foundation understands that the Financial Accounting Standards Board made an equivalent change to its 2021 US GAAP taxonomy (see, for example: https://www.fasb.org/cs/Satellite?c=Page&cid=1176175721628&pagename=FASB %2FPage%2FSectionPage).

Transformation Registry 4

- 11 Transformation rules are used to allow text strings in Inline XBRL documents to be converted into the data types used within XBRL instance documents.
- 12 XBRL International has published a new set of transformation rules (Transformation Registry 4). This update changes the names of some rules, makes some more flexible, and adds others (mostly covering the EU's official languages).
- Transformation Registry 4 reached Recommendation status as of 12 February 2020; see https://www.xbrl.org/Specification/inlineXBRL-transformationRegistry/REC-2020-02-12/inlineXBRL-transformationRegistry-REC-2020-02-12.html.
- The transformation registry does not affect, and is not used by, the IFRS Taxonomy directly. It is relevant for inline XBRL instance documents, and software that creates or consumes them.
- The European Securities and Markets Authority's European Single Electronic Format (ESEF) reporting manual recommends the use of Transformation Registry 4 for filings made in accordance with the ESEF reporting regime. In order to align the usage of transformation rules, the IFRS Foundation implemented Transformation Registry 4 for the iXBRL version of the IFRS Foundation Annual Report 2020.

The Foundation proposes that from 2022 the IFRS Taxonomy Illustrative Examples² would use Transformation Registry 4. This would require replacing references to the namespace http://www.xbrl.org/inlineXBRL/transformation/2015-02-26 with references to http://www.xbrl.org/inlineXBRL/transformation/2020-02-12, and making the following replacements of transform functions referred to in the inline XBRL documents:

Existing transform function	Transformation Registry 4 equivalent
Numdotdecimal	num-dot-decimal
Datedaymonthyearen	date-day-monthname-year-en
	fixed-zero

HTTPS

- The Foundation proposes to use HTTPS (rather than HTTP) addresses for the IFRS Annual Taxonomy 2022 in our hosting of the IFRS Taxonomy XBRL files and in our canonical entry points. HTTPS provides:
 - (a) authentication—by allowing user software to check it is receiving content from the expected source, such as the IFRS Foundation, rather than a 'man-in-the-middle' impostor, reducing the possibility of anyone intercepting requests for IFRS Taxonomy content and injecting malicious content; and
 - (b) data integrity—by allowing user software to check data received is complete and has not been accidentally corrupted when downloading.
- 18 The specific changes required in the IFRS Taxonomy files are:
 - (a) catalog.xml-change http://xbrl.ifrs.org to https://xbrl.ifrs.org in the rewriteURI element; and
 - (b) taxonomyCatalog.xml—change http://xbrl.ifrs.org to https://xbrl.ifrs.org in all href attributes of entryPointDocument elements.
- 19 Previously published IFRS Taxonomy files (which is for versions prior to the IFRS Annual Taxonomy 2022) will remain available at their current HTTP addresses to avoid any retrospective impact.
- The Foundation expects that this change should have limited impact. Software may need to be reconfigured or updated to access HTTPS content, but we expect such changes to be simple to implement.
- The Foundation notes that several taxonomies published by the US Securities and Exchange Commission for use by Electronic Data Gathering, Analysis, and Retrieval system submissions (such as their Document and Entity Information, Country, Currency, Exchanges and SIC adjunct taxonomies) have had HTTPS official addresses since their 2019 releases.

² https://www.ifrs.org/issued-standards/ifrs-taxonomy/ifrs-taxonomy-illustrative-examples/

Changes to reference URI links

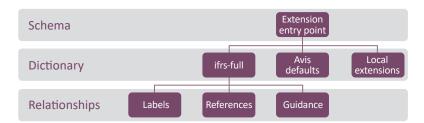
- The Foundation proposes to use HTTPS links leading to the new eIFRS service hosting facility, which will be available within the 'https://www.ifrs.org' domain. This will be used instead of the domain name: 'http://eifrs.ifrs.org' which is currently used within the ref:URI part of all IFRS Taxonomy references, and within the accompanying IFRS Taxonomy Illustrated documents.
- Due to migration to the new eIFRS hosting facility the precise structure of the parts of the link URIs following the domain name is subject to change.
- The Foundation expects to introduce this change for the IFRS Taxonomy 2022. Earlier versions of the IFRS Taxonomy will be unaffected, and the links embedded within their ref.URI elements will continue to resolve, within the new eIFRS service, to the appropriate locations detailing the related parts of IFRS Standards. We are committed to support at least the four most recent versions of the annual IFRS Taxonomy within the new eIFRS hosting facility.
- The Foundation expects that this change should have limited impact. Software which utilises the IFRS Taxonomy ref:URI may possibly need to be reconfigured or updated to access HTTPS content.
- Any software that currently attempts to parse the (undocumented) detailed structure of the links currently embedded in the IFRS Taxonomy files and IFRS Taxonomy Illustrated documents (in contrast to software that simply follows the links) may need additional adjustment when the pattern of the link addresses changes. However, we believe that such detailed parsing of the provided ref:URI information is, or would be, poor practice, is unlikely to occur, and, if it does, it should be discontinued.

Additional entry points

- The Foundation proposes to add entry points to the IFRS Taxonomy, to simplify its extension, that:
 - (a) will be created for each reporting scenario (basic_ifrs, combined, fullifrs, full_ifrs_mc, mc, and ifrs_for_smes);
 - (b) include IFRS Taxonomy elements, all elements' labels including guidance labels and all existing IFRS Taxonomy references; and
 - (c) exclude Presentation, Definition, Calculation, Generic label and Generic Reference linkbases, with the exception of the '[990000] Axis Defaults' Extended Link Role in the definition linkbase, which will be included to define the default members of axes.
- The proposed new entry points would provide a foundation that regulators can use to extend the IFRS Taxonomy. In addition, or alternatively, the new entry points would enable regulators to provide reporting entities with a 'base taxonomy' on which they could build their instance taxonomies. This proposal should be contrasted with the current typical practice of using the 'core' schema files—containing just the definitions of the IFRS Taxonomy elements—as the base starting point for regulator or entity taxonomies, a

practice that requires regulators and entities specifically to provide any labels, axis defaults or references that might be needed. Thus, under the proposals, regulators will be able to allow reporting entities easily to include all necessary IFRS Taxonomy components. Users of financial data would then be able to interpret reporting entities' filings, and to avoid accidental inconsistencies, without entities necessarily having to define custom schemas. This approach could simplify how filers use the IFRS Taxonomy architecture and increase the consistency of global IFRS filings.

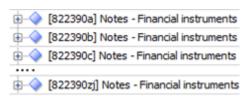
- We propose the following naming convention for the proposed new entry points:
 - (a) basic_ifrs_entry_point_ext_YYYY-MM-DD.xsd;
 - (b) combined_entry_point_ext_YYYY-MM-DD.xsd;
 - (c) full_ifrs_entry_point_ext_YYYY-MM-DD.xsd;
 - (d) full_ifrs_mc_entry_point_ext_YYYY-MM-DD.xsd;
 - (e) ifrs_for_smes_entry_point_ext_YYYY-MM-DD.xsd; and
 - (f) mc_entry_point_ext_YYYY-MM-DD.xsd.
- This change is expected to be included in the IFRS Taxonomy 2022.
- 31 Here is a sample illustration of proposed components in use for the full-ifrs scenario:



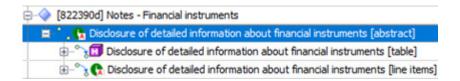
Changes to titles for definition linkbase roles

- The Foundation is proposing to improve the titles of multiple Extended Link Roles (ELRs) within the definition linkbases in the IFRS Taxonomy 2021 which currently utilise the same title name.
- The current approach to creating titles for ELRs in the definition linkbases is derived from the naming of presentation linkbases based on the IFRS Standards. When multiple dimensional/table structures are derived from the same presentation group, the name of that group is given to all definition linkbases representing it.
- This practice makes navigation through the IFRS Taxonomy definition linkbases more difficult than it should be because some taxonomy viewers only display ELR names when viewing the definition linkbase.

To illustrate the resulting difficulty in finding a correct dimensional breakdown, consider this example from the IFRS Taxonomy 2021. Let us assume that we are looking for the 'Disclosure of detailed information about financial instruments' breakdown. In the definition linkbase there is a list of more than 30 ELRs related to 'Notes – Financial instruments':



We can find the 'Disclosure of detailed information about financial instruments' breakdown under '[822390d] Notes – Financial instruments' group:



To simplify how an appropriate breakdown is found we propose to enhance the titles of the ELRs with descriptions of the breakdown contained in each ELR. Under the proposal, the example ELR in paragraph 35 would appear as follows:

[822390d] Notes – Financial instruments (Disclosure of detailed information about financial instruments)'.