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Product category rules for life cycle assessments of electronic and electrical products and systems

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

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Product category rules for life cycle assessments of electronic and electrical products and systems

Règles de définition des catégories de produits pour l'analyse du cycle de vie des produits et systèmes électriques et électroniques Verfahren zur quantitativen, umweltgerechten Produktgestaltung durch Ökobilanzen und Umweltdeklarationen mittels Produktkategorieregeln für elektronische und elektrotechnische Geräte

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European Committee for Electrotechnical Standardization Comité Européen de Normalisation Electrotechnique Europäisches Komitee für Elektrotechnische Normung

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Contents

Page

Eur	opean i	foreword	4
Intr	oductio	on	5
1	Sco	ope	6
2	No	rmative references	6
3	Ter	rms and definitions	6
4 4.1 4.2	Ge	oduct life cycle assessmentneraloduct Category Rules	12
	4.2.1	General	
	4.2.2	Functional unit and reference flow description	
	4.2.3	System boundary	15
	4.2.4	Life cycle inventory	17
	4.2.5	Allocation rules	19
	4.2.6	Units	19
	4.2.7	Data quality	19
4.3	De v 4.3.1	velopment of scenarios	
	4.3.2	Transportation scenarios	21
	4.3.3	Use scenarios	21
	4.3.4	End-of-life scenarios	21
4.4		e cycle impact assessment	
4.5	LC .	A report	
	4.5.2	Scope of the study	23
	4.5.3	Life cycle inventory	23
	4.5.4	Environmental impact assessment	23
	4.5.5	Additional environmental information	24
5	Re	quirements for the development of PSR for EEPS	25
Anr	nex A (r	normative) Additional Rules	26
A .1	Ru	le(s) for extrapolation to a homogenous product family	26
A.2	Ru	les applying for the aggregation of environmental impacts on system level	26
Anr	nex B (i	nformative) Recommended impact categories	27
B.1	Ge	neral	27
B.2		ditional environmental information	
Anr	•	nformative) Correlation with the Product Environmental Footprint (PEF) Initiative of	31

Anne	x D (informative) Correlation with EN 15804 standard	36
Anne	x E (informative) General content of a product's environmental declaration	38
E.1	General	38
E.2	List of information in environmental declarations	38
E.2.1	Information about the manufacturer	38
E.2.2	Description of the product family, the reference product and its packaging	38
E.2.3	Constitutive materials and substances	38
E.2.4	Information on life cycle stages and potential impacts	39
Anne	x F (informative) Example of a product's environmental declaration	40
F.1	General	40
F.2	Basic example	40
Anne	x G (informative) Recovery activities: Allocation, calculation and default values	44
G.1	Circular formula	44
G.2	Formula without benefits	44
G.3	Formula with benefits	45
G.4	Formula with net benefits	46
G.5	Default values for R ₁ , R ₂ and R ₃	47
Biblio	ography	49

EN 50693:2019 (E)

European foreword

This document (EN 50693:2019) has been prepared by CLC/TC 111X "Environment".

The following dates are fixed:

- latest date by which this document has (dop) 2020-08-12 to be implemented at national level by publication of an identical national standard or by endorsement
- latest date by which the national (dow) 2022-08-12 standards conflicting with this document have to be withdrawn

The TC 111X Working Group 8 has been assigned to deal with the NWIP to define product category core rules for life cycle assessment as basis for environmental declarations. This document has been elaborated to ensure a harmonized and compatible approach through harmonized methods of assessing the environmental performance and providing environmental declarations for electrical and electronic products and systems (EEPS).

Key points:

- a) requirements how to conduct life cycle assessments for environmental declarations;
- b) requirements how to compile an associated life cycle assessment report;
- c) requirements how to develop product specific rules in vertical, product specific technical committees.

It is the intention of the working group that this document, once finalized as European standard, will be further processed to an international consensus in IEC according to the UAP procedure agreement between CENELEC and IEC.

Future standards defining product specific rules have to be consistent with this standard during their preparation. Any product specific standard already including these topics, e.g. EN 50598-3, should adapt their content to this standard within their usual maintenance circles.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

EN 50693:2019 (E)

Introduction

In the recent years, environmental aspects of electrical and electronic products and systems gained in importance for interested parties, such as customers and regulators.

In addition to qualitative approaches already widely applied in the context of environmental conscious design process, quantitative information on the potential environmental impacts of the full life cycle of products gained further interest. This generates the need to provide harmonized rules for the underlying life cycle assessment (LCA) in order to provide robust and consistent quantitative environmental data on electrical and electronic products and systems (EEPS), as well as to enable data aggregation at system level, like e.g. buildings, power drive systems and control cabinets.

The definition of product category rules (PCR), derived from EN ISO 14025, is an established method for a consistent approach by setting minimum quality standards for life cycle assessment in context to environmental product declarations (EPD) and hence are now defined as core rules in this standard for the variety of electrical and electronic products and systems.

On the base of the overarching PCR set out as core rules for EEPS, product specific rules (PSR) should be elaborated to further detail the requirements for the LCA in the specific context of the products or systems in scope. This can be done e.g. by product specific standardization committees or environmental declaration programs.

1 Scope

This document defines product category rules (PCR) for electronic and electrical products and systems (EEPS). It specifies the process and requirements on how to conduct life cycle assessment in the context of environmental declarations.

PCR is complemented by additional product-specific rules (PSR), which further define e.g. functional units and default scenarios in the product-specific context. Therefore, it also provides guidance on how to develop PSR in corresponding technical committees.

This document provides common rules for:

- a) life cycle assessment (LCA), including the requirements for developing default scenarios;
- b) the LCA report;
- c) the development of product specific rules.

This document provides further guidelines for environmental declarations.

The basic LCA principles and framework are based on the EN ISO 14040 series of standards (i.e EN ISO 14040 and ISO 14044), and therefore out of scope of the standard.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN ISO 14040, Environmental management - Life cycle assessment - Principles and framework (ISO 14040)

EN ISO 14044:2006, Environmental management - Life cycle assessment - Requirements and guidelines (ISO 14044:2006)

EN ISO 14020, Environmental labels and declarations - General principles (ISO 14020)

EN ISO 14021:2016, Environmental labels and declarations - Self-declared environmental claims (Type II environmental labelling) (ISO 14021:2016)

EN ISO 14025, Environmental labels and declarations - Type III environmental declarations - Principles and procedures (ISO 14025)

CEN ISO/TS 14027, Environmental labels and declarations – Development of product category rules

koniec náhľadu – text ďalej pokračuje v platenej verzii STN