



## EUROPEAN COMMISSION

DIRECTORATE-GENERAL FOR ENERGY AND TRANSPORT

DIRECTORATE D - New and Renewable Energy Sources, Energy Efficiency & Innovation  
**Energy efficiency of products & Intelligent Energy – Europe**

Brussels, 21st December 2009

**M/459 EN**

### **Mandate to CEN, CENELEC and ETSI for Standardisation in the field of household refrigerating appliances**

#### **1. BACKGROUND**

##### **1.1 Legal Basis of the Mandate**

This mandate relates to Directive 2009/125/EC<sup>1</sup> of the European Parliament and of the Council, to Council Directive 92/75/EEC and to measures implementing these Directives for which a Harmonised Standard(s) should be developed to cover essential requirements.

##### **1.2 The aim of the Mandate**

The Commission Regulation (EC) No 643/2009 *implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for household refrigerating appliances* (hereafter referred to as Regulation 643/2009) was adopted and published in the Official Journal on 22 July 2009<sup>2</sup>. The Regulatory Committee established by Directive 92/75/EEC has also endorsed a *Draft Commission Directive implementing Council Directive 92/75/EEC with regard to energy labelling of household refrigerating appliances*' (hereafter referred to as Draft Labelling Directive). The -Regulation 643/2009 and the Draft Labelling Directive require that the measurement procedure for establishing the energy consumption and other parameters of refrigerating appliances shall be reliable, accurate and reproducible and takes into account the generally recognised state of the art, in order to ensure comparable measurements and fair competition, and to facilitate market surveillance activities.

The aim of this mandate is to create a harmonised European standard(s) which covers this requirement.

#### **2. DESCRIPTION OF THE MANDATED WORK**

The Commission requests CEN, CENELEC and ETSI to elaborate a reliable, accurate and reproducible European standard(s), which takes into account the generally recognised state of the art, and/or adopt or adapt existing European and International standards for household refrigerating appliances, laying down procedures and methods of measuring the

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<sup>1</sup> Former Directive 2005/32/EC

<sup>2</sup> OJ L 226, 28.8.2009, p. 23–23

energy consumption, the storage temperature, the volume and associated characteristics of household refrigerating appliances. The standard has also to include the necessary definitions of the appliance and compartment types and of the parameters to be measured.

The standardisation tasks covered by this mandate are as follows.

1. Procedures and methods for measuring the energy consumption, the storage temperature, the volume and associated characteristics of household refrigerating appliances within the scope of Regulation 643/2009 and of the Draft Labelling Directive:

- to ensure that the prospective harmonised standard(s) provides, where appropriate, revised and/or new definitions for at least the appliance and compartment types and main characteristics, and the parameters included in Regulation 643/2009 and in the Draft Labelling Directive; in particular:
  - appliances and compartments with an internal temperature between +14°C and +20°C;
  - compartments with an internal temperature between 0°C and -6°C
- to ensure that the prospective harmonised standard(s) takes into due account the definitions and parameters needed to fulfil the scope of Regulation 643/2009 and of the Draft Labelling Directive.
- to ensure that the prospective harmonised standard(s) provides procedures and methods to measure at least the linear dimensions, areas and volumes, energy consumption, storage temperatures, compartments star ratings, freezing capacity, temperature rise time of free-standing and built-in household refrigerating appliances as included in Regulation 643/2009 and in the Draft Labelling Directive;
- to ensure that, for the purpose of Regulation 643/2009 appliances equipped for operation on different power supplies, but that can be operated at a rated voltage within the range between 220 V and 240 V, are tested only at 230V±1% with a frequency of 50Hz±1%;
- to ensure that the prospective harmonised standard(s) includes a procedure that avoids an appliance being programmed to recognize the test conditions, and reacting specifically to them;
- to identify the volume range outside which the application of the standard(s) is unpractical;
- to ensure that the prospective harmonised standard(s) takes into account improved test conditions, test materials, new appliance types and the state of the art at European and international level and better reflects the user behaviour, in particular:
  - the possible usage of appliances at cool ambient temperatures below +10°C and related test methods, and in any case the indication of the allowed minimum ambient temperature to consumer below which the appliance will not function according to the intended use;

- the usage of drawers and other items included with the product when sold, which may affect the temperature and energy performance of the appliance in real use;
  - the extension of the standard(s) to address the whole area of nutrition refrigeration, and/or compartments only for beverages;
  - the setting of ‘through the door devices’ or similar features in operation when measuring the appliance energy consumption, in compliance with Annex III, section 1, point 2 of Regulation 643/2009 and Annex VIII, section 1, point 2 of the draft Labelling Directive;
  - the evaluation of the influence on foodstuff preservation of appliance feature(s) to be switched on by the user and altering the temperature in one or more compartments towards the warmest end of the storage temperature range for the compartments type in order to save energy in real usage;
  - the use of appropriate food simulant(s) when measuring the energy consumption and other performance characteristics as appropriate;
  - cooling technologies not already explicitly mentioned, such as thermoelectric cooling;
- to provide guidelines indicating the type of information to be declared by the manufacturers to fulfil the information requirements set out in Annex II, section 1, point 1 (b) of Regulation 643/2009;

2. Procedures and methods for measuring the energy consumption, the storage temperature, the volume and associated characteristics of wine storage appliances:

- to extend the standard(s) to address appliances and/or compartments to be used exclusively for wine storage (either short term, long term or both);
- to ensure that the prospective harmonised standard(s) provides the definition and characteristics of the refrigerating appliances and compartments to be used exclusively for the long term storage and/or the aging of wine and the differences with refrigerating appliances and compartments to be used exclusively for bringing wine at the optimum drinking temperature;
- to ensure that the prospective harmonised standard(s) provides revised and/or new definition(s) for a standard wine bottle(s) of 75 centilitres in order to measure the rated capacity of wine storage appliances;
- to ensure that the prospective harmonised standard(s) includes a procedure that avoids a wine storage appliance being programmed to recognize the test conditions, and reacting specifically to them

3. Verification procedure for market surveillance purposes:

- to ensure that the prospective harmonised standard(s) identifies and reduces to a minimum the sources of variability to be considered for market surveillance purposes;
- to provide the minimum values achievable for measurement uncertainties for the purposes of 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;

- to verify if, in order to reduce the impact of variability to the system, the standard(s) should include specific criteria to be met by laboratories involved in the verification of the declared data (e.g. quality management system, qualification system, personnel training...)

#### 4. Template for test report:

- to define a template for a test report indicating the information to be declared by the manufacturers to fulfil at least the ecodesign requirements set out in Regulation 643/2009 and in the Draft Labelling Directive.

### **3. EXECUTION OF THE MANDATE**

CEN, CENELEC and ETSI are requested to communicate to the Commission, within 2 months of the acceptance of this mandate, a work plan for the execution of the above mentioned standardisation tasks, indicating the standard(s) requiring revision or amendment, and the new standard(s) that would need to be developed, if any.

CEN, CENELEC and ETSI are requested to communicate to the Commission after 7 months from the acceptance of this mandate an interim report on the progress of the tasks set out in this mandate, indicating any eventual difficulties encountered and communicating details of any Standard(s) that has been taken into consideration and modified to answer to the needs of the Mandate.

CEN, CENELEC and ETSI are requested to provide, in the three working languages of the ESOs, a copy of the standard(s) developed under this mandate **within 18 months** of the acceptance of the mandate.

CEN, CENELEC and ETSI are requested to forward the titles of the standard(s) developed or adapted under this mandate in all the official languages of the European Union.

CEN, CENELEC and ETSI are requested to draw up the work plan and execute the above mentioned tasks in close cooperation in order to ensure consistency and avoid overlapping standards.

Wherever possible the tasks should be executed within the framework of the Vienna and Dresden Agreements with a view to duly take into consideration the activities already done or in process at international level.

CEN, CENELEC and ETSI are requested to indicate the relationship between the clauses of the standard and the essential requirements covered.

Acceptance by CEN, CENELEC and ETSI, as applicable, of this mandate starts the standstill period referred to in Article 7 of the Directive 98/34/EC of 22 June 1998 (Of N° L 204/37 of 21 July 1998).

### **4. BODIES TO BE ASSOCIATED**

As appropriate, CEN, CENELEC and ETSI will invite the representative organisations of consumers' interests (ANEC), environmental protection (ECOS), workers (ETUI-REHS) and small and medium-size enterprises (NORMAPME) to take part in the standardisation work.