

CEN-CENELEC TC10
Material Efficiency Aspects for Ecodesign'

Secretary Enquiry (new work item 65709 / prEN 45556)

To: National Standardisation Bodies and Collaborating Partners

Secretary Enquiry

CEN/CLC European Standard

prEN 45556 - General method for assessing the proportion of re-used components in an energy related product.

National Standardisation Bodies and Collaborating Partners are invited to comment on the document. Comments can be considered only if form sheet (FormComments.doc) is used.

National Standardisation Bodies and Collaborating Partners shall upload their comments, as a reply to this document on the Collaboration tool, no later than 2017-11-15.

Remark

The common text (Introduction) has been discussed recently with all workgroup conveners. The outcome of this is not yet reflected in this version. This will be changed during the next CEN-CLC TC10/WG 04 Meeting.

prEN/TS/TR Reference Number (if available) :	
Database Work Item Number :	
English Title :	General method for assessing the proportion of reused components in energy related products.
French Title (if available):	
German Title (if available):	

2	Contents	Page
3		
4	Foreword	3
5	Introduction	3
6	1 Scope	3
7	2 Normative references	3
8	3 Terms and definitions	4
9	3.1 Reused component	4
10	4 Assessment method for the reused components of an energy related product	4
11	4.1 General considerations	4
12	4.2 Calculation of reused component index	4
13	5 Quality assurance	5
14	5.1 General requirements for quality assurance of reused components use in the product	5
15	6 Marking and Instructions	5
16	6.1 Information and documentation	5
17	6.2 Traceability	5
18	6.3 Marking	5
19	Annex A : Assessment of the proportion of reused components	Fehler! Textmarke nicht definiert.
20	Bibliography	6
21		

22 Foreword

23 TBD

24 Introduction

25 This standard, along with the standards of the **CEN-CLC XXXXX series**, has been developed under Mandate
26 M/543 of the European Commission.

27 Topics covered in the **CEN-CLC XXXXX series** are inter alia, product durability, reparability, reusability,
28 recyclability, recycled content, ability to remanufacture, and product lifespan. While various important topics in
29 the context of material efficiency are covered in the standards of the CEN-CLC XXXXX series, other subjects
30 of material efficiency, e.g. renewable resources, biodegradable plastics, light weighting and multi functionality,
31 are not covered for the moment, despite their potential impact on material efficiency.

32 CEN, CENELEC and ETSI have been requested by M/543 to develop horizontal standards on fundamental
33 principles, concepts, terminology or technical characteristics, relevant to a number of technical committees and
34 of crucial importance to ensure the coherence of the corpus of standardisation documents. Generic standards
35 developed under M/543 will be the baseline for future product publications covering a specific energy-related
36 product (ErP) or group of related ErPs.

37 The primary addressee of the standards in the **CEN-CLC XXXXX series** are experts preparing product specific
38 publications on the various covered topics.

39 Standardisation request M/543 has asked the European standardisation organisations CEN, CENELEC and
40 ETSI to jointly draft new European standards and standardisation deliverables on material efficiency Aspects
41 for energy-related products in support of implementation of the EcoDesign Directive (2009/125/EC). It is
42 expected that increased focus on material efficiency aspects in the application of Directive 2009/125/EC should
43 make a sizeable contribution to the transition towards a more circular economy.

44 More specifically, the standard presented here proposes a standardized way of report use of **reused**
45 **components**, making it also easier for consumers to understand it.

46 This European Norm (EN) provides a general methodology for assessing the proportion of **reused components**
47 in an energy related product.

48 1 Scope

49 This EN includes:

- 50 • Products in the scope of Ecodesign directive

51 NOTE: Products falling newly under the scope of a revised eco-design directive shall also fall in the scope of this EN

52 This EN should be used as a general guideline, when drafting product specific standards.

53 2 Normative references

54 The following referenced documents are indispensable for the application of this document. For dated
55 references, only the edition cited applies. For undated references, the latest edition of the referenced document
56 (including any amendments) applies.

57 Reference to the standards cited will be worked in at a later stage.

3 Terms and definitions

For the purposes of this document, the terms and definitions given in [Definitions of PT1] and the following apply

3.1 Reused component

A component which was initially integrated into another product and is/will be integrated into another product. Its safety and performance properties are equal to a new component for the same purposes, which is checked by appropriate tests.

4 Assessment method for the reused components of an energy related product

4.1 General considerations

As there are no methods available for directly measuring the number of **reused components** in a product it can be only determined indirectly. Therefore, the verification is left to the documental proof, provided by the manufacturer.

Reused components require a different kind of market surveillance as physical test for **reused components** are not possible. It requires

1. Correct assessment of **components** of a product unit
2. A transparent management system to trace the origin of **component** inputs

When information is missing, it is assumed the origin is new part. There is no obligation to collect all information, but only documented verifiable origin can be accounted as **reused components**, when applicable.

4.2 Calculation of reused component index

The **reused component** index (R_{co}) of a product shall be calculated per one of the three different methods presented in this chapter.

1)

$$R_{co} = \left(\frac{\sum_i m_{re i}}{m_{tot}} \right) \times 100\%$$

where

- m_{re} is the mass of **reused components** used to manufacture a product
- m_{tot} is the total mass of the product
- R_{co} is the **reused component** index of a product

Note: All masses shall be expressed in the same unit

2)

$$R_{co} = \left(\frac{\sum_i n_{re i}}{n_{tot}} \right) \times 100\%$$

where

- n_{re} is the number of **reused components** used to manufacture a product
- n_{tot} is the total number of components in the product
- R_{co} is the **reused component** index of a product

3)

97

$$R_{co} = \left(\frac{\sum_i v_{re i}}{v_{tot}} \right) \times 100\%$$

98 where

99 v_{re} is the value of **reused components** used to manufacture a product100 v_{tot} is the total value of the product101 R_{co} is the **reused component** index of a product

102

103 Note: All values shall be expressed in the same unit

104

105 The determination which formula is to be used, shall be made by the experts in each product group.

106 **5 Quality assurance**107 **5.1 General requirements for quality assurance of reused components use in the product**

108 In order that the purchaser of the **reused components** may have confidence in the quality of the product, the
 109 supplier shall maintain records of the quality control carried out, including incoming materials, processes, and
 110 finished products.

111

112 **6 Marking and Instructions**113 **6.1 Information**

114 The complete assessment should be documented.

115 **6.2 Traceability**

116 To ensure the level of traceability that is needed in accordance with the intended application a system shall be
 117 put in place which shall contains identification number and information on the reused component. Detailed
 118 aspects can be found in the **use of reused component standard EN XXXX**.

119

120 **6.3 Marking**

121 Under consideration and will also reference to the work of WG 6 where applicable.

122

Bibliography

123 [1] Under consideration.

124 [2]

125