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Foreword

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Environmental labels and declarations — Type III environmental declarations

Introduction

This Technical Report has been prepared based on ISO/TR 14025 *Environmental labels and declarations — Type III Environmental Declarations* published in 2000 without modifying the technical contents.

The purpose of this Technical Report is to identify and describe the elements and issues concerning Type III environmental declarations and corresponding programmes, as well as to provide information in specific areas where general agreement among experts exists.

This Technical Report also discusses issues that should be resolved prior to the possible development of an International Standard. It recognizes that there are various Type III environmental declarations in use and that the concept is still evolving.

In the work plan of the Type III task group, a Type III environmental declaration is described as "quantified environmental life cycle product information, provided by a supplier, based on independent verification, (e.g. third party), (critically reviewed) systematic data, presented as a set of categories of parameter (for a sector group).

- The Type III environmental declaration is non-selective but presents the information in a format that facilitates comparison between products.
- The Type III environmental declaration includes information supplied to industrial customers and to end-use consumers.

"Third party" does not necessarily imply the involvement of a certification body."

1 Scope

This Technical Report identifies and describes elements and issues concerning Type III environmental declarations and corresponding programmes, including technical considerations, declaration format and communication, and administrative considerations for developing and/or issuing a Type III environmental declaration.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this Technical Report. For dated reference, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this Technical Report are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of JIS maintain registers of currently valid International Standards.

JIS Q 14020:1999, *Environmental labels and declarations — General principles*.

ISO 14021:1999, *Environmental labels and declarations — Self-declared environmental claims (Type II environmental labelling)*.

ISO 14024:1999, *Environmental labels and declarations — Type I environmental labelling — Principles and procedures*.

JIS Q 14040:1997, *Environmental management — Life cycle assessment — Principles and framework*.

JIS Q 14041:1999, *Environmental management — Life cycle assessment — Goal and scope definition and inventory analysis*.

ISO 14042:2000, *Environmental management — Life cycle assessment — Life cycle impact assessment*.

ISO 14043:2000, *Environmental management — Life cycle assessment — Life cycle interpretation*.

3 Terms and definitions

For the purposes of this Technical Report, the terms and definitions given in JIS Q 14020, ISO 14024, JIS Q 14040, JIS Q 14041, ISO 14042, ISO 14043 and the following apply.

3.1

category endpoint

attribute or aspect of natural environmental, human health or resources, identifying an environmental issue of concern

NOTE Figure 2 [ISO 14042] illustrates this term in further detail.

[ISO 14042:2000]

3.2

certification

procedure by which a third party gives written assurance that a product, process or service conforms to specified requirements

[ISO/IEC Guide 2:1996]

3.3

functional unit

quantified performance of a product system for use as a reference unit in a life cycle assessment study

[JIS Q 14040:1997]

3.4

impact category

class representing environmental issues of concern to which LCI results may be assigned

[ISO/IEC 14042]

3.5

interested party

any party affected by the development and use of a Type III environmental declaration

3.6

life cycle impact category indicator

quantifiable representation of an impact category

NOTE The shorter expression "category indicator" is used in the text of the International Standard [ISO 14042] (including the terms and definitions clause) for improved readability.

[ISO 14042]

3.7

product

any goods or service

[ISO 14024]

3.8

product category

group of products which have equivalent function

[ISO 14024]

3.9

product function characteristics

attribute or characteristic in the performance and use of a product

[ISO 14024]

3.10

third party

person or body that is recognized as being independent of the parties involved, as concerns the issue in question

NOTE "Third party" does not necessarily imply the involvement of a certification body.

3.11

Type III environmental declaration

quantified environmental data for a product with pre-set categories of parameters based on the ISO 14040 series of standards, but not excluding additional environmental information provided within a Type III environmental declaration programme

NOTE In the present development of Type III environmental declarations, alternative methodologies have been considered. In future standardization work, alternative methodologies could be incorporated as the basis for Type III environmental declarations. Therefore this Technical Report discusses issues associated with these methodologies as well. If other operational methodologies have been developed by the time future standardization work is carried out, this could be incorporated.

3.12

Type III environmental declaration programme

voluntary process by which an industrial sector or independent body develops a Type III environmental declaration, including setting minimum requirements, selecting categories of parameters, defining the involvement of third parties and the format of external communications

4 Objective of Type III environmental declarations

The overall goal of environmental labels and declarations is, through communication of verifiable and accurate information that is not misleading on environmental aspects of products and services, to encourage the demand for and supply of those products and services that cause less stress on the environment, thereby stimulating the potential for market-driven continuous environmental improvement [JIS Q 14020].

5 Technical considerations

5.1 General

Consistent with the principles of JIS Q 14020, the methodology used to develop Type III environmental declarations shall be based on scientific and engineering approaches that can accurately reflect and communicate the environmental aspects and information contained in the declaration. This Technical Report presents the current state of information and experience in the practice of Type III environmental declarations.

Specifically, this Technical Report recognizes the need to resolve some outstanding issues related to Type III environmental declarations, including:

- methods of data collection and assessment, including the role of values and subjectivity, hereafter referred to as value-choices (5.2);
- choice of life cycle inventory analysis (LCI) data categories and life cycle impact assessment (LCIA) impact categories (5.3, 7.2);
- ensuring quality of environmental information in terms of relevance, accuracy and uncertainty (5.2.3, 5.5);
- the means of ensuring that environmental information is relevant and not misleading (clause 6, 7.2);
- how to communicate with purchasers and potential purchasers in an accurate and not misleading way (clause 7);
- ensuring international compatibility, maximum comparability, and the use of sufficiently specific product information (clauses 7 and 8).

5.2 Methodology options

5.2.1 General

The quantified environmental product information in a Type III environmental declaration shall be based on procedures and results from a life cycle study in accordance with the ISO 14040 series of standards. Type III environmental declarations that have emerged to date have been based on a life cycle approach using life cycle assessment (LCA). This clause describes methodological options for Type III environmental declarations and programmes and refers to the standards in the ISO 14040 series. Figure 1 shows the relationship between the different options. The common element is that each option is based on LCI in accordance with JIS Q 14040, JIS Q 14041 and ISO 14043. However, the route to the final declaration may vary (e.g. data analysis and inclusion of additional environmental information), as described below and in Figure 1.

- Option A: A life cycle inventory analysis (LCI in accordance with JIS Q 14040 + JIS Q 14041 + ISO 14043), or
- Option B: An LCI followed by life cycle impact assessment (LCIA in accordance with JIS Q 14040 + JIS Q 14041 + ISO 14042 + ISO 14043), or
- Option C: An LCI in accordance with JIS Q 14040 + JIS Q 14041 + ISO 14043, with some additional analysis of the data, but not strictly following ISO 14042 (referred to as alternative methodologies).

Results from other environmental analysis tools may also be used to provide additional environmental information that gives a complementary perspective to a Type III environmental declaration (see Figure 1). The inclusion of additional environmental information is optional. This information may or may not be derived from an analysis of the product's life cycle. It may concern other issues associated with the product's overall environmental performance; this could include for example relevant elements of sustainable development, such as economic or social elements.

A discussion of these methodologies and the issues which are raised in the context of Type III environmental declarations appears in annex A.

5.2.2 Considerations related to product comparisons

The main purpose of Type III environmental declarations is to provide quantitative environmental data, as described in definition 3.11 of this Technical Report. Although the Type III environmental declarations do not contain comparative assertions, the information can be used to make comparisons between products. Therefore, the developer of the Type III environmental declaration should carefully consider the requirements in JIS Q 14040 and elsewhere in the LCA series concerning "comparative assertions" and use these requirements as guidance in developing his technical approach, regardless of the specific methodology on which the technical approach may be based.

5.2.3 Critical review

Critical review is a technique to verify whether the LCA study has met the requirements of relevant Standards JIS Q 14040, JIS Q 14041, ISO 14042 and ISO 14043. The evaluation shall be in accordance with the critical review process of 7.3.3 in JIS Q 14040:1997. The critical review process shall ensure that the methods used to carry out the LCA are scientifically and technically valid, that the data used are appropriate and reasonable in relation to goal and scope of the study, that the interpretations reflect the limitations identified and the goal of the study, and that the report is transparent and consistent.

For the purposes of this Technical Report, critical review shall also be used for evaluation of the alternative methodologies. For all forms of Type III environmental declaration, the critical review should also include an evaluation of the content and format of the external communication and how it is likely to be interpreted by end users. This evaluation should include a review for conformity to the principles defined in JIS Q 14020 and in the programme procedures.