

OPEN FOR COMMENTS
UNTIL 8 APRIL 2024

Draft ESRS Set 1 XBRL Taxonomy

FEBRUARY 2024

EXPLANATORY NOTE AND
BASIS FOR CONCLUSIONS



EFRAG

sustainability reporting

Disclaimer

The Draft XBRL ESRS Set 1 Taxonomy is published by EFRAG for comment only and is accompanied by this Explanatory Note and Basis for Conclusions. EFRAG assumes no responsibility or liability whatsoever for the content or any consequences or damages direct, indirect or incidental arising from following the advice or guidance contained in this document. Information contained in this publication does not constitute advice and should not be substituted for the services of an appropriately qualified professional.

How to provide feedback on the Draft XBRL ESRS Set 1 Consultation Document

Comments need to be received by 8 April 2024 by completing the questionnaire available [here](#). To see a PDF of the survey, click [here](#). All comments will be on the public record and posted on our website at www.efrag.org unless the respondent requests confidentiality.

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. © 2024 EFRAG All rights reserved.

Reproduction and use rights are strictly limited. For further details please contact efragsecretariat@efrag.org

Draft ESRS Set 1 XBRL Taxonomy – Explanatory Note and Basis for Conclusions

Table of Contents

1. Introduction	6
2. Objective of the Draft ESRS Set 1 XBRL taxonomy released by EFRAG for consultation.....	7
2.1 Design of the Taxonomy reflecting the architecture of ESRS Set 1	10
3. Description of the Draft ESRS Set 1 XBRL Taxonomy	12
4. Glossary and terms	14
5. Summary of interviews with users and statistics.....	17
6. Methodology and architecture.....	17
6.1. Basic principles	17
6.2. Relation between the taxonomy and ESRS statements	19
6.3. General granularity of the elements in the taxonomy.....	20
6.4. Elements created for flexibility purposes.....	21
6.5. Implementation of the narrative tagging hierarchy.....	22
6.6 ESRS 2 MDR – the technical relationship between material IROs (SBM-3), Policies, Actions (including Resources) and Targets (including Metrics)	25
6.7 ESRS 2 SBM-3 ‘List of IROs’.....	27
6.8 Validation rules implemented.....	27
6.9 Entity-specific and additional digital disclosures (‘Other’, MDR-M and additions).....	28
6.10 Incorporation by reference.....	30
6.11 Connectivity with financial reporting.....	32
6.12 Interoperability with other sustainability-related reporting standards.....	32
Appendix 1: Specific technical implementation details	34
A1.1. Semi-narrative elements (Boolean and enumeration elements)	34
A1.2. Paragraphs not implemented as reportable XBRL elements in the XBRL taxonomy.....	37
A1.3. Avoidance of overlapping narrative elements and re-usage across DRs	39
A1.4. ESRS 2 MDR on Metrics.....	40
A1.5. ESRS E1-9 Disclosure of the location of assets at material physical risks.....	41
A1.6. Technical implementation of optional disaggregation (typed dimensions in open and closed hypercubes)	42
A1.7. Using fact-to-fact relationships for ESRS 2 GOV-4 and BP-2 as well as ESRS 1	44
A1.8. Positive and negative fact values and balance attributes	46
A1.9. Implementation of current and anticipated financial effects	47

Draft ESRS Set 1 XBRL Taxonomy – Explanatory Note and Basis for Conclusions

A1.10. Tagging of numerical and intensity values in particular	48
A1.11. Implementation of the disaggregation by ESRS Sectors and economic activities	51
Appendix 2: Summary of user interviews	53
Introduction	53
The details	53
Usability of XBRL-based narrative disclosures.....	53
Granular tagging	54
Additional semi-narrative tags	55
Timeline for digitisation of ESRS	55
Additional recommendations	56
Conclusion	56
Questionnaire	57
Anonymised responses from users.....	57
Appendix 3: List of public meetings – EFRAG SR TEG and EFRAG SRB.....	64
Appendix 4: List of internal meetings – EFRAG SR TEG and EFRAG SRB.....	64
Appendix 5: List of Digital Reporting Consultative Forum (DRCF) meetings.....	65
Appendix 6: Digital Committee (DC) and other meetings	65

List of Illustration of application instructions

IAI 1: Illustration of application instructions on choosing between alternative XBRL elements for tagging.....	22
IAI 2: Illustration of application instructions on the tagging of narrative textblock tags.....	23
IAI 3: Illustration of application instructions on typed dimensions on Minimum Disclosure Requirements (MDR)	26
IAI 4: Illustration of application instructions on the tagging of XBRL elements as ‘not material’ ...	27
IAI 5: Illustration of application requirements on disclosures stemming from other legislation or generally accepted sustainability reporting standards and frameworks.....	29
IAI 6: Illustration of application instructions on entity-specific disclosures and taxonomy extensions	30
IAI 7: Illustration of application instructions on incorporations by reference	31
IAI 8: Illustration of application instructions on the tagging of Boolean elements.....	35
IAI 9: Illustration of application instructions on the tagging of enumeration elements	36

Draft ESRS Set 1 XBRL Taxonomy – Explanatory Note and Basis for Conclusions

IAI 10: Illustration of application requirements on ESRS 2 MDR-Metrics	41
IAI 11: Illustration of application instructions on the disclosure of the NUTS-based location of assets at material physical risk (E1-9).....	42
IAI 12: Illustration of application instructions on the use of the ‘Reporting Scope [axis]’ dimensions	43
IAI 13: Illustration of application instructions on the use of open hypercubes and dimensional disaggregation	44
IAI 14: Illustration of application instructions on the use of fact-to-fact relationships in XBRL reports	45
IAI 15: Illustration of application instructions on tagging negative numerical values	46
IAI 16: Illustration of application instructions on the disclosure of monetary amounts in text blocks	47
IAI 17: Illustration of application instructions on tagging numerical XBRL elements	50
IAI 18: Illustration of application instructions on the use of transformation for formatted numerical and date XBRL elements.....	51
IAI 19: Illustration of application instructions on tagging countries, sectors, and economic activities	52

1. Introduction

1. EFRAG has been tasked to develop the digital taxonomy (hereafter: 'taxonomy' or 'XBRL taxonomy' in this document) for **ESRS** Set 1 issued as Delegated Act in July 2023 (hereafter: ESRS Set 1). On the basis of this taxonomy, the European Securities and Market Authority (ESMA) will define the tagging rules 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).
2. EFRAG has also been tasked to develop the digital taxonomy for Article 8 disclosure requirements¹. The release of the Draft Article 8 XBRL Taxonomy is provided on the EFRAG webpage together with a separate consultation questionnaire and accompanying documents.
3. This document accompanies the release of the taxonomy for consultation. 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 a machine-readable format, to support the understanding of the implementation of the draft taxonomy and obtain more informed feedback in this consultation.
4. The Draft ESRS Set 1 XBRL Taxonomy (hereafter: taxonomy or XBRL taxonomy) has been developed by EFRAG based on the Draft ESRS XBRL Taxonomy Methodology and Architecture (hereafter: methodology paper) approved in April 2023 by the SRB. **This document has to be read in conjunction with the methodology paper.**²
5. The purpose of the consultation is to receive feedback from constituents on the proposed draft version of the Taxonomy. The feedback will be considered by EFRAG in the finalization of this deliverable and, when appropriate, adjustments will be made in the final version of the Taxonomy. EFRAG is consulting on the most appropriate approach to transpose the content of the ESRS into a digital format. EFRAG is not consulting on the content of the ESRS itself, their structure and the articulation of disclosures in datapoints in those standards.
6. The release of this draft Taxonomy for consultation 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 submitted to EFRAG due process and are not authoritative. In particular:

¹ 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.

² Draft ESRS XBRL Taxonomy Methodology and Architecture, as approved by the SRB on the 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>

Draft ESRS Set 1 XBRL Taxonomy – Explanatory Note and Basis for Conclusions

- (a) *ESRS Set 1 Illustrative of application instructions* presents detailed illustrations of preparers good practices to implement the draft Taxonomy. They are aiming at testing the technical feasibility to convert the sustainability statement into the 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 practices suggestions.
- (b) *ESRS Set 1 Illustrative Examples of XBRL Reports* presents a set of technical illustrative reports (**XBRL reports** in **Inline XBRL**). Those 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 Draft ESRS Set 1 XBRL Taxonomy. The authoritative tagging rules to be applied will be developed by ESMA for listed EU companies and for other companies in the scope of Directive 2013/34/EU³ (hereafter: Accounting Directive) as recently amended by Directive (EU) 2022/2464⁴ (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.).

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

2. Objective of the Draft ESRS Set 1 XBRL taxonomy released by EFRAG for consultation.

9. EFRAG issued in November 2022 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 2023:⁵
- (a) ESRS 1 General requirements
- (b) ESRS 2 General disclosures

³ 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.

⁴ 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.

⁵ 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.

- (c) ESRS E1 Climate change
 - (d) ESRS E2 Pollution
 - (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
10. The Taxonomy that EFRAG will release following this consultation represents the correct digital transposition of the human-readable ESRS Set 1, in EFRAG’s opinion as the advisor to the European Commission that developed those standards.
 11. The XBRL taxonomy is considered to be useful for **preparers** (and software vendors) for structuring their ESRS sustainability statement according to the data modelling adopted by the taxonomy. Then this process will bring benefit to tagging the human-readable sustainability statement and enables its conversion into the machine-readable format.
 12. The XBRL taxonomy brings also benefits to **users** of the sustainability disclosures (e.g. analysts and data providers), who can access the 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.
 13. 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.
 14. 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).

15. These undertakings must, from financial year 2024 onwards based on a phased approach, prepare this information in accordance with the first set of ESRS.⁶
16. The 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'.⁷
17. 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 the parent undertakings subject to the requirements of Article 29a of the Accounting Directive.
18. 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 Art. 8 of Regulation (EU) 2020/852) as part of the technical process in the preparation of an amendment to the ESEF Regulation.⁸
19. 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.
20. 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 as well compliant with the European Single Electronic Format (ESEF), which specifies the technical language to mark up information in the annual financial report using Inline XBRL. EFRAG has selected this format as it is globally accepted and

⁶ 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, the LSME ESRS Exposure Draft is under consultation by EFRAG.

⁷ 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.

⁸ 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.

Draft ESRS Set 1 XBRL Taxonomy – Explanatory Note and Basis for Conclusions

used by other EU and international organisations to develop digital taxonomies for financial and sustainability-related disclosures.⁹

21. EFRAG has not performed a cost-benefit analysis associated with the development of the digital taxonomy as this task will be performed 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.
22. 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) 2020/852¹⁰ (hereafter: Taxonomy Regulation) will be provided within the sustainability statement and, thus, it must be tagged accordingly. A separate consultation on the Draft Article 8 XBRL Taxonomy is launched by EFRAG.
23. The Draft ESRS Set 1 XBRL taxonomy is not the final version and will be amended based on the consultation's responses. EFRAG expects to deliver the final taxonomy together with the Article 8 XBRL Taxonomy to ESMA and the EC in the second half of 2024. The taxonomy will finally be adopted by way of an amendment to the ESEF Regulation.
24. The draft XBRL taxonomy can be used for testing purposes, preparatory work and even voluntary tagging of ESRS sustainability statements as soon as it is published by EFRAG.

2.1 Design of the Taxonomy reflecting the architecture of ESRS Set 1

25. The Draft ESRS Set 1 XBRL taxonomy reflects the general architecture of the first set of ESRS composed of 12 standards:
 - two cross-cutting ESRS (ESRS 1 and ESRS 2) and
 - 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).
26. An integral component of the design of the draft 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

27. The objective of ESRS 1 is to set out the general requirements that undertakings shall comply with when preparing and presenting ESG information.

⁹ EBA, EIOPA, IFRS Foundation, GRI, CDP.

¹⁰ 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.

28. ESRS 1 does not prescribe disclosure requirements (hereafter: DRs) to be automatically transposed into specific elements in the taxonomy. Nevertheless, the general principles of ESRS 1 were taken into account to better model the taxonomy. In addition, the taxonomy includes elements as *esrs:OtherMediumOrLongtermTimeHorizonsThanDefinedInESRS1Abstract* related to ESRS 1 paragraph 77 [‘When preparing its sustainability statements, the undertaking shall adopt the following time intervals as of the end of the reporting period: (a) for the short-term time horizon: the period adopted by the undertaking as the reporting period in its financial statements; (b) for the medium-term time horizon: from the end of the short-term reporting period per (a) above to five years; and (c) for the long-term time horizon: more than five years.’].

ESRS 2

29. ESRS 2 establishes information to be mandatorily provided by the undertaking at a general level, across all sustainability topics.
30. 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. *Disclosure Contents* that correspond to the Minimum Disclosure Requirement – **MDR** on Policies, Actions, Targets and Metrics (see chapter 4 and 5 of ESRS 2). The MDRs play a pivotal role (like a centralised 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 digitalised ‘horizontally’, i.e. replicated within each topical standard.

Topical ESRS

31. The Topical standards are structured into two main blocks:
- (a) ESRS 2 Related DRs and
 - (b) additional DRs covering the E, S and G matters;
32. Regarding point (a), topical ESRS provide detailed requirements on sustainability matters that complement the information under certain DR 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 draft 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 draft taxonomy they are reported alongside ESRS 2 with the exception of SBM-3 where for the human readable reporting there is an option to report alongside topical disclosures, which can also be achieved in Inline XBRL tagging.

33. DRs in 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 digitalised within each topical standard, as this is disclosed at a topical level.

General Structure and relationship to (draft) IG 03 Datapoint List

34. In ESRS Set 1, the core of the DRs is located in the main body of the standard in paragraphs easily identifiable by the expressions ‘shall disclose’ and ‘shall include’ placed after paragraph on the objective of the DR. Usually, individual datapoints are easily identifiable 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).
35. 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 level 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.
36. In this regard, EFRAG has released the [draft] IG 03 (currently subject to the public consultation) which presents in an Excel format the complete list of all disclosure requirements in sector agnostic standards (cross cutting and topical standards)¹¹.

3. Description of the Draft ESRS Set 1 XBRL Taxonomy

32. The Draft ESRS Set 1 XBRL Taxonomy files are provided as a Taxonomy Package (ZIP Archive) using the following entry points:
- (a) ESRS All (importing ESRS Core with all topics and disclosure requirements, including presentation and definition linkbases and validation rules):
https://xbrl.efrag.org/taxonomy/draft-esrs/2023-07-31/esrs_all.xsd
 - (b) ESRS Core (concepts, labels and references only):
https://xbrl.efrag.org/taxonomy/draft-esrs/2023-07-31/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.¹² The tagging allows to identify, navigate and extract the digital disclosures (facts). Besides the definitions of quantitative (numerical) and qualitative (narrative) XBRL elements reflecting the ESRS datapoints, the Draft 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

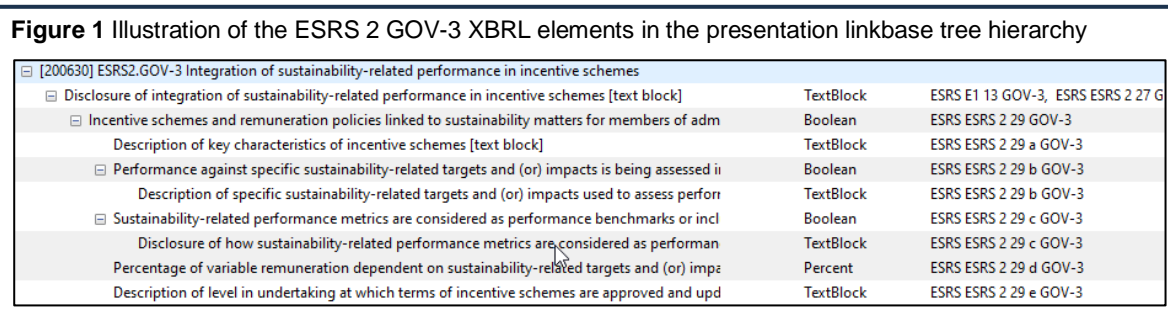
¹¹ <https://www.efrag.org/News/Public-471/Publication-of-the-3-Draft-EFRAG-ESRS-IG-documents-EFRAG-IG-1-to-3->

¹² 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.

Draft ESRS Set 1 XBRL Taxonomy – Explanatory Note and Basis for Conclusions

(e.g., country, gender, **GHG** type, etc.), which are pre-defined lists of elements (members) as part of the XBRL taxonomy, and **typed dimensions** (e.g., geographical areas, policies, targets, operating segments, 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 like period type (instant/duration¹³) and a 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 Draft 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, constituting 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 to present the disclosures in similar table structures.



37. The XBRL taxonomy contains a small number of validation rules (technical term: assertions) automatically executed by XBRL software when validating the XBRL reports. EFRAG notes

¹³ The XBRL specification requires for each XBRL element definition to 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.

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 specifications¹⁴ and should be used with an appropriate XBRL software¹⁵ that is implementing 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.

4. Glossary and terms

40. The following terms are used throughout this document and shall be read in conjunction with the official XBRL glossary.¹⁶

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.
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 <i>revenue</i> may

¹⁴ XBRL Specification 2.1, Dimensions 1.0, Enumeration Elements 2.0, 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/>

¹⁵ A list of compliant and certified software products is available in <https://software.xbrl.org/>

¹⁶ <https://www.xbrl.org/guidance/xbrl-glossary>

	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 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., <i>France, Germany, Italy, Spain, and Other Countries</i> .
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 semantical relationships between XBRL elements. A presentation linkbase groups the XBRL in a tree hierarchy using parent-child relationship, 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), 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 it can enrich the unstructured narrative disclosures. Also called categorical elements.
Table	Grouping of XBRL elements and dimensions (and their members) onto 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., <i>Cancer medication</i> , <i>App-based medical advice</i> or <i>pharmaceutical devices</i> for the typed dimension of 'Products' or 'Operating Segments'.
Unit	XBRL unit defines the currency and/or physical unit of a XBR 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 organization 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 XZY 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	A XBRL instance document (XML, CSV or JSON) or Inline XBRL document (set). A XBRL report uses one or more XBRL taxonomies.
xsi:nil	A fact attribute signalling that an empty fact value is valid ('not in list'). ¹⁷

5. Summary of interviews with users and statistics

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 performed interviews with users. However, this does not represent a cost-benefit analysis (see paragraph 19). A summary report of the interviews with users can be found in Appendix 2.

6. Methodology and architecture

6.1. Basic principles

42. EFRAG has developed the Draft 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 or 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, tagging effort, etc.
43. 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

¹⁷ https://www.w3.org/TR/xmlschema11-1/#xsi_nil

such a one-to-one correspondence would have resulted in either excessive or insufficient granularity. Such cases are explained in section 6.4., A1.2., and A1.3. of this document.

44. 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 two categories:
- ‘content-first’ processes, where the preparer first 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
 - ‘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 chunk of content corresponding to that information, and the software assembles all the chunks into one document.
45. 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 32.¹⁸ For this purpose, EFRAG released for public feedback the non-authoritative EFRAG Implementation Guidance 3 (IG3)¹⁹, which details the datapoints in ESRS Set 1. The content of IG3 is consistent with the structure of datapoints in this draft Taxonomy, as laid out in the explanatory note for IG3: All datapoints are implemented as XBRL elements, but the XBRL taxonomy contains more technical elements and attributes (e.g. for disaggregation). The IG3 datapoint list can be used to advance the preparation of human-readable ESRS sustainability statements that will be easier to digitalise.
46. 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 ESRS might facilitate the tagging of the information reported.
47. Even if allowed, the sustainability statement whose design deviates from the architecture and structure of the ESRS may lead to a more complex tagging.

¹⁸ Paragraph 32 of the approved ‘Draft ESRS XBRL Taxonomy Methodology and Architecture’: <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>

¹⁹ Draft EFRAG IG 3: Detailed ESRS datapoints implementation guidance and accompanying explanatory note: <https://www.efrag.org/News/Public-471/Publication-of-the-3-Draft-EFRAG-ESRS-IG-documents-EFRAG-IG-1-to-3->

6.2. Relation between the taxonomy and ESRS statements

48. 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.
49. 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. DPs 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 6.9 on entity-specific and additional disclosures.
50. 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 through using one of the approaches described in section 6.9.
69. Creating extension taxonomies and creating entity-specific elements within extension taxonomies is sensibly more complex²⁰ than simply directly using elements provided in the ESRS XBRL taxonomy.
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, 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

²⁰ 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.

that preparers are required to disclose and/or digitally tag disaggregation of information on GHG emissions by type of GHG category.

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 necessary 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 work for the preparation of the report.
75. Conversely, if the taxonomy does not provide disaggregation with a level of details that match the requirements and options for disaggregation as described in the standard, it would become much more complex to tag the corresponding disclosures.

6.3. General granularity of the 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 as explained below and in the methodology.²¹
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 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 within that area that should be excluded from the tag, and whether there are pieces of information of other parts of the sustainability statement that should be covered by the tag (using Inline XBRL **continuations**²²) is often complex if there are many pieces of information of different nature within the content expected to be covered by the tag. 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 would first need to look at the granular datapoints in subparagraphs (a), (b) and (c). The preparer would need to identify areas covering (a), possibly in different

²¹ Chapter 6: Narrative tagging: working assumptions.

²² 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>

places in the sustainability report, then similarly identify areas covering (b) and identify areas covering (c). In other words, they would need to do the same identifying work that would be 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 in different pages) requires the preparer to separately apply XBRL tags to all different pieces of information and then to 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, the reviewers would also not be able to rely on just the name of the XBRL element. They would also be required to 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 straightforward 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.
- 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 in itself. This granularity is therefore suitable and 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 under EU reporting frameworks is likely to be useful to suppliers, clients, investors and other stakeholders 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.

6.4. 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 elect 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 detailed 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 the ISO 14064-1), the XBRL element corresponding to the chosen option should be tagged.

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

6.5. 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 the 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 the 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 03 – 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 the 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 have 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.²³
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:
- (a) the Level 1 XBRL element (known as *parent*) can be used to capture the full content of the disclosure requirement;
 - (b) the Level 2 XBRL element has dedicated elements (known as *children*) for each datapoint listed in the subparagraph of the 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.

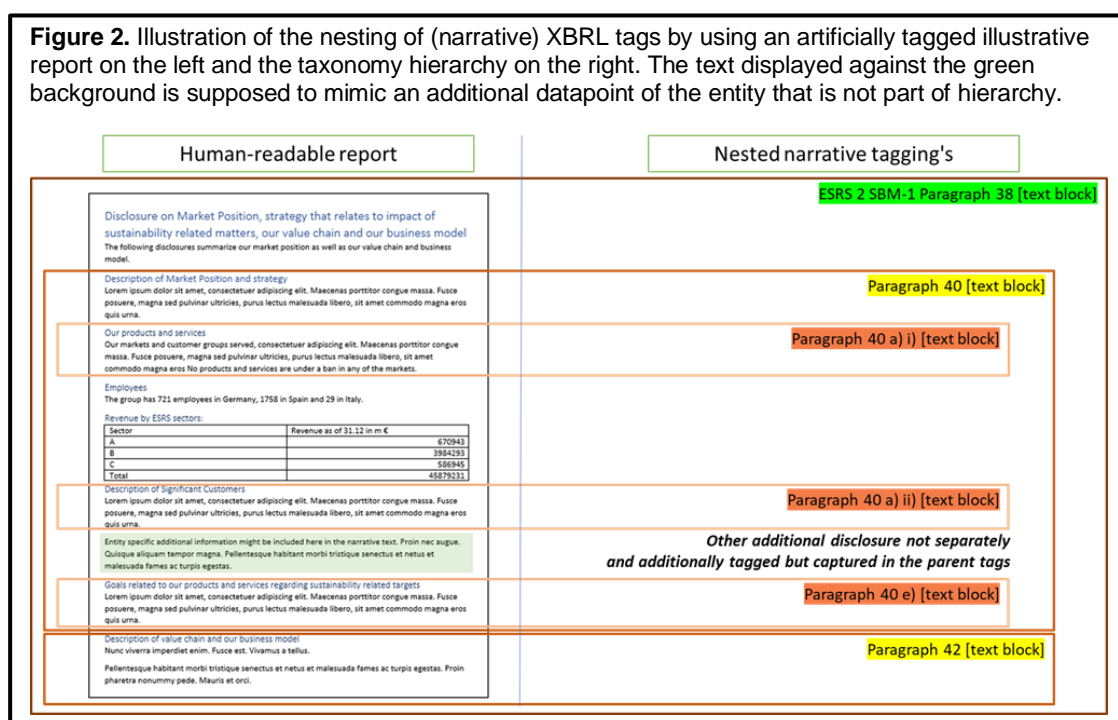
IAI 2: Illustration of application instructions on the tagging of narrative textblock tags

If the content of a sustainability statement reflecting a disclosure requirement is completely tagged with the granular textblocks of the ESRS taxonomy hierarchy, and no entity specific content or additions to ESRS datapoints are disclosed, the tagging of the XBRL element could 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*'.

²³ 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. It is worth noting that, unlike financial reporting where narrative information in most of the 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.

Draft ESRS Set 1 XBRL Taxonomy – Explanatory Note and Basis for Conclusions

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 tagging of ‘parent’ information can be omitted when the full content of the disclosure requirement is exhaustively tagged with a more granular ‘children’ of the parent. Users of the digital narrative disclosures could then ‘constitute’ the content of the parent element through the conjunction of all (narrative) disclosures of the children.
97. The implementation of the XBRL taxonomy shows that this is indeed possible given the limitations above; however, EFRAG would like to note that the Level 1 XBRL element covering the full disclosure requirement has a specific and important role to play by capturing entities’ additional datapoints or even entity-specific disclosures, as described in chapter 6.9. This is also illustrated in Figure 2 below.



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, might be very useful for users of the digital disclosures when wanting to navigate the corresponding section in the human-readable report.
99. 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, like foreseen in the ESRS is less useful, compared to the continuation functionality of Inline XBRL which allows to ‘navigate’ and ‘jump’ to a

disclosure with ease, if the content is distributed in different pages or sections of the report. This is to be considered as significantly more sophisticated than the page numbers. However, the human-readable content index might still be useful for human-readers.

100. Given the importance of Level 1 tags and of the more granular level 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.

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

101. ESRS 2 defines related concepts of Impacts, Risks and Opportunities (IROs) and Policies, Targets (including metrics) and Actions (including resources) 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 policies, targets and actions, those could be linked in an entity-relationship model as known from the data base design. When designing data bases, the concept of 'foreign-keys' is often used, which allows to link each and every 'entry' of a table to another entity.
102. In an XBRL taxonomy, this can be achieved also by re-using dimensions across hypercubes (tables) and also, therefore, by re-using its XBRL facts in an XBRL report. EFRAG has implemented relationships between IROs, Policies, Targets and Actions 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, Targets, Actions and Metrics. 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 preparers-friendly and flexible approach to be important for the first-time adoption. It reduces the risk of mismatches when (slightly) different typed dimension identifiers are used, with the assumption that Inline XBRL reports have to be prepared.²⁴ 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 on how to do the tagging correctly are provided in the box 'Illustration of application instructions on typed dimensions'.

²⁴ 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 (MDR)

The typed dimensions for IROs, policies, targets and actions, can be used with technical IDs, e.g. with a number like ‘p-1’ for the first policy. 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 string XBRL element is provided in the XBRL taxonomy, that enables linking the target to a policy. For instance, when the human readable target ‘All suppliers shall have a net zero target by 2035’ should be linked with the ‘p-1’ to the related policy.

In order to provide a machine-readable link between IROs, policies, targets and actions, it is of particular relevance, to use consistent identifiers or names across the report 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 or identifier of impact, risk and opportunity	Name or identifier of related impacts, risks and opportunities	ESRS 2 SMB-3
Identifier of policy [typed axis]	Name or identifier of policy	Name or identifier of related policy	ESRS 2 MDR-P
Identifier of target [typed axis]	Name or identifier of target	-	ESRS 2 MDR-T
Identifier of action (plan) [typed axis]	Name or identifier of action (plan)	-	ESRS 2 MDR-A
Name of metric(s) [typed axis]	-	-	ESRS 2 MDR-M

If a policy addresses multiple IROs, the names or identifiers reported in the related fact should be separated with a comma.

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.

103. 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, while using foreign-keys could be reintroduced to improve the data quality.

6.7 ESRS 2 SBM-3 ‘List of IROs’.

104. The XBRL taxonomy implements the ‘list of IROs’ as per ESRS 2, SBM-3 with a typed dimension. This allows for the digital disaggregation of a single IRO and for the linking of Policies, Actions, and Targets to each of them as described above. A multiple-choice enumeration with the sustainability matters (topics, subtopics and sub-subtopics) has been implemented, which allows for linking of the IRO to one or more of sustainability matters.
105. During the development of the ESRS XBRL taxonomy, an additional implementation has been 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 has been discarded because it would not be possible to link a tagged disclosure on an IRO to multiple sustainability matters or topics. Also, the missing possibility to separately identify Impacts, Risks and Opportunities was considered a drawback for users of the digital ESRS statements.

6.8 Validation rules implemented

106. The XBRL taxonomy implements three validation rules, based on the Formula Linkbase 1.0 specification, which can be used by preparers, auditors, and regulators to validate the XBRL reports.
107. 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 the XBRL reports.

According to ESRS 1 paragraph 35, EU datapoints shall ‘explicitly stated’ to be ‘not material’, when omitted.

108. 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

Draft ESRS Set 1 XBRL Taxonomy – Explanatory Note and Basis for Conclusions

will result in a WARNING when validating the XBRL report, and for one or more XBRL elements no tags are found.

109. 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).
110. It is recommended to tag non-material XBRL elements with *xsi:nil*, which will not raise any validation message. Phase-in provisions might be applied, which could also result in false positive validation results when the tagging is omitted. EFRAG will discuss the issue with ESMA and will provide a recommendation on this matter. Additionally, the fact that only one out of two alternative XBRL elements is used for tagging (as described in paragraph 95) needs to be reflected in the final XBRL taxonomy and that is not yet implemented in the draft.
111. 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.

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 <i>General Disclosures</i> 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

112. EFRAG proposes to introduce 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 6.6.).

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

113. In the XBRL taxonomy, starting with the materiality assessment, IROs, policies, targets, and actions (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 the different disclosures' aspects (e.g., 'Name or identifier of policy') as separate XBRL elements, wherever possible, in order to allow for tagging in the human-readable format, while the typed dimension could have a technical identifier, that is independent from the language and might be more stable across reporting periods. The use of typed dimensions for IROs, policies, targets and actions, is illustrated in IAI 3.

114. The XBRL elements provided for the ESRS 2 MDR-Metrics allow 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.
115. 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 'other [member]' implemented (e.g., 'other decarbonisation levers', 'other GHG category', 'other than female and male', etc.).

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 [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 cover the disclosure as well.

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

117. 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 [text block]’, which can be used in conjunction with a typed dimension for an IRO, and a semi-narrative enumeration element 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 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).

Undertaking’s narrative additions to ESRS datapoints or entity-specific narrative disclosures 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. If the disclosures are additions to ESRS datapoints, the parent narrative tag of the hierarchy (at least level 1) should be tagged. In both cases, a 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.

Entity-specific metrics (ESRS 1, paragraph 11), should be tagged with the generic MDR-M XBRL elements in combination with the typed dimension, separating each metric.

If the XBRL taxonomy extensions are nevertheless to be created, or third-party taxonomy tags are used, the re-creation of the presentation linkbase should be avoided. 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.

The 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.

118. 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 to define a completely new presentation linkbase. Instead, XBRL elements could be added to the presentation linkbase.

6.10 Incorporation by reference

119. ESRS 1, chapter 9.1 and ESRS 2, BP-2 paragraph 16 describe a way in which incorporation by reference could be done by preparers. Paragraph 16 of BP-2 requires to disclose 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 the same ‘digitisation’ 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.²⁵ The XBRL specification allows for multiple XHTML documents to be considered as one set. In practice, it would mean that a single *Inline XBRL Report Package*²⁶ could 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, would 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 could 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’ feature²⁷ 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.

IAI 7: Illustration of application instructions on incorporations by reference

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 a single Inline XBRL Report Package.

The conditions for such incorporation, set in ESRS 1 paragraph 120, do not allow to incorporate disclosures from any source or document outside of the Inline XBRL Document set.

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.

²⁵ <https://www.xbrl.org/specification/inlinexbrl-part1/rec-2013-11-18/inlinexbrl-part1-rec-2013-11-18.html#d1e533>

²⁶ <https://www.xbrl.org/specification/inlinexbrl-part1/rec-2013-11-18/inlinexbrl-part1-rec-2013-11-18.html#term-inlinexbrldocumentset>

²⁷ <https://www.xbrl.org/specification/inlinexbrl-part1/rec-2013-11-18/inlinexbrl-part1-rec-2013-11-18.html#d1e1266>

120. 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.

6.11 Connectivity with financial reporting

121. The availability of the three taxonomies (IFRS, ESRS, and Article 8 XBRL Taxonomies) embedded into the ESEF Regulation will create an ecosystem of data from EU companies accessible through the European Single Access Point (hereafter: ESAP). In this context, digital technology may play an important role in the connectivity. Some potential aspects in this regard are:

- (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 accounting taxonomy into sustainability taxonomy, e.g., Revenue/Turnover and Assets];
- (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 the 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).

122. More research work is necessary in this area in the future, once the first reports will be available, to fully exploit the potential of digital connectivity²⁸.

6.12 Interoperability with other sustainability-related reporting standards

123. Digital interoperability of the ESRS with other sustainability-related reporting standards like the IFRS sustainability-related Disclosure Standard (hereafter IFRS S1 and S2), the standard defined by the Global Reporting Initiative (hereafter: GRI) and the Carbon Disclosure Project (hereafter: CDP) is an important objective for EFRAG. This reflects the need of preparers and users to prepare and access data interchangeably between different XBRL Taxonomies, with limited effort. However, the 'digital' interoperability can only follow what has been defined as interoperable in the human-readable standards.

124. In order to avoid double reporting and/or 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, a digital concordance table can be developed. This digital concordance

²⁸ EFRAG has established a project on the Connectivity between Financial and Sustainability Reporting, where this topic is being considered.

table shows the relationships between XBRL elements of the Draft ESRS XBRL Taxonomy and the related XBRL elements representing other standards. EFRAG plans to implement those concordance tables as part of a separate reference linkbase of the XBRL taxonomy, which would even allow to auto-tag or convert ESRS-tagged instance documents into related XBRL instance documents whenever the relationship allows for it. A comprehensive concordance table between ESRS and IFRS or between ESRS and GRI cannot be developed at this stage, as the respective digital taxonomies are still being developed. An interoperability index of the GRI and ESRS standards has been jointly published, and the EFRAG secretariat is working with the GRI staff on a digital mapping.

125. Following the high interoperability reached between ESRS and IFRS Sustainability Disclosure Standard S1 and S2 (specifically on Climate Change)²⁹, EFRAG assessed ways to enable concordance between the ISSB taxonomy and the ESRS taxonomy. A formalised mapping has not been issued yet.
126. EFRAG has assessed that:
 - (a) companies that are required to report in accordance with the ESRS will to a very large extent report the same information regarding climate change as companies that use ISSB standards and that;
 - (b) the very high degree of interoperability between the ESRS and the two ISSB standards significantly reduces the risk of double reporting by ESRS preparers.
127. EFRAG considers that there is high-level interoperability in the human-readable format and considers advisable that the same be valid for digital reporting.
128. Starting with the premise above that IFRS climate-related datapoints can be located in a ESRS human-readable report³⁰, EFRAG considers that the most effective approach to achieve the highest possible level of interoperability is a digital concordance table or 'ear-marking system' identifying individual XBRL elements common to both taxonomies. This will possibly allow for a quasi-automatic translation of ESRS tags into ISSB tags, and fostering the easy access to both sets of disclosures without undue conversion burden. In an ideal situation, the two XBRL taxonomies would reflect the same methodological approach resulting in the digital concordance, reflecting the relationship between XBRL elements on a one-to-one basis. However, in EFRAG's view a simple one-to-many relationship is also possible where the information required by one IFRS Standard taxonomy element is split across multiple elements (or tags) in the corresponding ESRS taxonomy (separability – see

²⁹ <https://www.ifrs.org/news-and-events/news/2023/07/european-comission-efrag-issb-confirm-high-degree-of-climate-disclosure-alignment/>

<https://efrag.org/Assets/Download?assetUrl=%2Fsites%2Fwebpublishing%2FMeeting%20Documents%2F2307280747599961%2F04-02%20EFRAG%20SRB%20%20230823%20-%20EFRAG%20IFRS%20interoperability%20and%20mapping%20table.pdf>

³⁰ EFRAG expects this to be the case for the vast majority of the datapoints in IFRS S1 and S2. There may be few exceptions. EFRAG expects to release an interoperability map illustrating these cases in the coming months.

chapter 8 of the methodological note). This would be the case where ESRS text blocks are tagged with high or higher granularity for narrative information than IFRS (see chapter 6 of the methodological paper) and can be automatically aggregated.

129. EFRAG published a ESRS mapping table³¹, which maps high-level paragraphs from IFRS S2 to the corresponding ESRS climate change related paragraphs. However, this does not imply that the underlying XBRL taxonomies are interoperable per datapoint. In fact, every paragraph with different wording and/or level of separation³² might be implemented slightly differently in the respective XBRL taxonomy, reflecting the wording of the standard. From a digital standpoint, a detailed concordance table between the ESRS XBRL taxonomy elements and the corresponding IFRS Sustainability Disclosure Taxonomy elements would have to be prepared. Such a concordance table could be included as part of the ESRS XBRL taxonomy reference linkbase. However, such a mapping table is most helpful when simple *one-to-one* relationships are identified. EFRAG is committed to continue its ongoing cooperation with the ISSB in finding (technical) solutions to overcome these challenges.

Appendix 1: Specific technical implementation details

A1.1. Semi-narrative elements (Boolean and enumeration elements)

130. EFRAG proposes creating additional element types, specifically *Booleans* and *enumerations* (also known as categorical elements). The *Boolean* corresponds to a ‘yes’ or ‘no’ (true or false) answer. 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).
131. 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).
132. 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

³¹

<https://efrag.org/Assets/Download?assetUrl=%2Fsites%2Fwebpublishing%2FMeeting%20Documents%2F2307280747599961%2F04-02%20EFRAG%20SRB%20%20230823%20-%20EFRAG%20IFRS%20interoperability%20and%20mapping%20table.pdf>

³² ESRS XBRL Taxonomy Architecture and Methodology, page 10,
<https://efrag.org/Meetings/2302240950097339/EFRA-GRB-26-April-2023>

24 b)). This specific 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 with ‘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 has proposed 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 in order to reflect the detailed requirements within a DR that requires a positive or negative confirmation (i.e., ‘If no such incidents have occurred, the undertaking shall state this’, as in ESRS S1, S1-17 paragraph 104 a)). Such form of requirements 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, subtopics and sub-subtopics pursuant to AR 16 ESRS 1).

133. 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 Yes or No 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:nonFact* 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" ><p> The group is excluded from the EU Paris aligned benchmarks.</p></ix:nonNumeric>
```

134. As the list of certified XBRL software tools shows, most of the products support the Extensible Enumerations 2.0 specification, which is relevant for the semi-narrative multi-choice drop-down menus.³³
135. A list of *conditional and technical Booleans* has been discussed in the SR TEG meeting on the 22 November and 5 December 2023.³⁴ 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’.
136. EFRAG proposes to keep the *Booleans* of datapoints that require an explicit ‘negative or positive confirmation’ and to remove all the remaining conditional *Booleans* from the Draft ESRS Set 1 XBRL taxonomy.

IAI 9: 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 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 to include the technical names of the selection in the human-readable part of the XHTML document. Instead, 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>
```

³³ <https://software.xbrl.org/>

³⁴ See Agenda Point 03, Appendix A: <https://efrag.org/Meetings/2305101050307353/EFRAG-SR-TEG-Meeting-05-December-2023>

137. After a voluntary Q&A session on 29 and 30 November with 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.
138. EFRAG removed the *Boolean* XBRL elements in question and will ask a specific question on this matter as part of the public consultation.
139. 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.

A1.2. Paragraphs not implemented as reportable XBRL elements in the XBRL taxonomy

140. The ESRS IG 1 list of 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.
141. 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.
142. 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 on 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.

143. 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 attributes for the tags. 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, as 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 the 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.

144. 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).

145. 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 6.4).

146. 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.

A1.3. Avoidance of overlapping narrative elements and re-usage across DRs

147. Several topical ESRS include DRs that complement the ESRS 2 GOV, IRO and SBM DRs.
148. 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.
149. 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.
150. 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, '[301001] E1.GOV-3 Integration of sustainability-related performance in incentive schemes (E1)'.
151. Keeping the corresponding elements in the main DRs in ESRS 2 separate from the complementary elements in topical ESRS makes it easier for users of the taxonomy (preparers and users) 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.
152. 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.
153. 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.
154. 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]	<ul style="list-style-type: none"> • 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 targets are compatible with limiting of global warming to one and half degrees Celsius in line with Paris Agreement [text block]	<ul style="list-style-type: none"> • E1-4, paragraph 34e • E1-1, paragraph 16a
Disclosure of significant operational expenditures (OpEx) and/or capital expenditures (Capex) required for implementation of action plan [text block]	<ul style="list-style-type: none"> • ESRS 2, paragraph 69 • E1-1, paragraph 16c
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]	<ul style="list-style-type: none"> • 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]	<ul style="list-style-type: none"> • 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 [text block]	<ul style="list-style-type: none"> • ESRS 2, MDR-T, paragraph 80 h • ESRS S1-5, paragraph 47 a

155. 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.

A1.4. ESRS 2 MDR on Metrics

156. 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) 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).

IAI 10: 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 could 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 (ESRS 2, paragraph 76) or additional metrics stemming from other legislation or generally accepted sustainability reporting standards and frameworks (ESRS 1, paragraph 114), should be tagged, including their numerical values, with the corresponding XBRL elements and the typed dimension (‘Name of metric(s) [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.

157. 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.
158. 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 semantical and contextual information.

A1.5. ESRS E1-9 Disclosure of the location of assets at material physical risks

159. AR 70(c) of ESRS E1-9 requires a disaggregation of the assets at material physical risks with **NUTS** codes. The XBRL taxonomy has a string element ‘NUTS codes for location of significant assets at material physical risk’ to cover this requirement. However, this might not

be sufficient to precisely identify the NUTS regions³⁵ due to the unstructured format of the XBRL element data type. Therefore, EFRAG plans to replace it with an explicit dimension.

IAI 11: Illustration of application instructions on the disclosure of the NUTS-based location of assets at material physical risk (E1-9)

Fact values tagged with the element ‘NUTS codes for location of significant assets at material physical risk’ should only contain codes listed in the table linked below separated by coma (whitespaces can be included but should be ignored by users).
<https://ec.europa.eu/eurostat/documents/345175/629341/NUTS2021.xlsx>

A1.6. Technical implementation of optional disaggregation (typed dimensions in open and closed hypercubes)

160. The following chapter mainly addresses the technical issue of discussing the implementation of disaggregation not explicitly foreseen in the DRs. Therefore, it might not be well understood by non-technical readers not familiar with the XBRL Dimension specification.³⁶

- (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 any other 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.

161. In order to implement (a) and (b), the XBRL taxonomy has introduced an explicit dimension ‘Reporting scope [axis]’ in every disclosure requirement with 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 ‘Restated, corrected or revised [member]’ or with the ‘Milestones and target years [member]’ to avoid duplicate facts. It is not necessary to use those dimensions on narrative XBRL elements (textblocks). Users (e.g., analysts,

³⁵ <https://ec.europa.eu/eurostat/web/nuts/background>

³⁶ <https://www.xbrl.org/specification/dimensions/rec-2012-01-25/dimensions-rec-2006-09-18+corrected-errata-2012-01-25-clean.html>

data providers) of digital XBRL reports should notice that fact values require special handling when detecting any ‘Reporting Scope’ dimension member in its XBRL context.

162. Whenever a disclosure requirement mentions a disaggregation by countries, the XBRL taxonomy includes the dedicated explicit dimension (e.g., E1-6, S1-6, S1-8, etc.). The same applies for the 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]’ dimensions

The Reporting Scope members should be used by preparers when tagging numerical facts as restated or as milestones and targets. 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.

When disclosing restatements, the period start/end or instant date of the XBRL context should be set to the actual reporting period that has been restated.

163. However, for the disaggregation described in (c), it would be excessive to include the country’s explicit dimension and one or even two typed dimensions for the site location as well as significant assets for every reportable XBRL element in every closed hypercube.
164. 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 for any fact that is not disaggregated by any asset or site location would need to be set, which could result in a 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 (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 extension taxonomy.
165. Due to the fact that the draft ESRS XBRL taxonomy is designed in a way that minimises the need for XBRL taxonomy extensions (see paragraph 117), EFRAG proposes to implement option (b), which is fully in line with the XBRL specifications. But it must be noted that, according to a working group note from XBRL International, the use cases for open

hypercubes are ‘unclear’³⁷ and, therefore, EFRAG added a specific question about their implementation in the public consultation. EFRAG is currently in the process of discussing the registration of an arcrole as described in (b) in the Link Role Registry (LRR) with international experts.

166. The E1-6 disclosure requirement on Greenhouse Gas emissions requires a similar solution as well since E1 AR 41 also allows for disaggregation by optional typed dimensions on *operating segments* and *subsidiary*.

IAI 13: Illustration of application instructions on the use of open hypercubes and dimensional disaggregation

The [Draft] 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 open hypercubes are used in the XBRL taxonomy, only those dimensions should be additionally tagged to corresponding facts, that are linked with an “optionalDimension” arcrole as part of the related hypercube in the definition linkbase.

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

167. 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.
168. 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. XBRL International provides a repository of those relationships, and EFRAG is in the process of registering a number of arcroles, which is preferred over defining them in the XBRL taxonomy itself. It must be noted that those arcroles are not to be compared to an XBRL element itself in the XBRL taxonomy and that, therefore, their usage can only be ‘enforced’ with a tagging rule.

³⁷ <https://www.xbrl.org/WGN/dimensions-use/WGN-2015-03-25/dimensions-use-WGN-2015-03-25.html#sec-use-cases>

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.

169. 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 that, but the related arcrole enables it.
170. The following list of arcroles should be used when digitally tagging with the XBRL taxonomy.

Arcrole	Description	Related XBRL element	Reference
fact-valueChain Estimation	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 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.	Disclosure of sources of measurement uncertainty [text block] Disclosure of assumptions, approximations and judgements made in metric measurement [text block]	ESRS 2, BP-2 Paragraph 11.
fact-dueDiligenceStatement	Arcrole for linking facts to an explanatory fact that is supposed to be used when the fact value covering an aspect of due diligence.	Disclosure of information about due diligence process (or cross-reference) [text block]	ESRS 2, GOV-4, Paragraph 32, 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 [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-disclosures Stemming From Other Legislation Or Generally Accepted Reporting Standard	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
--	---	---	----------------------------

171. 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.

A1.8. Positive and negative fact values and balance attributes

172. 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
Changes in water storage	Volume	ESRS E3-4 28 d
Expected changes to 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	Monetary	ESRS E1-9 AR 77 b
Adjusting items to assets at material transition risk	Monetary	ESRS E1-9 AR 77 b
Adjusting items to liabilities at material transition risk	Monetary	ESRS E1-9 AR 77 b
Adjusting items to net revenue at material physical risk	Monetary	ESRS E1-9 AR 77 b
Adjusting items to net revenue at material transition risk	Monetary	ESRS E1-9 AR 77 b

173. 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.

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

All of the numerical XBRL elements are supposed to 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 reduction XBRL elements (according to E1-4, paragraph 34) shall be disclosed as a positive number. 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.

174. The ESRS XBRL taxonomy does not have a calculation linkbase, but EFRAG will evaluate the introduction of a calculation linkbase at a later stage.

175. It must be noted that the XBRL elements representing ESRS E1-4 on Greenhouse Gas Emission reduction (in absolute and intensity values) are supposed to 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 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

A1.9. Implementation of current and anticipated financial effects

176. While the ESRS 2 MDR-A, ESRS E1-9, and ESRS E2-9 have dedicated monetary XBRL elements that reflect the wording of the ESRS, such as ‘Carrying amounts of assets at material physical’, the general disclosure requirement in ESRS 2 SMB-3 paragraph 48(d) as well as other environmental standards do not define precise monetary datapoints. Therefore, the XBRL taxonomy has implemented textblock tags for the corresponding datapoints, recognising their inappropriate data types in terms of usability and comparability.

IAI 16: Illustration of application instructions on the disclosure of monetary amounts in text blocks

For those ESRS XBRL elements, that are reflecting 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 textblock tag.

Affected ESRS XBRL textblock tags have a specific documentation label for this purpose:

The anticipated financial effects are expected to be disclosed in monetary values. While the ESRS XBRL Taxonomy does not have detailed numerical XBRL elements yet, 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.

177. A specific label has been introduced for those elements in order to indicate that monetary amounts indeed have to be disclosed as part of this 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 and material risks and opportunities for which there is significant risk of material adjustment within next annual reporting period to carrying amounts of assets and liabilities reported in related financial statements [text block]
Disclosure of anticipated financial effects of material risks and opportunities on financial position, financial performance and cash flows over the short-, medium- and long-term [text block]
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]

A1.10. Tagging of numerical and intensity values in particular

178. 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 <i>per net revenue</i>	DR
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
Energy intensity from activities in high climate impact sectors (total energy consumption per net revenue)	E1-5

179. 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 specific data type requires to use a specific XBRL unit for tagging. The intensity can be presented in tons, kilograms, grams, etc. Monetary values can be disclosed in different currencies and scale, i.e., in billions, millions, thousands or per single currency.

180. 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.’

181. 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>
```

182. Due to the scale attribute being set to -6, the resulting fact value would then be 0.00008 tons of CO₂eq per EUR and the attributes provided in the XBRL **unit** would allow **users** to use the data accordingly.
183. EFRAG has registered the new Data Type Registry³⁸ (hereafter: DTR) and Unit Type Registry³⁹ (hereafter: UTR) entries; however, they might not be available for the launch of the Draft ESRS Set 1 XBRL Taxonomy.

³⁸ <https://www.xbrl.org/dtr/dtr.html>

³⁹ <http://www.xbrl.org/utr/utr.xml>

IAI 17: 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
Baseline value against which progress is considered (absolute value)	ESRS 2 MDR-T
Quantitative metric (absolute value)	ESRS 2 MDR-M

Additionally, some units are prescribed in the ESRS, and the same unit should be used across the XBRL report (e.g. MWh for energy, m³ for water and metric tons of CO₂eq, 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 human-readable representation (e.g. GHG Emission are disclosed in Gram, while the XBRL Unit is defined in Tons of CO₂eq).

184. For E1-4, paragraph 34 a) intensity values have been implemented in the XBRL taxonomy accordingly. However, as 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 indeed 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 draft 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 elements listed above unless a correct XBRL unit is defined in the XBRL report. In theory, it would be possible to use a (entity-specific) typed dimension as well; however, given the fact that the ESRS sector specific standard might result in appropriate XBRL elements in the future, this approach has been discarded. The following list contains XBRL elements related to intensity values using a decimal item type.

List of XBRL elements related to intensity values temporarily using a decimal item
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

185. 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/dot).

IAI 18: Illustration of application instructions on the use of transformation for formatted numerical and date XBRL elements

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/dot). 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.

A1.11. Implementation of the disaggregation by ESRS Sectors and economic activities

186. Whenever the standard requires disclosure of ESRS sectors, NACE code-based economic activities⁴⁰ or disaggregation by them, such as in ESRS 2 SMB-1, E1-6, E1-9, E2-4 or E3-4, the corresponding dimension *Sectors and economic activities [axis]* has been implemented in the XBRL taxonomy. It must be noted that the tree combines the sectors and NACE code-based economic activities in one dimension, with a parent-child (or rather domain-member) relationship. The tree is based on the draft SEC1 working paper⁴¹ published in February 2022. EFRAG is currently working on an updated ESRS sector classification;⁴² hence, the XBRL taxonomy will be amended accordingly as soon as the ESRS sector classification is finalised.
187. 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 only available in the Definition Linkbase under the role *[902000] Sectors* and *[901000] Countries*.
188. It is likely that the ESRS sectors and NACE-code-based activities in the XBRL taxonomy would need to be updated on a regular basis (e.g., annually) to reflect amendments.

⁴⁰ The ESRS economic activities are not related to the economic activities of the Article 8 'EU Taxonomy'.

⁴¹

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

⁴² SR TEG Meeting 15 January 2024, <https://efrag.org/Meetings/2311080942079508/EFRAG-SR-TEG-meeting-15-Janvier-2024>

IAI 19: Illustration of application instructions on tagging countries, sectors, and economic activities

The full list of dimension members for countries, NACE-code based economic activities and sectors, can be found in the Definition Linkbase of the XBRL taxonomy under the corresponding extended link role *[902000] Sectors* and *[901000] Countries*.

Appendix 2: Summary of user interviews

Introduction

- 1 The objective of this summary is to analyse and synthesise 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 the users' perspective on the usability of digitally tagged narrative disclosures. The interviews have been done in meetings where EFRAG first presented their methodology and architecture⁴³ 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 anonymized in this summary):
 - Bloomberg
 - MSCI
 - Corporatings
 - FactSet
 - Wikirates

The details

Usability of XBRL-based narrative disclosures

- 3 All respondents indicated to have plans to use XBRL-based narrative disclosures for both manual and automated (AI) analysis. The respondents confirmed that narrative disclosures will 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 will enable a human insight approach. Human oversight on 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.

⁴³ Draft ESRS XBRL Taxonomy Methodology and Architecture, approved by SRB on the 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>

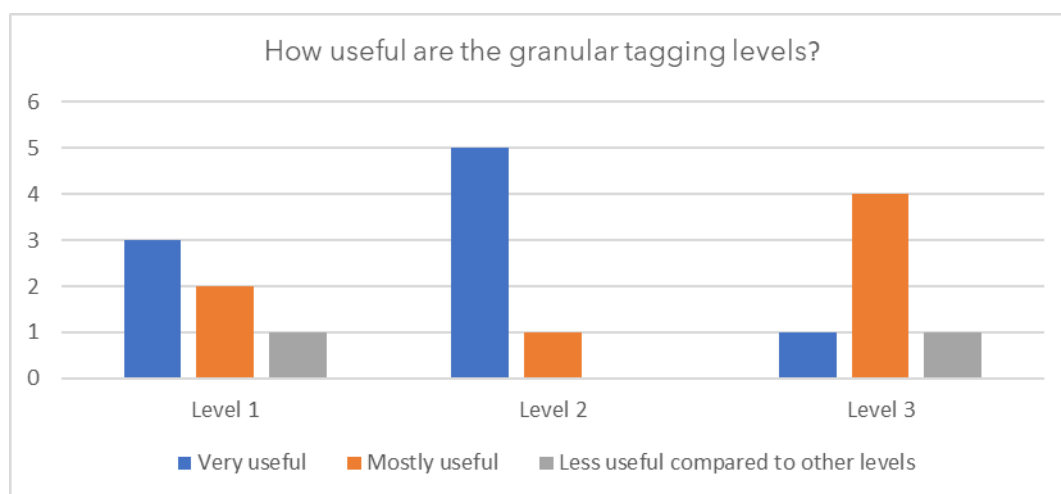
- 5 Another respondent explained that narrative disclosures are to be extracted entirely manually. Thereby, proper tagging would facilitate the extraction of data to assemble it in spreadsheets that allow for comparison amongst a portfolio of undertakings.
- 6 At least three users explicitly confirmed that, wherever possible, narrative disclosures will 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, it 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.⁴⁴
- 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.

⁴⁴ 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 one mentioned that this level of tagging might be too onerous on 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 respondent’s views on how useful each granular tagging level embedded in the full hierarchy of the taxonomy is.



Additional semi-narrative tags

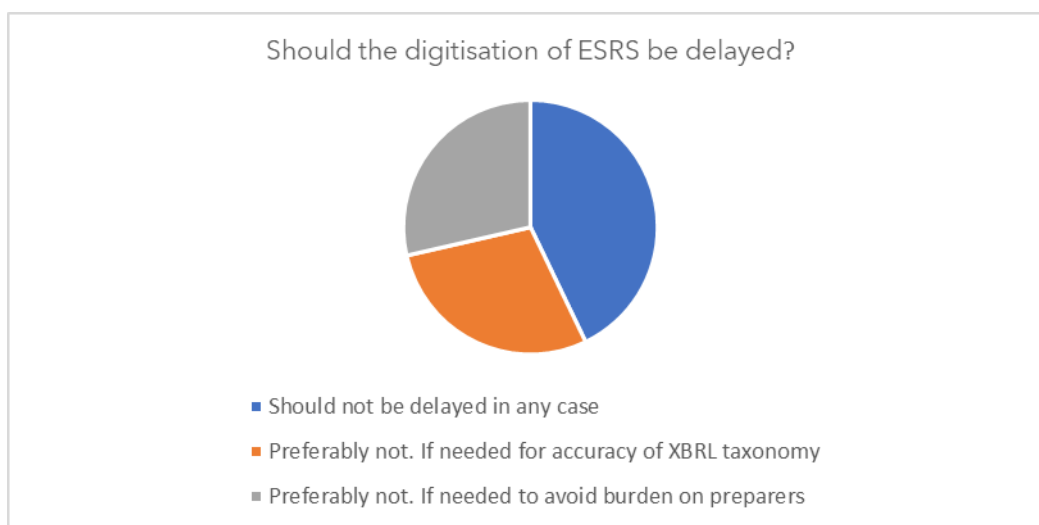
- 14 The six respondents pointed out that additional semi-narrative tags (*Yes/No Booleans*, Drop-Down-Menus XBRL Enumeration elements) would be very useful and a huge step forward in achieving clarity. Including additional semi-narrative tags would enhance data accuracy and would enable filtering. Several 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 to give 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 The six respondents recommended to implement the digitisation of ESRS as soon as possible. The respondents highlighted some issues that could arise from postponing implementation of the digital tagging. If preparers invest in systems that do not incorporate the specifications needed for the digital (XBRL) reporting format, it could 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 on the digitalisation 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 could maximise, according to them, the benefits of the digitisation of the ESRS. These features included a mechanism in the XBRL taxonomy that allows 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 the reconciliation between operating segments and EU Taxonomy Activities (according to Article 8 Taxonomy Regulation disclosures) is an issue as well. 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, to improve searchability of information and understanding the context. Based on the comments received, a combination of Level 2 and

Draft ESRS Set 1 XBRL Taxonomy – Explanatory Note and Basis for Conclusions

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 is to avoid delaying its implementation, as it would have costly implications for them and the preparers. However, the 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 that 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 (we have text character limits on Bloomberg's fields), but we do have transparency to all our documents where if we use XBRL, 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 a “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 standardize 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 be 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 pattern (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 'discretize' them to identify that common practice through automated classification and/or automated summarization.

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, can lead to efficiency data extraction, can 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 breakdown the disclosures into smaller chunks 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 very 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 to 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 the analysis 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 for data, we could benefit from having a consistent set of data across all companies even it means sacrificing highly granular tagging (level 3). For e.g., having all companies disclose information on level 1 and provide more detailed level 2 info would be preferable than 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 analyses 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 roll out 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 roll out 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 favour for the preparers by providing the blueprint of the reports. It is also a blueprint for the 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 more preferable to set-up any automatic and more accurate data extraction. However, we do understand the constraints on preparers in the first year for 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.

Draft ESRS Set 1 XBRL Taxonomy – Explanatory Note and Basis for Conclusions

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 the audits down.

Appendix 3: List of public meetings – EFRAG SR TEG and EFRAG SRB

- 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 Adler, Johan Dahl, Anne-Claire Ducrocq, Julian Müller, 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.

Appendix 4: List of internal meetings – EFRAG SR TEG and EFRAG SRB

- 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.

Appendix 5: List of 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)

Appendix 6: 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