



**EUROPEAN COMMISSION**  
DIRECTORATE-GENERAL FOR ENERGY

Directorate C - New and renewable sources of energy, Energy efficiency & Innovation  
**C.3 - Energy efficiency of products & Intelligent Energy – Europe**

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**M/469 EN**

## **Mandate to CEN, CENELEC and ETSI for Standardisation in the field of circulators**

### **1. BACKGROUND**

#### **1.1 Legal Basis of the mandate**

This mandate relates to Directive 2005/32/EC of the European Parliament and of the Council, and to measures implementing these Directives for which a Harmonised Standard should be developed to cover ecodesign requirements.

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

The Regulatory Committee established by Directive 2005/32/EC is expected to endorse in 2009a Draft Commission Regulation implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for circulators. The draft implementing measure requires that the measurement and calculation procedures for establishing the energy efficiency index, hydraulic power, power consumption and other parameters of circulators shall be reliable, accurate and reproducible and take into account the generally recognised state of the art, in order to ensure comparable measurements and calculations of energy efficiency for the circulator types in the scope of the implementing measure, and to facilitate market surveillance activities.

The aim of this mandate is to create a harmonised standard 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 circulators, laying down procedures and methods of measuring and calculating the energy efficiency index, power consumption and associated characteristics of circulators. The standard has also to include the necessary definitions of the appliance types and of the parameters to be measured and/or calculated.

The standardisation tasks covered by this mandate are as follows.

Procedures and methods for measuring and calculating the energy efficiency index, power consumption and associated characteristics of standalone circulators and glandless circulators integrated in products, abbreviated "circulators" in the following:

- (1) to ensure that the prospective harmonised standard(s) provides, where appropriate, revised and/or new definitions for at least the circulator types and main characteristics, and the parameters to be included in the 'Draft Commission Regulation implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for glandless standalone circulators and glandless circulators integrated in products';
- (2) to ensure that the prospective harmonised standard(s) provides procedures and methods to measure and calculate at least the energy efficiency index and power consumption of circulators;
- (3) 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;
- (4) to ensure that the prospective harmonised standard(s) takes into account improved test conditions, test materials and new appliance types to better reflect the user behaviour and the state of the art at European and international level.
- (5) to extend existing standard(s), such as the EN 1151-1:2006, to define standalone and circulators integrated in products, including boiler-integrated circulators, drinking water circulators, radiator circulators, circulators used in heat pumps, solar heating and cooling, water heating systems, CHP units and district heating units or any other circulator designed for use in heating systems or in secondary circuits of cooling distribution systems, as appropriate. The power range of circulators should be broadened to 1 W - 2500 W rated hydraulic output power;
- (6) to ensure the inclusion is such an extension of circulators with variable speed technology;
- (7) the extension of the standard(s) to include, if appropriate, the Europump calculation method for energy efficiency index of glandless standalone circulators and to broaden this Europump calculation method to various specific circulator types, such as those mentioned in the above point (5);
- (8) to ensure compliance with the efficiency levels identified in the draft Ecodesign Regulation on circulators;
- (9) the extension of the standard(s) to include tolerances, as defined in the draft Ecodesign Regulation on circulators;
- (10) to ensure close cooperation between circulator and boiler manufacturers, especially concerning the development of methods for boiler integrated circulators, including possible joint working groups;

Verification procedure for market surveillance purposes:

to ensure that the prospective harmonised standard(s) identifies and controls the sources of variability to be considered for market surveillance purposes;

to provide values 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...)

#### 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 by Draft Commission Regulation implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for glandless standalone circulators and glandless circulators integrated in products.

#### **4. 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 for the stage 1 requirements of the Regulation on circulators and after 12 months for the second stage requirements of the Regulation, 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 working languages of the ESOs, a copy of the standard(s) developed under this mandate for the stage 1 requirements of the Regulation within 12 months, and for the second and third stage requirements of the Regulation within 36 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).

## **5. 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), small and medium-size enterprises (NORMAPME) and market surveillance authorities of Member States to take part in the standardisation work.