



Brussels, **XXX**
[...](2015) **XXX** draft

COMMISSION IMPLEMENTING DECISION

of **XXX**

on a standardisation request to the European Committee for Standardisation and to the European Committee for Electrotechnical Standardisation pursuant to Regulation (EU) No 1025/2012 of the European Parliament and of the Council as regards ecodesign requirements for welding equipment

Only the English, French and German texts are authentic

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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 of 25 October 2012 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 Council¹, and in particular Article 10(1) thereof,

Whereas:

- (1) Directive 2009/125/EC of the European Parliament and of the Council² 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 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.
- (2) Welding equipment is included in the indicative list of product groups covered by the working plan 2009-2011 under the Ecodesign Directive, via "machine tools"³.
- (3) The Consultation Forum established under Article 18 of Directive 2009/125/EC, having met on 6 May 2014 to discuss the Commission's plans for regulating the environmental and functional performance of welding equipment as part of the larger overall group of products considered under machine tools and related machinery, concluded that harmonised methods were lacking for the measurement of the environmental and functional performance of the products concerned, and that such methods should be first published in the form of harmonised standards.

¹ OJ L 316, 14.11.2012, p. 12.

² Directive 2009/125/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for the setting of ecodesign requirements for energy-related products (OJ L 315, 14.11.2012, p. 1).

³ COM(2008) 660 final of 21 October 2008.

- (4) To support a Commission regulation for welding equipment it is necessary to be able to measure comparable data on their performance and to ensure that such measurement methods take into account any international developments related to this product group. It is therefore appropriate to request that the European standardisation organisations publish European standards with the necessary measurement and calculation methods prior to the adoption of the related ecodesign regulation.
- (5) The intention to request harmonised standards in support of Directive 2009/125/EC was stated in point 2.3 of the annual Union work programme for European standardisation for 2015⁴.
- (6) The Commission has established guidelines⁵ for the execution of standardisation requests and the European standardisation organisations have agreed to apply those guidelines when executing standardisation requests.
- (7) The European standardisation organisations, the European stakeholders' organisations receiving Union financing and the Consultation Forum established under Article 18 of Directive 2009/125/EC have been consulted.
- (8) The European Committee for Standardisation (CEN) and the European Committee for Electrotechnical Standardisation (Cenelec) have indicated that the work covered by the request falls under the scope of CEN and Cenelec.
- (9) 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) and the European Committee for Electrotechnical Standardisation (Cenelec) are requested to draft new harmonised standards for the measurement and calculation of product parameters for welding equipment in support of the implementation of Directive 2009/125/EC of the European Parliament and of the Council. The requested harmonised standards are listed in Table 1 of Annex II, and they shall meet the requirements set out in Annex I.

Article 2

Establishment of the work programme

CEN and Cenelec shall prepare the work programme indicating all the requested deliverables, the responsible technical bodies and a timetable for the execution of the work in line with the deadline set out in Annex II. CEN and Cenelec shall submit the work programme to the Commission no later than three months after the notification of this Decision by the Commission, and shall provide the Commission with access to an overall project plan.

CEN and Cenelec may decide how many harmonised standards are needed for the measurement and calculation of the regulated product parameters in order to execute the request referred to in Article 1.

⁴ COM(2014)500 final of 30 July 2014.

⁵ SWD(2015) 205 final 27.10.2015, Vademecum on European standardisation in support of Union legislation and policies PART III, Guidelines for the execution of standardisation requests.

Article 3
Agreement on the work programme

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

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

New subjects for harmonised standards may be added to the work programme where Annex I includes requirements for such subjects and where the Commission has been consulted and agrees to that addition, after having informed the Committee established by Article 22 of Regulation (EU) No 1025/2012.

Article 4
Reporting

CEN and Cenelec shall report annually to the Commission on the execution of the request referred to in Article 1. These organisations shall submit to the Commission the first annual report 13 months after notification of this Decision by the Commission.

Article 5
Harmonised standards

After the Commission has adopted the relevant Commission Regulation concerning ecodesign requirements on welding equipment, CEN and Cenelec shall include in every harmonised standard a clear and precise indication with regard to the relationship between its content and the corresponding requirements of that Regulation. Every harmonised standard developed or revised on the basis of the request referred to in Article 1 shall refer to this Decision.

CEN and Cenelec shall include, in every revised or amended harmonised standard, information concerning significant changes that have been introduced.

After the Commission has adopted the relevant Commission Regulation concerning ecodesign requirements on welding equipment, CEN and Cenelec shall provide to the Commission the titles of the requested harmonised standards in all the official languages of the Union.

Article 6
Validity

If the request referred to in Article 1 is not accepted by either CEN or Cenelec within one month of receiving it, the request shall not constitute a basis for the drafting of harmonised standards.

Article 7
Addressee

This Decision is addressed to the European Committee for Standardisation and the European Committee for Electrotechnical Standardisation.

Done at Brussels,

For the Commission
Elżbieta Bieńkowska
Member of the Commission



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[...] (2017) **XXX** draft

ANNEXES 1 to 2

ANNEXES

to the

COMMISSION IMPLEMENTING DECISION

on a standardisation request to the European Committee for Standardisation and to the European Committee for Electrotechnical Standardisation pursuant to Regulation (EU) N° 1025/2012 of the European Parliament and of the Council as regards ecodesign requirements for welding equipment

ANNEX I

Requirements for the harmonised standards

1. GENERAL REQUIREMENTS

The measurement and calculation methods laid down in the requested harmonised standards shall be reliable, accurate and reproducible and shall take into account the generally recognised 'state of the art' measurement and calculation methods. These methods shall be laid down in new European standards for welding equipment, or in amended existing European standards, laying down procedures and methods for measuring and calculating the energy consumption and any related environmental inputs, outputs and emissions associated with this equipment.

The prospective standards must also include the necessary definitions of the product types and of the parameters that are to be measured or calculated. The welding equipment to be included must cover automated, semi-automated and manual types.

Categories of welding equipment excluded from the scope of the requested harmonised standards are the following: (a) Submerged Arc equipment (arc > 600A); (b) Welding equipment in the scope of EN 60974-6 (low duty cycle equipment designed primarily for domestic levels of use on an annual basis); (c) Resistance welding equipment; (d) Stud welding equipment.

2. SPECIFIC REQUIREMENTS FOR THE HARMONISED STANDARDS

2.1. Tasks covered by this request

CEN and Cenelec are requested:

1. To indicate clearly in the work programme for harmonised standards which specific ecodesign-related product parameters (among those referred to in Section 2.2) are addressed by every specific standard;
2. To indicate in the work programme for harmonised standards those existing standards which are suitable, the existing standards which have to be revised and any new standards which have to be developed.

The harmonised standards shall incorporate relevant measurement and calculation methods in line with requirements given in section 2.2.

2.2. Requirements for harmonised standards on welding equipment

The objectives of standards for procedures and methods for measurements and calculations for welding equipment are:

1. To ensure that the harmonised standards provide, where appropriate, revised or new definitions for at least the types and main characteristics of welding equipment, taking into account, inter alia, the parameters and definitions contained in the reference documents referred to in Table 2 of Annex II;
2. To ensure that the harmonised standards provide procedures and methods to examine, measure and calculate at least the following parameters:
 - (a) The efficiency of three-phase direct current (DC) welding equipment in %;

- (b) The efficiency of single-phase direct current (DC) welding equipment in %;
 - (c) The efficiency of alternating current (AC) welding equipment in %;
 - (d) The idle state power consumption [in W];
 - (e) A precise description of the sequence of events leading to automatic changes of power states;
 - (f) A method to determine whether the power management capability to enter the idle state occurs after a period of inactivity;
 - (g) A method to determine the time taken for welding equipment to power down to idle state;
 - (h) A method to determine the consumption of relevant material inputs associated with welding equipment (most importantly shielding gas and welding wire or filler material);
 - (i) Any emissions to air resulting from welding equipment;
 - (j) A method to determine a suitable reliable indicator of durability or lifetime, of the overall welding equipment and its key components.
3. To ensure that the harmonised standards stipulate appropriate test conditions and measurement methods, including:
- (a) Stipulating appropriate test conditions and sensitivity and accuracy of measuring instruments;
 - (b) Parameters to define the suitability of the electricity supply system regarding measurement of the true Root Mean Square (r.m.s.) value of the supply current;
 - (c) Parameters to define conventional welding conditions and conventional load voltages;
 - (d) Parameters to define power draw;
 - (e) Parameters to define the measurement of consumables related to welding, inter alia shielding gases, and welding wire or filler material;
 - (f) Characterisation and measurement of emissions to air;
 - (g) Parameters to permit the definition of any required standardised materials, test pieces and geometries of joints for testing;
 - (h) Parameters to measure the quality and strength of defined test pieces and welding joints produced during the test, also taking into account any after-treatment techniques;
 - (i) Parameters to describe requirements relating to access to components and modules, to ensure transparent availability of information sufficient to undertake their repair, refurbishment or replacement, for example based on a description of the disassembly sequence, including for each necessary operation, the type of joining, fastening or sealing techniques to be undone, and the tool(s) required.
4. To ensure that the harmonised standards build on existing standards, by taking into account improved measurement and calculation methods and new or improved appliance types to better reflect the user behaviour and state of the art methods at

European and international level;

5. To take into account that the harmonised standards must concentrate on the welding equipment which has been identified¹ as most relevant for inclusion in potential Ecodesign measures.
6. To ensure that the harmonised standards include a procedure that avoids welding equipment being programmed to recognise the test conditions, and reacting specifically to them².

2.3. Requirements for the verification procedure for market surveillance purposes

The objectives of standards for procedures and methods for measurements and calculations are:

1. To ensure that the harmonised standards identify and control the sources of variability that influence measurement uncertainties to be considered for market surveillance purposes;
2. To provide values for measurement uncertainties to characterise the verification procedure for the measured parameters, taking into account the different sources of variability to be considered when a specific product is taken from the market and measured for market surveillance purposes;
3. To define templates for test reports for welding equipment, indicating the information which is needed when declaring compliance with regulated or other parameters considered in a harmonised standard and as envisaged in Section 2.2 point 2.

¹ See summary of Consultation Forum, 6th May 2014, ENTR Lot 5 Machine Tools and Related Machinery and the associated Working Document, 11 April 2014 (both available on European Commission database CIRCABC, via the section entitled "EcoDesign of Energy-related Products (ErP) – Consultation Forum").

² In other words, to prevent the use of so-called "defeat devices"

ANNEX II
Harmonised standards and deadline for adoption

Table 1 –Requested Harmonised standards for welding equipment

Reference information	Deadline for adoption³
European standard(s) for the measurement and calculation of product parameters for welding equipment	20 months after notification of this Decision to CEN and Cenelec

³ 'Adoption' makes reference to the moment when the relevant European standardisation organisation makes a standard available to its members or to the public.

Table 2: Non-exhaustive list of reference documents

EN 14717:2005, Welding and allied processes – Environmental Checklist

HD 22.1 S4, Cables of rated voltages up to and including 450/750 V and having crosslinked insulation — Part 1: General requirements

HD 22.6 S2, Rubber Insulated Cables of Rated Voltages up to and Including 450/750 V — Part 6: Arc Welding Cables

IEC 60038:2009, IEC standard voltages

IEC 60050-195:1998, International Electrotechnical Vocabulary (IEV) — Part 195: Earthing and protection against electric shock

IEC 60050-851:2008, International Electrotechnical Vocabulary (IEV) – Part 851: Electric welding

IEC 60050-826:2004, International Electrotechnical Vocabulary — Part 826: Electrical installations

IEC 60085, Electrical insulation — Thermal evaluation and designation

IEC 60204-1, Safety of machinery — Electrical equipment of machines — 1: General requirements

IEC 60309-1, Plugs, socket-outlets and couplers for industrial purposes — 1: General requirements

IEC/TR 60755:2008, General requirements for residual current operated protective devices

IEC 60950-1, Information technology equipment — Safety — Part 1: General requirements

IEC 60974-1, Arc welding equipment – Part 1: Welding power sources

IEC 60974-6, Arc welding equipment — Part 6: Limited duty equipment

IEC 60974-9 Arc welding equipment — Part 9: Installation and use

IEC 60974-10, Arc welding equipment — Part 10: Electromagnetic compatibility (EMC) requirements

IEC 60974-12, Arc welding equipment — Part 12: Coupling devices for welding cables

IEC 61558-1, Safety of power transformers, power supplies, reactors and similar products — Part 1: General requirements and tests

IEC 62079, Preparation of instructions — Structuring, content and presentation

ISO 3864-1, Graphical symbols — Safety colours and safety signs — Part 1: Design principles for safety signs and safety markings

ISO 7000:2004, Graphical symbols for use on equipment — Index and synopsis

ISO 13732-1, Ergonomics of the thermal environment — Methods for the assessment of human responses to contact with surfaces — Part 1: Hot surfaces

ISO 17846, Welding and allied processes — Health and safety — Wordless precautionary labels for equipment and consumables used in arc welding and cutting

ONR 192102:2014, Label of excellence for durable, repair-friendly designed electrical and electronic appliances

Working documents resulting from CEN and Cenelec's ongoing work addressing Commission Implementing Decision C(2015) 9096 final 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