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COMMISSION IMPLEMENTING DECISION

of XXX

on a standardisation request to the European standardisation organisations pursuant to Article 10(1) of Regulation (EU) No 1025/2012 of the European Parliament and of the Council in support of the implementation of Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements on material efficiency aspects

(Text with EEA relevance)

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(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EU) No 1025/2012 of the European Parliament and of the Council on European standardisation, amending Council Directives 89/686/EEC and 93/15/EEC and Directives 94/9/EC, 94/25/EC, 95/16/EC, 97/23/EC, 98/34/EC, 2004/22/EC, 2007/23/EC, 2009/23/EC and 2009/105/EC of the European Parliament and of the Council and repealing Council Decision 87/95/EEC and Decision No 1673/2006/EC of the European Parliament and of the Council,[1] and in particular Article 10(1) thereof,

Whereas:

(1) According to Article 10(1) of Regulation (EU) No 1025/2012 the Commission may within the limitations of the competences laid down in the Treaties request European standardisation organisations to draft European standards or European standardisation deliverables.

(2) The implementation of Directive 2009/125/EC of the European Parliament and of the Council establishing a framework for the setting of ecodesign requirements for energy-related products[2] can be supported by European standardisation. According to articles 9 and 10 of Directive 2009/125/EC harmonised standards are to be used for the implementation of the Directive.

(3) The Ecodesign Directive establishes the framework for the setting of Community ecodesign requirements for energy-related products with the aim of ensuring the free movement of such products within the internal market. It contributes to the sustainable development by increasing energy and resource efficiency and the level of protection of the environment, while at the same time increasing the security of supply. To date, the implementation of the Directive has tended to focus on energy efficiency aspects.

(4) One of the reasons for the relative lack of ecodesign requirements related to material efficiency in the implementing measures adopted so far is the absence of adequate metrics. These include absence of standards for assessing material efficiency aspects identified previously. The availability of, standardisation deliverables, particularly generic standards, on such aspects would facilitate the discussion on potential

[1] OJ L 316, 14.11.2012, p. 12.

requirements related to material efficiency aspects in subsequent product specific implementing measures adopted under the Ecodesign Directive.

(5) In order to be useful in the implementation of the Ecodesign Directive, any deliverable resulting from this request should fulfil the following criteria: provide reliable, accurate and reproducible measurement procedures, which are not prohibitively expensive or imply lengthy tests; and enable (when referenced by harmonised standards adopted in accordance with separate, product specific standardisation requests) both economic operators and market surveillance authorities to determine conformity with relevant requirements set out in one or several Ecodesign implementing measures.

(6) A more rounded implementation of the Ecodesign Directive, better taking into account material efficiency aspects, would make a sizeable contribution to the delivery of the Europe 2020 Flagship initiative "A resource-efficient Europe"[2], the "Roadmap to a Resource Efficient Europe"[3], the EU Raw Materials Initiative[4] and the and the European Consumer Agenda[4] (highlighting the need to make consumer goods more durable). In addition, it would contribute to the implementation of the 7th Environment Action Programme[5], which calls for products to be "'eco-designed' with a view to optimising resource and material efficiency. This should include addressing, inter alia, product durability, reparability, reusability, recyclability, recycled content and product lifespan." Moreover horizontal and generic, not product specific, European standards on material efficiency aspects would serve as a voluntary reference point when designing all kinds of products beyond the scope of the Ecodesign Directive and its implementing measures.

(7) In its recent standardisation request C(2014) 10238 final[6] of 7.1.2015 the Commission already invited CEN, Cenelec and ETSI to develop European standards on material efficiency aspects for energy related products to cover technical specifications for material efficiency metrics assessment, such as reusability, recyclability, recoverability and, durability, in support of implementation of Directive 2009/125/EC. This request however expired because of rejections by CEN and Cenelec and because of non-response from ETSI.

(8) The intention to request European standards or European standardisation deliverables with regard to material efficiency aspects (recyclability, recoverability and reusability indexes, durability and reversible disassembly) is stated in point 2.1.4.3 of the annual Union work programme for European standardisation[7].

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[2] COM(2011) 21

[3] COM(2011) 571

[4] COM (2012) 225

[5] Decision No 1386/2013/EU of the European Parliament and of the Council of 20 November 2013 on a General Union Environment Action Programme to 2020 'Living well, within the limits of our planet' Text with EEA relevance, OJ L 354, 28/12/2013, p. 171–200

[6] COMMISSION IMPLEMENTING DECISION C(2014) 10238 final on a standardisation request to the European standardisation organisations pursuant to Article 10(1) of Regulation (EU) No 1025/2012 of the European Parliament and of the Council in support of the implementation of Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements on material efficiency aspects (recyclability, recoverability and reusability indexes, durability, reversible disassembly and end of life extraction time)

[7] COM(2013)561 final

(9) The Commission has established guidelines for the execution of standardisation requests and the European standardisation organisations have agreed to apply those guidelines.

(10) The European standardisation organisations, the European stakeholders' organisations receiving Union financing and the Consultation Forum established under article 18 of Directive 2009/125/EC composed by a balanced participation of Member States' representatives and all interested parties concerned have been consulted.

(11) The measures provided for in this Decision are in accordance with the opinion of the Committee established by Article 22 of Regulation (EU) No 1025/2012.

HAS ADOPTED THIS DECISION:

Article 1
Requested standardisation activities

The European Committee for Standardisation (CEN), the European Committee for Electrotechnical Standardisation (Cenelec) and the European Telecommunications Standards Institute (ETSI) are requested to draft new European standards and European standardisation deliverables on material efficiency aspects for energy-related products in support of implementation of Directive 2009/125/EC. The requested European standards and European standardisation deliverables, as listed in Annex II, shall meet the requirements set out in Annex I.

Article 2
Establishment of the work programme

CEN, Cenelec, and ETSI shall prepare the joint work programme indicating all requested deliverables, responsible technical bodies and a timetable for the execution of the work in line with the deadlines set out in Annex II. CEN, Cenelec and ETSI shall submit the work programme to the Commission [by xx [month] 20xx] [no later than six months after the notification of this Decision by the Commission][8] and provide it with access to an overall project plan.

When establishing the work programme, CEN, Cenelec, and ETSI shall consider the criteria of: relevance, acceptability, credibility, easiness and robustness (RACER) as well as consistency between Ecodesign and other relevant Regulations. The joint preliminary work programme should also take into account, for example, changes in impact of technological changes on the availability of components or assemblies.

CEN, Cenelec and ETSI may decide how many European standards and European standardisation deliverables are needed in order to execute the request referred to in Article 1.

Article 3
Agreement on the work programme

In its work programme, CEN, Cenelec and ETSI shall follow the possible priorities identified by the Commission for the execution of the request referred to in Article 1.

[8] Note: A date counted from the notification date should be used only in the preparation phase; in the final Decision, an exact date should be given.

CEN, Cenelec and ETSI shall inform the Commission of any amendments to the work programme.

Article 4
Reporting

CEN, Cenelec and ETSI shall report annually to the Commission on the execution of the request referred to in Article 1. They shall submit the first joint annual report to the Commission [by xx [month] 20xx] [18 months after notification of this Decision by the Commission][9].

Subsequent reporting shall be done in an annual basis and submitting a joint annual report which covers the execution of all eco-design related standardisation requests.

CEN, Cenelec and ETSI shall provide the Commission with the joint final report no later than three months after adopting all the deliverables requested by this standardisation request in order to notify the fulfilment of this standardisation request.

Article 5
Validity

If neither CEN, nor Cenelec, nor ETSI do not accept the request referred to in Article 1 within a month of receiving it, the request shall not constitute a basis for the drafting of European standards and European standardisation deliverables.

The request referred to in Article 1 may no longer constitute a basis for the drafting of European standards and European standardisation deliverables once the joint final report referred to in the second paragraph of Article 4 has been submitted.

Article 6
Addressees

This Decision is addressed to the European Committee for Standardisation, the European Committee for Electrotechnical Standardisation and the European Telecommunications Standards Institute.

Done at Brussels,

For the Commission

[…]

(PE/PO/PH)
The President (choose the correct position)
Vice-President (choose the correct position)
Member of the Commission (choose the correct)

[9] Note: A date counted from the notification date should be used only in the preparation phase; in the final Decision, an exact date should be given.

Annex I Requirements for the European standards and European standardisation deliverables

1. Objectives for the standardisation work

This standardisation request is linked to the following material efficiency aspects:

- Extending product lifetime.
- Ability to re-use components or recycle materials from products at end-of-life.
- Use of re-used components and/or recycled materials in products

European standards prepared on the basis of this standardisation request shall consider the above, which includes aspects like: upgrade-ability, ability to extract key components for reuse, repair, recycling and treatment; calculation of recycled and re-used content in products; methods to identify components by e.g. their environmental impact; reporting formats; reusability, recyclability and recoverability indices.

These standards shall be general in nature. They could be cited together with product-specific or product group harmonised standards[10] as defined in point 27 of Article 2 of the Ecodesign Directive, where relevant implementing measures set ecodesign requirements for material efficiency aspects.

Where adoption of European standards is not yet feasible the European standardisation organisations (ESOs) should consider adopting European standardisation deliverables.

2 DESCRIPTION OF THE REQUIREMENTS FOR THE REQUESTED DELIVERABLES

2.1 General requirements

The requested standards shall be based on reliable, accurate and reproducible procedures and methods, which take into account the generally recognised state of the art. In the development of these standards, the principle of technology neutrality should be observed, as far as possible.

Where possible, standards shall be applicable to all products covered by the Ecodesign Directive and cover defined parameters to be measured and/or calculated. Where it is not possible to develop standards covering all products under the scope of Ecodesign Directive then the specific product(s) covered shall be clearly identified.

2.2 Requirements concerning the content of requested deliverables

The requested deliverables shall as far reasonably practicable deal with the following topics:

[10] Such harmonised standards are always subject to separate product specific standardisation requests.

- Definition of parameters and methods relevant for assessing durability, upgradability and ability to repair, re-use and re-manufacture of products;
- Provision of guidance on how standardisation deliverables for assessing durability, upgradability and ability to repair and re-manufacture of products can be applied to vertical standards;
- Ability to access or remove certain components, consumables or assemblies from products to facilitate repair or remanufacture or reuse;
- Reusability/recyclability/recoverability (RRR) indexes or criteria, preferably taking into account the likely evolution of recycling methods and techniques over time;
- Ability to access or remove certain components or assemblies from products to facilitate their extraction at the end-of-life for ease of treatment and recycling;
- Method to assess the proportion of re-used components and/or recycled materials in products;
- Use and recyclability of Critical Raw Materials to the EU, which are listed by the European Commission;
- Documentation and/or marking regarding information relating to material efficiency of the product taking into account the intended audience (consumers, professionals or market surveillance authorities).

The adopted deliverables shall as far as possible specify:

- Selection of parameters to be evaluated;
- Calculation methods;
- Test methods;
- Definition of reference tables (or guidance on how to build representative and quality-assured tables);
- Definition of reporting formats
- Description of the means for communicating information regarding products.

Recommended reference documents that could be considered during standardisation work is given point 3.

3. REFERENCE DOCUMENTS

STANDARDSISATION DOCUMENTS

BS 8887:1. "Design for Manufacture, assembly, disassembly and end-of-life processing (MADE)". British Standards. 2006

EN 50625-1 WEEE General Treatment Requirements

CEN TS 16524 "Mechanical products - Methodology for optimizing environmental impacts in product design and development". CEN/TS 16524. 2013.

EN 15343. Plastics. Recycled plastics. Plastics recycling traceability and assessment of

conformity and recycled content. 2007

EN 15804 "Sustainability of construction works. Environmental product declarations. Core rules for the product category of construction products". This standard for building products, which refers to recycling and resource efficiency aspects.

IEC/TR 62635 "Guidelines for end-of-life information provided by manufacturers and recyclers and for recyclability rate calculation of electrical and electronic equipment". International Electrotechnical Commission (IEC). Edition 01 (2012-10-19).

IEC 62309 Dependability of products containing reused parts - Requirements for functionality and test. International Electrotechnical Commission (IEC). 2004.

IEC, 60312-1. Vacuum cleaners for household use – Part 1: dry vacuum cleaners – Methods for measuring the performance (September 2010).

IEEE 1680.1, 2009 IEEE Std 1680.1™-2009. IEEE Standard for Environmental Assessment of Personal Computer Products, Including Notebook Personal Computers, Desktop Personal Computers, and Personal Computer Displays. The Institute of Electrical and Electronics Engineers.

IEEE 1680.2, 2012 IEEE Std 1680.2™-2012. IEEE Standard for Environmental Assessment of Imaging Equipment. The Institute of Electrical and Electronics Engineers.

IEEE 1680.3, 2012 IEEE Std 1680.3™-2012. IEEE Standard for Environmental Assessment of Televisions. The Institute of Electrical and Electronics Engineers.

ISO 22628. Road vehicles -- Recyclability and recoverability -- Calculation method. EN 15643 standard for buildings, which refers to recycling and resource efficiency aspects. 2002.

ISO 14021. Environmental labels and declarations — self-declared environmental claims (Type II environmental labelling). 1999

ONR 192102 Durability mark for electric and electronic appliances designed for easy repair (white and brown goods).

OTHER DOCUMENTS

The RACER concept is documented:

- 2012 DG ENVI report "Assessment Resource Efficiency Indicators and Targets" pages 31 and 34. http://ec.europa.eu/environment/enveco/resource_efficiency/pdf/report.pdf
- 2010, Ecologic: http://www.ecologic.eu/sites/files/publication/2010/OPEN_Deliverable_Pre_Modelling_Analysis_Footprint_Family.pdf (p.19, **p.23-60**)
- 2010, DG Enterprise: http://ec.europa.eu/enterprise/dg/files/evaluation/final_report_cses_en.pdf
- 2009: IA guidelines http://ec.europa.eu/smart-regulation/impact/commission_guidelines/docs/ia_guidelines_annexes_en.pdf (p.79)
- 2008, DG ENV:

http://www.sei.se/eipot/resources/EIPOT-RACER-evaluation-framework-final-07Oct08.pdf

Ardente F, Mathieux F. (2014a). Environmental assessment of the durability of energy-using products: method and application. Journal of Cleaner Production, 74(1), 2014, 62-73. http://dx.doi.org/10.1016/j.jclepro.2014.03.049

Ardente F, Mathieux F (2014b). Identification and assessment of product's measures to improve resource efficiency: the case-study of an Energy using Product. Journal of Cleaner Production, 83(15), 2014, 126-141. http://dx.doi.org/10.1016/j.jclepro.2014.07.058.

Ardente, F., Mathieux, F., Recchioni, M. (2014)). Recycling of electronic displays: Analysis of pre-processing and potential ecodesign improvements. Resources, Conservation and Recycling 92, 2014, 158–171. http://dx.doi.org/10.1016/j.resconrec.2014.09.005.http://dx.doi.org/10.1016/j.resconrec.2014.09.005.

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European Economic and Social Committee (EESC). Opinion of 2013. Towards more sustainable consumption: industrial product lifetimes and restoring trust through consumer information, http://www.eesc.europa.eu/?i=portal.en.ccmi-opinions.26788

Huisman J, Boks CB, Stevels A. (2003)). Quotes for Environmentally Weighted Recyclability (QWERTY), The concept of describing product recyclability in terms of environmental value. International Journal of Production Research, 41(16), 2003, 3649-3665.

JRC-IES (2012a). Ardente, F., Mathieux, F. "Application of the project's methods to three product groups". European Commission. Joint Research Centre (JRC) Technical Report. November 2012a. ISBN: 978-92-79-27997-3.

JRC-IES (2012b). Ardente, F., Mathieux, F. "Refined methods and Guidance documents for the calculation of indices concerning Reusability/ Recyclability/ Recoverability, Recycled content, Use of Priority Resources, Use of Hazardous substances, Durability". European Commission. Joint Research Centre (JRC) Technical Report. September 2012b. ISBN 978-92-79-25931-9.

JRC-IES (2012c). Ardente, F., Mathieux, F., Sanfélix Forner, J.. Analysis of Durability. European Commission. Joint Research Centre (JRC) Technical Report. November 2012. ISBN 978-92-79-27981-2.

Kara, S., Kaebernick, H. (2006). Selective disassembly sequencing: a methodology for the disassembly of end-of-life products. CIRP Annals—Manufacturing Technology, 55(1):), 2006, 37-40.

Kroll E, Carver BS, 1999. Disassembly analysis through time estimation and other metrics. Robotics and Computer Integrated Manufacturing, 15, (1999), 191-200.

List of Critical Raw Materials to the EU:

- 2014, European Commission:

  http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52014DC0297&from=EN

Mathieux F, Recchioni M, Ardente F. (2014)). Measuring the time for extracting components in end-of-life products: needs for a standardized method and aspects to be considered. Published in Proceedings of the 21th Life Cycle Engineering Conference, Trondheim (Norway), 18-20th June 2014 http://www.sciencedirect.com/science/article/pii/S2212827114004569.

Nelen D, Manshoven S, Peeters JR, Vanegas P, D'Haese N, Vrancken K. (2014) A multidimensional indicator set to assess the benefits of WEEE material recycling. Journal of Cleaner Production. 83(15), 2014, 305–316 http://dx.doi.org/10.1016/j.jclepro.2014.06.094.

Shailendra Mudgal et al "Assessment of resource efficiency indicators and targets" BIO Intelligence Service for the European Commission, DG Environment, 6 February 2012

http://ec.europa.eu/environment/enveco/resource_efficiency/pdf/report.pdf

Annex II: European standards and European standardisation deliverables and deadlines for adoption

Table 1: Requested new European standards and European standardisation deliverables concerning material efficiency aspects

Reference information	Deadline for adoption[11]
1. European standards and/or European standardisation deliverables covering the topics indicated in point 2.2 of Annex I	31.3.2019

[11] 'Adoption' refers to the relevant European standardisation organisation making a standard available to its members or the public.