ESRS Set 1 XBRL Taxonomy

AUGUST 2024

EXPLANATORY NOTE AND BASIS FOR CONCLUSIONS

EFRAG

sustainability reporting

Disclaimer

EFRAG has issued this proposed ESRS Set 1 XBRL Taxonomy pursuant to the mandate received from the EC following its standard setting due process.

About EFRAG

EFRAG's mission is to serve the European public interest in both financial and sustainability reporting by developing and promoting European views in the field of corporate reporting. EFRAG builds on and contributes to the progress in corporate reporting. In its sustainability reporting activities, EFRAG provides technical advice to the European Commission in the form of draft European Sustainability Reporting Standards (ESRS) elaborated under a robust due process and supports the effective implementation of ESRS. EFRAG seeks input from all stakeholders and obtains evidence about specific European circumstances throughout the standard-setting process. Its legitimacy is built on excellence, transparency, governance, due process, public accountability and thought leadership. This enables EFRAG to speak convincingly, clearly and consistently and be recognised as the European voice in corporate reporting and a contributor to global progress in corporate reporting.

EFRAG is funded by the European Union through the Single Market Programme in which the EEA-EFTA countries (Norway, Iceland and Liechtenstein) as well as Kosovo participate. Any views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union, the European Commission or of countries that participate in the Single Market Programme. Neither the European Union, the European Commission nor countries participating in the Single market Programme can be held responsible for them.

Table of Contents

List of Illustration of application instructions

1. Introduction

1. EFRAG has been requested by the EC to develop the digital taxonomy (hereafter 'taxonomy' or 'XBRL taxonomy') for ***ESRS*** Set 1 issued as Delegated Act[1] in July 2023 (hereafter 'ESRS Set 1'), along with a separate XBRL taxonomy for the Article 8 disclosures[2] which is available on an EFRAG webpage together with separate accompanying documents[3].

2. On the basis of those taxonomies, the European Securities and Markets Authority (ESMA) will define the tagging rules[4] to be applied in digital reporting under ESRS Set 1. Such tagging rules will finally be adopted by the European Commission (EC) by way of a delegated act (DA) amending Commission Delegated Regulation (EU) 2019/815 on the European Single Electronic Format (hereafter '***ESEF*** Regulation').

3. A Draft ESRS Set 1 XBRL Taxonomy was issued for public consultation by EFRAG on 8 February 2024 for 60 days. A number of changes and enhancements have been discussed with the EFRAG SR TEG and SRB and have been implemented, to reflect the outcome of this consultation. The consultation responses as well as a feedback statement are provided on an EFRAG webpage[5].

4. EFRAG has not performed a structured cost-benefit analysis on the ESRS Set 1 XBRL Taxonomy, as this is going to take place in the next phase when ESMA develops the final tagging rules.

5. This document accompanies the release of the proposed XBRL taxonomy. It illustrates the basis for conclusions, the methodology applied, and technical options considered in the preparation of the taxonomy. It also includes illustrations of the resulting reporting in machine-readable format, to support users' understanding of the implementation of the taxonomy. A previous version of this document was published alongside the public consultation on the Draft ESRS XBRL Taxonomy. It has now been updated to reflect the consultation responses and changes implemented.

6. The ESRS Set 1 XBRL Taxonomy has been developed by EFRAG based on the Draft ESRS XBRL Taxonomy Methodology and Architecture (hereafter: 'methodology paper') approved

[1] Commission Delegated Regulation (EU) 2023/2772 of 31 July 2023 supplementing Directive 2013/34/EU of the European Parliament and of the Council as regards sustainability reporting standards.

[2] Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 and Commission Delegated Regulation (EU) 2021/2178 supplementing Regulation (EU) 2020/852 by specifying the content and presentation of information to be disclosed by undertakings subject to Articles 19a or 29a of Directive 2013/34/EU concerning environmentally sustainable economic activities and by specifying the methodology to be used to comply with that disclosure obligation.

[3] https://www.efrag.org/en/projects/article-8-xbrl-taxonomy/exposure-draft-consultation

[4] Tagging rules will encompass how sustainability statements will have to be marked-up ("tagged") by undertakings.

[5] https://www.efrag.org/en/projects/esrs-xbrl-taxonomy/exposure-draft-consultation

in April 2023 by EFRAG SRB. **This document has to be read in conjunction with the methodology paper[6].**

7. The release of this taxonomy is accompanied by *ESRS Set 1 Illustrations of application instructions* and *ESRS Set 1 Illustrative Examples of XBRL Reports*, prepared by EFRAG. These two documents are not subject to EFRAG due process and are not authoritative. In particular:

   (a) *ESRS Set 1 Illustrations of application instructions* presents detailed illustrations of preparers best practice to implement the taxonomy. They aim to test the technical feasibility of converting the sustainability statement into machine-readable format. They may be considered in the next step by ESMA and, ultimately, the EC when defining the final tagging rules. They could be implemented as rules, recommendations or best practice suggestions.

   (b) *ESRS Set 1 Illustrative Examples of XBRL Reports* presents a set of technical illustrative reports (***XBRL reports*** in ***Inline XBRL***). These reports contain dummy data (meaningless text and random numbers) but try to mimic the structure of a digital ESRS report. The tagging used in the illustrative reports should not be considered the only possible way to use the ESRS Set 1 XBRL Taxonomy. The authoritative tagging rules to be applied will be developed by ESMA for listed EU companies and other companies in the scope of Directive 2013/34/EU[7] (hereafter: 'Accounting Directive') as recently amended by Directive (EU) 2022/2464[8] (hereafter: 'Corporate Sustainability Reporting Directive or CSRD'). Their sole purpose is to demonstrate the technical correctness of the XBRL taxonomy, the feasibility of the tagging, and to provide technical details and illustrations on how a disclosure could be tagged. The tagged illustrative reports should not be used as templates. The tagged illustrative reports (including iXBRL Viewers) can be displayed in any web browser (Chrome, Firefox, Edge, Opera, Safari, etc.).

8. For ease of reading, a number of technical details are provided in Appendix 1.

9. In this document, terms that are defined in the glossary (see Chapter 4 Glossary and terms) are marked in ***bold italic*** when they appear in the text for the first time.

---

[6] Draft ESRS XBRL Taxonomy Methodology and Architecture, as approved by the SRB on 26 April 2023: https://www.efrag.org/system/files/sites/webpublishing/Meeting%20Documents/2302240950097339/04.02%20-%20Draft%20ESRS%20XBRL%20Taxonomy%20Architecture%20and%20Methodology%20%28final%29.pdf

[7] Directive 2013/34/EU of the European Parliament and of the Council of 26 June 2013 on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings, amending Directive 2006/43/EC of the European Parliament and of the Council and repealing Council Directives 78/660/EEC and 83/349/EEC.

[8] Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting.

2. Approval by EFRAG SR TEG and EFRAG SRB

10. The XBRL taxonomy was approved by EFRAG SR TEG on 16 July 2024 and by EFRAG SRB on 17 July 2024.

11. The following SR TEG members attended the voting session: Jean-Francois Coppenolle, Philippe Diaz, Robert Adamczyk, Per Anders Öjar Törnqvist, Sandra Atler, PierMario Barzaghi, Kati Beiersdorf, Luca Bonaccorsi, Carlota de Paula Coelho, Chiara Del Prete, Anne-Claire Ducrocq, Eric Duvaud, Luc Hendrickx, Klaus Hufschlag, Signe Lysgaard, Jose Moneva, Luis Piacenza, Vanya Rusinova, Olivier Scherer, Christoph Toepfer, Belen Varela, Sigurt Vitols, and Fiona Watson. Luc Hendrickx abstained, as he was not able to predict any possible consequences of EFRAG's proposal on small to medium undertakings that are part of the value chains of undertakings in scope. All the other members approved the ESRS Set 1 XBRL Taxonomy. Robert Adamczyk, Anne-Claire Ducrocq, Eric Duvaud, Klaus Hufschlag, Vanya Rusinova, Belen Varela, and Fiona Watson conditioned their approval on the need for phasing-in the mandatory tagging and a field-test based on real life ESRS sustainability statements (which will be available in 2025 and 2026 for the two different batches of companies in scope)[9]. These members in particular consider that a longer implementation period for narrative tagging would better accommodate their overall ongoing ESRS transition efforts. It is worth noting that phasing-in is not in EFRAG's remit, but it will be considered in ESMA's final proposal of the draft RTS to the EC.

12. The following members attended the SRB voting session: Patrick de Cambourg, Kerstin Lopatta, Grégoire de Montchalin, Thomas Roulland, Salvador Marin, Alexander Bassen, Annina Tanhuanpää, Luc Vansteenkiste, Marcello Bianchi, Simon Braaksma, Monika Brom, Laurence Rivat, Kristian Koktvedgaard, Maria Dolores Urrea, Charlotte Söderlund, Ruben Zandvliet, Begoña Giner, and Filip Gregor. Maria Dolores Urrea abstained, as in her opinion the architecture of the XBRL taxonomy is complex. All the other members approved the ESRS Set 1 XBRL Taxonomy.

3. Objective of the ESRS Set 1 XBRL Taxonomy release

13. In November 2022, EFRAG issued the first set of draft ESRS that were adopted (including some amendments) by the EC on 31 July 2023 and published in the Official Journal of the European Union on 22 December 2023:[10]

    (a) ESRS 1 General requirements

    (b) ESRS 2 General disclosures

    (c) ESRS E1 Climate change

    (d) ESRS E2 Pollution

[9] EFRAG has not conducted a field test, given the lack of time and resources, no mandate from the EC and the lack of compliant ESRS disclosures.

[10] Commission Delegated Regulation (EU) 2023/2772 op. cit.

(e) ESRS E3 Water and marine resources

(f) ESRS E4 Biodiversity and ecosystems

(g) ESRS E5 Resource use and circular economy

(h) ESRS S1 Own workforce

(i) ESRS S2 Workers in the value chain

(j) ESRS S3 Affected communities

(k) ESRS S4 Consumers and end users

(l) ESRS G1 Business conduct

14. In EFRAG's opinion, the taxonomy that EFRAG hereby releases represents the correct digital transposition of the human-readable ESRS Set 1, as the advisor to the European Commission that developed those standards.

15. The XBRL taxonomy is considered to be useful for ***preparers*** (and software vendors) in structuring their ESRS sustainability statement according to the data modelling adopted by the taxonomy. Then this process will support tagging the human-readable sustainability statement and enables its conversion into the machine-readable format.

16. The XBRL taxonomy also benefits ***users*** of sustainability disclosures (e.g. analysts and data providers), who can access data through the taxonomy and prepare corresponding fields in their databases. EFRAG also recommends processing the XBRL taxonomy while extracting the digital disclosures, e.g. to render taxonomy-based table views with the ***fact*** values, to use the hierarchy of narrative and semi-narrative elements for analytical purposes and to use the short descriptions (***labels***) and references to the standard.

17. EFRAG's proposal for the creation of the ESRS XBRL Taxonomy relies on the current EU legal framework and is mainly based on the Accounting Directive as recently amended by the Corporate Sustainability Reporting Directive.

18. According to the Accounting Directive, large undertakings, small- and medium-sized undertakings with securities admitted to trading on EU regulated markets, and undertakings of large groups shall include in a dedicated section of their management report or consolidated management report the information necessary to understand the undertaking's material impacts on sustainability matters (impact materiality) and the information necessary to understand how material sustainability matters affect the undertaking's development, performance and position (financial materiality).

19. These undertakings must, from financial year 2024 onwards based on a phased approach, prepare this information in accordance with the first set of ESRS.[11]

20. Digital sustainability reporting is a new requirement introduced by the CSRD, based on the rationale that 'Digitalisation creates opportunities to exploit information more efficiently and holds the potential for significant cost savings for both users and undertakings. Digitalisation also enables the centralisation at Union and Member State level of data in an open and accessible format that facilitates reading and allows for the comparison of data'[12].

21. Art. 29d of the Accounting Directive, as amended by the CSRD, provides that 'undertakings ... shall prepare their management report in the electronic reporting format specified in Article 3 of Commission Delegated Regulation (EU) 2019/815 (*) and shall mark up their sustainability reporting, including the disclosures provided for in Article 8 of Regulation (EU) 2020/852, in accordance with the electronic reporting format specified in that Delegated Regulation.' The same provision applies to parent undertakings subject to the requirements of Article 29a of the Accounting Directive.

22. In line with the Accounting Directive, EFRAG received the mandate from the EC to develop the Sustainability Reporting Digital Taxonomy (including the digital taxonomy for the information to be disclosed under Article 8 of Regulation (EU) 2020/852) as part of the technical preparation process of an amendment to the ESEF Regulation.[13]

23. The ESEF Regulation (in the new text which will be amended by the EC) will define the rules for tagging the sustainability statement within the management report or consolidated management report. The Transparency Directive provides that ESMA is the competent body/authority responsible to prepare the draft regulatory technical standards (draft RTS) to be submitted to the EC for adoption.

24. The XBRL format, the open international standard for digital business reporting, has been chosen by EFRAG as the appropriate machine-readable format that is compliant with the CSRD provision. This format is also compliant with the European Single Electronic Format (ESEF), which specifies the technical language to mark up information in the annual financial statement using Inline XBRL. EFRAG has selected this format as it is globally accepted and

[11] Small- and medium-sized undertakings with securities admitted to trading on the EU regulated markets have the option to prepare this information in accordance with sustainability reporting standards for listed small- and medium-sized undertakings (hereinafter LSME ESRS), which will be adopted by the EC after the release of the technical advice provided by EFRAG. LSME ESRS will be the common sustainability reporting standards proportionate and relevant to the capacities and the characteristics of small- and medium-sized undertakings and to the scale and complexity of their activities. At this stage,EFRAG SRB and SR TEG are redeliberating the outcomes from the public consultation of the LSME ESRS Exposure Draft.

[12] Recital 55, Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting.

[13] ESEF Regulation is an EU regulation that supplements the Transparency Directive [Directive 2004/109/EC] with regard to regulatory technical standards on the specification of a single electronic reporting format.

used by other EU and international organisations to develop digital taxonomies for financial and sustainability-related disclosures.[14]

25. EFRAG has not performed a structured cost-benefit analysis associated with the development of the digital taxonomy, as this task will be done by ESMA. However, a focused outreach on the feasibility and benefits of some of the proposed technical features has been performed, as described in this document.[15] Additionally, a survey among 10 XBRL tagging service providers[16] has been conducted together XBRL Europe in order to estimate the costs of tagging, which was presented to SR TEG and SRB members. Based on this survey responses, the average costs of tagging the financial statements and notes are estimated to be between 15-20 EUR per XBRL element of the ESEF XBRL Taxonomy[17].

26. It is worth noting that EFRAG has also developed the Article 8 XBRL Taxonomy under the mandate received from the EC to develop the Sustainability Reporting Digital Taxonomy. The information disclosed under Article 8 of the Regulation (EU) 2020/852[18] (hereafter: 'Taxonomy Regulation') will be provided within the sustainability statement; thus, it must be tagged accordingly. A separate consultation on the Draft Article 8 XBRL Taxonomy has been conducted by EFRAG.

27. The ESRS Set 1 XBRL Taxonomy has been amended based on the consultation's responses. EFRAG is hereby delivering the proposed taxonomy (together with the Article 8 XBRL Taxonomy) to ESMA and the EC. The taxonomy will finally be adopted by way of an amendment to the ESEF Regulation.

28. The XBRL taxonomy can be used for testing purposes, preparatory work and even voluntary tagging of ESRS sustainability statements.

3.1. Design of the taxonomy reflecting the architecture of ESRS Set 1

29. The proposed ESRS Set 1 XBRL Taxonomy reflects the general architecture of the first set of ESRS composed of 12 standards:

    (a) two cross-cutting ESRS (ESRS 1 and ESRS 2) and

    (b) ten topical standards that cover sustainability matters in the area of Environment (ESRS E1, E2, E3, E4 and E5), Social (ESRS S1, S2, S3 and S4) and Governance (ESRS G1).

---

[14] EBA, EIOPA, IFRS Foundation, GRI, CDP.

[15] As part of the approval meetings with EFRAG SRB and SR TEG, the EFRAG Secretariat presented an estimation of the costs for tagging based on a survey performed with XBRL Europe. The current estimated cost for having a service provider tagging a PDF with the annual financial report and notes with the ESEF taxonomy is between 15-20 EUR per XBRL element.

[16] Tagging service provider offer conversion services. Practically this means, that a company can send a PDF report to the service provider, who converts it into XHTML and tags it with the corresponding XBRL elements. The cost for those services can be considered as the most realistic estimations of tagging costs, since it covers the full process including labour.

[17] Which is basically reflecting the IFRS Accounting XBRL taxonomy.

[18] Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088.

30. An integral component of the design of the proposed taxonomy is the systematic consideration of the relationships between the cross-cutting standards and the topical standards, in order to reflect the architecture and contents of the standards in a structured digital manner whilst avoiding duplication of elements.

ESRS 1

31. The objective of ESRS 1 is to set out general requirements that undertakings shall comply with when preparing and presenting sustainability-related information.

32. Even though ESRS 1 does not prescribe disclosure requirements (hereafter: 'DRs') to be directly transposed into the taxonomy, the general principles of ESRS 1 have been taken into account to better model the taxonomy. In addition, the taxonomy includes specific elements based on ESRS 1, such as *esrs:DefinitionOfNumberOfYearsForDeviatedMediumtermTimeHorizonCountedFromReportingPeriod* related to ESRS 1 paragraph 80 ('There may be circumstances where the use of the medium- or long-term time horizons defined in paragraph 77 results in non-relevant information, as the undertaking uses a different definition for (i) its processes of identification and management of material ***impacts, risks*** and ***opportunities*** or (ii) the definition of its ***actions*** and setting ***targets***. These circumstances may be due to industry-specific characteristics, such as cash flow and business cycles, the expected duration of capital investments, the time horizons over which the users of ***sustainability statements*** conduct their assessments or the planning horizons typically used in the undertaking's industry for decision-making. In these circumstances, the undertaking may adopt a different definition of medium- and/or long- term time horizons (see ESRS 2 BP–2, paragraph 9).').

ESRS 2

33. ESRS 2 establishes information to be mandatorily provided by the undertaking at a general level, across all sustainability topics.

34. For digitisation reasons, the structure of ESRS 2 has been split into two parts:

    (a) *General Disclosure Requirements* that correspond to the DRs related to Basis for preparation (BP), Governance (GOV), Strategy (SBM) and Impact, risk and opportunity management (***IRO***). The datapoints within these requirements have been separately identified and converted into taxonomy elements; and

    (b) *Minimum Disclosure Requirements* (***MDR***) that correspond to MDRs on Policies, Actions, Targets and Metrics (see chapter 4 and 5 of ESRS 2). The MDRs play a pivotal role (like a centralised or cross-cutting table) for the disclosure of the information provided in the relevant topical ESRS. MDRs shall also be applied when the undertaking prepares entity-specific disclosures. In that context, these requirements have been digitised 'horizontally', i.e. replicated within each topical standard.

Topical ESRS

35. The topical standards are structured into two main blocks:

    (a) ESRS 2-related DRs and

    (b) DRs covering Environmental, Social and Governance matters.

36. Regarding point *(a)*, topical ESRS provide detailed requirements on sustainability matters that complement the information under certain DRs of ESRS 2 (i.e., Disclosure requirements related to ESRS 2 IRO 1 or SBM 3 or GOV 3). This structure has been modelled in the taxonomy, treating the ESRS 2-related DRs and Application Requirements (hereafter: '***ARs***') that represent 'extensions' of the relevant ESRS 2 content. Consistent with the human readable version, in the taxonomy they are reported alongside ESRS 2, with the exception of SBM-3 where for the human readable reporting there is an option to disclose alongside topical disclosures, which can also be achieved in the Inline XBRL tagging.

37. DRs in a topical standard pertaining to each topic are clearly defined and identified with numbers (i.e., *Disclosure Requirement E1-1*) in each topical ESRS. The related information has been digitised within each topical standard, as this is disclosed at a topical level.

General Structure and relationship to EFRAG IG 3 List of ESRS datapoints

38. In ESRS Set 1, the core of the DRs is located in the main body of the standard in paragraphs identifiable by the expressions 'shall disclose' and 'shall include' placed after the paragraph on the objective of the DR. Usually, individual datapoints can be identified by separate items reported in a list of letters: (a), (b), (c). These can be further disaggregated in a sublist of items, identified by small roman numbers: (i), (ii), (iii).

39. ARs support the information to be reported according to the main text of the DRs. They also contain datapoints mainly derived from the wording 'may disclose', which are complementary to the datapoints in the main text. As an exception, for some topical standards (e.g., ESRS E1), ARs provide additional levels of disclosures to be reported or integrated in the DRs provided in the main body of the standard. Whenever the standard provides options to report additional breakdowns or additional datapoints by using 'may', those have been implemented in the XBRL taxonomy as well as separate elements.

40. In this regard, EFRAG has released the IG 3 in Excel format, which presents the complete list of all disclosure requirements in sector-agnostic standards (cross-cutting and topical standards)[19].

4. Description of the ESRS Set 1 XBRL taxonomy

32. The ESRS Set 1 XBRL Taxonomy files are provided as a Taxonomy Package (ZIP Archive) using the following entry points:

[19] https://www.efrag.org/News/Public-471/Publication-of-the-3-Draft-EFRAG-ESRS-IG-documents-EFRAG-IG-1-to-3

(a) ESRS All (importing ESRS Core with all topics and disclosure requirements, including presentation, calculation and definition linkbases and validation rules): https://xbrl.efrag.org/taxonomy/esrs/2023-12-22/esrs_all.xsd

(b) ESRS Core (concepts, labels and references only): https://xbrl.efrag.org/taxonomy/esrs/2023-12-22/common/esrs_cor.xsd

33. The taxonomy consists of a set of ***XBRL elements*** (also called *concepts* or *tags*), which can be tagged in a human-readable Inline XBRL report.[20] The tagging allows one to identify, navigate and extract digital disclosures (facts). Besides the definitions of quantitative (numerical) and qualitative (narrative) XBRL elements reflecting the ESRS datapoints, the ESRS XBRL Taxonomy contains ***dimensions*** (also called *axis*) that can be used to disaggregate digital disclosures with ***dimension members***. The XBRL taxonomy uses explicit dimensions (e.g., country, gender, ***GHG*** category, etc.), which are pre-defined lists of elements (members) as part of the XBRL taxonomy, and ***typed dimensions*** (e.g., geographical area, identifier of policy, identifier of target, operating segment, etc.), which are entity-specific and must be defined when preparing the digital reports.

34. Each reportable XBRL element (in XBRL terms: non-abstract) is equipped with corresponding attributes, such as period type (instant/duration[21]) and data type (e.g., monetary, percentage, volume, GHG emissions, textblock, etc.). Additionally, a reference to the ESRS, DR and paragraph number and, if applicable, to other standards or EU legislation is included in the reference linkbase for each element. Each XBRL element is identified by its technical name and equipped with a short description of its content (XBRL term: labels). EFRAG provides the ESRS Set 1 XBRL Taxonomy labels in English only. ESMA will then develop its draft RTS to be submitted to the EC, also only in English. The EC will be responsible for its translation, adoption, and publication in the Official Journal, following an objection period for the European Parliament and the Council.

35. The ***Boolean*** types (yes/no) and the enumeration item types (drop-down values) are called semi-narratives (or categorical) hereafter, because they can enrich the unstructured narrative disclosures.

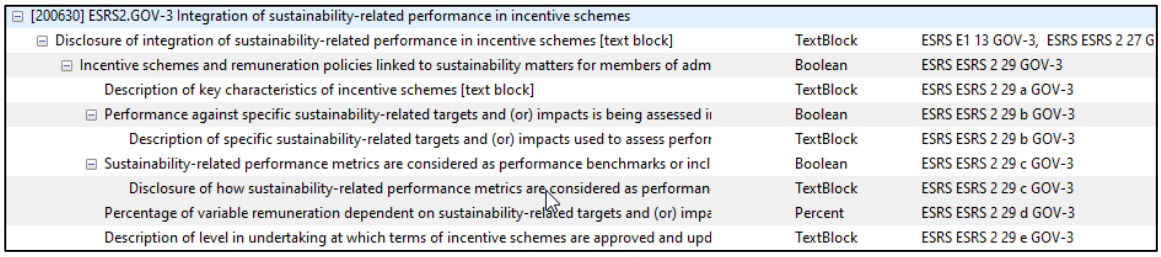
36. Reflecting the structure of the ESRS, all XBRL elements are grouped in the XBRL taxonomy into Disclosure Requirements in the presentation linkbase, as a tree structure as illustrated in Figure 1. This enables easy navigation through the XBRL taxonomy and illustrates related and nested elements. The technical definition linkbase of the XBRL taxonomy is used to define which XBRL elements shall be combined with corresponding dimensions, grouping

[20] Inline XBRL is a structured data language that allows preparers to develop a single document that is both human-readable and machine-readable, so that they need only prepare one Inline XBRL document rather than generate an HTML document and then tag a copy of the data to create a separate XBRL document.

[21] The XBRL specification requires that each XBRL element definition set the period type attribute to either instant or duration. This impacts which context date can be set for each fact in an XBRL report: either the fact is reported at the end of the reporting period (e.g. 31.12.2024), or for the reporting period itself (1.1.2024-31.12.2024). Most of the ESRS XBRL elements have duration period type, except elements related to assets and number of employees.

them into tables (XBRL term: hypercubes). The tagging of dimensions in Inline XBRL documents can be done in a flexible way and does not require presenting the disclosures in similar table structures.

Figure 1 Illustration of ESRS 2 GOV-3 XBRL elements in the presentation linkbase tree hierarchy



37. The XBRL taxonomy contains a small number of validation rules (technical term: assertions) automatically executed by XBRL software when validating XBRL reports. EFRAG notes that more validation rules may be considered when the first digital reports are available to ensure high-quality data.

38. The XBRL taxonomy itself is compliant with the XBRL specifications[22] and should be used with an appropriate XBRL software[23] that implements the specifications. For convenience purposes, EFRAG has prepared a visualisation of the XBRL taxonomy in Excel, which provides a human-readable illustration of the XBRL taxonomy, but which cannot be used for tagging purposes.

39. To maximise the benefits for users, EFRAG recommends processing the XBRL taxonomy while extracting the digital disclosures, e.g. to render taxonomy-based table views with the fact values, to use the hierarchy of narrative and semi-narrative elements for analytical purposes and to use the short descriptions (labels) and references to the standard.

5. Glossary and terms

40. The following terms are used throughout this document and shall be read in conjunction with the official XBRL glossary.[24]

Name	Description
Abstract element	Reportable element with the abstract attribute set to false. Abstract elements are, for instance, dimensions or elements introduced simply for grouping purposes in the presentation linkbase.

[22] XBRL Specification 2.1, Dimensions 1.0, Enumeration Elements 2.0, Calculations 1.1, Formula 1.0, Taxonomy Packages 1.0. For the preparation of the tagged illustrative reports, the Inline XBRL specification 1.1 as well as the transformation registries have been used. The full specifications are available in https://specifications.xbrl.org/

[23] A list of compliant and certified software products is available at https://software.xbrl.org/

[24] https://www.xbrl.org/guidance/xbrl-glossary

AR	Application Requirement.
Continuation	Mechanism in Inline XBRL to continue non-numerical facts in different sections of the XHTML document.
Data type	The data type assigned to each XBRL element defines the formatting of its fact values. XBRL data types are defined in the XBRL specifications and in the Data Type Registry (DTR): https://www.xbrl.org/dtr/dtr.html.
Default dimension	A dimension member that provides a dimension a default value for facts where the dimension is not explicitly reported and omitted. The dimension default often represents the total of all members for that dimension. It is also referred to as a default member.
Dimension	A qualifying characteristic that is used to uniquely define or further disaggregate a datapoint. For example, a fact reporting *revenue* may be qualified by a 'country' dimension to indicate the country to which the revenue relates. A dimension may be either a taxonomy-defined dimension with explicit dimension members or an entity-specific dimension that can be defined in the XBRL report (typed dimension). Synonym: Domain.
DR	Disclosure Requirement.
Enumeration	An XBRL element with the enumeration or enumerationSet item type allows one to tag a value of a pre-defined list of options (drop-down menu). Enumeration elements are single choice and enumerationSet elements allow multiple-choice.
ESEF	European Single Electronic Format set out in Delegated Regulation (EU) 2019/815.
ESRS	European Sustainability Reporting Standards adopted by the EC on 31 July 2023 and published in the Official Journal of the European Union on 22 December 2023.
(Explicit) dimension member	Taxonomy-defined value for an explicit dimension, e.g., *France, Germany, Italy, Spain,* and *Other Countries.*
Fact	A value being tagged and therefore reported for an XBRL element.
GHG	Greenhouse Gases.
Hypercube	Groups valid dimensions and reportable XBRL elements (line items) into a table.
IAI	Illustration of application instructions.

Inline XBRL (or iXBRL)	The Inline XBRL document (set) is set out in XHTML, which means it can be rendered in a web browser. The tagged numerical and non-numerical facts can be converted into an XBRL instance document.
IROs	Impacts, Risks and/or Opportunities.
Label	A human readable description of a taxonomy XBRL element. XBRL labels can be defined in multiple languages and can be of multiple types, such as a 'standard label', which provides a concise name for the component, or a 'documentation label', which provides a more complete definition of the component.
Linkbase	A linkbase is part of an XBRL taxonomy, providing semantic relationships between XBRL elements. A presentation linkbase groups the XBRL in a tree hierarchy using parent-child relationships, while a definition linkbase defines the dimensional relationships. Label and reference linkbases are providing additional resources for each XBRL element.
MA	Materiality assessment.
MDR	Minimum Disclosure Requirement, according to ESRS 2. Often followed by a letter A (Actions), T (Targets), P (Policies), or M (Metrics).
NUTS	Nomenclature of territorial units for statistics (classification system for regions).
Period type	The period type attribute on an XBRL element defines if the corresponding XBRL fact is reported for an instant date (e.g. 31.12.2024) or for a duration period (e.g. 1.1.2024-31.12.2024).
Preparer	An undertaking (company) preparing (digital) ESRS statements.
PATs	Policies, actions and targets.
Reference	A reference to a reporting standard, e.g. by providing section, paragraph, subparagraph and clause.
Semi-narrative	The *Boolean* item types (yes/no) and the enumeration item types (see above) are called semi-narratives, because they can enrich the unstructured narrative disclosures. Also called categorical elements.
Table	Grouping of XBRL elements and dimensions (and their members) into columns and rows.
Textblock (element)	A narrative disclosure or its related XBRL element that is not restricted in any way. It can contain an unstructured sentence of

	formatted text, multiple paragraphs or pages, images, tables, diagrams, etc.
Typed dimension	Entity-specific value for a taxonomy-defined dimension, e.g., *Cancer medication, App-based medical advice* or *Pharmaceutical devices* for the typed dimension of '*Name of product*' or '*Operating segment*'.
Unit	XBRL unit defines the currency and/or physical unit of a XBRL fact. Complex units can not only have measures like EUR but also numerators and denominators. Units are defined in XBRL reports and linked to numerical XBRL facts.
User	An analyst, data provider, investor or any other organisation or individual using (digital) ESRS disclosures.
Validation rule	Technical rule or check (existence, value, or consistency assertions) defined as part of an XBRL taxonomy using the Formula 1.0 XBRL specification that can be evaluated by compliant XBRL software. Examples: Fact for element XYZ must exist in an XBRL report; The fact value for the XBRL element XYZ must be a positive number.
(XBRL) Element	An XBRL taxonomy element that represents a datapoint in a reporting standard and has a number of attributes (period type, balance, abstract, ID) and a unique technical name. It can be used for tagging of a fact value. Synonym: Concept or tag.
XBRL report	An XBRL instance document (XML, CSV or JSON) or Inline XBRL document (set). An XBRL report uses one or more XBRL taxonomies.
xsi:nil	A fact attribute signalling that an empty fact value is valid ('not in list').[25]

6. Summary of interviews with users

41. EFRAG considered the feasibility of tagging when developing the XBRL taxonomy and the usefulness for users. Therefore, EFRAG has prepared tagged illustrative reports and conducted interviews with users. However, this does not represent a cost-benefit analysis (see paragraph 25). A summary report of the interviews with users can be found in Appendix 2.

42. As part of the discussion in EFRAG SR TEG and SRB, additional target interviews were conducted to understand the view of users of the digital datasets on an aggregation proposal put forth by one respondent (a National Standard Setter) in the public consultation. The users interviewed confirmed that the development of the taxonomy should only be a technical

[25] https://www.w3.org/TR/xmlschema11-1/#xsi_nil

exercise and not a supplement of standard setting activity. It should translate the ESRS to digital format without altering the level of granularity defined in the standard setting phase. According to the users interviewed, such a detailed tagging of narrative information would indeed be useful, and the majority agreed that EFRAG should not accept the aggregation proposal. One analyst provided a detailed list of data points of interest that should not be merged in any way (including those covered by the aggregation proposal). One data provider shared a detailed analysis with comments on the aggregation proposal with EFRAG, explaining why aggregation would make the data less useful.

7. Consultation responses and feedback statement

43. EFRAG published the ESRS Set 1 Draft XBRL taxonomy on 8 February 2024 for public feedback. The public consultation lasted until 8 April 2024. An overview of the consultation responses was presented to EFRAG SR TEG members on 22 April 2024.

44. A total of 49 responses were provided in the course of the public consultation. Two additional comment letters were provided after the deadline, and one was incorrectly uploaded to the Draft Article 8 XBRL Taxonomy consultation survey. All responses are available for download here:

    (a) Draft ESRS Set 1 XBRL Taxonomy survey comments, letters and files attached as part of the response. The response ID used as prefix for each file (ZIP, 48 MB)

    (b) Draft ESRS Set 1 XBRL Taxonomy comment letters provided after the deadline 8 April 2024 (ZIP, 557 KB)

45. The public feedback showed broad support for the draft XBRL taxonomy. 85% of respondents thought that it appropriately reflected the ESRS. Many respondents, moreover, provided valuable suggestions for improvements.

46. One respondent (a National Standard Setter) was particularly critical of the granularity of the narrative tagging. The respondent suggested merging or deleting 30-40% of the elements in the draft XBRL Taxonomy, arguing that ‘users do not necessarily require all the detailed information made by preparers’, and that in general, granular ESRS datapoints have an ‘educational’ character. This was not aligned with the overall responses to the draft taxonomy consultation.

47. This aggregation proposal was rejected for the following reasons:

    (a) It would have contradicted the methodology approved by EFRAG SRB on 26 April 2023 and basis for the development of the XBRL taxonomy, in particular the principle that the digitalisation process is not standard setting, i.e. it should not revisit how the standard setter has split the narrative disclosure into datapoints;

    (b) It would have created issues in regard to interoperability with other XBRL standards and taxonomies such as ISSB and GRI. The aggregation proposal would have decreased and complicated interoperability with ISSB in several cases;

(c) It would have introduced judgemental aggregation of narrative datapoints without proposing a new and clear methodology, in particular as different users may have different approaches to the separation of datapoints;

(d) It would have reduced usability and comparability of narrative disclosures: instead of smaller portions of text, larger sections of the report might be block tagged;

(e) Taxonomy-centric report preparation would be put at risk;

(f) Following it, narrative disclosures might be aggregated and therefore diluted, resulting in a risk of potentially allowing for greenwashing practices. In fact, it is challenging to find adequate labels for the 'merged' XBRL elements when crossing multiple levels, as these aggregations are not aligned with the structure of the DRs (i.e. a), b), i), ii) etc.); and

(g) Following it, implementing a phasing-in for narrative tagging might be more complex for ESMA, because the levels of the tagging hierarchy would be partially removed, which would have made a phasing-in based on it impossible.

48. Because of these disadvantages and following the suggestions of various users[26] of digital sustainability data interviewed by EFRAG on this matter, as reported above, EFRAG decided not to implement most of this aggregation proposal. Only certain suggestions, relating to overlaps between ESRS 2 MDR tags and MDR-related tags in the topical standards (as explained in section A1.4. below), have been implemented, since they were in line with the approved methodology.

49. An overview of the consultation responses and of how EFRAG has addressed the comments is provided as a separate feedback statement on the EFRAG website.

8. Changes implemented in the proposed taxonomy compared to the draft XBRL taxonomy

50. Following the analysis of the feedback received in the course of the public consultation, EFRAG implemented the following changes to the XBRL taxonomy, as well as smaller editorial changes and corrections:

(a) **Further details have been included** alongside each XBRL element to specify whether it is a mandatory ('shall') or voluntary ('may') disclosure, whether it is subject to the phase-in provisions, and whether its applicability is dependent on certain conditions (e.g. if the undertaking is active in high climate impact sectors).

(b) **A Calculation Linkbase has been included** for many tables (ESRS 2 SBM-1, E1-5, E1-6, E1-9, E2-5, S1-9, S1-14) to ensure the mathematical consistency of the reported data.

[26] See more information on the target interviews in Chapter 6.

(c) **The names of some *Boolean* elements have been rephrased** to facilitate the understandability of the required disclosures, especially in cases with compounded subjects or objects. In such cases, the conjunction relating the various substantives has been changed to 'and/or', in order to clarify the meaning of the condition.

(d) **The elements for 'Name or identifier of related […]' have been split** into two different elements, one for the name and one for the identifier. By splitting this element, additional validation rules could be introduced to ensure that the IDs in the typed dimensions are consistent.

(e) **A dedicated item type** has been implemented for the 'Identifier of related Impact, Risk and Opportunity/Policy/Action' elements, allowing a better tooling support for building relationships.

(f) **Validation rules have been enhanced** to consider phase-in provisions, in order not to flag omitted tags when such disclosures are subject to phase-in. Further additional validation rules have also been implemented, for example for voluntary or alternative tags, or for the expected units of certain facts.

(g) Following the comments provided by the consultation respondents, **the hypercubes have been closed.** This means that instead of allowing the preparer to disaggregate facts with freely chosen dimensions, all the prescribed disaggregations will already be provided by the taxonomy. This is best-practice in the development of XBRL taxonomies, but is not as flexible as open hypercubes and will require preparers to use taxonomy extensions to tag further disaggregations, which is a drawback but still seems to be preferred by respondents.

(h) **The Reporting scope dimension has been split** to correctly reflect whether a fact is a target or a measured value, whether it is a correction of a previously reported fact, whether it relates to a short/medium/long-term time horizon, and whether it is related to specific milestone years.

(i) **The targets not adopted have been included in a central template** (as previously done for policies and actions) and removed from the topical standards.

(j) **An enumeration with all sustainability matters**, based on ESRS 1 paragraph AR 16, has been included for each MDR-related table on policy, action and target adopted. This enumeration has also been applied in the table for policies, actions and targets not adopted.

(k) **MDR tags have also been introduced for ESRS G1.** The MDRs from paragraphs 63 to 81 of ESRS 2 shall in fact be applied with respect to Policies, Actions and Targets in ESRS G1, irrespective of the fact that there is no explicit cross-reference to PATs in the topical standard, as pointed out in Q&A ID 479.

(l) A number of **XBRL elements have been re-used** across the environmental standards.

(m) A number of XBRL elements have been changed, either by **enhancing the label to better reflect the ESRS text or by adjusting the item type** (e.g. enumeration set instead of single enumeration to allow multiple-choice).

(n) A few smaller changes have also been implemented to enhance the **interoperability with ISSB S1 and S2 XBRL taxonomy**. For example, in the ESRS 2 SBM-3 template, the new elements 'Disclosure of how and when resilience analysis has been conducted [text block]' and 'Time horizon(s) applied for resilience analysis' have been added in addition to the existing 'Information about resilience of strategy and business model regarding capacity to address material impacts and risks and to take advantage of material opportunities [text block]', which were previously only included in the topical templates.

51. The tagging of narrative information about Policies, Actions and Targets has been simplified by removing the overlapping elements between ESRS 2 MDR and the topical standards, in a way consistent with the approved methodology. These changes have been implemented on an exceptional basis, when (see more information section A1.4. below):

(a) no content detail is lost;

(b) the change does not complicate interoperability with other XBRL taxonomies; and

(c) following an approval from EFRAG SR TEG.

A list of the affected elements is provided in Appendix 4.

52. Furthermore, other improvements and corrections to the XBRL taxonomy include:

(a) Addition of the 'Topical ESRS [axis]' in the ESRS 2 IRO-1 template, which allows preparers to distinguish between processes to identify and assess material impacts, risks and opportunities relating to different ESRS topics.

(b) In the MDR-A templates, new elements 'Description of scope of key action in own operations [text block]', 'Description of scope of key action in upstream and (or) downstream value chain [text block]' and 'Key action coverage' have been added alongside the existing 'Description of scope of key action (coverage in terms of activities, upstream and (or) downstream value chain, geographies and affected stakeholder groups) [text block]'. A new element has also been added for 'Sustainability matter(s) addressed by action'.

(c) New elements have been introduced in the MDR-T templates for 'Description of relationship of target to policy objectives [text block]', 'Sustainability matter(s) addressed by target' and 'Target coverage', while the elements for 'Baseline value of measurable target (absolute value)' and 'Baseline value of measurable target (percentage)' have been removed, as they can be tagged with the amended Reporting scope dimension.

(d) The element 'Period to which target applies' has been split into 'Period to which target applies (start year)' and 'Period to which target applies (end year)'.

(e) The *Boolean* 'Stakeholders have been involved in target setting', and the respective textblock for the description of how they have been involved, have been renamed to 'Stakeholders have been involved in target setting for each material sustainability matter'.

(f) In the E1-5 template, the element 'Energy consumption from activities in high climate impact sectors' has been removed, as the ESRS do not actually require the disclosure of this indicator.

(g) In the E2-4 template, a new combined element for 'Microplastics generated or used' has been added in addition to the existing 'Microplastics generated' and 'Microplastics used'.

(h) The 'Pollutant [axis]' used in ESRS E2-4 has been updated to reflect the Annex II of Regulation (EC) No 166/2006 of the European Parliament and of the Council.

(i) 'Hazard classes [axis]' and 'Hazard categories [axis]' have been introduced in the E2-5 template in order to allow for disaggregation of substances of concern and substances of very high concern..

(j) In the S1-6 template, a new element has been added for 'All people performing work for undertaking are employees and undertaking does not have any people in its workforce who are not employees'.

(k) The elements 'Disclosure of general and specific approaches to addressing material negative impacts [text block]', 'Disclosure of initiatives aimed at contributing to additional material positive impacts [text block]', 'Disclosure of how far undertaking has progressed in efforts during reporting period [text block]', and 'Disclosure of aims for continued improvement [text block]' have been removed from the S2-4, S3-4 and S4-4 templates and are now only included in the S1-4 template.

(l) In the SBM-3 templates, a new element for 'Name of impact, risk and opportunity' has been added in order to allow for the linking of the SBM-3 disclosures with a particular IRO.

(m) The full lists of NACE codes, NUTS codes, SEC sectors and Countries have been included in the Presentation Linkbase.

53. Lastly, this document, the Explanatory Note and Basis for Conclusions, has also been amended to include enhanced and new examples, details and explanations with respect to a number of subjects. The examples of illustrative tagged XBRL reports have been updated and finetuned with the proposed taxonomy and inconsistencies have been corrected.

9. Methodology and architecture

9.1. Basic principles

54. EFRAG has developed the ESRS Set 1 XBRL Taxonomy as the correct digital transposition of the content of ESRS Set 1, having developed those standards in its capacity of advisor to

the European Commission. The technical decisions made during the taxonomy creation process followed three principles:

(a) It should be possible to tag a sustainability statement compliant with the ESRS and provide in machine-readable format data carrying the same qualitative characteristics of information as in human-readable format.

(b) The elements created in the taxonomy must only be those necessary for the disclosure of the datapoints described in the ESRS (including both information that is phrased with the words 'shall' and 'may' in the standards), with no more and no less granularity than in the human-readable ESRS Set 1.

(c) Where there was a choice between several technical solutions compatible with the requirements above, EFRAG selected the choice that was most practical for preparers, considering aspects such as (technical) simplicity, readiness of tagging tools, and tagging effort.

55. The second principle, reported under the aforementioned letter (b), results in a one-to-one correspondence between elements in the taxonomy and the paragraphs, subparagraphs and sub-subparagraphs in the standards. There were, however, a few exceptions where such one-to-one correspondence would have resulted in either excessive or insufficient granularity. Such cases are explained in sections 9.4., A1.3., and A1.4. of this document.

56. To assess the ease of preparation of reports with the taxonomy, EFRAG surveyed the tools currently available for the preparation of similar reports. EFRAG concluded that the preparation process generally falls into one of the following categories:

(a) 'content-first' processes, where the preparer writes the full human-readable part of the sustainability statement before using a tool to 'map' the information in the report onto the XBRL taxonomy that describes the standards; or

(b) 'taxonomy-centric preparation' processes (tag-first), where the preparer first identifies the nature of the information to be inserted into the report (and the corresponding XBRL elements), then writes the piece of content corresponding to that information, and the software assembles all the pieces into one document.

(c) a mix of the two approaches above might also be applied: The taxonomy might be used to structure the disclosures, but the tagging itself is performed at the end of the report preparation process (e.g. by a service provider).

57. When preparing the human-readable sustainability statement, the adoption of the data modelling of the taxonomy as a structure (i.e. taxonomy-centric preparation) will facilitate the tagging, i.e. as indicated in the methodology document in paragraph 32.[27] For this purpose,

[27] Paragraph 32 of the approved 'Draft ESRS XBRL Taxonomy Methodology and Architecture': https://www.efrag.org/system/files/sites/webpublishing/Meeting%20Documents/2302240950097339/04.02%20-%20Draft%20ESRS%20XBRL%20Taxonomy%20Architecture%20and%20Methodology%20%28final%29.pdf

EFRAG released the non-authoritative EFRAG Implementation Guidance 3 (IG 3)[28], which details the datapoints in ESRS Set 1. The content of IG 3 is consistent with the structure of datapoints in this taxonomy, as laid out in the explanatory note for IG 3: All datapoints are implemented as XBRL elements, but the XBRL taxonomy contains more technical elements and attributes (e.g. for disaggregation). The IG 3 datapoint list can be used to advance the preparation of human-readable ESRS sustainability statements that will be easier to digitise.

58. EFRAG has developed the XBRL taxonomy on the assumption of a 'hypothetical' sustainability statement whose design is consistent with the structure of the ESRS and their corresponding DRs. In this regard, it is worth noting that structuring the statement consistently with the structure of the ESRS might facilitate the tagging of the information reported.

59. Even if allowed, the sustainability statement whose design deviates from the architecture and structure of the ESRS may lead to a more complex tagging.

9.2. Relation between the Taxonomy and ESRS statements

60. The ESRS XBRL Taxonomy is a tool designed to support the creation and consumption of sustainability statements in Inline XBRL format, which is both human-readable and machine-readable.

61. In particular,

    (a) the presence of an element in the ESRS XBRL Taxonomy does not imply that the corresponding information is required to be included and marked-up in a sustainability statement (e.g. datapoints are voluntary, subject to ***MA***, phased-in, or alternative XBRL elements), and

    (b) the absence of an element in the taxonomy does not limit the preparer's ability to markup corresponding information in the sustainability statement, as described in chapter 99.9 on entity-specific and additional disclosures.

62. If a sustainability statement includes information whose markup is required in a reporting framework but for which the ESRS XBRL Taxonomy does not provide an element, that information may be tagged using one of the approaches described in section 9.9.

69. Creating extension taxonomies and creating entity-specific elements within extension taxonomies is sensibly more complex[29] than simply directly using elements provided in the ESRS XBRL Taxonomy.

---

[28] EFRAG IG 3: Detailed ESRS datapoints implementation guidance and accompanying explanatory note: https://www.efrag.org/en/projects/esrs-implementation-guidance-documents

[29] Extending taxonomies means that a new XBRL taxonomy has to be created, which incorporates the base taxonomy by references. This process is technically more challenging than preparing the XBRL report itself since XML schema files, presentation and definition linkbase are to be provided. It usually requires an XBRL software that is able to create an XBRL taxonomy instead of a report creation software.

70. Therefore, EFRAG aims at creating a taxonomy as complete as possible to support comparability and relevance. This supports preparers' need for flexibility and at the same time limits to a minimum the need for creating elements within extension taxonomies. This is particularly important considering that including an element in the ESRS XBRL Taxonomy

    (a) does not in itself create additional markup requirements for preparers,

    (b) reduces the amount of work to be performed by preparers to mark up their reports when these include the corresponding information, and

    (c) increases the usability and comparability of the marked-up information for users.

71. The conclusion might be the same with regards to the level of disaggregation and the possible values within the disaggregation. When the taxonomy describes a certain level of disaggregation, there is no implication that the sustainability statement must describe that same level of disaggregation.

72. For instance, for the DR E1-6 the taxonomy provides a dimension for the disaggregation of GHG emissions and the related information by GHG category (CO2, CH4, N2O, etc.). That does not imply that preparers are required to disclose and/or digitally tag such information by GHG category, since pursuant to E1-6 AR 41 this disaggregation is voluntary.

73. Having such disaggregation in the taxonomy simply facilitates the tagging of information related to GHG emissions for undertakings that assessed that a disaggregation by GHG category was necessary for the information to be understandable.

74. When for undertakings a disaggregation by GHG category is not appropriate for the information to be understandable, the presence of the dimension and a detailed list of possible values in that dimension does not create any additional effort for the preparation of the report.

75. Conversely, if the taxonomy does not provide disaggregation with a level of detail that matches the requirements and options for disaggregation as described in the standard, it will become much more complex to tag the corresponding disclosures.

9.3. General granularity of elements in the taxonomy

76. Using the same level of granularity as the standards (generally speaking, matching the breakdown of the standards with paragraphs and subparagraphs) is supported by several considerations explained below and in the methodology paper.[30] However, it must be noted that when discussing the granularity of the XBRL taxonomy with SR TEG and SRB members, some expressed concerns about it (see also aggregation proposal in chapter 7).

77. For preparation and in particular for 'content-first' processes, such granularity is consistent with EFRAG's hypothesis whereby reports should have a structure where it is reasonably easy to identify the datapoint in the section addressed in the report. If a section of the sustainability statement clearly addresses a specific datapoint in the standards and there is

[30] Chapter 6: Narrative tagging: working assumptions.

an element of the XBRL taxonomy clearly linked to that datapoint, the 'tagging' task is very straightforward.

78. To the contrary, applying tags corresponding to non-granular information may present additional challenges. The main challenge is determining the right scope to which the tag should be applied. Determining where the tag should start and end, whether there are pieces of information that should not be marked up with this tag, and whether there are pieces of information in other parts of the sustainability statement that should be covered by the tag (using Inline XBRL ***continuations***[31]) is often complex, especially when the tag can be used to mark up information of a different nature. To use a tag that corresponds to a paragraph in ESRS that contains three datapoints in subparagraphs *(a)*, *(b)* and *(c)*,

    (a) the name of the tag corresponding to the paragraph of ESRS does not precisely describe the expected content in the report, so to determine the areas to be tagged, a preparer first needs to look at the granular datapoints in subparagraphs *(a)*, *(b)* and *(c).* The preparer needs to identify areas covering *(a)*, possibly in different places in the sustainability report, then similarly identify areas covering *(b)* and identify areas covering *(c)*. In other words, they need to do the same identifying work that is necessary to do granular tagging of *(a)*, *(b)* and *(c)*;

    (b) the preparer then has an additional burden that would not be required for granular tagging – that of deciding the order in which the different parts identified for *(a)*, *(b)* and *(c)* should be read to make sense;

    (c) tagging large content made out of several sections in a document (for instance, paragraphs on different pages) requires the preparer to separately apply XBRL tags to all different pieces of information and then declare that they should be assembled when information is extracted from the document. In other words, while only one element of the taxonomy is used, the preparer still needs to apply several tags; and

    (d) when the tagging is to be reviewed by another party (for instance, an assurance provider), the earlier identification of the parts corresponding to *(a)*, *(b)* and *(c)* is lost. To make their review, reviewers are also unable to rely on just the name of the XBRL element. They must also do their own identification of content corresponding to *(a)*, *(b)* and (c) and may come up with a different interpretation of that content or of the order in which the content should be read.

79. Granularity of the XBRL taxonomy that is consistent with that of the standard is also most suitable for EFRAG's maintenance of the taxonomy year after year, as changes to the standard can be straightforwardly translated to changes in the taxonomy. Preparers will benefit from this identification of changes in the standard through the taxonomy, as this creates a simple and direct way for them to identify the parts of their sustainability reports affected by the change.

---

[31] The purpose of the continuation mechanism of Inline XBRL is to combine several content snippets into one single XBRL tag. See: https://www.xbrl.org/specification/inlinexbrl-part1/rec-2013-11-18/inlinexbrl-part1-rec-2013-11-18.html#d1e1266

80. The granularity in the standards themselves was chosen so that the most granular paragraphs, subparagraphs and sub-subparagraphs in each Disclosure Requirement always provide information that is decision-useful. This granularity is therefore suitable to be used in the XBRL taxonomy to enable reports to convey information at a decision-useful level.

81. Information contained within sustainability reports prepared in accordance with the ESRS is likely to be useful to suppliers, clients, investors and other stakeholders[32] of the undertaking that need to collect and aggregate information for their own sustainability reports or for other reporting requirements. Determining the impact of the value chain, or of investments, on a specific granular datapoint is much more efficient if that same granular datapoint is digitally identified in reports coming from that value chain or investments.

9.4. Elements created for flexibility purposes

82. Each distinct ESRS datapoint identified under every Disclosure Requirement has been transposed into (at least) one distinct element in the XBRL taxonomy.

83. However, in a limited number of instances EFRAG concluded that it was necessary to create multiple taxonomy elements for a single datapoint in the standard in order to avoid undue constraints for preparers.

84. For instance, ESRS S1 paragraph 50 a) requires the disclosure of the total number of employees by head count. This datapoint may be interpreted either as the head count at the end of reporting period or as the average head count over the reporting period. Some undertakings may even choose to disclose both figures in their reports.

85. Two elements were therefore created for the number of employees described in ESRS S1 paragraph 50 a): ‘Number of employees (head count), at end of period’ and ‘Number of employees (head count), during period’.

> **IAI 1: Illustration of application instructions on choosing between alternative XBRL elements for tagging**
>
> Whenever the XBRL taxonomy provides multiple elements for the same ESRS Disclosure Requirement or datapoint, for instance in order to allow tagging with the correct metadata (e.g., disclosure of headcount of employees in ESRS 2, SBM-1 paragraph 40 a) iii) as instant or duration), or because the standard provides different options (e.g., E1-6 GHG Scope 3 Categories in accordance with the GHG Protocol or ISO 14064-1), the XBRL element corresponding to the chosen option should be tagged. Alternative or conditional XBRL elements can be identified in the final taxonomy with the XBRL referenceelement: *ConditionalDatapoint*.

[32] See paragraph 22 of ESRS 1: users of sustainability statements : primary users of general-purpose financial reporting (existing and potential investors, lenders and other creditors, including asset managers, credit institutions, insurance undertakings), and other users of sustainability statements, including the undertaking’s business partners, trade unions and social partners, civil society and non-governmental organisations, governments, analysts and academics.

86. Removing either element would make it much more complex for an undertaking using the corresponding option to mark up their sustainability statement, even though the statement would be perfectly compliant with the standards.

9.5. Implementation of the narrative tagging hierarchy

87. The ESRS have been designed to systematically structure the ESRS sustainability statement into a list of detailed requirements corresponding to a given disclosure objective (or DR). Indeed, the core of a DR is in the main body of the standard and in a paragraph easily identifiable using the expressions 'shall disclose' and 'shall include' placed after the paragraph on the objective. Usually, individual datapoints are identifiable by separate items reported in a list of letters: *(a)*, *(b)*, *(c)*, etc. These can be further disaggregated in a sub-list of items identified by small roman numbers: *(i)*, *(ii)*, *(iii)*, etc.

88. It is worth noting that this precise architecture of a DR has been developed by the standard setter since the development of the ESRS Exposure Draft (released in April 2022). EFRAG has been thinking in digital terms since the beginning.

89. In that context, a large amount of reportable disclosure requirements is represented as qualitative information in the format of a narrative disclosure. The statistics that accompany the publication of the Implementation Guidance 3 – List of ESRS Datapoints confirm this scenario, with an estimation of the qualitative disclosure in a range between 50% to 60% of the total amount of potential datapoints included in the sustainability statement.

90. Users recognise the intrinsic value of qualitative disclosures. A narrative text might not be considered less important than a metric, as the interviews with users confirmed (see Appendix 2).

91. In addition, several users recognised the importance of the consumption of single narrative datapoints through the extraction of data corresponding to a precise piece of content (identifiable under a precise paragraph/subparagraph and usable independently from the rest of the narrative text).

92. The ESRS XBRL Taxonomy has been developed to provide the technical solution that best reflects the structure of each DR through the creation of a (reasonable) granular system of taxonomy elements capturing the value embedded in each narrative disclosure.[33]

93. The XBRL taxonomy implements a hierarchical system of nested elements (known as the parent-children relationship) for each Disclosure Requirement. As laid out in the methodology paper (paragraphs 37-47), the structure is the following:

[33] EFRAG is aware that the usability of quantitative monetary and non-monetary datapoints is straightforward. Instead, designing the optimal tagging for the narrative disclosures requires more attention. Unlike financial reporting, where narrative information in most cases accompanies and provides context for a quantitative datapoint, in sustainability reporting narrative statements are in most cases not explanatory of quantitative information, but they are qualitative datapoints themselves.

(a) the Level 1 XBRL element (known as *parent*) can be used to capture the full content of a Disclosure Requirement;

(b) the Level 2 XBRL element has dedicated elements (known as *children*) for each datapoint listed in the subparagraph of a DR (i.e., *(a)*, *(b)*, *(c)*); and,

(c) where applicable, additional XBRL elements have been implemented at the Level 3 in order to reflect the romaine numbered datapoints required by a specific DR (i.e., *a(i)*, *a(ii)*, *a(iii)*).

94. This hierarchical system helps to design a flexible taxonomy through the creation of elements placed at different levels of the hierarchy (levels 1, 2 and 3). Users can extract data from the *parent* level or from the levels below. It is important to note that the hierarchy of the presentation linkbase of the XBRL taxonomy does not relate to the hierarchy of the XBRL elements. Often, abstract elements, which purely serve as grouping elements and headlines, are included in the presentation linkbase, adding technical levels to the hierarchy. The only level that can be reliably distinguished is Level 1, which is equipped with a dedicated indication in the reference linkbase for each element (Level1Element).

95. When implementing the narrative hierarchy, EFRAG avoided the introduction of XBRL elements that overlap in terms of content and instead reused existing elements, as illustrated in section A1.3.

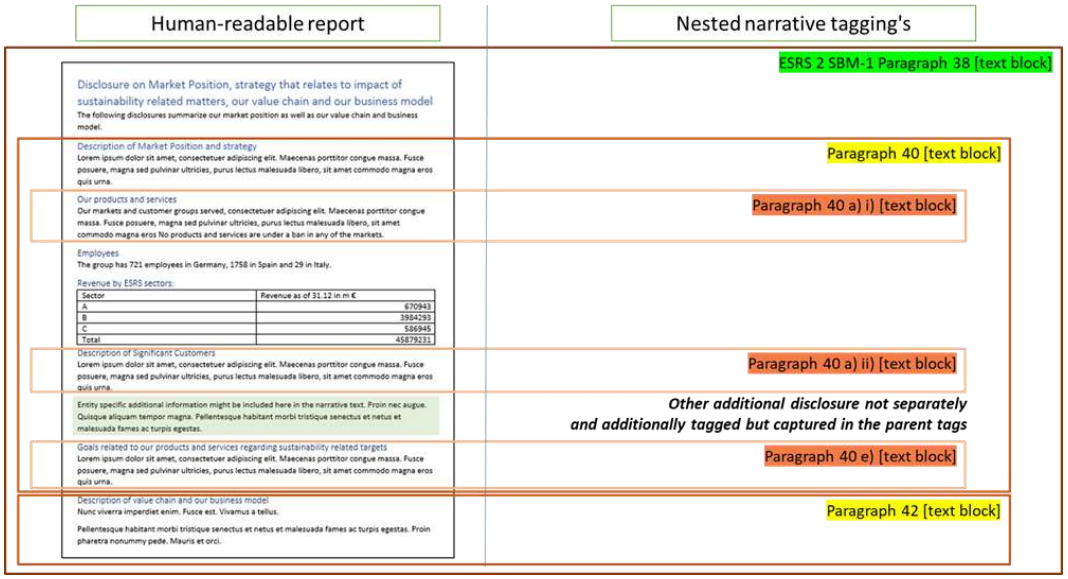
96. In the methodology paper (paragraph 36), a hypothesis has been made whereby the 'parent' tag can be omitted when the full content of a Disclosure Requirement is exhaustively tagged with more granular 'children' tags of the parent tag. Users of the digital narrative disclosures would then 'constitute' the content of the parent element through the conjunction of all (narrative) disclosures of the 'children' tags.

97. Still, it has to be noted that the Level 1 XBRL element covering the full Disclosure Requirement has a specific and important role to play by potentially capturing entities' additional datapoints or even entity-specific disclosures, as described in chapter 9.9 and illustrated in Figure 2 below[34]. This would be the case when the additional information is not tagged with an 'Other' XBRL element, which makes it easier for users of the report to distinguish entity-specific content from ESRS information (see chapter 9.9).

98. Additionally, Level 1 tags have an important meaning by providing a 'content index'. In fact, the ESRS 2 Disclosure Requirement IRO-2, paragraph 56 and AR 19, which require a list of Disclosure Requirements complied with in preparing the sustainability statement, might be very useful for users of the digital disclosures when navigating the corresponding section in the human-readable report.

[34] The purpose of the example is to illustrate the narrative tagging hierarchy. It is not meant to indicate that prepares have to strictly follow the structure of the XBRL taxonomy when drafting the disclosures, as also discussed in chapter 9.10. Using the Inline XBRL and especially the continuation functionality, narrative disclosures can freely be tagged across a document.

Figure 2. Illustration of the nesting of (narrative) XBRL tags by using an artificially tagged illustrative report on the left and the taxonomy hierarchy on the right. The text displayed against a green background is supposed to mimic an additional datapoint of the entity that is not part of hierarchy.



99. Hence, omitting Level 1 tags should be carefully considered. If Level 1 tags are not used in a report, other ways for users to clearly and simply identify the list of Disclosure Requirements complied with should be provided. When using a digitally tagged report, a human-readable content index referring to page numbers, as foreseen in the ESRS, is less useful compared to the continuation functionality of Inline XBRL which allows one to 'navigate' and 'jump' to a disclosure with ease, if the content is distributed in different pages or sections of the report. This method is significantly more sophisticated than using page numbers. However, the human-readable content index might still be useful for human readers.

100. If the tagging rule foresees a phased-in approach to the use of XBRL taxonomy elements, resulting in mandatory use of Level 1 XBRL elements in the first year(s) of taxonomy application and requiring use of lower level tags in the later year(s), from a technical perspective it would be possible to ultimately omit tagging with Level 1 tags. After the phase-in is completed, the Level 1 tags should be changed to no-content items, as described in the Working Group Note on Inline XBRL Block tagging issued by XBRL International[35].

101. Given the importance of Level 1 tags and of the more granular levels below, as well as the fact that most narrative XBRL elements represent Level 2 paragraphs, EFRAG considers the tagging of the full hierarchy to be the most appropriate way to this effect: it will provide users with the most flexibility to access the information on each level depending on their needs.

[35] https://www.xbrl.org/WGN/blocktagging-wgn/WGN-2024-06-18/blocktagging-wgn-2024-06-18.html

IAI 2: Illustration of application instructions on the tagging of narrative textblock tags

If the content of a sustainability statement reflecting a Disclosure Requirement is completely tagged with the granular text blocks of the ESRS taxonomy hierarchy, and no entity-specific content or additions to ESRS datapoints are disclosed, the tagging with the Level 1 XBRL element could potentially be omitted or the generation of an output fact for the parent could be avoided by setting the format attribute of the nonNumeric fact to '*ixt:fixed-empty*'.

Following the Working Group Note on Inline XBRL Block tagging issued by XBRL International, the Level 1 tags (which can be identified with a XBRL reference element *Level1Element*) should be considered as 'non-content' XBRL elements, as long as the narrative disclosures are tagged with more granular elements as well.

Caution: Official adopted tagging rules should be considered.

9.6. ESRS 2 MDR – the technical relationship between material IROs (SBM-3), Policies, Actions (including Resources) and Targets (including Metrics)

102. ESRS 2 defines related concepts of Impacts, Risks and Opportunities (IROs) and Policies, Actions (including resources) and Targets (including metrics) which address the IROs. Even if IROs are entity-specific and result from the undertaking's materiality assessment, they are closely linked to the sustainability matters and pre-defined ESRS topics and sub-topics of Appendix A of ESRS 1 paragraph AR 16. From a datapoint modelling perspective, those entity-specific disclosures are key concepts and can be modelled with relationships. For instance, if a company discloses a number of material IROs and a number of polices, actions and targets, those could be linked in an entity-relationship model as known from the database design. When designing databases, the concept of 'foreign keys' is often used, which allows to link each and every 'entry' of a table to another entity.

103. In an XBRL taxonomy, this can be achieved also by re-using dimensions across hypercubes (tables) and also, therefore, by re-using XBRL facts in an XBRL report. EFRAG has implemented relationships between IROs, Policies, Actions and Targets in the ESRS XBRL taxonomy using explicit dimensions in an enumeration element (link between IROs and topics) and typed dimensions for the link between IROs and Policies, Actions and Targets. However, the typed dimension link is not implemented with a strict foreign-key relationship since this would not provide flexibility when a policy is not directly linked to a single IRO or requires very complex mapping tables as part of the Inline XBRL report. Also, EFRAG considers a preparer-friendly and flexible approach to be important for first-time adoption. This reduces the risk of mismatches when (slightly) different typed dimension identifiers are

used, with the assumption that Inline XBRL reports have to be prepared[36]. Therefore, EFRAG decided to implement 'soft links' between those entities implemented as typed dimensions by using string elements that can contain the identifiers or names of related IROs, Policies, Targets, etc. More information on the practical implications and how to tag correctly are provided in the box 'Illustration of application instructions on typed dimensions'.

104. A number of respondents to the public consultation asked EFRAG to split the 'Name or identifier of related Policy/Action/Target' elements into two XBRL elements. This change has been implemented in the proposed taxonomy. Additionally, a validation rule has been implemented, to check that the IDs provided in the fact value are actually reported in the typed dimension. Furthermore, a dedicated item type has been provided in the XBRL taxonomy, limiting the use of the separator character in the typed dimension, in order to ensure that this character can be used to provide multiple IDs in the identifier of related Impacts, Risks, Opportunities/Policies/Targets/Action (plans) elements.

105. In order to support the report preparation software, XBRL International is planning to standardise this approach as a new Extensible Enumeration 3.0 specification that will support typed dimensions. This will allow for better tooling support and validation. The ESRS XBRL Taxonomy needs to be updated as soon as the specification is moved to recommendation status and the custom item types need to be replaced.

[36] Similar foreign-key relationships have been implemented in open tables of EIOPA (Solvency II) and EBA (CRD IV) XBRL taxonomies; however, those are implemented and disclosed using 'static' Table Linkbase templates, which are often rendered as input tables. In contrast to the preparation of individual human-readable reports, where the relationships are not necessarily part of the visible XHTML document, this approach is less error-prone.

IAI 3: Illustration of application instructions on typed dimensions on Minimum Disclosure Requirements (MDRs)

The typed dimension values for IROs, policies, targets and actions (having the linkIdentifierType type), should be used with technical IDs, e.g. with a number like ‘p1’ for the first policy. This technical ID cannot include the separator character (comma) that is used to split different IDs in one fact value. Additionally, a name for each IRO, policy, target and action should be tagged in the human-readable Inline XBRL document, e.g. the related human name for a policy ‘Policy to choose suppliers that implement net zero target’. In order to link a specific target to a policy, a specific XBRL element is provided in the XBRL taxonomy that enables such linking: linkIdentifiersItemType. For instance, the human readable target ‘All suppliers shall have a net zero target by 2035’ should be linked with the ‘p1’ to the related policy.

In order to provide a machine-readable link between IROs, policies, actions and targets, it is of particular relevance to use consistent identifiers or names across the report and across reporting periods when using the following elements, relating to their typed dimensions:

Typed dimension element representing a (technical) identifier (invisible in the XBRL context)	**String element representing a human-readable name for the typed dimension in the visible XHTML**	**Element providing the link from other MDR aspects (‘foreign keys’)**	**DR**
Identifier of impact, risk and opportunity [typed axis]	Name of impact, risk and opportunity	Identifier(s) of related impacts, risks and opportunities	ESRS 2 SBM-3
Identifier of policy [typed axis]	Name of policy	Identifier(s) of related policies	ESRS 2 MDR-P
Identifier of target [typed axis]	Name of target	Identifier(s) of related targets	ESRS 2 MDR-T
Identifier of action (plan) [typed axis]	Name of action (plan)	Identifier(s) of related action (plans)	ESRS 2 MDR-A
Name(s) of metrics [typed axis]	Name(s) of metrics	-	ESRS 2 MDR-M

If multiple fact groups are linked, the IDs in the fact value of the linkIdentifiersItemType element should be separated with a comma. For instance, if a policy addresses multiple IROs, the names or identifiers reported in the related fact should be separated with a comma.

106. A review of the implementation described above after an analysis of the first digital reporting of ESRS statements is recommended. Validation rules and consistency checks could be introduced to ensure the relationships or ‘hard links’ in terms of typed dimensions, and stricter foreign keys could be reintroduced to improve the data quality of linked fact groups.

9.7. ESRS 2 SBM-3 'Tagging of IROs'.

107. The XBRL taxonomy implements the IROs as per ESRS 2, SBM-3 with a typed dimension. This allows for the digital disaggregation of a single or grouped IROs and for the linking of Policies, Actions, and Targets to each of them as described above. A multiple-choice enumeration of sustainability matters (topics, subtopics and sub-subtopics) has been implemented, which allows for linking of the IRO to one or more sustainability matter.

108. During the development of the ESRS XBRL Taxonomy, an additional implementation was considered as well, which would allow for tagging of the same ESRS 2 SBM-3 IRO XBRL elements with an explicit dimension for each topic instead of a typed dimension. However, this approach was discarded because it would not be possible to link a tagged disclosure on an IRO to multiple sustainability matters or topics. Also, the lack of a possibility to separately identify Impacts, Risks and Opportunities was considered a drawback for users of digital ESRS statements.

9.8. Validation rules and tagging as 'Not material'

109. The XBRL taxonomy implements three validation rules for the purpose of checking the existence of a fact in the XBRL report, based on the Formula Linkbase 1.0 specification, which can be used by preparers, auditors, and regulators to validate the XBRL reports.

110. The first validation rule is to validate if datapoints related to other EU legislation are tagged in the XBRL report. Those elements can be recognised in the digital taxonomy with reference names starting with 'Commission Delegated Regulation (EU') or 'Commission Implementing Regulation (EU)'. If disclosures of information prescribed by datapoints derived from other EU legislation are omitted, those shall be 'explicitly stated' to be 'not material' (ESRS 1, paragraph 35). In an XBRL report, this could be done by tagging the fact and setting the xsi:nil attribute to true. Therefore, the validation rule checks whether a corresponding fact (either with a value or xsi:nil) for each element with reference to other EU legislation exists in the XBRL report, and it displays an ERROR message if this is not the case.

IAI 4: Illustration of application instructions on the tagging of XBRL elements as 'not material'

When tagging XBRL facts with the *xsi:nil* attribute set to true, those facts should be interpreted as 'not material' by users of XBRL reports.

According to ESRS 1 paragraph 35, the undertaking shall explicitly state that information is 'not material', when it omits the information prescribed by a datapoint that derives from other EU legislation.

In order to support this, dedicated XBRL explicit dimension members have been provided in the XBRL taxonomy in Role 900004.

111. The second validation rule implements the check (assertion) for mandatory disclosures that are outside of the materiality assessment (according to ESRS 1, paragraph 29). It includes

XBRL elements that are part of ESRS 2 and the additional IRO-1 elements in all topical standards. The validation rule is implemented with the severity WARNING, which means it will result in a WARNING when validating the XBRL report, in case for one or more XBRL elements no tags are found.

112. The third validation rule implements INFORMATION whereby the (numerical) metrics of ESRS topics are deemed to be not material when no corresponding facts exist in a XBRL report, as discussed in the methodology paper and according to ESRS 1, paragraph 34(b).

113. It is recommended to tag non-material XBRL elements with *xsi:nil*, which will not raise any validation message. This could also be used as a workaround when validation rules cause a false-positive error or warning, e.g. when a phasing-in is not considered. Following the public consultation, EFRAG has updated the validation rules to consider alternative elements (as described in paragraph 95) and ESRS phasing-ins. An example of alternative elements is 'Number of employees (head count), at end of period' and 'Number of employees (head count), during period', hence only one of them needs to be reported. These types of elements have the 'Alternative' reference part with the name of the alternative element. Similarly, ESRS phasing-ins elements have 'PhaseIn' reference part e.g. 'Disclosure of most common types of non-employees, their relationship with undertaking, and type of work that they perform [text block]' with a 1-year phase-in period.

Validation Rule	Unsatisfied message	xsi:nil fact accepted	Severity
EU Datapoints	No tag found for '{label}' ({qname}). According to ESRS 1 paragraph 35, undertakings shall always disclose the information datapoint that derives from other EU legislation listed in Appendix B of ESRS 2.	Yes	ERROR
Outside MA	No tag found for '{label}' ({qname}). According to ESRS 1, paragraph 29, undertakings shall always disclose the information required by ESRS 2 *General Disclosures* and the Disclosure Requirements in topical ESRS related to the Disclosure Requirement IRO-1. Phase-in provisions in accordance with Appendix C of ESRS 1 might be applied.	No	WARNING
Metrics not material	According to ESRS 1, paragraph 34(b), the following metric '{label}' ({qname}) is not tagged in the report and is therefore deemed to be not material. Phase-in provisions in accordance with Appendix C of ESRS 1 might be applied.	Yes	OK

114. A review of the implemented validation rules (and their potential enhancement) is necessary as soon as real disclosures are available to ensure their practicability and avoid false positive validation messages, which might lead to confusion and to discussions with assurance

providers when reviewing the XBRL reports. As part of the consultation responses, stakeholders proposed to consider phase-in provisions in the validation rules, which EFRAG implemented in the proposed taxonomy using a global parameter that is evaluating the *esrs:ReportingPeriodStartDate* fact value.

115. After the public consultation, a number of additional validation rules suggested by the respondents were implemented. They are mainly technical validation rules, supporting preparers in setting the right units and providing correct values. A list of these additional validation rules can be found below. One respondent to the public consultation suggested grouping the validation rules by topic, and only evaluating if topic is actually material for the company. This approach could be implemented in a future version of the taxonomy.

Validation Rule	Unsatisfied message	Severity
IRO IDs consistency	The IDs '{label}' ({qname}) are not existing in at least one typed dimension '{listoftypeddimensions}'	WARNING
Policy IDs consistency	The IDs '{label}' ({qname}) are not existing in at least one typed dimension '{listoftypeddimensions}'	WARNING
Target IDs consistency	The IDs '{label}' ({qname}) are not existing in at least one typed dimension '{listoftypeddimensions}'	WARNING
Action plan IDs consistency	The IDs '{label}' ({qname}) are not existing in at least one typed dimension '{listoftypeddimensions}'	WARNING
Energy unit	According to the Disclosure Requirement E1-5, paragraph 37 and 39 the '{label}' should be reported in utr:MWh. The unit for the fact ({qname}) is set to ({unit}) instead.	WARNING
Volume unit	According to the Disclosure Requirement E3-4, paragraph 28 and 29 the '{label}' should be reported in utr:m3. The unit for the fact ({qname}) is set to ({unit}) instead.	WARNING
GHG emissions unit	According to the ESRS E1-4, E1-6, E1-7 and E1-8, the '{label}' should be reported in utr:tCO2e. The unit for the fact ({qname}) is set to ({unit}) instead.	WARNING
Positive fact values	The fact value {value} for element '{label}' ({qname}) is below 0 for period with end date {end date}, and unit {unit}. The value is supposed to be reported as a positive, the sign attribute can be used to present it with a negative value in the Inline XBRL report.	WARNING
Dimensional breakdowns	The dimensional breakdowns of the element '{label}' ({qname}) do not add up to the total of {value}, for reporting period with end date {end date}, and unit {unit}	WARNING

Dimensional breakdown – sum to 100%	The dimensional breakdowns of the element '{label}' ({qname}) do not add up to 100%, for reporting period with end date {end date}, and unit {unit}	WARNING
Dimensional breakdowns – value chain	The dimensional breakdowns for 'Upstream value chain [member]', 'Downstream value chain [member]' and 'Own operations [member]' do not add up to the total of {value} for the element '{label}' ({qname}), for reporting period with end date {end date}, and unit {unit}	WARNING
Estimated values	The estimated value of the element '{label}' ({qname}) is lower (higher) than the reported minimum (maximum) value, for reporting period with end date {end date}, and unit {unit}	WARNING
Percentage of employees	The elements 'Percentage of employees under 30 years old' (esrs:PercentageOfEmployeesUnder30YearsOld), 'Percentage of employees between 30 and 50 years old' (esrs:PercentageOfEmployeesBetween30And50YearsOld) and 'Percentage of employees over 50 years old' (esrs:PercentageOfEmployeesOver50YearsOld) do not add up to 100%, for reporting period with end date {end date}, and unit {unit}	WARNING
Number of employees (head count), during period	The elements 'Number of employees (head count) under 30 years old, during period' (esrs:NumberOfEmployeesHeadCountUnder30YearsOldDuringPeriod), ' Number of employees (head count) between 30 and 50 years old, during period' (esrs:NumberOfEmployeesHeadCountBetween30And50YearsOldDuringPeriod) and ' Number of employees (head count) over 50 years old, during period' (esrs:NumberOfEmployeesHeadCountOver50YearsOldDuringPeriod) do not add up to the value of the element 'Number of employees (head count), during period' (esrs:NumberOfEmployeesHeadCOuntDuringPeriod), for reporting period with end date {end date}, and unit {unit}	WARNING
Number of employees (head count), at end of period	The elements 'Number of employees (head count) under 30 years old, at end of period' (esrs:NumberOfEmployeesHeadCountUnder30YearsOldAtEndOfPeriod), ' Number of employees (head count) between 30 and 50 years old, at end of period' (esrs:NumberOfEmployeesHeadCountBetween30And50YearsOldAtEndOfPeriod) and ' Number of employees (head count) over 50 years old, at end of period' (esrs:NumberOfEmployeesHeadCountOver50YearsOldAtEndOfPeriod) do not add up to the value of the element 'Number of	WARNING

	employees (head count), at end of period' (esrs:NumberOfEmployeesHeadCountAtEndOfPeriod), for reporting period with end date {end date}, and unit {unit}	

116. EFRAG proposes introducing additional validation rules and consistency checks in the XBRL taxonomy in the coming years to foster high-quality digital disclosures and help preparers who incorrectly use the XBRL taxonomy (see, for instance, section 9.6.).

117. As respondents to the public consultation pointed out, the ESRS taxonomy currently does not implement any cross-taxonomy validations, e.g. between the ESRS and the IFRS Accounting taxonomy. An example would be a cross-check of the revenue reported in the financial statements and in the ESRS statements. Those validation rules should be implemented by ESMA as part of the ESEF taxonomy, since it will have access to both taxonomies.

9.9. Entity-specific and additional digital disclosures ('Other', MDR-M and additions)

118. In the XBRL taxonomy, starting with the materiality assessment, IROs, policies, actions and targets, (as of ESRS 2 MDR) are implemented as typed dimensions, which provides a flexible and simple way of preparing the digital ESRS statements. This implementation reduces the need for highly complex and error-prone XBRL taxonomy extensions and can be consumed by users of the digital disclosures without understanding and processing a digital taxonomy. EFRAG included the names of different disclosure aspects (e.g., name or identifier of policy) as separate XBRL elements wherever possible, in order to allow for tagging in human-readable format, while the typed dimension could have a technical identifier independent from the language and more stable across reporting periods. The use of typed dimensions for IROs, policies, actions and targets is illustrated in IAI 3.

119. The XBRL elements provided for the ESRS 2 MDR-Metrics allow one to digitally tag entity-specific metrics that are not defined in the ESRS, using a generic decimal or percent XBRL element and a typed dimension.

120. Whenever the standard provides the implementation of 'other' as part of a list of pre-defined aspects that are implemented as explicit dimensions, the XBRL taxonomy has an element for other implemented (e.g., 'Other decarbonisation levers [member]', 'Other GHG category [member]', 'Gender other than female and male [member]', etc.).

121. Furthermore, undertakings' additions to ESRS datapoints can be captured in two ways by digital tagging. The Level 1 narrative parent XBRL element can be used to tag complete Disclosure Requirements, including additions not covered by any of the children tags in its hierarchy. This allows analysts to get a full picture of the disclosure objective, including undertakings' specific additions, and secondly it allows them to implicitly identify aspects that are not based on any of the sub-datapoints in the hierarchy.

IAI 5: Illustration of application requirements on disclosures stemming from other legislation or generally accepted sustainability reporting standards and frameworks

Undertakings' narrative disclosures stemming from other legislation or generally accepted sustainability reporting standards and frameworks (ESRS 1, paragraph 114) can be tagged with the 'Disclosure of other material and (or) entity-specific information to enable users understand undertaking's sustainability-related impacts, risks or opportunities [text block]' element. The typed dimension for the 'Identifier of impact, risk and opportunity [typed axis]' should be used to link the disclosure to an IRO. The most appropriate ESRS sub-topic should be selected and digitally tagged for each instance of the XBRL elements above, or 'Other'.

Metrics stemming from other legislation or generally accepted sustainability reporting standards and frameworks should be tagged with the generic MDR-M XBRL elements in combination with the typed dimension, separating each metric (see IAI 3).

In both cases, the element 'Name and reference to other legislation or generally accepted sustainability reporting standards and frameworks' should be tagged.

If applicable, the Level 1 textblock tag of the related ESRS disclosure requirement should be tagged on the disclosure as well.

122. In the second approach, the methodology foresees the introduction of an additional 'other' XBRL element for every level of the hierarchy. This has been implemented by EFRAG with a technical approach. The introduction of the 'Disclosure of other material and (or) entity-specific information to enable users understand undertaking's sustainability-related impacts, risks or opportunities [text block], which can be used in conjunction with a typed dimension for an IRO, and a semi-narrative enumeration for sustainability matters that links the digital tag to an ESRS topic, sub-topic, or sub-subtopic will enable users to capture the semantic meaning of an entity-specific disclosure and to map it onto the corresponding Disclosure Requirements. The XBRL taxonomy further includes 'other' elements (members) per subtopic in that enumeration list to help users identify entity additions to datapoints for certain subtopics.

IAI 6: Illustration of application instructions on entity-specific disclosures and taxonomy extensions

In general, the ESRS XBRL Taxonomy minimizes the need for entity-specific XBRL taxonomy extensions by using various mechanisms (providing voluntary disclosure elements, typed dimensions, other disclosure tags, custom metrics with MDR-M). In general, the ESRS XBRL Taxonomy minimises the need for entity-specific XBRL taxonomy extensions by using various mechanisms (providing voluntary disclosure elements, typed dimensions, other disclosure tags, custom metrics with MDR-M).

Undertakings' narrative additions to ESRS datapoints or entity-specific narrative disclosures should be tagged with the 'Disclosure of other material and (or) entity-specific information to enable users understand undertaking's sustainability-related impacts, risks or opportunities [text block]' element. If the disclosures are additions to ESRS datapoints, the parent narrative tag of the hierarchy (at least Level 1) could be also tagged. The typed dimension for the 'Identifier of impact, risk and opportunity [typed axis]' should be used to link such additional disclosure to an IRO. The most appropriate ESRS sustainability matter should be selected as fact value for *esrs:SustainabilityMattersRelatedToImpactsRisksAndOpportunities*, including the use of other sub-topic, and digitally tagged for each instance of the XBRL elements above.

Entity-specific metrics and their amounts (ESRS 1, paragraph 11) should be tagged with the generic MDR-M XBRL elements in combination with the typed dimension 'Name(s) of metrics [typed axis]', separating each metric.

If the XBRL taxonomy extensions are nevertheless to be created, or third-party taxonomy tags are used, re-creation of the presentation linkbase should be avoided whenever possible. Instead, XBRL elements should be introduced as parent-child elements below existing elements in the presentation hierarchy, as provided in the 'esrs_all.xsd' entry point.

Usage of the anchoring mechanism for entity-specific XBRL extensions as defined in the ESEF Reporting Manual, connecting a wider or narrower anchor to the extension element should be considered.

123. With the given implementation of the XBRL taxonomy, the need for entity-specific XBRL taxonomy extensions is minimised. If those are still to be considered, it is important to note that the ESRS XBRL Taxonomy does not require defining a completely new presentation linkbase. Instead, XBRL elements can be added to the presentation linkbase.

9.10. Incorporation by reference

124. ESRS 1, chapter 9.1 and ESRS 2, BP-2 paragraph 16 describe a way in which incorporation by reference can be done by preparers. Paragraph 16 of BP-2 requires the disclosure of a list of those Disclosure Requirements or datapoints that 'have been incorporated by

reference'. However, given the conditions for incorporation of information by reference, listed in paragraph 120 of ESRS 1, which requires inter alia that the disclosures incorporated by reference 'meet the same technical digitalisation requirements as the sustainability statement' and therefore tagging of the incorporated parts, it would only be possible to a certain degree to use incorporation by reference in an XBRL report. In particular, the following conditions should be met:

(a) All disclosures of ESRS statements are part of one Inline XBRL document set.[37] The XBRL specification allows for multiple XHTML documents to be considered as one set. In practice, it means that a single *Inline XBRL Report Package*[38] can contain multiple tagged XHTML documents. However, incorporating disclosures from another source, e.g., by providing a link to a PDF on a webpage that is not tagged, will not be possible.

(b) Single datapoints (and, in particular, narrative disclosures) can freely be tagged with their corresponding XBRL elements as long as it is part of the same Inline XBRL document set (see above). For instance, a digital tagging of a particular text block can be done in the notes to the financial statements instead of the dedicated section in the management report – as long as the ESRS allows it.

(c) The Inline XBRL 'continuation' feature[39] allows for the combination of fragments of narrative disclosures into a single fact value. However, due to the potentially missing context, this functionality should be used carefully.

[37] https://www.xbrl.org/specification/inlinexbrl-part1/rec-2013-11-18/inlinexbrl-part1-rec-2013-11-18.html#d1e533

[38] https://www.xbrl.org/Specification/report-package/REC-2023-09-22/report-package-REC-2023-09-22.html#inline-xbrl-report-package

[39] https://www.xbrl.org/specification/inlinexbrl-part1/rec-2013-11-18/inlinexbrl-part1-rec-2013-11-18.html#d1e1266

IAI 7: Illustration of application instructions on a single Inline XBRL report package and incorporations by reference

The sustainability statements being tagged with the ESRS XBRL taxonomy (and potentially Article 8 XBRL taxonomy) should be provided in a single Inline XBRL Report Package, according to chapter 3.1 of the Report Package specification 1.0.

When incorporations by reference are used, all digitally tagged ESRS statements and disclosures need to be part of a single Inline XBRL document Set, optionally having more than one XHTML document and should be provided in this single Inline XBRL Report Package.

The conditions for such incorporation, set in ESRS 1 paragraph 120, do not allow the incorporation of disclosures from any source or document outside of the Inline XBRL Document set (e.g. information provided on the webpage of the company or in a separate PDF).

Inline XBRL continuations provide flexibility in order to incorporate single disclosures by reference from different sections of the report, however those should not be used excessively and should be applied carefully in order not to lose the context of information provided.

125. Given the considerations above, if ESRS statements are completely digitally tagged, no specific disclosure for ESRS 2 BP-2 paragraph 16 has to be made. Therefore, no XBRL element has been implemented for this paragraph.

9.11. Connectivity with financial reporting

126. The availability of the three XBRL taxonomies (IFRS Accounting Taxonomy, ESRS Taxonomy, and Article 8 Taxonomy) embedded into the ESEF Regulation will create an ecosystem of data from EU companies accessible through the European Single Access Point (‘ESAP’). In this context, digital technology may play an important role in the connectivity. Some potential aspects in this regard are (considering that apply IFRS for their financial statements):

(a) the creation of individual elements or even their specific data type classification [i.e., monetary elements such as ‘assets at physical risk’] within the sustainability taxonomy, which will facilitate the usability of data related to the point of connectivity with financial statements;

(b) the potential creation of interoperability between the three taxonomies (i.e., reusing elements of the IFRS Accounting Taxonomy into ESRS or Article 8 Taxonomy, e.g., Revenue/Turnover and Assets); If it is not possible to re-use elements across XBRL taxonomies, cross-checks of the fact values should be implemented using XBRL Formula validations whenever appropriate;

(c) the presentation of anticipated financial effects of sustainability matters (ESRS), which could be disclosed based on financial statement line items combined with an ESRS

dimension (e.g., 'anticipated financial effect through climate change long-term/medium-term/short-term'; see appendix A1.9 in this document below); and

(d) the reconciliation of financial statement items and operating segments with ESRS Sectors and related datapoints (e.g., Revenue in ESRS 2 SBM-1, paragraph 40 b)).

127. More research work is necessary in this area in the future, once the first reports become available, to fully exploit the potential of digital connectivity[40]. The research to be done should cover the question companies reporting with local GAAPs can implement digital connectivity with financial statements.

9.12. Interoperability with other sustainability-related reporting standards

128. Digital interoperability of the ESRS with other sustainability-related reporting[41] represents an important objective for EFRAG. This reflects the need of preparers and users to respectively prepare and access data interchangeably between different XBRL sustainability taxonomies, with limited effort.

129. A digital concordance table has been identified as a potential solution to avoid double tagging for preparers and to make it so that digital ESRS statements (or parts of those) to be tagged with the XBRL taxonomy comply with other standards, Indeed, the digital concordance table aims to show the direct relationships between XBRL taxonomy elements and the corresponding XBRL elements representing other standards.

130. However, a digital concordance table will be based and defined once the standard setters reach, first, a joint agreement on the respective alignment of the "human-readable" standards at the datapoint level[42]. Indeed, interoperability needs to be assessed at the most granular level, corresponding to a single XBRL element (or datapoint); every paragraph has been digitally converted into several elements (or datapoints) that might be implemented differently into the respective XBRL taxonomies, reflecting the wording of the standard and/or the decision behind the level of datapoints' separation which might result into the creation of different XBRL elements[43].

131. An additional (and not less relevant) consideration in the preparation of the digital concordance table is the comparison between the data modelling adopted by the respective XBRL sustainability taxonomies which might lead to a different level of configuration of the

---

[40] EFRAG has established a project on the Connectivity between Financial and Sustainability Reporting, where this topic is being considered.

[41] Mainly with standards like the IFRS sustainability-related Disclosure Standard (hereafter: 'IFRS S1 and S2'), the Global Reporting Initiative (hereafter: 'GRI') and the Carbon Disclosure Project (hereafter: 'CDP')

[42] In this regard, please refer to the interoperability guidance published by the IFRS Foundation and EFRAG on 2 May 2024 and available at the following link https://www.efrag.org/en/news-and-calendar/news/ifrs-foundation-and-efrag-publish-interoperability-guidance. This guidance represents a good starting point to develop a digital concordance table between EFRAG and IFRS Foundation on the sustainability information.

[43] ESRS XBRL Taxonomy Architecture and Methodology, page 10, https://www.efrag.org/system/files/sites/webpublishing/Meeting%20Documents/2302240950097339/04.02%20-%20Draft%20ESRS%20XBRL%20Taxonomy%20Architecture%20and%20Methodology%20%28final%29.pdf

tagging system. The digital implementation of the detailed requirements through a model which combines explicit and typed dimensions, enumerations and individual elements is another relevant aspect to be further investigated to reach the digital interoperability.

132. From a digital standpoint, a detailed concordance table has been considered a valid approach to reach interoperability at the machine-readable level as well. Such a concordance table could be implemented in a new digital concordance mechanism, that XBRL International plans to develop together with the standard setters. EFRAG is happy to collaborate with XBRL International, and the work is expected to start in the third quarter of 2024.

Appendix 1: Specific technical implementation details

A1.1. Labels of the XBRL elements

133. The ESRS XBRL Taxonomy includes labels for each XBRL element, with different roles. Each element is equipped with a standard label that contains a short description of the ESRS data point reflecting the ESRS text. Moreover, some specific elements have additional labels, such as total labels, or guidance/documentation labels with supplementary information on how the element is supposed to be used, or in which unit a value should be presented.

134. A number of respondents in the public consultation raised the idea that the labels should include the full text of the ESRS. EFRAG considers this to be unfeasible due to technical reasons, but also practically: navigating the XBRL taxonomy does not replace reading the ESRS Disclosure Requirements and their ARs. A reference to the ESRS text (indicating the ESRS standard, the Disclosure Requirement and the relevant paragraph) and a hyperlink have been included in the reference linkbase for elements that serve to tag the disclosed information, with a view to improve the taxonomy's usability.

A1.2. Semi-narrative elements (Boolean and enumeration elements)

135. EFRAG created additional element types, specifically *Booleans* and *enumerations* (also known as categorical elements). The *Boolean* corresponds to a 'true' or 'false' disclosure. The *enumeration* is a predefined list (like a 'drop-down menu') created in the taxonomy that will facilitate the option to be selected from this list of items by choosing the most appropriate element (single choice) or more elements (multiple choices).

136. The creation of these element types in the taxonomy is expected to improve the usability and comparability of information. Indeed, part of the detailed requirements (within a DR) can be easily converted into *Booleans* and *enumerations* by enabling the simplification of the digitalisation (from the preparer's perspective) and, at the same time, by supporting the usability of the data (from the user's perspective).

137. Regarding *Booleans*, there are different reasons for the creation of such elements in the taxonomy. EFRAG has created three different categories of *Booleans*:

(a) *Simple Boolean*: this data type element has been created in the taxonomy in order to reflect the detailed requirements within a DR associated with the use of 'whether' (i.e., 'The undertaking shall specifically disclose whether it has adopted (…) sustainable land/agriculture practices or policies', as in ESRS E4, E4-2 paragraph 24 b)). This structure has been intentionally designed by the standard-setter to avoid boilerplate language and to easily convert/digitalise it into a 'true' or 'false' selection. In case the standard requires a disclosure of 'whether and how' (i.e., 'whether and how the administrative, management and supervisory bodies are informed about the views and interests of affected stakeholders with regard to the undertaking's sustainability-related impacts', as in ESRS 2, SBM-2 paragraph 45 d)), EFRAG proposes two distinct elements in the taxonomy according to the methodology adopted in April 2023:

- a *Boolean* implemented to cover the 'whether', and
- a *text block* implemented to cover the 'how'.

(b) *Narrative (or Conditional)] Boolean*: this data type element has been created in the taxonomy to reflect the detailed requirements within a DR that require a positive or negative confirmation (i.e., 'where the undertaking has no such procedures in place, it shall disclose this fact', as in ESRS G1, G1-3 paragraph 19). Such a requirement can be easily converted into a *Boolean* element by avoiding the creation of a text block and, at the same time, by improving the level of data comparability; and

(c) *Technical Boolean*: this data type element has been created in the taxonomy in order to be able to connect different pieces of information (i.e., 'The undertaking shall specify actions and resources in relation to areas at water risk, including areas of high-water stress', as in ESRS E3, E3-2 paragraph 19). The creation of a *technical Boolean* facilitates the search filter associated with relevant information. Regarding the enumeration, this data type element responds to a particular structure of the DR that can be easily converted into a list of elements to be selected by the preparers (i.e., list of topics, sub-topics and sub-subtopics pursuant to ESRS 1 AR 16).

138. EFRAG tested the tagging of *Booleans* (see the tagged illustrative reports) and did not see a significant effort needed to tag a human-readable sentence with a *Boolean*. Also, *Booleans* are already used in XBRL reporting in EBA- and EIOPA-related XBRL taxonomies.

IAI 8: Illustration of application instructions on the tagging of Boolean elements

Tagging *Boolean* elements with True or False fact values does not require the inclusion of the phrase 'yes' or 'no' (or the technical equivalent values true, false or 1, 0) in the human readable report. Instead, it is possible to tag *Boolean* facts with a true or false value by using the Inline XBRL transformation 'fixed-true' or 'fixed-false'. The *ix:nonFaction* element should therefore span the human-readable text with the positive or negative disclosures, as shown in the example below:

<ix:nonNumeric name="esrs:UndertakingIsExcludedFromEUParisalignedBenchmarks" id="fact-1" format="ixt5:fixed-true" contextRef="c-1" > The group is excluded from the EU Paris aligned benchmarks. </ix:nonNumeric>

139. The list of certified XBRL software tools shows that most products support the Extensible Enumerations 2.0 specification, which is relevant for the semi-narrative multi-choice drop-down menus[44].

140. As part of the public consultation responses, EFRAG received a number of comments indicating that it is not clear for some *Boolean* elements when and when not to disclose information based on assigning either 'true' or 'false' values unless other options are also contemplated. This is mainly because the elements provide two conditions in the label (example: 'Policy addresses sustainable sourcing and use of renewable resources'), yielding in turn binary responses only, True or False, without further ado. In order to address this issue, EFRAG has revised some of the labels in the proposed taxonomy and used 'and (or)' where applicable to allow for cases where neither one of those two options (True or False) can be said to fully and accurately apply.

IAI 9: Illustration of application instructions on the tagging of Boolean elements with compound subjects or objects

The labels of certain Boolean elements in the ESRS Set 1 XBRL Taxonomy include compound subjects or objects. An example of such a case is the requirement of ESRS 2 paragraph 40 d) iv), which requires undertakings to disclose whether they are active in the cultivation and production of tobacco. Since an undertaking could potentially be active in either the production or the cultivation of tobacco, in both of them, or in none, the label of the corresponding Boolean element has been phrased as 'Undertaking is active in cultivation and (or) production of tobacco'. When tagging this Boolean with a True value, however, it is not directly clear whether the undertaking is active in both cultivation and production, or only in one of those. For this reason, when tagging such Booleans with compound conditions, preparers should explain in the respective textwhich conditions apply to them.

[44] https://software.xbrl.org/

141. Some other respondents to the public consultation pointed out that negatively phrased *Booleans*, such as 'Measurable outcome-oriented targets have not been set', could also be ambiguous, since both values could be disclosed such as 'Yes, measurable outcome-oriented targets have not been set' as well as 'No, measurable outcome-oriented targets have been not set'. Instead of rephrasing the labels of those elements, EFRAG suggests to not think of *Booleans* as questions to be answered with a positive or negative answer, but rather as statements to be either confirmed or contradicted. With such a reasoning, the interpretation of the values of a *Boolean* is more straightforward. Rephrasing the labels might also be confusing since they would no longer reflect the Disclosure Requirements.

142. A list of *conditional and technical Booleans* was discussed in the EFRAG SR TEG meetings on 22 November and 5 December 2023.[45] EFRAG provided a methodology on how those *Booleans* should be reflected in the XBRL taxonomy, when the text of ESRS does not contain 'whether and how'.

143. Following the due process, EFRAG decided to keep the *Booleans* of datapoints that require an explicit 'negative or positive confirmation' and to remove all the remaining conditional *Booleans* from the ESRS Set 1 XBRL Taxonomy.

144. Some respondents in the public consultation raised concern over the question, where undertakings could provide contextual narrative information and explanation on the reported *Boolean* fact value. XBRL enables two ways of conveying additional narrative disclosures with true/false disclosures:

    (a) When tagging the true/false value using a transformation, the text conveying the human-readable positive or negative statement can be used to describe the approach. In this case, the *nonFraction* Inline XBRL tag should span the text of the statement.

    (b) The parent textblock (in the presentation linkbase) tag can be used to capture the additional information. This includes the 'how' narrative textblock element that often accompanies *Boolean* elements.

145. After a voluntary Q&A session on 29 and 30 November with EFRAG SR TEG members and a detailed discussion, EFRAG agrees with the counterproposal of change in classification from KEEP to REMOVE in three cases related to ESRS E1. The reclassification of these 3 elements is justified by the following conditions/criteria:

    (a) the presence of another element in the taxonomy that covers the same information, and

    (b) the low potential usability of these *Booleans* for users.

146. EFRAG removed the *Boolean* XBRL elements in question.

[45] See Agenda Point 03, Appendix A: https://efrag.org/Meetings/2305101050307353/EFRAG-SR-TEG-Meeting-05-December-2023

147. In theory, a new XBRL data type could be introduced that combines a narrative tagging in an Inline XBRL report with a *Boolean* attribute. That way, a combined XBRL element for each 'whether and how' could be implemented. EFRAG will continue to investigate if this approach is feasible and technically possible and whether it would most likely require a new XBRL specification, which takes a certain amount of time to be adopted by the market.

IAI 10: Illustration of application instructions on the tagging of enumeration elements

Enumeration elements are basically reflecting 'drop-down' menus, either single choice (item type *enumeration*) or multi-choice (*enumerationSet*). The 'drop-down' options in the form of explicit dimension members are provided in the Definition Linkbase of the XBRL taxonomy (starting with the prefix '*Enumeration:*').

The tagging of *enumerationSet* should always contain at least one option being set; empty *enumerationSet* elements should be avoided.

The tagging of enumeration elements does not require the inclusion of the technical names of the selection in the human-readable part of the XHTML document;a dedicated transformation '*enumeration*' provided by XBRL International in the transformation registry (TRR) can be used.

Before the official transformation is moved to recommendation status and can be applied by software tools, the fact value can be provided in the *ix:hidden* section of the Inline XBRL document, which is not visible when rendering in a web browser. In order to keep the link to the human-readable disclosure that contains the options selected, a CSS class with a specific prefix as defined in the ESEF Reporting Manual (Guidance 2.4.1) should be used (simplified example below):

```
<header>
  <ix:hidden>
    <ix:nonNumeric name="esrs:BasisForPreparationOfSustainabilityStatement" id="fact-2" contextRef="c-1" >https://xbrl.efrag.org/taxonomy/draft-esrs/2023-07-31#IndividualMember</ix:nonNumeric>
</ix:hidden>
</header>
<body>
  <p style="-esef-ix-hidden:fact-2">The sustainability statements of The Group have been prepared on an individual basis.</p>
</body>
```

148. As part of the public consultation, a number of respondents raised concerns that the tagging of enumeration and *Boolean* elements leads to a difference in the human-readable report and the machine-readable XBRL report. This seems to be based on the assumption that the enumeration and *Boolean* fact values are tagged in the hidden section of the Inline XBRL report – which hides its technical values from the face of the XHTML report. It must be noted that this approach, which is common practice in many other tagging frameworks, such as the US SEC, is not mandatory. It is, of course, possible to provide the technical true/false

and enumeration fact values in the human-readable XHTML layer. This approach is illustrated in the tagged illustrative examples of XBRL reports for ESRS 2, BP-1, e.g. for element esrs:UndertakingIsNotRequiredToDrawupFinancialStatements.

A1.3. Paragraphs not implemented as reportable XBRL elements in the XBRL taxonomy

149. The ESRS IG 3 list of ESRS datapoints (as well as the ESRS XBRL Taxonomy) has dedicated and separate items only for separate disclosures. Those datapoints are often indicated by the term 'shall disclose' or 'may disclose' in the ESRS. ESRS 1, as well as paragraphs and ARs that provide objectives, methodological or other aspects that are to be considered when disclosing ESRS statements, are not considered as separate datapoints.

150. The following examples illustrate how a decision has been made concerning whether a certain paragraph is to be considered as a separate datapoint or not:

(a) ESRS E1, paragraph 36: not a datapoint because it describes the objective of the disclosure requirement E1-5 on Energy consumption and mix.

(b) ESRS E1, paragraph AR 36: not a datapoint because it provides calculation guidance on the energy intensity ratio.

(c) ESRS E1, paragraph AR 38: implemented as a separate datapoint due to the character of the AR, which defines how the reconciliation of net revenue from activities in high climate impact sectors may be presented by the undertaking.

151. In general, the XBRL taxonomy has XBRL elements implemented for (voluntary) datapoints defined in the ARs. However, if an AR is a further specification of a narrative XBRL element based in the main body, and depending on the wording of the AR, it has not been implemented as an additional narrative XBRL element:

(a) ESRS E3, paragraph AR 22: not a datapoint because it provides guidance on possible content of the disclosure of ecological thresholds identified when setting targets.

(b) ESRS S1, paragraph AR 18: not a datapoint because it provides guidance on the possible description of function or role that has operational responsibility in the undertaking for engaging with own workforce and workers' representatives about impacts.

(c) ESRS S1, paragraph AR 65: not a datapoint because it provides guidance on the possible content of the disclosure of contextual information necessary to understand data on non-employees in the undertaking's own workforce.

152. Not all Disclosure Requirements that could be implemented using XBRL metadata (XBRL context period, ***unit***, currency, accuracy, etc.) have been implemented with dedicated XBRL elements in the taxonomy, because they can be met by setting the correct tag attributes. Examples of this include the following:

(a) S1-6, paragraph 50 d) ii) requires the undertaking to describe whether the disclosed number of employees head count is at the end of the reporting period, an average across the reporting period, or whether another calculation methodology is used. This

information could be reported using only *Booleans* or an enumeration. However, this disclosure was implemented by means of integer elements for head counts at the end of the reporting period and during the reporting period as distinct XBRL elements (see paragraph 85), so users of the digital reports will know the methodology from looking at the name of the element, and a *Boolean* element for statement on the use of another methodology. Adding only *Booleans* or an enumeration corresponding to S1-6, paragraph 50 d) ii) is therefore not required for information to be clearly conveyed.

(b) S1-16, paragraph AR 100 requires gender pay gaps to be reported for two comparative periods instead of the usual one, if it has been already disclosed in previous sustainability statements. Tagging information about an additional comparative period requires one more tag in a tagged sustainability report, which would only differ from the other gender pay gap tags by its dates that are also provided in the XBRL's context of the fact (metadata). Therefore, this requirement does not require a corresponding XBRL element, as it can be reflected in the metadata.

153. EFRAG decided to implement ranges of numerical values to be disclosed (whenever the standard explicitly allows it) as explicit dimensions (*Minimum value, Maximum value, and Estimated value* members), even if the XBRL decimal attribute could be used to provide similar information on the accuracy of the fact value. Examples of this are taxonomy elements for disclosure of anticipated financial effects in environmental standards (E1 to E5) and the XBRL elements related to emissions to air, water and soil for specific pollutants (in E2-4).

154. Accordingly, ESRS datapoints that cannot be modelled with a single XBRL element because the XBRL metadata would not allow disclosing it correctly are separated as two elements, and preparers need to choose the appropriate element (see chapter 99.4).

155. Several XBRL elements related to number of employees have been implemented with a decimal item type instead of integer in order to allow for fact values representing Full Time Equivalents (FTEs), which could be disclosed with a decimal.

A1.4. Avoidance of overlapping narrative elements and re-usage across DRs

156. Several topical ESRS include DRs that complement the ESRS 2 GOV, IRO and SBM DRs.

157. In those cases, the granular topical datapoints related to ESRS 2 datapoint are presented in a separate section of the taxonomy. However, the Level 1 text block XBRL element used for that topical DR is the same as for the ESRS 2 DR.

158. For instance, ESRS E1 Climate Change includes a 'Disclosure requirement related to ESRS 2 GOV-3 Integration of sustainability-related performance in incentive schemes' that describes several granular datapoints to be disclosed about the integration of climate-related performance in incentive schemes.

159. Granular datapoints described within the 'Disclosure requirement related to ESRS 2 GOV-3 Integration of sustainability-related performance in incentive schemes' (Disclosure Requirements in ESRS E1 Climate Change) are presented in a dedicated section of the

taxonomy, '[301000] E1.GOV-3 Integration of sustainability-related performance in incentive schemes - general'.

160. Keeping the corresponding elements in the main DRs in ESRS 2 separate from the complementary elements in topical ESRS makes it easier for preparers and users of the taxonomy to navigate the elements. Aggregating all elements corresponding to granular datapoints from all topical complements (and possibly in the future from sector-specific complements) with the topic-agnostic elements would create a confusing heap of elements.

161. However, the presence of the same Level 1 text block as parent of each section related to ESRS 2 GOV-3 grants data consumers the ability to easily retrieve all information related to the integration of sustainability-related performance in incentive schemes in a sustainability statement, if Level 1 tagging is applied.

162. Following the materiality assessment, within a single report it is likely that not all possible elements related to datapoints related to ESRS will be used. The Level 1 text block aggregating the topic-agnostic and topic-specific parts of the disclosure should therefore remain readable in the context of a specific report.

163. On an exceptional basis, individual narrative XBRL elements have been 'merged' in order to avoid ambiguous elements. Typically, those elements have multiple references in the XBRL taxonomy. Examples of those cases are the following:

XBRL Element Label	References
Description of material risks and (or) opportunities resulting from materiality assessment [text block]	• ESRS 2, SBM-3, paragraph 48 a • S1-SBM-3, paragraph 14 d • S2-SBM-3, paragraph 11 e • S3-SBM-3, paragraph 9 d • S4-SBM-3, paragraph 10 d
Explanation of how target is compatible with limiting of global warming to one and half degrees Celsius in line with Paris Agreement [text block]	• E1-4, paragraph 34e • E1-1, paragraph 16a
Explanation of relationship of significant CapEx and OpEx required to implement actions taken or planned to CapEx plan required by Commission Delegated Regulation (EU) 2021/2178 [text block]	• E1-1, paragraph 16 c • E1-3, paragraph 29 c iii • E4-3, paragraph AR 18 c
Information about resilience of strategy and business model regarding capacity to address material impacts and risks and to take advantage of material opportunities [text block]	• ESRS 2, SBM-3, paragraph 48 f • E1, SBM-3, paragraph 19 • E4-1, paragraph 13
Disclosure of how stakeholders have been involved in target-setting for each material sustainability matter [text block]	• ESRS 2, MDR-T, paragraph 80 h • ESRS S1-5, paragraph 47 a

164. Following the public consultation, EFRAG extended this approach to other XBRL elements (both narrative as well as *Booleans* and *enumerations*) in the environmental standards, where some elements have been merged and reused among environmental standards taxonomy tables, provided that the wording of the relevant paragraphs in the standard

allowed for such merging (e.g. 'Ecological thresholds and entity-specific allocations were taken into consideration when setting target'). Following this process, 61 individual XBRL elements were merged into 19 elements. The full list of such cases is provided in Appendix 3.

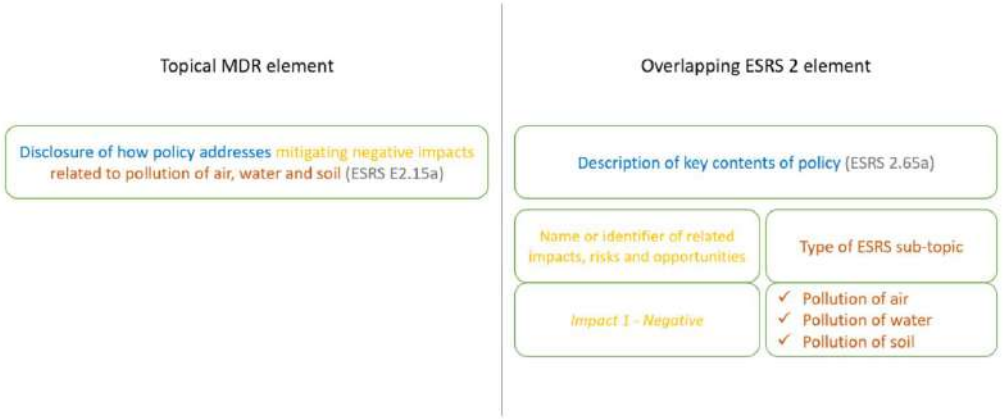
165. In order not to duplicate XBRL elements reflecting similar Disclosure Requirements in the social standards, a number of XBRL elements have been implemented with names and labels reflecting the different stakeholder groups (separated by dashes) to which they could be applied. Example: 'Disclosure of policies adopted to manage material impacts on own workforce / value chain workers / affected communities / consumers and end-users, as well as associated material risks and opportunities [text block]'. In order to differentiate the re-used XBRL elements across S1, S2, S3 and S4, an explicit topical dimension with the name and number of the relevant social standard has been introduced for those Disclosure Requirements.

166. Following the public consultation, EFRAG identified a number of additional overlapping elements between ESRS 2 MDR and the topical MDR related Disclosure Requirements.

167. While ESRS 2 sets out the MDRs with regards to Policies, Actions and Targets, often the topical ESRS add onto these requirements by specifying topic-specific disclosures.

168. One example is the requirement of ESRS 2 paragraph 65 a), which requires 'a description of the key contents of the policy', for each material policy the undertaking has adopted in order to manage material sustainability matters. In addition to this, undertakings are required under ESRS E2 paragraph 15 a) to indicate how its policies address the 'mitigation of negative impacts related to pollution of air, water and soil including prevention and control'. There is therefore certainly a clear relation between the two Disclosure Requirements, which could result in preparers tagging both elements with the same content. Figure 3 below depicts the potential overlap presented in this example.

Figure 3. In this example, the topical disclosure of ESRS E2.15a on the left can be modelled with the generic ESRS 2 element, which is used in combination with an enumeration on the sustainability matters and a link to the impact. The element for E2.15a has been removed and the MDR elements on the right have been kept.



.

169. EFRAG eliminated such overlaps by replacing the topical element with the corresponding ESRS 2 element, but strictly only when there was a complete overlap, and no detail was lost. If by removing (or replacing) such elements, some degree of detail would be lost, EFRAG kept both elements. Eliminating such details from the XBRL taxonomy elements would have been against the methodology, because it would no longer fully represent the ESRS and would decrease the usability of the data. The full list of eliminated elements is provided in Appendix 4.

170. Nevertheless, a disadvantage of this change even in cases of complete overlap is, that dedicated elements representing ESRS datapoints will be lost (as despite having two datapoints in ESRS, there would be only one tag) and the correct application of the enumeration element and the link to the IROs by preparers is now more crucial. A user might not find the elements representing a dedicated paragraph in the ESRS text and in the IG 3 in the taxonomy anymore. This could negatively affect understandability and usability of the digitally tagged data.

171. While the topical elements linked to MDRs (hereinafter: 'topical MDR elements') often provide detailed indications with regards to the required facts, the MDR elements (included in ESRS 2) are more general. The MDR elements are expected to be used in conjunction with an enumeration (multi-choice selection menu) including the sustainability matters listed in ESRS 1 paragraph AR 16, and with a link to a defined Impact, Risk or Opportunity. Additionally, a reference to the related IROs can be provided for each policy (by means of tags for name(s) and identifier(s) of the related IROs).

172. In cases where the topical MDR elements refer to a specific aspect of a sustainability matter in ESRS 1 paragraph AR 16 (therefore not explicitly included in the list of sustainability matters used for the enumeration), the EFRAG Secretariat proposes to add such matters in the enumeration as well. For example, ESRS E5 paragraph 24 requires the disclosure of 'how target relates to increase of circular material use rate'. The enumeration with sustainability matters currently only includes 'Resource inflows', 'Resource outflows related to products and services' and 'Waste' for ESRS E5, as per ESRS 1 paragraph AR 16. By including a more specific enumeration menu item for 'Circularity of products and materials', it will be possible to tag such information using the enumeration value in conjunction with the ESRS 2 element 'Description of scope of target [text block]', and achieve the same semantic meaning (i.e. allow one to specifically tag the topical MDR element).

    When such overlaps are identified, in cases where the topical element had no children in the hierarchy, it has been deleted. If the element instead had children elements in the hierarchy, it has then been made abstract. The references of the deleted elements have been added to the overlapping ESRS 2 element.

A1.5. ESRS 2 MDR on Metrics

173. The ESRS XBRL Taxonomy provides two ways in which MDR-M disclosures can be digitally tagged:

(a) as contextual disclosures on ESRS metrics (ESRS 2, paragraph 75) by providing a typed dimension that allows for the grouping of metrics and selecting their instances with an enumeration 'ESRS metric(s) and monetary amount(s) used to evaluate performance and effectiveness, in relation to material impact, risk or opportunity', which provides a list of all ESRS metrics; and

(b) by providing a mechanism to digitally tag entity-specific or additional metrics stemming from other legislation or generally accepted sustainability reporting standards and frameworks (as per ESRS 2, paragraph 76 and ESRS 1, paragraph 114). Additionally, amounts of metrics that do not have an appropriate XBRL element in the ESRS XBRL Taxonomy can be tagged with this approach as well. This approach can also be used to tag sector-specific metrics, which are not yet defined in any sector-specific XBRL taxonomy provided by EFRAG.

IAI 11: Illustration of application requirements on ESRS 2 MDR-Metrics

Contextual information on ESRS metrics, as per ESRS 2 MDR-M, paragraphs 75 and 77, should be tagged with a typed dimension ('Name of metric(s) [typed axis]' and the corresponding enumeration with all ESRS metrics. For ESRS-specific metrics, the typed dimension can be used to group those metrics (e.g., for disclosure of contextual information on all water-related metrics). The values for the ESRS metrics should be tagged with the corresponding numerical elements that are based on relevant ESRS topical disclosures.

Entity-specific metrics and their numerical values (ESRS 2, paragraph 76), disclosures that do not have an appropriate XBRL element in the ESRS XBRL Taxonomy, or additional metrics stemming from other legislation or generally accepted sustainability reporting standards and frameworks (ESRS 1, paragraph 114), should be taggedwith corresponding XBRL MDR-M elements ('Quantitative metric (absolute value)', and 'Quantitative metric (percentage)') and the typed dimension ('Name(s) of metrics [typed axis]') uniquely identifying each metric. The corresponding topic and sub-topic, as well as the related impact, risk and opportunity should be also tagged. If applicable, the XBRL element 'Name and reference to other legislation or generally accepted sustainability reporting standards and frameworks' should be used.

174. The XBRL elements provided under (a) allow for the grouping of contextual disclosures related to certain ESRS metrics in order to disclose common methodologies and assumptions (ESRS 2, paragraph 77 a)) for a group of ESRS metrics. For instance, an undertaking might want to group contextual information as of ESRS 2 MDR-M for all water-related or Scope 3 GHG emissions-related metrics. The quantitative values can be tagged with the corresponding numerical XBRL elements from each Disclosure Requirement.

175. The XBRL elements provided under *(b)* enable the digital tagging of entity-specific metrics and provide quantitative XBRL elements for the metric values. Those metrics can be linked

to topics and subtopics and to a specific IRO using the related XBRL elements to provide users of the digital disclosures with the relevant semantic and contextual information.

A1.6. ESRS E1-9 Disclosure of the location of significant assets at material physical risk

176. Paragraph AR 70 c) of ESRS E1-9 requires disclosure of the location of significant assets at material physical risk with ***NUTS*** codes. The Draft ESRS XBRL taxonomy had a string element 'NUTS codes for location of significant assets at material physical risk' to cover this requirement. However, this was deemed to be insufficient to precisely identify NUTS regions[46] due to the unstructured format of the XBRL element data type. Therefore, EFRAG replaced the string element with an *enumerationSet* element (esrs:NutsCodesForLocationOfSignificantAssetsAtMaterialPhysicalRisk).

A1.7. Technical implementation of optional disaggregation (typed dimensions in open and closed hypercubes)

177. The following chapter mainly addresses the technical issue of discussing the implementation of disaggregation not explicitly foreseen in the DRs. For a better understanding of this, knowledge of the XBRL Dimension specification is required.[47]

(a) Restatements: according to ESRS 1, paragraph 84, and ESRS 2 BP-2 paragraph 13, revised figures shall be restated (i.e., the corrected numbers are supposed to be restated).

(b) Milestones and targets: according to ESRS 1, paragraph 12 d) and ESRS 2 chapter 5 'Metrics and targets', any metric can be used as a target. In some cases, the topical standards mention this explicitly (e.g., E1-4 using metrics from E1-6), but it is reasonable to assume that any measurable, timebound and outcome-oriented target can be expressed by an ESRS metric. For instance, an undertaking might decide to disclose a target on the reduction of energy consumption (E1-5), which could be expressed using the XBRL element 'Total energy consumption related to own operations'.

(c) Disaggregation by country, site location or significant asset: according to ESRS 1, paragraph 54, when needed for a proper understanding of its material impacts, risks and opportunities, the undertaking shall disaggregate reported information by country, site location or significant asset.

178. In order to implement (a) and (b), the XBRL taxonomy has introduced an explicit dimension 'Reporting scope [axis]' and 'Currently stated, baseline, milestones or target years [axis]' for every Disclosure Requirement with corresponding numerical XBRL elements (for metrics and targets). This will allow preparers to tag facts using the ESRS XBRL elements when needed with the corresponding members 'Previously stated [member]' or with the

[46] https://ec.europa.eu/eurostat/web/nuts/background

[47] https://www.xbrl.org/specification/dimensions/rec-2012-01-25/dimensions-rec-2006-09-18+corrected-errata-2012-01-25-clean.html

'Milestones and target years [member]' to avoid duplicate facts. It is not necessary to use those dimensions on narrative XBRL elements (text blocks). Users (e.g., analysts, data providers) of digital XBRL reports should notice that fact values require special handling when detecting any of those dimension members in its XBRL context.

179. Whenever a Disclosure Requirement mentions a disaggregation by country, the XBRL taxonomy includes the dedicated explicit dimension (e.g., E1-6, S1-6, S1-8, etc.). The same applies for disaggregation by site location, which is implemented for E2-4 as a typed dimension.

> **IAI 12: Illustration of application instructions on the use of the 'Reporting scope [axis]' and 'Currently stated, baseline, milestones or target years [axis]'**
>
> Dedicated members of the 'Reporting scope [axis]' should be used by preparers when tagging numerical facts as restated. When disclosing restatements of numerical facts, the 'Previously stated [member]' should be tagged to values provided before, while the 'Currently stated, corrected or revised (retrospective) [member]' should be used for values that are currently stated, corrected or revised.
>
> Dedicated members of the 'Currently stated, baseline, milestones or target years [axis]' should be used by preparers when tagging numerical facts. The XBRL period start/end or instant date of the XBRL context should be set to the actual baseline year (past), target or milestone date (future) when a target or milestone is disclosed. The disclosure requirements set in ESRS 2 MDR-T are still to be considered and targets should still be disclosed using MDR-T elements.

180. However, for the disaggregation described in *(c)*, it was considered excessive to include the country's explicit dimension and one or two typed dimensions for the site location as well as for significant assets for every reportable XBRL element in every closed hypercube. Hence, 'Country [axis]', 'Significant asset [typed axis]' and 'Significant site [typed axis']' have been applied in dedicated Roles 900001 to 900003, in order to meet requirements of ESRS 1, paragraph 54.

181. There are three options that could allow for this implicit general disaggregation:

(a) all closed hypercubes in the definition linkbase could be equipped with the additional dimensions. The presentation linkbase would not contain those dimensions in order not to overload it. This comes with the disadvantage that, due to the missing default members for typed dimensions, an 'xsi:nil' attribute would need to be set for any fact that is not disaggregated by any asset or site location, which could result in massive tagging effort;

(b) the hypercubes in the XBRL taxonomy could be defined as 'open', and the additional dimensions could be included under 'optional dimension', using a new and specific technical relationship (or arcrole). This comes with the advantage that even if the hypercubes are open, a tagging or review software could potentially indicate that only the 'optional' dimensions should be added; and

(c) if the preparers would like to further disaggregate information, they could create new hypercubes (or extend existing ones) as part of an XBRL taxonomy extension.

182. Due to the fact that the Draft ESRS XBRL taxonomy was designed in a way that minimised the need for XBRL taxonomy extensions (see paragraph 117), EFRAG proposed to implement option *(b)*, which was fully in line with the XBRL specifications. However, the consultation responses indicated that XBRL experts and software vendors had concerns about this approach. Therefore, EFRAG provided closed hypercubes in the proposed XBRL taxonomy, which will lead to more XBRL taxonomy extensions when combinations of dimensions need to be tagged that are not provided in any of the hypercubes of the XBRL taxonomy. XBRL International is currently in the process of discussing the registration of an *optionalDimension* arcrole as described in *(b)* in the Link Role Registry (LRR), which might be useful for the ESRS taxonomy if implemented in the future.

183. The E1-6 Disclosure Requirement on Gross Scopes 1, 2, 3 and Total GHG emissions requires a similar solution, since E1 paragraph AR 41 also allows for disaggregation by optional typed dimensions on *operating segments* and *subsidiary*.

IAI 13: Illustration of application instructions on dimensional disaggregations

The ESRS XBRL Taxonomy provides dedicated XBRL elements for each datapoint and dimensions for further disaggregation, so that each fact of an XBRL instance document can be uniquely identified. Inconsistent duplicate facts should not be tagged.

When combinations of dimensions needed for tagging are provided in any valid hypercube of the ESRS XBRL Taxonomy, an XBRL taxonomy extension should be created, adding this specific hypercube in the presentation and definition linkbase.

Whenever a typed dimension breakdown is not applicable for the undertaking, but is required for technical reasons, the typed dimension value element can be reported with the *xsi:nil* attribute.

184. Going forward, the EFRAG Secretariat recommends replacing or redefining the following typed dimensions with explicit dimensions, in order to improve the comparability of the digital disclosures. This could be done by introducing appropriate standards or classifications for the items in the table below, which would replace ‘entity-specific’ tagging with predefined items in the ESRS XBRL Taxonomy.

Typed dimension name	Reference	Comment
Geographical area [typed axis]	G1-5 29 b).i;.ESRS 2. SBM-1 40 a)..iii;.G1-6.AR 16; E2-4.AR 22	Used for various disclosures. A dedicated standard to capture geographical areas should be introduced. However, in case of its absence it would be possible to use regions based on NUTS codes for all EU geographical areas, and countries at least as an approximation for non-EU geographical areas.

Region [typed axis]	ESRS S1-6 51; G1-3 AR 7; S1-6 52 a) and 52 b); S1-8 60 c)	Used for various disclosures. NUTS codes for EU regions, countries and/or another standard for non-EU regions should be implemented.
Ecological status of areas [typed axis]	E4 SBM-3 16 a)	Material impacts, risks and opportunities and their interaction with strategy and business model - breakdown of sites.
Name of recognised quality standard [typed axis]	E1-7 AR 62 c)	Percentage of carbon credits cancelled for recognised quality standard.
Energy efficiency class [typed axis]	E1-9 67 c)	Anticipated financial effects from material transition risks - real estate assets.
Type of source [typed axis]	E2-4 AR 22	Pollution source types.
Type of ecosystem [typed axis]	E4-5 41 and AR 37	Material impacts related to ecosystems.
Type of recipient or beneficiary [typed axis]	G1-5 29 b)	Financial and in-kind political contributions made by type of beneficiary.
Employee category [typed axis]	S1-13 84 and S1-16 98	Training and skills development metrics by employee category and gender pay gap.
Supplier category [typed axis]	G1-6 33 b) and AR 16	Standard payment terms.

185. For the typed dimension ‘Site location’ it might not be possible to implement it as an explicit dimension, but enriching it with digital information on the location, e.g. by classifying its region and adding a human-readable name and/or address should be considered.

A1.8. Tagging of BP-2 information on metrics and their fact values

186. The Disclosure Requirement of ESRS 2 BP-2 on value chain estimation and sources of estimation and outcome uncertainty can be tagged using typed dimension ‘Name(s) of metrics [typed axis]’, which has been introduced in the proposed taxonomy based on a public consultation response. By grouping the disclosures and affected XBRL metrics with a typed dimension, the information can be made available in a consolidated way. As an alternative, fact-to-fact relationships can be used as described below to indicate if very specific fact values are related to value chain estimation and sources of estimation and outcome uncertainty.

A1.7. Using fact-to-fact relationships for ESRS 2 GOV-4, BP-2, and ESRS 1

187. Several DRs require the identification of metrics or disclosures within the ESRS statements. Technically, this is usually modelled with the use of dimensions, e.g., as in the case of targets and restatements. However, in some cases the implementation of dimensions or specific elements seems to be inappropriate.

188. Instead, a specific XBRL mechanism can be used that allows for the linking of digital tags together in an XBRL report or to provide a footnote with a specific meaning. The XBRL 'arc roles' allow for the formal definition of those relationships. EFRAG provided the arcrole definitions as part of its proposed ESRS XBRL Taxonomy schema files. It must be noted that the arcroles are not to be compared to an XBRL element in the XBRL taxonomy. Therefore, their usage can only be enforced with a tagging rule.

IAI 14: Illustration of application instructions on the use of fact-to-fact relationships in XBRL reports

When tagging digital ESRS disclosures, specific fact-to-fact (or fact-to-footnote) relationships (arcroles), should be used in order to link facts together (see table below). Those arcroles should not be used as a replacement of the centralized disclosures of ESRS 2 BP-2, but should be used in conjunction with it.

189. Arcroles can also be used to only 'mark' certain facts with a semantic meaning. For instance, if a preparer would like to mark a single fact in a specific reporting period and not all the facts related to a specific XBRL element in general as being validated by an external body, the centralised disclosure would not allow for it, but the related arcrole enables such information to be marked.

190. The following list of arcroles should be used when digitally tagging with the XBRL taxonomy.

Arcrole	Description	Related XBRL element	Reference
fact-valueChainEstimation	Arcrole for linking facts to an explanatory fact that is supposed to be used when value chain estimated data is disclosed.	Description of basis for preparation of metrics that include upstream and (or) downstream value chain data estimated using indirect sources [text block] Description of resulting level of accuracy of metrics that include upstream and (or) downstream value chain data estimated using indirect sources [text block] Description of planned actions to improve accuracy in future of metrics that include upstream and (or) downstream value chain data estimated using indirect sources [text block]	ESRS 2, BP-2 Paragraph 10.
fact-outcomeAndMeasurementUncertainty	Arcrole for linking facts to an explanatory fact that is supposed to be used when the fact value is affected by measurement and outcome uncertainty.	Information about sources of measurement uncertainty [text block] Disclosure of assumptions, approximations and judgements made in metric measurement [text block]	ESRS 2, BP-2 Paragraph 11 and 12.
fact-dueDiligenceStatement	Arcrole for linking facts to an explanatory fact that is supposed to be used when the fact value covers an aspect of due diligence.	Disclosure of mapping of information about due diligence process (or cross-reference) [text block]	ESRS 2, GOV-4, Paragraph 30, ESRS 1, Paragraph 61.
fact-connectivityWithFinancialStatements	Arcrole for linking sustainability-related facts to facts from financial statements.	-	ESRS 1, chapter 9.2 paragraph 126, also paragraphs 124 (direct connectivity), 125 (indirect connectivity)
fact-connectivityOtherPartsOfCorporateReporting	Arcrole for linking sustainability-related facts to facts from other corporate reporting disclosures.	-	ESRS 1, chapter 9, paragraph 118 and 119.

fact-metricMethodologyAndAssumptions	Arcrole for linking facts of metrics in (sustainability) disclosures to the explanatory fact with the methodologies and significant assumptions behind the metric.	Disclosure of methodologies and significant assumptions behind metric(s) [text block]	ESRS 2, paragraph 77 a)
fact-validatedByExternalBody	Arcrole for linking facts to an explanatory fact with the disclosure whether and how the fact values and/or measurement of the fact values have been validated by an external body.	Type of external body other than assurance provider that provides validation [text block]	ESRS 2, paragraph 77 b)
fact-disclosuresStemmingFromOtherLegislationOrGenerallyAcceptedReportingStandard	Arcrole for linking facts to an explanatory fact with information that this sustainability statement information is stemming from other legislation that requires the undertaking to disclose sustainability information or from generally accepted sustainability reporting standards and frameworks.	-	ESRS 2, BP-2, paragraph 15

191. The arcrole fact-connectivityWithFinancialStatements could be used to link facts from the ESRS XBRL Taxonomy to the IFRS Accounting Taxonomy when financial statement items are related and tagged with this taxonomy.

192. It must be noted that the use of all different arcroles should not be compulsory, and their use should depend on how the information is presented in the ESRS statements. For instance, when a preparer chooses to use a background colour to indicate which numbers are validated by an external body, explaining this in one section of the report, the corresponding arcrole might be useful to digitise this information. If a centralised disclosure lists all metrics being validated by an external body, the arcrole might be redundant.

193. The fact that some of the arcroles, such as the arcrole representing connectivity with the financial statements, might be used to document relationships between ESRS facts and IFRS Accounting Taxonomy elements instead of their facts, should be further discussed and evaluated. As an example, the current and anticipated financial effects according to ESRS 2 SMB-3 paragraph 48 d) and e) could be implemented as an enumeration element having all the related financial statement (IFRS) XBRL elements.

194. The existing officially registered arcrole fact-explanatoryFact could also be used to connect narrative disclosures (with text block item type) to numerical or semi-narrative elements.

A1.9. Positive and negative fact values and balance attributes

195. The XBRL taxonomy provides XBRL elements for numerical disclosures of various types. While most of those numbers are expected to be disclosed as positive numbers, a few might also be provided with a negative fact value. A list of those elements is provided in the table below:

Label	Data type	Reference
Increase (decrease) in water storage	Volume	ESRS E3-4 28 d
Increase (decrease) in net revenue from low-carbon products and services or adaptation solutions to which undertaking has or may have access	Monetary	ESRS E1-9 69 b

Adjusting items to assets at material physical risk, in reconciliation with financial statement	Monetary	ESRS E1-9 AR 77 b
Adjusting items to assets at material transition risk, in reconciliation with financial statement	Monetary	ESRS E1-9 AR 77 b
Adjusting items to liabilities at material transition risk, in reconciliation with financial statement	Monetary	ESRS E1-9 AR 77 b
Adjusting items to net revenue at material physical risk, in reconciliation with financial statement	Monetary	ESRS E1-9 AR 77 b
Adjusting items to net revenue at material transition risk, in reconciliation with financial statement	Monetary	ESRS E1-9 AR 77 b

196. It must be noted that the XBRL taxonomy does not make use of any balance attribute (debit/credit) and that, instead, an additional label is included to indicate where negative numbers are expected.

197. Following the public consultation, the proposed ESRS XBRL Taxonomy has a calculation linkbase and a dedicated Formula validation rule to check if positive numbers are provided.

IAI 15: Illustration of application instructions on tagging negative numerical values

All of the numerical XBRL elements should be disclosed as positive fact values, except those that have an additional label that indicates that the value can be disclosed as a negative number.

All GHG emissions reduction XBRL elements (according to E1-4, paragraph 34) shall be disclosed as positive numbers. If preparers decide to present the numbers as negative values in the human-readable XHTML report, the Inline XBRL sign attribute should be used to invert its fact value.

When GHG emissions reduction fact values relate to expected reductions, these should be tagged with the 'Milestones and target years [member]', whilewhen GHG emissions reduction fact values relate to achieved reductions, these should not be tagged with 'Milestones and target years [member]'.

198. It must be noted that the XBRL elements representing ESRS E1-4 on Greenhouse Gas emissions reduction (in absolute and intensity values) should be disclosed with positive fact values, even if in the human-readable XHTML report the numbers are presented with a negative sign, as indicated by E1 paragraph AR 31.

Label
Absolute value of total Greenhouse gas emissions reduction
Intensity value of total Greenhouse gas emissions reduction
Absolute value of Scope 1 Greenhouse gas emissions reduction
Intensity value of Scope 1 Greenhouse gas emissions reduction
Absolute value of location-based Scope 2 Greenhouse gas emissions reduction
Intensity value of location-based Scope 2 Greenhouse gas emissions reduction
Absolute value of market-based Scope 2 Greenhouse gas emissions reduction
Intensity value of market-based Scope 2 Greenhouse gas emissions reduction
Absolute value of Scope 3 Greenhouse gas emissions reduction

Intensity value of Scope 3 Greenhouse gas emissions reduction

A1.10. Implementation of current and future financial resources

199. Paragraph 69 b) and c) and paragraph AR 23 of ESRS 2 require the disclosure of current and future financial resources. In the XBRL taxonomy, this differentiation has been implemented using the 'Time horizon [axis]' explicit dimension with its members to be applied with 'Financial resources allocated to action plan (OpEx)' and 'Financial resources allocated to action plan (CapEx)' monetary elements.

IAI 16: Tagging of current and future financial resources according to ESRS 2 MDR-A, paragraph 69

When tagging amounts of future financial resources, one of the explicit dimension members of the 'Time horizon [axis]' should be tagged. For current financial resources, no dimension member should be tagged (default member).

A1.11. Implementation of current and anticipated financial effects

200. While the ESRS 2 MDR-A, ESRS E1-9, and ESRS E2-6 have dedicated monetary XBRL elements that reflect the wording of the ESRS, such as 'Carrying amount of assets at material physical risk', the Disclosure Requirement in ESRS 2 SBM-3 paragraph 48 d) and e), as well as disclosures of anticipated financial effects in E3-5, E4-6 and E5-6 do not define precise monetary datapoints. Therefore, the XBRL taxonomy has implemented text block tags for the corresponding datapoints, recognising their inappropriate data types in terms of usability and comparability.

IAI 17: Illustration of application instructions on the disclosure of monetary amounts in text blocks

For those ESRS XBRL elements that reflect monetary amounts, but no corresponding XBRL elements with monetary data type are available in the XBRL taxonomy, the preparer should disclose monetary amounts as part of the text block tag.

Affected ESRS XBRL text block tags have specific documentation labels for this purpose, such as:

The anticipated financial effects are expected to be disclosed in monetary values. When the ESRS XBRL Taxonomy does not have detailed numerical XBRL elements, the corresponding quantitative disclosures are expected to be part of the content tagged by this text block tag. Phase-in provisions in accordance with Appendix C of ESRS 1 might be applied.

201. Specific labels have been introduced for those elements in order to indicate that monetary amounts have to be disclosed as part of the text block element. Phase-in provisions in accordance with Appendix C of ESRS 1 might be applied.

Disclosure of current financial effects of material risks and opportunities on financial position, financial performance and cash flows [text block]
Disclosure of anticipated financial effects of material risks and opportunities on financial position over short-, medium- and long-term [text block]
Disclosure of anticipated financial effects of material risks and opportunities on financial performance and cash flows over short-, medium- and long-term [text block]
Disclosure of quantitative information about anticipated financial effects of material risks and opportunities arising from impacts [text block]

A1.12. Tagging of numerical and intensity values in particular

202. The ESRS define a number of intensity-related datapoints as listed below, which require a specific implementation in the XBRL taxonomy.

List of intensity XBRL Elements *per net revenue*	**DR**
Energy intensity from activities in high climate impact sectors (total energy consumption per net revenue)	E1-5
GHG emissions intensity, location-based (total GHG emissions per net revenue)	E1-6
GHG emissions intensity, market-based (total GHG emissions per net revenue)	E1-6
Water intensity (total water consumption per net revenue)	E3-4

203. To enable full flexibility with regard to how the numbers are presented in the human-readable sustainability statement, and full comparability in the digital data set, a specific XBRL data type 'per monetary item types' needs to be used for the XBRL elements. At the same time, this data type requires the use of a specific XBRL unit for tagging. The intensity can be presented in tonnes, kilograms, grams, etc. Monetary values can be disclosed in different currencies and scale, i.e., in billions, millions, thousands or per single currency.

204. For instance, in the Inline XBRL Document, a sentence like this could be disclosed in the human-readable section of the Inline XBRL document: 'In 2023 the greenhouse gas intensity per net revenue was 80 grams per Euro.'

205. The correct implementation in an XBRL report would be:

```
<p>In 2023 the greenhouse gas intensity per net revenue is <ix:nonFraction contextRef="c-1" unitRef="u-1" scale="-6" name="esrs:GhgIntensityPerNetRevenue">80<ix:nonFraction> grams per Euro.</p>

<ix:hidden>
   <xbrli:unit id="u-1">
      <xbrli:divide>
         <xbrli:unitNumerator>
            <xbrli:measure>utr:tCO2e</xbrli:measure>
         </xbrli:unitNumerator>
         <xbrli:unitDenominator>
            <xbrli:measure>iso4217:EUR</xbrli:measure>
         </xbrli:unitDenominator>
      </xbrli:divide>
   </xbrli:unit>
</ix:hidden>
```

206. Due to the scale attribute being set to -6, the resulting fact value would then be 0.00008 tonnes of CO2eq per EUR and the attributes provided in the XBRL ***unit*** would allow ***users*** to use the data accordingly.

207. EFRAG has registered new Data Type Registry[48] (hereafter: 'DTR') and Unit Type Registry[49] (hereafter: 'UTR') entries.

IAI 18: Illustration of application instructions on tagging numerical XBRL elements

When tagging numerical facts, correct XBRL units from the XBRL Unit Type Registry must be chosen in order to reflect the correct measurement. This is particularly relevant for items that have a generic decimal item type, listed below:

XBRL element label	DR
Measurable target (absolute value)	ESRS 2 MDR-T, 80 b)
Baseline value against which progress is considered (absolute value)	ESRS 2 MDR-T, AR 26
Quantitative metric (absolute value)	ESRS 2 MDR-M, 75 and 76
Intensity value of total Greenhouse gas emissions reduction	E1-4, 34 a)
Intensity value of Scope 1 Greenhouse gas emissions reduction	E1-4, 34 a)
Intensity value of location-based Scope 2 Greenhouse gas emissions reduction	E1-4, 34 a)
Intensity value of market-based Scope 2 Greenhouse gas emissions reduction	E1-4, 34 a)
Intensity value of Scope 3 Greenhouse gas emissions reduction	E1-4, 34 a)

Additionally, some units are prescribed in the ESRS, and the same unit should be used across the XBRL report (e.g. MWh for energy, m^3 for water and metric tonnes of CO2eq for GHG emissions, etc.). If numbers are presented in thousands, millions or billions in the human-readable Inline XBRL, setting the appropriate scale attribute on the XBRL fact is necessary.

The correct scale attribute should always be set when tagging numerical items in Inline XBRL. The scale attribute is essential for all intensity-based XBRL elements, where the human-readable representation differs from the machine-readable representation (e.g. GHG emissions are disclosed in grams, while the XBRL Unit is defined in tonnes of CO2eq).

[48] https://www.xbrl.org/dtr/dtr.html

[49] http://www.xbrl.org/utr/utr.xml

208. For E1-4, paragraph 34 a) intensity values have been implemented in the XBRL taxonomy accordingly. However, as E1 paragraph AR 23 lays out, those can be calculated based on intensity targets that 'are formulated as ratios of GHG emissions relative to a unit of physical activity or economic output'. This means that an intensity value for a target is always entity- or sector-specific, as the ESRS further elaborates: 'Relevant units of activity or output are referred to in ESRS sector-specific standards'. The ESRS XBRL taxonomy has implemented those XBRL elements with a decimal item type in order to allow for digitisation. It must be noted that the resulting fact will not be comparable in the same way for the relevant intensity-related XBRL elements unless a correct XBRL unit is defined in the XBRL report. The ESRS taxonomy has a typed dimension for those items as well, that can optionally be used to avoid duplicate facts, until proper data types and units are defined as part of a sector-specific XBRL taxonomy. The following list contains XBRL elements related to intensity values using a decimal type.

List of XBRL elements related to intensity values temporarily using a decimal type
Intensity value of total Greenhouse gas emissions reduction
Intensity value of Scope 1 Greenhouse gas emissions reduction
Intensity value of location-based Scope 2 Greenhouse gas emissions reduction
Intensity value of market-based Scope 2 Greenhouse gas emissions reduction
Intensity value of Scope 3 Greenhouse gas emissions reduction

209. In some cases, digitally tagged numerical values need to be specifically transformed in the XBRL report, based on their language-specific formatting (e.g., decimal separator as comma/period).

IAI 19: Illustration of application instructions on the use of transformation for formatted numerical and date XBRL elements

In some cases, digitally tagged numerical valuesneed to be specifically transformed in the XBRL report, based on their language specific formatting (e.g., decimal separator as comma/period). Additionally, the XBRL taxonomy contains a number of XBRL tags that have a date data type. Human-readable representations of the differently presented dates, based on the language of the report, can be transformed into unified dates by using an appropriate transformation rule from the XBRL Transformation Registry, and as described in the ESEF Reporting Manual in Guidance 2.2.3.

If no appropriate transformation is available, the XBRL facts can be reported in the *ix:hidden* section of the Inline XBRL document, implementing the link to the human-readable XHTML by using a CSS class, as described in the ESEF Reporting Manual Guidance 2.4.1.

A1.13. Implementation of disaggregation by ESRS Sectors and economic activities

210. Whenever the standard requires disclosure of ESRS sectors, NACE code-based economic activities[50] or disaggregation by them, such as in ESRS 2 SBM-1, E1-6, E1-9, E2-4 or E3-4, the corresponding dimensions 'ESRS SEC 1 Sectors [axis]' or 'NACE economic activities [axis]' have been implemented in the XBRL taxonomy. The 'ESRS SEC 1 Sectors [axis]', with its members, is based on the draft SEC1 working paper[51] published in June 2024. EFRAG is currently working on an updated ESRS sector classification[52], and the XBRL taxonomy will be amended accordingly as soon as the ESRS sector classification is finalised.

211. In order not to overburden the Presentation Linkbase with a large number of NACE code-based economic activities and country-explicit dimension members, those elements are available in the Presentation Linkbase under the role *[902000] Full list of codes and additional dimensions*.

212. In order to address a public consultation response, the ESRS SEC 1 Sectors and NACE economic activities have been split into two separate dimensions. The NACE codes have been updated to reflect NACE rev 2.1.

213. It is likely that the ESRS SEC 1 Sectors and NACE economic activities will need to be updated in the XBRL taxonomy on a regular basis (e.g., annually) to reflect future amendments.

> **IAI 20: Illustration of application instructions on tagging countries, sectors, and economic activities**
>
> The full list of dimension members for countries, NACE economic activities and ESRS SEC 1 Sectors can be found in the Definition Linkbase of the XBRL taxonomy under the corresponding extended link role *[902000] Full list of codes and additional dimensions*.

A1.14. Use of the ESRS XBRL Taxonomy in context with other XBRL taxonomies

214. The current ESEF XBRL Taxonomy provided by ESMA contains the IFRS Accounting Taxonomy. Going forward, the ESEF XBRL Taxonomy needs to be updated to enable the following use-cases:

(a) Tagging of both the IFRS consolidated financial statements and notes and the ESRS statements as part of the management report,

(b) Tagging of the ESRS statements and potentially any other local GAAP XBRL Taxonomy for the financial statements, and

---

[50] The ESRS economic activities are not related to the economic activities of the Article 8 'EU Taxonomy'.

[51] https://www.efrag.org/Assets/Download?assetUrl=%2Fsites%2Fwebpublishing%2FSiteAssets%2FWorking%2520Paper%2520Draft%2520ESRS%2520SEC1%2520Sector%2520Classification%2520Standard%5B1%5D.pdf

[52] EFRAG SR TEG Meeting 15 January 2024

(c) Tagging of the Article 8 disclosures with the combinations mentioned above.

215. EFRAG recommends that ESMA provides multiple entry points and guidelines for different use-cases. The use of a target-attribute to differentiate XBRL instances based on their taxonomies is not desirable, but might be required in some cases to avoid technical issues and interference.

Appendix 2: Summary of user interviews

Introduction

1 The objective of this summary is to analyse and synthetise the responses of individuals representing users (analysts, data providers, etc.) to questions about their planned use of digital sustainability statements in the XBRL format and implementation details. While all users confirmed the usefulness of digital disclosures in general, EFRAG was particularly interested in understanding users' perspectives on the usability of digitally tagged narrative disclosures. The interviews were conducted during meetings where EFRAG first presented its methodology and architecture[53] to develop the ESRS XBRL Taxonomy, and then respondents provided comments, often demonstrating their solutions and databases for digital ESG data. Additionally, all participants sent written answers to the questions in Annex 1.

2 The sample of respondents includes six companies that fall under the following categories: providers of critical decision support tools and services, analytics providers, and/or AI technology users. The responses of the following companies are considered in this report (their individual responses are anonymised in this summary):

- Bloomberg
- MSCI
- Corporatings
- FactSet
- Wikirates

The details

Usability of XBRL-based narrative disclosures

3 All respondents indicated they planned to use XBRL-based narrative disclosures for both manual and automated (AI) analysis. The respondents confirmed that narrative disclosures would be used to accompany numerical and categorical disclosures.

4 For manual analysis, narrative disclosures would be analysed and extracted in different ways. A respondent explained that their AI resources enabled a human insight approach. Human oversight of the extracted data will allow qualitative inputs to be standardised. Given the circumstantial nature of narrative disclosures, solely automated classification of data would likely leave out important information.

[53] Draft ESRS XBRL Taxonomy Methodology and Architecture, approved by EFRAG SRB on 26 April 2023, https://efrag.org/Assets/Download?assetUrl=%2Fsites%2Fwebpublishing%2FMeeting%20Documents%2F2302240950097339%2F04.02%20-%20Draft%20ESRS%20XBRL%20Taxonomy%20Architecture%20and%20Methodology%20%28final%29.pdf

5 Another respondent explained that narrative disclosures are to be extracted entirely manually. Thereby, proper tagging would facilitate the extraction of data to assemble it in spreadsheets that allow for comparison amongst a portfolio of undertakings.

6 At least three users explicitly confirmed that, wherever possible, narrative disclosures would be converted into *Booleans*. However, users would still be able to read further narrative information in the original source. In general, the 'drill-down' to the source of the information, i.e., the tagged Inline XBRL report, is a main feature of systems demonstrated by data providers. In the absence of digitally tagged annual reports, one respondent confirmed that tagging is done by the data provider itself. In that context, the respondent mentioned that they prefer a single document, e.g., a PDF document, as opposed to a human-readable document and an additional technical digital report, which usually leads to inconsistencies.

7 Regarding automated analysis, the respondents have plans to use AI to identify patterns and words in the specific narrative disclosures, AI technology to standardise ESG qualitative information, NLP to gather information, or to 'discretise' the disclosures to identify common practices through automated classification and/or summarisation.

8 One respondent pointed out that automated analysis of XBRL-based narrative disclosures 'will potentially be more efficient than locating information within a PDF of an annual report.'

Granular tagging

9 All respondents agreed that granular narrative tagging as implemented in the ESRS XBRL Taxonomy is very useful and helpful. According to them, it enhances comparability, searchability, and understandability of data. Based on the responses, granular narrative tagging can lead to more efficient data extraction, and it has proven to significantly increase the performance of AI algorithms. A respondent highlighted that 'granular tagging (at the same granularity level as the standard) is exactly what will allow the AI to learn this logical structure'. Nevertheless, there were contrasting views in respect to the relative usefulness of the different levels within the full hierarchy.

10 Regarding Level 1 narrative tagging, there were slightly different opinions on whether it is useful compared to Level 2 and Level 3. Some respondents agreed that Level 1 tagging allows for proper identification of the section and gives necessary context for specific disclosures. On the other hand, one respondent indicated that where there are more granular disclosures (Level 2 and Level 3), Level 1 will be a duplication, making it time- and resource-consuming for users and preparers.[54]

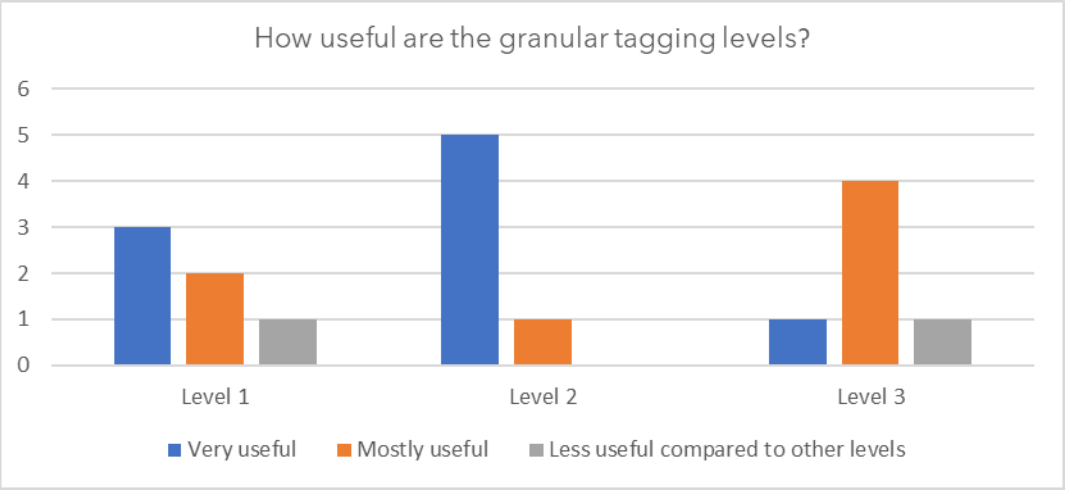
11 Regarding Level 2 tagging, the respondents unanimously agreed that it is useful. The respondents mentioned that this level of tagging enables in-depth analysis, is useful for comparative purposes, and has some specificity to it, but it is not too narrow.

---

[54] This is in line with the ESRS XBRL Taxonomy Methodology and Architecture. If the content of a disclosure is entirely digitally tagged with granular tags, it would in theory not be required to additionally tag the 'parent' XBRL element, since users can 'constitute' the content of the parent by combining the text of children.

12 Regarding Level 3 tagging, one respondent stated that it is the most useful because it gives metadata about the text. Four respondents pointed out that Level 3 tagging is mostly useful but offered some observations. One respondent suggested that it would be more beneficial if Level 3 tags could be converted into *Booleans*. Another respondent expressed concern based on additional complexity, and another mentioned that this level of tagging might be too onerous for preparers. One respondent said that this level of tagging is less useful because it is too narrow and likely omits information.

13 The following graph shows the respondents' views on the usefulness of each granular tagging level embedded in the full hierarchy of the taxonomy.



Additional semi-narrative tags

14 Six respondents pointed out that additional semi-narrative tags (Yes/No *Booleans*, Drop-Down-Menus XBRL Enumeration elements) would be very useful and a significant step forward in achieving clarity. Including additional semi-narrative tags would enhance data accuracy and enable filtering. Several respondents mentioned that *Booleans* alone would not be enough. Support from narrative disclosures would give a clearer context.

15 Two respondents made remarks on the use of additional semi-narrative tags. One respondent suggested giving a clear definition of what could be classified as 'yes' or 'no'. Another respondent argued that semi-narrative tags would be helpful but not indispensable, as there are other ways to derive such information.

16 A respondent who supported the additional semi-narrative tags emphasised that these disclosures 'must be followed by supporting narrative open text that could be required to provide more context by referencing to Level 1, 2 or 3 narrative tagging.'

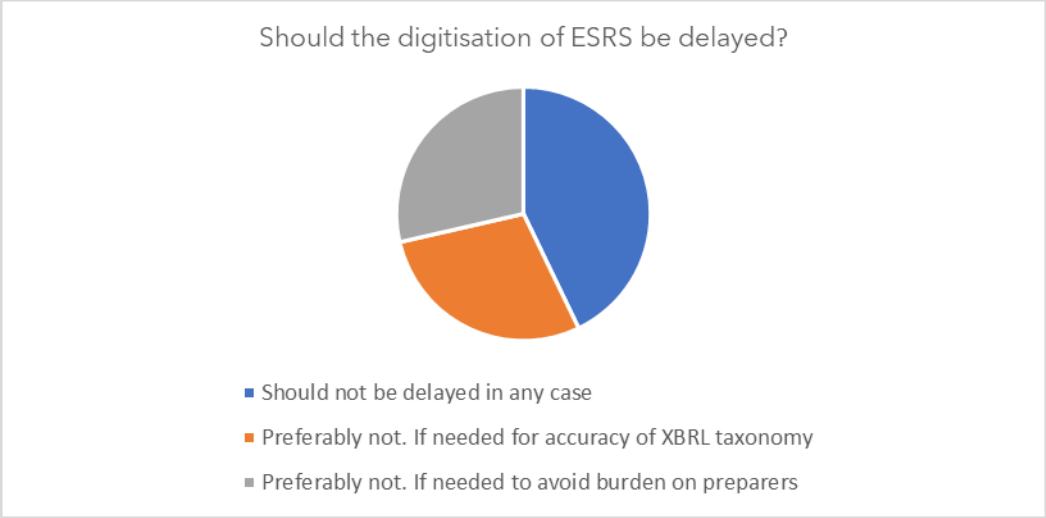
Timeline for digitisation of ESRS

17 Six respondents recommended the implementation of the digitisation of ESRS as soon as possible. They highlighted some issues that could arise from postponing the implementation of digital tagging. If preparers invest in systems that do not incorporate the specifications needed for the digital (XBRL) reporting format, it can lead to additional costs. Moreover, the

period before the system is refined and simplified for users will be longer, and it may lead to the adoption of common practices poorly compatible with the final version of digitisation.

18 Moreover, half of the respondents contemplated scenarios that could justify the delay of the digitisation. One of the scenarios would be to support the adequate full development of the taxonomy (and its implementation as a tagging rule in the corresponding legislation, an amendment to the ESEF Delegated Regulation) and to avoid possible inaccuracies due to time constraints. However, if time constraints were not an obstacle to develop a full taxonomy, the respondents would not support a delay of the digitisation of the ESRS.

19 The second scenario, contemplated by two respondents, is that the delay would be justified if preparers argue that they have resource constraints during the first reporting year.



Additional recommendations

20 A few respondents suggested additional features that, according to them, could maximise the benefits of the digitisation of the ESRS. These features included a mechanism in the XBRL taxonomy that allows one to separately tag individual Impacts, Risks and Opportunities. Furthermore, a respondent pointed out that the XBRL taxonomy should limit the possibility to use ‘taxonomy extensions’. The respondent argued that the open and undefined character of geographical area disaggregation (implemented as entity-specific typed dimension in the draft ESRS XBRL Taxonomy) is a big issue and prevents any reasonable automated analysis. Additionally, the respondent mentioned that reconciliation between operating segments and EU Taxonomy Activities (according to Article 8 Taxonomy Regulation disclosures) is an issue. Also, quality issues (e.g. scaling) should be avoided as much as possible.

Conclusion

21 The responses to the questionnaire highlighted the usability of XBRL-based narrative disclosures for manual and automated analysis. Granular tagging appeared to be a very useful feature to enhance accuracy of data, improve searchability of information and understand context. Based on the comments received, a combination of Level 2 and Level

3 seemed to be the most popular. Nevertheless, the respondents pointed out that Level 1 provides necessary context and supports the whole hierarchy, making it an important level capable of ensuring a consistent and comparable set of data across a portfolio of undertakings. According to all the responses, adding semi-narrative tags and combining semi-narrative (*Booleans*, enumerations) with narrative information would be helpful. Based on the benefits of the digital format of ESRS, the recommendation of all the respondents was to avoid delaying its implementation, as this would have costly implications for them and for preparers. However, respondents pointed out that having an accurate full taxonomy is the priority, regardless of the time of implementation.

Questionnaire

22 The users were asked the following questions:

- *Q1: Do you plan to use XBRL-based narrative disclosures for manual (human) analysis? And if yes, how?*
- *Q2: Do you plan to use XBRL-based narrative disclosures for automated (text/AI) analysis? And if yes, how?*
- *Q3: Do you consider granular tagging of narrative disclosures to be helpful for the analysis?*
- *Q4: How useful do you consider level 1 narrative tagging (principle-based comprehensive disclosures, probably multiple pages of unstructured data)?*
- *Q5: How useful do you consider level 2 narrative tagging (smaller narrative disclosures, addressing specific aspects of the DR)?*
- *Q6: How useful do you consider level 3 narrative tagging (individual aspects being part of a larger disclosure, i.e. a few sentences or paragraphs)?*
- *Q7: Do you find the introduction of additional semi-narrative tags (Boolean Yes/No, Dropdowns) helpful which enable filtering and provide precise statements?*
- *Q8: Do you support the delay of a mandatory digitisation of ESRS statements in the first years of reporting being a relief preparer?*

Anonymised responses from users

23 Q1: Do you plan to use XBRL-based narrative disclosures for manual (human) analysis? And if yes, how?

- Yes, extract it from the XBRL data. We have free text metrics and comment fields accompanying categorical/numerical metrics, depending on the disclosure requirement we will capture narrative disclosures in these fields so our users can access and (re)use that information as well.
- Yes. We try to convert narrative disclosures into boolean Y/N fields where possible. For example, ‘does the company conducted a climate scenario analysis for the company's own trajectory based on global warming scenarios outlined by the International Energy Agency

(IEA) in its World Energy Outlook (WEO) publication.?' Answer = Y/N. We will not necessarily take all the surrounding information (our fields have text character limits), but we do have transparency to all our documents where if we use IXBRL, humans can open up the transparency to the source document and read the relevant information surrounding that topic.

- Yes, we plan to use XBRL-based narrative disclosures for automated (text/AI) and manual (human) analysis. We have adopted an 'AI-enabled human insights' approach, wherein for narrative data, we will always have human oversight on the human-collected or machine-extracted data/output. It could help us to collate and standardise the qualitative inputs for our ESG and sustainability solutions with higher efficiency and accurate data. With XBRL-based narrative, we believe it could help on source-level transparency on the text used to arrive at an assessment.
- Yes – we use narrative disclosures for a number of use cases. E.g. understanding if companies have a certain policy in place (and evaluating the 'quality' of such a policy), analysing e.g. Transition Plans, screening for any controversy type activity and a general improvement in the understanding of how a company functions.
- Yes – we already do. Narrative disclosures can be used to derive variables. For example, 'Accelerated Share Repurchase' = 1 if the company disclosed a share repurchase that was accelerated in its equity footnote.
- Yes. Some narrative disclosures give information about the company's unique circumstances. Because they are specific to the company, automated classification cannot perform well, and an automated summary would be very likely to leave out actually important information. We and our users therefore consume this data 'manually', in its complete form. It is still very useful for us that the data has been properly tagged and can be extracted out of the whole document. For instance, in order to compare actions on a specific topic by a portfolio of 50 companies, we need to be able to extract the text and assemble them into a single sheet of a spreadsheet. When the narrative disclosure is accompanied by numerical data, for instance in tables, that are also highly specific to the company, we consider that numerical data to be a part of the narrative disclosure and the above requirements also apply or being able to assemble several such disclosures into a single document to allow quick comparisons.

24 Q2: Do you plan to use XBRL-based narrative disclosures for automated (text/AI) analysis? And if yes, how?

- Yes, we plan to use AI to find patterns (common words) in the specific narrative disclosures (not the whole report). Example: Definition of biodiversity, what is included, what not, -> will use to provide feedback to companies. We do not have concrete plans for this yet but capturing it in the XBRL formats and in our system does mean that it is a possibility which we can exploit in the future. We could then for instance do post-processing to discover new

disclosure patterns that could be included in advice to the EU and could be turned into additional disclosure requirements for the ESRS.

- Yes. We are currently exploring a TCFD AI model to understand TCFD disclosure statistics - the 11 disclosure categories. If there is relevant data within these disclosures, we would use this as input into our models.
- We use NLP to gather information. It would therefore be conceivable that we could use such techniques to gather information from XBRL-based narrative disclosures. This would potentially be a more efficient way of gathering information than locating it within a PDF-based annual report.
- Yes – we automate the above to create *Boolean*/dichotomous variables.
- Yes. For some narrative disclosures, we expect common practice to be observable; for instance, when it comes to the scenarios used to assess climate risks, the types of incentives schemes, it would be surprising for a company to be using something completely unique. We will attempt to 'discretise' them to identify that common practice through automated classification and/or automated summarisation.

25 Q3: Do you consider granular tagging of narrative disclosures to be helpful for the analysis?

- The more granular, the better. We expect the narrative be more used in the future. Example: Audit of working conditions has many aspects, we would like to know all the aspects (when was the audit done, etc).
- More granular tagging is helpful to be able to capture more specifics than L1 provides.
- Yes, we consider granular tagging of narrative disclosures to be helpful for the analysis. It can help in enhanced data accuracy, lead to efficiency data extraction, enable better comparative analysis on specific sections within narrow scope of information, and enable advanced analytics through NLP and machine learning to extract insights and patterns in the disclosures.
- To the extent it would make these disclosures more searchable, then yes.
- Yes – because more topic-specific textblocks reduces the search space.
- Absolutely yes. For manual analysis, this allows us to break down the disclosures into smaller pieces whose content may be compared between companies. For automated use, even though we may want to feed our algorithms text that is not at the most granular level, internal tagging of the text that is being analysed has proven to significantly increase the performance of the AI algorithm. While NLP algorithms are good at understanding common logical structures, they cannot have internalized the logical structure of ESRS reporting. Granular tagging (at the same granularity level as the standard) is exactly what will allow the AI to learn this logical structure.

26 Q4: How useful do you consider level 1 narrative tagging (principle-based comprehensive disclosures, probably multiple pages of unstructured data)?

- Very helpful to identify the section. Extracting the content to our Database is very important, automatically extracting it from PDF is not working well. The hierarchy and the XBRL taxonomy will be implemented in our system.
- Where there is more granular disclosure, L2 and L3, L1 will be a duplication and therefore less useful, and more burden on corporate preparers. Also, transparency taking clients to the most relevant part of the document where this is housed is less useful as they will need to spend time reading through all text to do analysis/get context.
- Continuing the earlier comment, we believe that granular and additional levels of disclosures (level 2 and 3) would help in more precise representation of the information and reduces the likelihood of error or misinterpretation of the data. Level 2 and 3 can also enable in-depth analysis and extract specific information as needed for more comparative analysis. We do have concerns around additional complexity and deeper understanding for the subsequent levels of DR from the preparers to provide a consistent set of information in scope and coverage. For users of data, we could benefit from having a consistent set of data across all companies even it means sacrificing highly granular tagging (level 3). E.g., having all companies disclose information on level 1 and provide more detailed level 2 info would be preferable to having half of the companies providing information till level 3 of nesting and the other half only providing information till level 1.
- Level 1 tagging is somewhat useful in that it ensures that the necessary context is available around a particular disclosure.
- Yes
  - Mostly useful to identify data disclosed to comply with the principle but not covered by the datapoints identified in the standard.

27 Q5: How useful do you consider level 2 narrative tagging (smaller narrative disclosures, addressing specific aspects of the DR)?

- Combination of L2 and L3 will be the most useful. I believe where L3 can be turned into *Booleans*/numerical, this is preferred, and allows for more granularity into L2 (i.e. breaking up revenue from fossil fuel/weapons etc per activity). Where items are all descriptions in L3 that cannot be converted to *Boolean*/numerical (less useful), then it may make sense to roll up to L2 for the narrative disclosure so that these can be read by clients as a paragraph without having to create separate tags for each and every description field.
- Yes.

- Level 2 tagging is useful in that it is not too narrow of a disclosure and has some specificity attached to it.
- Preferable to Level 1.
- Mostly useful to identify data disclosed to comply with the specific aspect but not covered by the datapoints identified in the standard.

28 Q6: How useful do you consider level 3 narrative tagging (individual aspects being part of a larger disclosure, i.e. a few sentences or paragraphs)?

- Useful but bare minimum.
- Level 3 disclosures are likely too narrow and will omit context. Thus, re-aggregation of disclosures may be necessary.
- Might be too onerous on filers. I think there is a cost-benefit trade off – striking that balance is key.
- Most useful, it gives the most metadata about the text, and we can assemble them to get the information disclosed to answer a DR or a specific aspect of it as described by the standard.

29 Q7: Do you find the introduction of additional semi-narrative tags (Boolean Yes/No, Dropdowns) helpful which enable filtering and provide precise statements?

- Very useful.
- Yes, this is something we convert to from narrative text already so having the preparers fill this in will help with data accuracy. We would suggest making sure for *Booleans* that there is a clear definition of what is Yes/No this will be important where there is a definition of what could be classified as Yes or No e.g. setting target can only be Y if they share the details of what is the target. (otherwise, how do we verify this?)
- Yes, semi-narrative tags (*Boolean* Yes/No, dropdowns) would enable filtering and provide precise information. We believe it must be followed by supporting narrative open text that could be required to provide more context and helpful in getting full context of the semi-narrative tags by referencing to Level 1, 2 or 3 narrative tagging.
- Yes - though *Boolean* entries alone may not be sufficient. For example, do you have a Policy, ‘yes/no’ is helpful. But assessing the quality of that policy is a different matter.
- Yes, but not mandatory as there are alternative ways to derive that information. However, if companies have to tag that, then the bifurcation can be used as window-dressing by companies and may still require further analysis by investors. For example: ‘Executive remuneration is tied to emissions’: True/False. Company can tag TRUE, but the weighting

on emissions as a measure may be immaterial. I think the argument can go either way so I am agnostic.

- Definitely yes. We use AI only because that is our only choice when dealing with freeform text, but discrete values (when limited choices are possible or when a condition can be clear) would be a huge step forward in getting the clarity our work requires.

30 Q8: Do you support the delay of a mandatory digitisation of ESRS statements in the first years of reporting being a relief preparer?

- No, not at all. The XBRL format is a blueprint/roadmap for preparers (aka companies) on how they should organize their internal data management and reporting systems. Delaying this rollout would mean that companies already have to set up their systems (because they will need to report anyway) and invest in systems that might soon after be unfit for purpose because they could not incorporate the specifications needed for the digital (XBRL) reporting format. So, it will actually cost preparers more money if the digital format is delayed. Furthermore, for development in technology it is best practice to roll it out and test it so the system can be further adapted to meet the needs of users. Delaying the rollout is not going to improve the system, it will just mean it will take longer before the system is refined and easy to use. If the data is here in the first year, the effort is resource intense, so we are thinking about not using the reporting at all for the first years not having a tagging. Delay would be quite serious. EFRAG is doing a favour to preparers by providing the blueprint of the reports. It is also a blueprint for service providers. The more precise we are in the taxonomy, the better for the preparers, providers and users.
- As consumers, we would advocate for this to be done as fast as possible without affecting accuracy of taxonomy/tags. We would not support if that could lead to the information in digitalisation being inaccurate compared to the PDF reporting. Digitalisation needs to be assured to the same degree as financial disclosure.
- We believe XBRL format is preferable to set-up any automatic and more accurate data extraction. However, we do understand the constraints on preparers in the first year of the new reporting requirement. We believe if there is a structured PDF reporting template across companies with guidance on filling up the information in a consistent tabular format with same headers, we can still ingest it (with lower accuracy). Any set of reports that deviate from the standard labels or column headers would be challenging to search and use in analysis and research.
- In general, we are in favour of sticking to the agreed timeline. However, if delays are necessary to support the full development of the taxonomy and/or to allow preparers time to adjust to the reporting standard, then we would support them.
- No.

- While we do understand that getting reports in a digital format in 2025 is unlikely: Non-digital reports will be much less useful for us as end-users of the data, but also for other stakeholders expecting us to provide the data for their own requirements under EU law. ESRS statements prepared for compliance for CSRD are a cog in the EU sustainability machine and stalling that data for years will endanger the success of the project as a whole.
- We believe it cannot be overstated how much more usable digitalised reports would be compared to paper reports. We also fear that the market will adopt common practice poorly compatible with digitalisation, and that there will be much friction if digitalisation starts late, with overall costs significantly higher than what would be saved in the first years.
- We also believe that digital-first reports would be usually much easier to prepare than paper reports, as preparation software could embed the digital version of the ESRS and use them to guide the creation of the report.
- The audit of paper ESRS statements is also probably going to be very costly for preparers. Digital versions of the reports (with the contents clearly structured and each part linked to the part of the standards they answer to) would also probably drive the cost of audits down.

Appendix 3: Merged elements in the environmental standards

Previous element	**Current element**	**Reference(s)**
Label	**Label**	
Consultations have been conducted (pollution)	Consultations have been conducted	ESRS E2 11 b IRO-1, ESRS E3 8 b IRO-1, ESRS E5 11 b IRO-1
Consultations have been conducted (water and marine resources)		
Consultations have been conducted (resource use and circular economy)		
Disclosure of how consultations have been conducted (pollution) [text block]	Disclosure of how consultations have been conducted [text block]	ESRS E2 11 b IRO-1, ESRS E3 8 b IRO-1, ESRS E5 11 b IRO-1, ESRS E5 AR 1 d IRO-1, ESRS E5 AR 7 IRO-1
Disclosure of how consultations have been conducted (water and marine resources) [text block]		
Disclosure of how consultations have been conducted (resource use and circular economy) [text block]		
Assets and activities have been screened in order to identify actual and potential water and marine resources-related impacts, risks and opportunities in own operations and upstream and downstream value chain	Assets and activities have been screened in order to identify actual and potential impacts, risks and opportunities in own operations and upstream and downstream value chain	ESRS E5 11 a IRO-1, ESRS E3 8 a IRO-1
Assets and activities have been screened in order to identify actual and potential impacts, risks and opportunities in own operations and upstream and downstream value chain		
Ecological thresholds and entity-specific allocations were taken into consideration when setting pollution-related target		ESRS E2 24 E2-3, ESRS E3 24 E3-3,

Ecological thresholds and entity-specific allocations were taken into consideration when setting water and marine resources target	Ecological thresholds and entity-specific allocations were taken into consideration when setting target	ESRS E4 32 a E4-4, ESRS E5 26 E5-3
Ecological thresholds and entity-specific allocations were taken into consideration when setting biodiversity and ecosystem-related target		
Ecological thresholds and entity-specific allocations were taken into consideration when setting resource use and circular economy target		
Disclosure of ecological thresholds identified and methodology used to identify ecological thresholds (pollution) [text block]	Disclosure of ecological thresholds identified and methodology used to identify ecological thresholds [text block]	ESRS E2 24 a E2-3, ESRS E3 24 a E3-3, ESRS E4 32 a i E4-4, ESRS E5 26 a E5-3
Disclosure of ecological thresholds identified and methodology used to identify ecological thresholds (water and marine resources) [text block]		
Disclosure of ecological thresholds identified and methodology used to identify ecological thresholds (biodiversity and ecosystems) [text block]		
Disclosure of ecological thresholds identified and methodology used to identify ecological thresholds (resource use and circular economy) [text block]		
Ecological thresholds are entity-specific (pollution)	Ecological thresholds are entity-specific	ESRS E2 24 b E2-3, ESRS E3 24 b E3-3, ESRS E4 32 a ii E4-4, ESRS E5 26 b E5-3
Ecological thresholds are entity-specific (water and marine resources)		
Ecological thresholds are entity-specific (biodiversity and ecosystems)		
Ecological thresholds are entity-specific (resource use and circular economy)		
Disclosure of how ecological entity-specific thresholds were determined (pollution) [text block]	Disclosure of how ecological entity-specific thresholds were determined [text block]	ESRS E2 24 b E2-3, ESRS E3 24 b E3-3,

Disclosure of how ecological entity-specific thresholds were determined (water and marine resources) [text block]		ESRS E4 32 a ii E4-4, ESRS E5 26 b E5-3
Disclosure of how ecological entity-specific thresholds were determined (biodiversity and ecosystems) [text block]		
Disclosure of how ecological entity-specific thresholds were determined (resource use and circular economy) [text block]		
Disclosure of how responsibility for respecting identified ecological thresholds is allocated (pollution) [text block]	Disclosure of how responsibility for respecting identified ecological thresholds is allocated [text block]	ESRS E2 24 c E2-3, ESRS E3 24 c E3-3, ESRS E4 32 a iii E4-4, ESRS E5 26 c E5-3
Disclosure of how responsibility for respecting identified ecological thresholds is allocated (water and marine resources) [text block]		
Disclosure of how responsibility for respecting identified ecological thresholds is allocated (biodiversity and ecosystems) [text block]		
Disclosure of how responsibility for respecting identified ecological thresholds is allocated (resource use and circular economy) [text block]		
Pollution-related target is mandatory (required by legislation)	Target is mandatory (required by legislation)	ESRS E2 25 E2-3, ESRS E3 25 E3-3, ESRS E5 27 E5-3
Water and marine resources-related target is mandatory (required by legislation)		
Resource use and circular economy target is mandatory (required by legislation)		
Description of methodologies used to calculate data and key assumptions used (resource inflows) [text block]	Description of methodologies used to calculate data and key assumptions used [text block]	ESRS E5 32 E5-4, ESRS E5 40 E5-5

Description of methodologies used to calculate data and key assumptions used (resource outflows) [text block]		
Disclosure of anticipated financial effects of material pollution-related risks and opportunities [text block]	Disclosure of anticipated financial effects of material risks and opportunities [text block]	ESRS E2 36 E2-6, ESRS E3 30 E3-5, ESRS E4 42 E4-6, ESRS E5 41 E5-6
Disclosure of anticipated financial effects of material water and marine resources-related risks and opportunities [text block]		
Disclosure of anticipated financial effects of material biodiversity- and ecosystem-related risks and opportunities [text block]		
Disclosure of anticipated financial effects of material risks and opportunities arising from resource use and circular economy-related impacts [text block]		
Disclosure of quantitative information about anticipated financial effects of material risks and opportunities arising from pollution-related impacts [text block]	Disclosure of quantitative information about anticipated financial effects of material risks and opportunities arising from impacts [text block]	ESRS E2 38 a E2-6, ESRS E2 39 a E2-6, ESRS E3 33 a E3-5, ESRS E4 45 a E4-6, ESRS E5 43 a E5-5
Disclosure of quantitative information about anticipated financial effects of material risks and opportunities arising from water and marine resources-related impacts [text block]		
Disclosure of quantitative information about anticipated financial effects of material risks and opportunities arising from biodiversity- and ecosystem-related impacts and dependencies [text block]		
Disclosure of quantitative information about anticipated financial effects of material risks and opportunities arising from resource use and circular economy-related impacts [text block]		

Disclosure of qualitative information about anticipated financial effects of material risks and opportunities arising from pollution-related impacts [text block]	Disclosure of qualitative information about anticipated financial effects of material risks and opportunities arising from impacts [text block]	ESRS E2 38 a E2-6, ESRS E2 39 a E2-6, ESRS E3 33 a E3-5, ESRS E4 45 a E4-6, ESRS E5 43 a E5-5
Disclosure of qualitative information about anticipated financial effects of material risks and opportunities arising from water and marine resources-related impacts [text block]		
Disclosure of qualitative information about anticipated financial effects of material risks and opportunities arising from biodiversity- and ecosystem-related impacts and dependencies [text block]		
Disclosure of qualitative information about anticipated financial effects of material risks and opportunities arising from resource use and circular economy-related impacts [text block]		
Disclosure of critical assumptions used to quantify anticipated financial effects, sources and level of uncertainty of assumptions (pollution) [text block]	Disclosure of critical assumptions used to quantify anticipated financial effects, sources and level of uncertainty of assumptions [text block]	ESRS E2 39 c E2-6, ESRS E3 33 c E3-5, ESRS E4 45 c E4-6, ESRS E5 43 c E5-6
Disclosure of critical assumptions used to quantify anticipated financial effects, sources and level of uncertainty of assumptions (water and marine resources) [text block]		
Disclosure of critical assumptions used to quantify anticipated financial effects, sources and level of uncertainty of assumptions (biodiversity and ecosystems) [text block]		
Disclosure of critical assumptions used to quantify anticipated financial effects, sources and level of uncertainty of assumptions (resource use and circular economy) [text block]		
Description of effects considered, related impacts and time horizons in which they are likely to materialise (pollution) [text block]	Description of effects considered, related impacts and dependencies and time horizons	ESRS E2 39 b E2-6, ESRS E3 33 b E3-5,

Description of effects considered, related impacts and dependencies and time horizons in which they are likely to materialise (water and marine resources) [text block]	in which they are likely to materialise [text block]	ESRS E4 45 b E4-6, ESRS E5 43 b E5-6
Description of effects considered, related impacts and dependencies and time horizons in which they are likely to materialise (biodiversity and ecosystems) [text block]		
Description of effects considered, impacts and dependencies to which they relate and time horizons in which they are likely to materialise (resource use and circular economy) [text block]		
Administrative, management and supervisory bodies have approved transition plan (climate change)	Administrative, management and supervisory bodies have approved transition plan	ESRS E1 16 i E1-1, ESRS E4 AR 1 j E4-1
Administrative, management and supervisory bodies have approved transition plan (biodiversity and ecosystems)		
Disclosure of scope of resilience analysis in relation to own operations and upstream and downstream value chain and in relation to risks considered in that analysis [text block]	Description of scope of resilience analysis [text block]	ESRS E4 13 b E4-1, ESRS E1 SBM-3 19 a
Description of scope of resilience analysis [text block]		
Time horizons used in resilience analysis (biodiversity and ecosystems)	Time horizons applied for resilience analysis	ESRS E4 13 d E4-1, ESRS E1 SBM-3 AR 7 b
Time horizons applied for resilience analysis		
Disclosure of results of resilience analysis (biodiversity and ecosystems) [text block]	Description of results of resilience analysis [text block]	ESRS E4 13 e E4-1, ESRS E1 SBM-3 19 c
Description of results of resilience analysis [text block]		

Appendix 4: Elements removed or made abstract following the removal of overlaps between ESRS 2 MDR and MDR-related elements in the topical standards

PAT	Topical element		Overlapping ESRS 2 element		Removed or made abstract
	Label en	References	Label en	Paragraph	
Policies	Disclosure of how policy addresses mitigating negative impacts related to pollution of air, water and soil [text block]	ESRS E2.15 a	Description of key contents of policy [text block]	ESRS 2.65 a	Removed
Policies	Disclosure of how policy either addresses substituting or minimising use of substances of concern and (or) phasing out substances of very high concern [text block]	ESRS E2.15 b	Description of key contents of policy [text block]	ESRS 2.65 a	Removed
Policies	Disclosure of how policy addresses water management [text block]	ESRS E3 .12 a	Description of key contents of policy [text block]	ESRS 2.65 a	Removed
Policies	Disclosure of how policy relates to sustainability matters for biodiversity and ecosystems [text block]	ESRS E4.23 a	Description of key contents of policy [text block]	ESRS 2.65 a	Removed
Policies	Disclosure of how policy refers to production, sourcing or consumption of raw materials [text block]	ESRS E4 AR 12	Description of key contents of policy [text block]	ESRS 2.65 a	Made abstract
Policies	Disclosure of how policy enables to mitigate contribution to material biodiversity loss drivers [text block]	ESRS E4 AR 16 d	Description of key contents of policy [text block]	ESRS 2.65 a	Removed
Policies	Description of relevant human rights policy commitments [text block]	ESRS S4.16, ESRS S2.17, ESRS S3.16, ESRS S1.20,	Description of key contents of policy [text block]	ESRS 2.65 a	Made abstract

		Commission Delegated Regulation (EU) 2022/1288 Indicator 9 Lack of a human rights policy, Annex 1 Table 3			
Policies	Description of policy provisions for preventing and addressing impacts on indigenous peoples [text block]	ESRS S3.15	Description of key contents of policy [text block]	ESRS 2.65 a	Removed
Policies	Disclosure of how corporate culture is established, developed, promoted and evaluated [text block]	ESRS G1.9	Description of key contents of policy [text block]	ESRS 2.65 a	Removed
Policies	Disclosure of how whistleblowers are protected [text block]	ESRS G1.10 c	Description of key contents of policy [text block]	ESRS 2.65 a	Made abstract
Actions	Information about action plans that have been implemented at site-level [text block]	ESRS E2 AR 15	Disclosure of key action [text block]	ESRS 2.68 a	Removed
Actions	Disclosure of how action covers higher levels of resource efficiency in use of technical and biological materials and (or) water [text block]	ESRS E5.20 a	Disclosure of key action [text block]	ESRS 2.68 a	Removed
Actions	Disclosure of how action covers higher rates of use of secondary raw materials (recyclates) [text block]	ESRS E5.20 b	Disclosure of key action [text block]	ESRS 2.68 a	Removed
Actions	Disclosure of how action covers application of circular design and (or) higher rates of either Reuse, Repair, Refurbishing, Remanufacture, Repurposing or Recycling [text block]	ESRS E5.20 c	Disclosure of key action [text block]	ESRS 2.68 a	Removed
Actions	Disclosure of how action covers application of circular business practices [text block]	ESRS E5.20 d	Disclosure of key action [text block]	ESRS 2.68 a	Removed

Actions	Disclosure of how action covers actions taken to prevent waste generation in upstream and downstream value chain [text block]	ESRS E5.20 e	Disclosure of key action [text block]	ESRS 2.68 a	Removed
Actions	Disclosure of how action covers optimisation of waste management in line with waste hierarchy [text block]	ESRS E5.20 f	Disclosure of key action [text block]	ESRS 2.68 a	Removed
Actions	Disclosure of how resources cover higher levels of resource efficiency in use of technical and biological materials and water [text block]	ESRS E5.20 a	Description of type of current and future financial and other resources allocated to action plan [text block]	ESRS 2.69 a	Removed
Actions	Disclosure of how resources cover higher rates of use of secondary raw materials (recyclates) [text block]	ESRS E5.20 b	Description of type of current and future financial and other resources allocated to action plan [text block]	ESRS 2.69 a	Removed
Actions	Disclosure of how resources cover application of circular design and higher rates of Reuse, Repair, Refurbishing, Remanufacture, Repurposing and Recycling [text block]	ESRS E5.20 c	Description of type of current and future financial and other resources allocated to action plan [text block]	ESRS 2.69 a	Removed
Actions	Disclosure of how resources cover application of circular business practices [text block]	ESRS E5.20 d	Description of type of current and future financial and other resources allocated to action plan [text block]	ESRS 2.69 a	Removed
Actions	Disclosure of how resources cover actions taken to prevent waste generation in upstream and downstream value chain [text block]	ESRS E5.20 e	Description of type of current and future financial and	ESRS 2.69 a	Removed

			other resources allocated to action plan [text block]		
Actions	Disclosure of how resources cover optimisation of waste management in line with waste hierarchy [text block]	ESRS E5.20 f	Description of type of current and future financial and other resources allocated to action plan [text block]	ESRS 2.69 a	Removed
Actions	Description of actions taken, planned or underway to prevent or mitigate material negative impacts on own workforce / value chain workers / affected communities [text block]	ESRS S1.38 a, ESRS S2.32 a, ESRS S3.32 a	Disclosure of key action [text block]	ESRS 2.68 a	Made abstract
Actions	Description of actions taken, planned or underway to prevent, mitigate or remediate material negative impacts on consumers and end-users [text block]	ESRS S4.31 a	Disclosure of key action [text block]	ESRS 2.68 a	Made abstract
Targets	Disclosure of how target relates to prevention and control of air pollutants and respective specific loads [text block]	ESRS E2.23 a	Description of relationship of target to policy objectives [text block]	ESRS 2.80 a	Removed
Targets	Disclosure of how target relates to prevention and control of emissions to water and respective specific loads [text block]	ESRS E2.23 b	Description of relationship of target to policy objectives [text block]	ESRS 2.80 a	Removed
Targets	Disclosure of how target relates to prevention and control of pollution to soil and respective specific loads [text block]	ESRS E2.23 c	Description of relationship of target to policy objectives [text block]	ESRS 2.80 a	Removed
Targets	Information about targets that have been implemented at site-level (pollution) [text block]	ESRS E2 AR 18	Description of scope of target [text block]	ESRS 2.80 c	Removed

Targets	Disclosure of how target relates to biodiversity and ecosystem impacts, dependencies, risks and opportunities identified in relation to own operations and upstream and downstream value chain [text block]	ESRS E4.32 c	Description of relationship of target to policy objectives [text block]	ESRS 2.80 a	Removed
Targets	Disclosure of geographical scope of target [text block]	ESRS E4.32 d	Description of scope of target [text block]	ESRS 2.80 c	Removed
Targets	Disclosure of how target relates to resource inflows [text block]	ESRS E5.24	Description of relationship of target to policy objectives [text block]	ESRS 2.80 a	Removed
Targets	Disclosure of how target relates to resource outflows [text block]	ESRS E5.24	Description of relationship of target to policy objectives [text block]	ESRS 2.80 a	Removed
Targets	Disclosure of how target relates to increase of circular product design [text block]	ESRS E5.24 a	Description of relationship of target to policy objectives [text block]	ESRS 2.80 a	Removed
Targets	Disclosure of how target relates to increase of circular material use rate [text block]	ESRS E5.24 b	Description of relationship of target to policy objectives [text block]	ESRS 2.80 a	Removed
Targets	Disclosure of how target relates to minimisation of primary raw material [text block]	ESRS E5.24 c	Description of relationship of target to policy objectives [text block]	ESRS 2.80 a	Removed
Targets	Disclosure of how target relates to sustainable sourcing and use of renewable resources [text block]	ESRS E5.24 d	Description of relationship of target to policy objectives [text block]	ESRS 2.80 a	Removed

Targets	Disclosure of how target relates to waste management [text block]	ESRS E5.24 e	Description of relationship of target to policy objectives [text block]	ESRS 2.80 a	Removed
Targets	Disclosure of how target relates to other matters related to resource use or circular economy [text block]	ESRS E5.24 f	Description of relationship of target to policy objectives [text block]	ESRS 2.80 a	Removed
Policies	Disclosure of how policy addresses either product or service design in view of addressing water-related issues and (or) preserving marine resources [text block]	ESRS E3.12 b	Description of key contents of policy [text block]	ESRS 2.65 a	Removed
Policies	Disclosure of how policy addresses commitment to reducing material water consumption in areas at water risk in own operations and (or) along upstream and downstream value chain [text block]	ESRS E3.12 c	Description of key contents of policy [text block]	ESRS 2.65 a	Removed
Policies	Disclosure of how policy addresses avoiding incidents and (or) emergency situations, and if (when) they occur, it either controls or limits their impact on people and environment [text block]	ESRS E2.15 c	Description of key contents of policy [text block]	ESRS 2.65 a	Removed
Targets	Disclosure of how target relates to management of material impacts, risks and opportunities related to areas at water risk, including improvement of water quality [text block]	ESRS E3.23 a	Description of relationship of target to policy objectives [text block]	ESRS 2.80 a	Removed
Targets	Disclosure of how target relates to responsible management of marine resources impacts, risks and opportunities, including nature and (or) quantity of marine	ESRS E3.23 b	Description of relationship of target to policy objectives [text block]	ESRS 2.80 a	Removed

	resources-related commodities used by undertaking [text block]				
Targets	Disclosure of how target relates to reduction of water consumption, including in areas at water risk and (or) in areas of high water-stress [text block]	ESRS E3.23 c	Description of relationship of target to policy objectives [text block]	ESRS 2.80 a	Removed
Policies	Disclosure of how biodiversity and ecosystems-related policy relates to material biodiversity and (or) ecosystems-related impacts [text block]	ESRS E4.23 b	Description of key contents of policy [text block]	ESRS 2.65 a	Removed
Policies	Disclosure of how biodiversity and ecosystems-related policy relates to either material dependencies or material physical and (or) transition risks and opportunities [text block]	ESRS E4.23 c	Description of key contents of policy [text block]	ESRS 2.65 a	Removed
Policies	Disclosure of how biodiversity and ecosystems-related policy supports traceability of products, components and raw materials with material actual or potential impacts on biodiversity and ecosystems along value chain [text block]	ESRS E4.23 d	Description of key contents of policy [text block]	ESRS 2.65 a	Removed
Policies	Disclosure of how biodiversity and ecosystems-related policy addresses either production, sourcing or consumption from ecosystems that are managed to maintain and (or) enhance conditions for biodiversity [text block]	ESRS E4.23 e	Description of key contents of policy [text block]	ESRS 2.65 a	Removed

Policies	Disclosure of how biodiversity and ecosystems-related policy addresses social consequences of biodiversity and (or) ecosystems-related impacts [text block]	ESRS E4.23 f	Description of key contents of policy [text block]	ESRS 2.65 a	Removed
Actions	Description of how local and indigenous knowledge and (or) nature-based solutions have been incorporated into biodiversity and ecosystems-related action [text block]	ESRS E4.28 c	Disclosure of key action [text block]	ESRS 2.68 a	Removed
Policies	Disclosure of how policy addresses transitioning away from use of virgin resources [text block]	ESRS E5.15 a	Description of key contents of policy [text block]	ESRS 2.65 a	Removed
Policies	Disclosure of how policy addresses sustainable sourcing and (or) use of renewable resources [text block]	ESRS E5.15 b	Description of key contents of policy [text block]	ESRS 2.65 a	Removed
Actions	Disclosure of actions taken to engage with upstream and downstream value chain and (or) local network on development of collaborations or initiatives increasing circularity of products and materials [text block]	ESRS E5.AR 11	Disclosure of key action [text block]	ESRS 2.68 a	Removed
Policies	Disclosure of specific policy commitments related to inclusion or positive action for people from groups at particular risk of vulnerability in own workforce [text block]	ESRS S1.24 c	Description of key contents of policy [text block]	ESRS 2.65 a	Removed
Actions	Disclosure of how action to provide and (or) enable remedy in relation to actual material impact on own workforce / value chain workers / affected communities / consumers and end-users has been taken [text block]	ESRS S1.38 b, ESRS S2.32 b, ESRS S3.32 b, ESRS S4.31 b	Disclosure of key action [text block]	ESRS 2.68 a	Removed

Appendix 5: List of meetings

EFRAG SR TEG and EFRAG SRB public meetings

- The discussion of EFRAG SR TEG 17 April 2023 on the Draft ESRS XBRL Taxonomy Architecture and Methodology.
- The discussion of EFRAG SR TEG 24 April 2023 on the Draft ESRS XBRL Taxonomy Architecture and Methodology (continuation of 17 April).
- The discussion of EFRAG SRB 26 April 2023 on the Draft ESRS XBRL Taxonomy Architecture and Methodology and on the feedback of the SR TEG.
- The discussion of EFRAG SR TEG 3 July 2023 on the impact of the ESRS DA on the Draft ESRS XBRL Taxonomy and the implementation of the Cross-Cutting Standards in XBRL.
- The discussion of EFRAG SR TEG 20 November 2023 on the comments of the Digital Committee, start of the approval process, and educational session.
- The discussion of EFRAG SR TEG 22 November 2023 on the Draft ESRS XBRL Taxonomy (continuation of 20 November).
- The discussion of EFRAG SR TEG 5 December 2023 on the Draft ESRS XBRL Taxonomy and approval thereof (continuation of 22 November). The following SR TEG members voted in favour of approving the ESRS XBRL Taxonomy to issue for consultation (subject to SRB approval): Chiara Del Prete, Belen Varela Nieto, Carlota de Paula Coelho, Christoph Töpfer, Eric Duvaud, Giulia Genuardi, Julia Menacher, Katerina Katsouli, Klaus Hufschlag, Luc Hendrickx, Philippe Diaz, Piotr Biernacki, Thomas Schmotz, Signe Andreasen Lysgaard. The following SR TEG members never submitted a written approval of the ESRS XBRL Taxonomy prior to this meeting: Alexandra van Selm, PierMario Barzaghi, Chiara Mio, Sigurt Vitols, Sandra Atler, Johan Dahl, Anne-Claire Ducrocq, Julian Müller, and Luca Bonaccorsi.
- The discussion of EFRAG SRB 10 January 2024 for the approval of the Draft ESRS XBRL Taxonomy to be issued for public comment. All the SRB members voted in favour of the Draft ESRS Set 1 XBRL Taxonomy, subject to written feedback on the Explanatory Note and Basis for Conclusions and further minor, technical improvements.
- The discussion of EFRAG SR TEG 15 January 2024 on the Explanatory Note and Basis for Conclusions and consultation questions.
- The discussion of EFRAG SR TEG 22 April 2024 on the overview of consultation responses for the draft XBRL taxonomy.
- The discussion of EFRAG SRB 5 June 2024 on the strategic direction on proposed changes following the public consultation.
- The discussion of EFRAG SRB 12 June 2024 continuing the strategic direction of proposed changes following the public consultation.
- The discussion of EFRAG SR TEG 1 July 2024 on the update on EFRAG SRB's strategic direction and changes to be implemented.

- The discussion of EFRAG SR TEG 16 July 2024 on the approval of the ESRS Set 1 XBRL Taxonomy. The XBRL taxonomy was approved, with one EFRAG SR TEG member abstaining (Luc Hendrickx) and all other present members voting in favour. Some EFRAG SR TEG members conditioned their approval on the need for a phasing-in and field-test of the digital tagging.
- The discussion of EFRAG SRB 17 July 2024 on the approval of the ESRS Set 1 XBRL Taxonomy. The XBRL taxonomy was approved, with one EFRAG SRB member abstaining (Maria Dolores Urrea Sandoval) and all other present members voting in favour.

EFRAG SR TEG and EFRAG SRB internal meetings

- EFRAG SR TEG (17 January 2023): update on the Draft ESRS XBRL Taxonomy and tagged illustrative reports.
- EFRAG SR TEG (7 July 2023): continued discussion of EFRAG SR TEG 3 July 2023 meeting.
- EFRAG SR TEG (2 October 2023): update on the Draft ESRS XBRL Taxonomy pre-approval process.
- EFRAG SR TEG (6 November 2023): presentation of the Draft ESRS XBRL Taxonomy and demonstration of the use of digital disclosures.
- EFRAG SR TEG & SRB (12 April 2024): Q&A Session for XBRL Taxonomy.

Digital Reporting Consultative Forum (DRCF) meetings

- 25 March 2023: Governance & Introduction to the ESRS XBRL Taxonomy project
- 26 April 2023: Presentation and discussion of the Draft ESRS XBRL Taxonomy Architecture and Methodology
- 29 June 2023: Implications of the Draft ESRS Delegated Act on the XBRL taxonomy; Implementation of Cross-Cutting standards in XBRL
- 4 September 2023: ISSB Taxonomy consultation and relation to the ESRS XBRL Taxonomy
- 16 November 2023: Presentation and discussion of the (Draft) ESRS XBRL Taxonomy
- 17 January 2024: Presentation and discussion on the (Draft) ESRS XBRL Taxonomy and (Draft) Article 8 XBRL Taxonomy consultation material (including consultation questions and Explanatory Note and Basis for Conclusions)
- 13 May 2024: Presentation and discussion of the proposed changes to the XBRL Taxonomy following the public consultation

Digital Committee (DC) and other meetings

- Meeting 1: 11 May 2023, all DC members
- Meeting 2: 25 May 2023, all DC members
- Meeting 3: 22 June 2023, all DC members
- Meeting 4: 6 July 2023, all DC members
- Meeting 5: 27 July 2023, all DC members
- Meeting 6: 3 August 2023, all DC members
- Meeting 7: 17 August 2023, all DC members

- Meeting 8: 31 August 2023, all DC members
- Meeting 9: 21 September 2023, all DC members
- Meeting 10: 25 September 2023, individual DC members
- Meeting 11: 28 September 2023, all DC members
- Meeting 12: 11 October 2023, all DC members
- Meeting 13: 26 October 2023, all DC members
- Meeting 14: 8 November 2023, all DC members
- Meeting 15: 28 November 2023, XBRL Q&A for SR TEG members
- Meeting 16: 31 May 2024, all DC members