ICS 13.020.20, 35.110 SLOVENSKÁ TECHNICKÁ NORMA Máj 2023

STN	**Environmentálne inžinierstvo (EE) Použiteľnosť EN 45552 až EN 45559 metód na hodnotenie aspektov materiálovej efektívnosti tovarov infraštruktúry siete IKT v kontexte obehového hospodárstva**	**STN EN 303 808 V1.1.1** 87 3808

Environmental Engineering (EE); Applicability of EN 45552 to EN 45559 methods for assessment of material efficiency aspects of ICT network infrastructure goods in the context of circular economy

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

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 04/23

Obsahuje: EN 303 808 V1.1.1:2023

136753

ETSI EN 303 808 V1.1.1 (2023-01)

Environmental Engineering (EE); Applicability of EN 45552 to EN 45559 methods for assessment of material efficiency aspects of ICT network infrastructure goods in the context of circular economy

Reference
DEN/EE-EEPS50

Keywords
base station, environmental impact, e-waste management, KPI, LCA, server, storage

ETSI

650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - APE 7112B
Association à but non lucratif enregistrée à la
Sous-Préfecture de Grasse (06) N° w061004871

Contents

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Foreword

This European Standard (EN) has been produced by ETSI Technical Committee Environmental Engineering (EE).

National transposition dates	
Date of adoption of this EN:	2 January 2023
Date of latest announcement of this EN (doa):	30 April 2023
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	31 October 2023
Date of withdrawal of any conflicting National Standard (dow):	31 October 2023

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Introduction

In order to facilitate a shift to a more sustainable economy, Circular Economy (CE) has been proposed as one of the main ways forward. In this context, CE combined with Information and Communication Technology (ICT) could enable decoupling of economic growth and environmental impact, see ETSI TR 103 476 [i.1] and Recommendation ITU-T L.1022 [i.6]. In 2015, the European Commission issued Mandate 543 (M/543 [i.12]) Standardization Request with regard to ecodesign requirements on material efficiency aspects for energy-related products, see ETSI TR 103 476 [i.1] requesting European standardization organizations to develop standards. ETSI TC-EE accepted this mandate for ICT network infrastructure goods, and CEN-CENELEC delivered a series of standards EN 45552 [1] to EN 45559 [8] to cover the products within their scope. The present document is intended to provide input for standardization related to Mandate M/543 [i.12]. The present document aims to show in which ways the finished material efficiency standards EN 45552 [1] to EN 45559 [8] may or may not be directly applicable to ICT network infrastructure goods. The present document is intended to provide an aid for further standardization, taking into account the specificities of ICT network infrastructure goods which include complex products designed for long operating lifetime, high availability and professional operation and maintenance processes in a business-to-business environment.

1 Scope

The present document defines an assessment of the direct applicability of the general material efficiency standards to ICT network infrastructure goods in the context of circular economy. The existing generic standards address durability; ability to remanufacture; repair, reuse, and upgrade; recyclability and recoverability; assessment of recycled content and reused components; critical raw material content and information provision. The present document highlights where further work on metrics/KPI and measurement methodologies may be needed for ICT network infrastructure goods beyond each of the general standards. Specific product standards will take precedence over the present document. The present document is a product family standard and will not define specific product requirements.

2 References

2.1 Normative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

Referenced documents which are not found to be publicly available in the expected location might be found at https://docbox.etsi.org/Reference/.

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The following referenced documents are necessary for the application of the present document.

[1] EN 45552:2020: "General method for the assessment of the durability of energy-related products", (produced by CEN and CENELEC).

[2] EN 45553:2020: "General method for the assessment of the ability to remanufacture energy-related products", (produced by CEN and CENELEC).

[3] EN 45554:2020: "General methods for the assessment of the ability to repair, reuse and upgrade energy-related products", (produced by CEN and CENELEC).

[4] EN 45555:2019: "General methods for assessing the recyclability and recoverability of energy-related products", (produced by CEN and CENELEC).

[5] EN 45556:2019: "General method for assessing the proportion of reused components in energy-related products", (produced by CEN and CENELEC).

[6] EN 45557:2020: "General method for assessing the proportion of recycled material content in energy-related products", (produced by CEN and CENELEC).

[7] EN 45558:2019: "General method to declare the use of critical raw materials in energy-related products", (produced by CEN and CENELEC).

[8] EN 45559:2019: "Methods for providing information relating to material efficiency aspects of energy-related products", (produced by CEN and CENELEC).

2.2 Informative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

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The following referenced documents are not necessary for the application of the present document but they assist the user with regard to a particular subject area.

[i.1] ETSI TR 103 476: "Environmental Engineering (EE); Circular Economy (CE) in Information and Communication Technology (ICT); Definition of approaches, concepts and metrics".

NOTE: Available at https://www.etsi.org/deliver/etsi_tr/103400_103499/103476/01.01.02_60/tr_103476v010102p.pdf.

[i.2] ETSI EN 303 800-1: "Environmental Engineering (EE); Assessment of material efficiency of ICT network infrastructure goods (circular economy); Part 1: General".

[i.3] ETSI EN 303 800-2: "Environmental Engineering (EE); Assessment of material efficiency of ICT network infrastructure goods (circular economy); Part 2: server and data storage product secure data deletion functionality".

[i.4] ETSI EN 303 800-3: "Environmental Engineering (EE); Assessment of material efficiency of ICT network infrastructure goods (circular economy); Part 3: server and data storage product availability of firmware and of security updates to firmware".

[i.5] ETSI EN 303 800-5: "Environmental Engineering (EE); Assessment of material efficiency of ICT network infrastructure goods (circular economy); Part 5: server and data storage product disassembly and disassembly instruction".

[i.6] Recommendation ITU-T L.1022: "Circular Economy: Definitions and concepts for material efficiency for Information and Communication Technology".

[i.7] COM(2017) 490 final: "Communication from the Commission to the European Parliament, the Council, the European economic and social committee and the Committee of the regions on the 2017 list of Critical Raw Materials for the EU".

[i.8] ETSI ES 203 199 (V1.2.1): "Environmental Engineering (EE); Methodology for environmental Life Cycle Assessment (LCA) of Information and Communication Technology (ICT) goods, networks and services".

[i.9] EN IEC 62308: "Equipment reliability - Reliability assessment methods".

[i.10] ETSI EN 300 019-1 (all sub-parts): "Environmental Engineering (EE); Environmental conditions and environmental tests for telecommunications equipment; Part 1: Classification of environmental conditions".

[i.11] ETSI EN 300 019-2 (all sub-parts): "Environmental Engineering (EE); Environmental conditions and environmental tests for telecommunications equipment; Part 2: Specification of environmental tests".

[i.12] M/543 Commission implementing Decision C(2015)9096 of 17.12.2015 on a standardisation request to the European standardisation organisations as regards ecodesign requirements on material efficiency aspects for energy-related products in support of the implementation of Directive 2009/125/EC of the European Parliament and of the Council.

[i.13] Preliminary ISO/IEC 82474-1 Working Draft: "Material declaration - Part 1: General requirements".

[i.14] European Commission, 2016/C 272/01, Commission Notice - The "Blue Guide" on the implementation of EU products rules, OJEU C 272 Volume 59, 26 July 2016.

[i.15] TR 45550:2020: "Definitions related to material efficiency", (produced by CEN and CENELEC).