

EUROPEAN COMMISSION

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Brussels, 16.12.2020 C(2020) 8839 final

COMMISSION IMPLEMENTING DECISION

of 16.12.2020

on a standardisation request to the European Committee for Standardisation as regards the measurement of functional performance of taps and showers in support of Directive 2009/125/EC of the European Parliament and of the Council and Regulation (EU) 2017/1369 of the European Parliament and of the Council

(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 Council , and in particular Article 10(1) thereof,

Whereas:

- (1) Directive 2009/125/EC of the European Parliament and of the Council¹ establishes a 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.
- (2) Regulation (EU) 2017/1369 of the European Parliament and of the Council² lays down a framework that applies to energy-related products placed on the market or put into service.
- (3) European standards support the implementation of Directive 2009/125/EC and/or Regulation (EU) 2017/1369.
- (4) Standards help ensuring high level of interoperability, accessibility, environmental protection, protection of the health and safety of consumers throughout the Union and thus contribute to free movement of goods in the Union. Given that such standards are technology-neutral and performance-based, they also contribute to ensuring equal conditions of competition among relevant economic operators dealing with taps and showers in particular small and medium-sized enterprises. Indirectly those standards also contribute to lower the energy and water consumption costs benefitting consumers in particular.

¹ 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 285, 31.10.2009, p. 10).

² Regulation (EU) 2017/1369 of the European Parliament and of the Council of 4 July 2017 setting a framework for energy labelling and repealing Directive 2010/30/EU (OJ L 198, 28.7.2017, p. 1).

- (5) The Communication from the Commission on the Ecodesign Working Plan 2016-2019³ established in accordance with Article 16(1) of Directive 2009/125/EC sets out the working priorities under the ecodesign and energy labelling framework for the period 2016 to 2019. The Ecodesign Working Plan identifies the energy-related product groups to be considered as priorities for the undertaking of preparatory studies and eventual adoption of implementing measures. Those product groups include water-related products. As described in the Ecodesign Working Plan, a labelling requirement for water-related products in general could deliver a saving of up to 70 TWh per year (and 1900 Mm3 of abstracted water) in 2025 and up to 17 TWh per year (and 700 Mm3 of abstracted water) in 2030.
- (6) The Commission has undertaken an ecodesign and energy labelling preparatory study entitled 'MEErP Preparatory Study on Taps and Showers' in 2014. In 2019 a followup study entitled 'Follow-up of the MEErP Preparatory Study on Taps and Showers' indicates the absence of international standards to assess functional performance aspects such as rinsing efficiency or comfort in an accurate and reproducible way.
- (7) So far, only the measurement of water flow rates and some technical parameters indirectly related to the functional performance of showers (spread area and spray force from showers) are available for taps and showers.
- (8) A standard could help in the determination of the functional performance aspects such as rinsing efficiency or comfort in an accurate and reproducible way associated with water and energy efficiency of taps and showers throughout the Union.
- (9) In the above mentioned studies water consumption at Union level (including a water loss of 24% in the water supply system) was estimated to be about 13.40 Gm³/year from taps and 11.50 Gm³/year from showers. Water consumption and scarcity is an increasing problem in many areas of the Union, primarily driven by climate change.
- (10) The Preparatory Study on Taps and Showers of 2014 and 2019 estimates that primary energy associated with the heating of water (including supply, conversion and transmission of energy), would correspond to 629 PJ/year for taps and 1960 PJ/year for showers. The higher value is associated with showers because of a higher demand of hot water. An annual increase of 0.1% until 2030 is estimated to reflect the demography of the Union.
- (11) In case a label was able to cover the entire Union market it has been estimated in the Preparatory Study on Taps and Showers of 2014 that in the period 2015 to 2030 the annual consumption of water and primary energy could be potentially reduced by 8% and 37%, respectively. Those reductions correspond to saving additional 0.4 Gm3 of water per year (-2%) and 40 PJ of energy per year in 2030 (-2%), compared to the BAU scenario set in those studies.
- (12) The intention to request the drafting of a European standard on taps and showers is not set out in the Commission staff Working Document accompanying the annual Union work programme for European standardisation for 2020. The consensual opinion of the Consultation Forum meeting on 18th December 2019 on the urgent need to have a standard in this area, the growing consequences of climate change on the water supply and the importance of having a standard that could support the Renovation Wave

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COM(2016)773 final of 30 November 2016.

initiative as part of the European Green Deal⁴ justify the urgency of this standardisation request.

- (13) The European Committee for Standardisation (CEN) has indicated that the work covered by the request falls within its area of competence.
- (14) It is therefore appropriate to request CEN to draft a new European standard in support of <u>Directive 2009/125/EC</u> and Regulation (EU) 2017/1369 on methods for the measurement of functional performance of taps and showers .
- (15) The requested standard should be drafted in such a way as to take into account the state of the art and current practice at the time of design and manufacture as well as technical and economic considerations, which are consistent with a high degree of health, safety and environmental protection. The standard should in particular address the need to ensure the necessary functional performance aspects such as rinsing efficiency or comfort in an accurate and reproducible way associated with water and energy efficiency of taps and showers.
- (16) The requested European standard should include detailed measurement and calculation methods of the functional performance of taps and showers including in relation to rinsing efficiency and users' comfort. They should also reflect the generally acknowledged state of the art measurement and calculation methods.
- (17) The European standardisation organisations (ESOs) have agreed to follow the Guidelines for the execution of standardisation requests⁵.
- (18) In order to ensure transparency and facilitate the execution of the requested standardisation activities, CEN should prepare a work programme and submit it to the Commission.
- (19) In order to enable the Commission to better monitor the requested standardisation work, CEN should provide the Commission with access to an overall project plan containing detailed information on the execution of the standardisation request.
- (20) Experience shows that during execution of the standardisation request, it may be necessary to adjust the scope of the request or the deadlines set therein. CEN should therefore promptly report to the Commission if it considers that more time is required to draft the standards than initially foreseen or that it is appropriate to adapt the scope of the request, in order to allow the Commission to take appropriate action.
- (21) In accordance with Article 10(3) of Regulation (EU) No 1025/2012 each standardisation request is subject to acceptance by the relevant European standardisation organisation. It is therefore necessary to provide for the rules on validity of this request if it is not accepted by CEN.
- (22) In order to ensure legal certainty as to the validity of the request after its execution, it is appropriate to provide for a date of expiry of this Decision.
- (23) The ESOs and the European stakeholders' organisations receiving Union financing and the Consultation Forum established respectively by Article 18 of Directive 2009/125/EC and Article 14 of Regulation (EU) 2017/1369 have been consulted.

⁴ Communication from The Commission to the European Parliament, The European Council, The Council, The European Economic and Social Committee and The Committee Of The Regions - The European Green Deal (COM/2019/640 final).

⁵ SWD(2015) 205 final of 27 October 2015.

(24) 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) is requested to draft a new European standard on the measurement of functional performance for taps and showers by 30 November 2023.

The standard referred to in the first paragraph shall meet the requirements set out in the Annex.

CEN shall provide the Commission with the title of the requested standard in all the official languages of the Union.

Article 2

Work programme

CEN shall prepare a work programme indicating the standard referred to in the first paragraph of Article 1, the responsible technical bodies and a timetable for the execution of the requested standardisation activities in line with the deadline set in that Article.

CEN shall submit the work programme to the Commission by 17 March 2021. CEN shall inform the Commission of any amendments to the work programme.

CEN shall provide the Commission with access to an overall project plan.

Article 3

Reporting

- (1) 1. CEN shall report annually to the Commission on the execution of the request referred to in Article 1 indicating the progress made in implementation of the work programme referred to in Article 2.
- (2) CEN shall submit the first annual report to the Commission by 17 December 2021. Subsequent annual reports shall be submitted to the Commission by 30 March each year.
- (3) CEN shall provide the Commission with the final report by 30 March 2024.
- (4) CEN shall promptly report to the Commission any major concerns relating to the scope of the request referred to in Article 1 and the deadline set in that Article.

Article 4 Validity of the standardisation request

If CEN does not accept the request referred to in Article 1 within a month of receiving it, the request may not constitute a basis for the standardisation activities referred to in that Article.

This Decision shall expire on 30 March 2024.

Article 5

Addressee

This Decision is addressed to the European Committee for Standardisation.

Done at Brussels, 16.12.2020

For the Commission Virginijus SINKEVIČIUS Member of the Commission

> CERTIFIED COPY For the Secretary-General

Martine DEPREZ Director Decision-making & Collegiality EUROPEAN COMMISSION



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ANNEX

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to the

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ANNEX

Requirements for the standard referred to in Article 1

Part A. Requirements to be supported by the standard

The standard shall support the application of potential measures for the implementation of Directive 2009/125/EC and Regulation (EU) 2017/1369 to improve the environmental performance of taps and showers on the Union Internal Market.

The standard shall provide detailed measurement and calculation methods of parameters corresponding to the functional performance of taps and showers. The parameters concerned should include, among other possible parameters, the rinsing performance and users' comfort as well as energy and water efficiency. They shall also reflect the generally acknowledged state of the art measurement and calculation methods. In this regard, existing standards on sanitary tapware shall be taken into account. The standard shall in particular ensure the necessary balance between the objectives of rinsing performance and users' comfort, and of energy and water efficiency.

Part B. Specific requirements for drafting the standard referred to in Article 1

1. Requirements for the standard

Standards shall reflect the generally acknowledged state of the art.

The standard to be drafted shall include the main characteristics of the products. It shall also include a description of the parameters to be measured or calculated so that reliable, accurate and reproducible results can be obtained.

'Round robin' or other statistical assessment methods may also be used to help determine the accuracy of certain methods used. The standard shall be designed to minimise the risk of circumvention, namely to minimise the risk that a unit alters its performance during a test with the objective of reaching a more favourable level of energy consumption or functionality. The approach shall also take steps to minimise the chance that the product can recognise that it is under test. The standard shall, to the extent possible, take into account the real-life usage and reflect average consumer behaviour.

2. Requirements for specific standard parameters

2.1 The standard shall, include at least:

- (a) definitions of taps, shower systems, parts, and their features (such as water break, boost, timed flow, start/stop controlled by a motion or proximity sensor, cold start, temperature break and thermostat function);
- (b) installation instructions (including product settings for parts such as sensors, mixers and shower heads);
- (c) requirements for test set-ups (including water inlet temperatures and pressures and ambient temperature and definitions of standard parts necessary for testing non-complete systems);
- (d) definitions of standard use cases and related actions for testing parameters (such as handwashing, showering or dishwashing);

2.2 The standard shall describe the technical measurement and calculation methods on functional performance, energy and water consumption for taps and showers and cover, at least, the following parameters:

- (a) water flow rate: for example [l/s] or [l/min];
- (b) energy consumption per time unit: for example [kWh/s] or [kWh/min];
- (c) rinsing performance: for example the time to perform a rinsing activity [s] for taps (including washbasins, kitchen, bidets);
- (d) water and energy efficiency: for example, water and energy consumption associated to certain activities, against a standard benchmark; performance of time flow regulators (automatic closure of water flow after fixed time).

2.2.1 In particular for taps (including washbasins, kitchen, and bidets) the standard shall include:

- (a) performance in function of the change of pressure;
- (b) performance of water break (automatic reduction of water flow in absence of mechanical action on the tap);
- (c) performance of cold start (start position of the tap delivering cold water);
- (d) performance of temperature break (automatic reduction of water temperature in absence of mechanical action on the tap);
- (e) performance of flow regulator (maximum delivery of fixed water flow);
- (f) difference between flow rate at highest and lowest water pressure;
- (g) performance of thermostatic valve;
- (h) performance of electronic tap (automatic start and stop of water flow based on sensors of the users' presence.

2.2.2 In particular, for showers (including shower taps, mixers showerheads, showers equipped with waste heat recovery, multi-output and multi-mode devices) the standard shall include:

- (a) measurement of spreading area;
- (b) measurement of spray force, where appropriate;
- (c) performance of flow regulators (maximum delivery of fixed water flow);
- (d) difference between flow rate at highest and lowest water pressure.

2.2.3 In particular, for shower systems the standard shall include:

- (a) performance of time flow regulators (automatic closure of water flow after fixed time);
- (b) performance of water breaks (automatic reduction of water flow in absence of mechanical action on the tap);
- (c) performance of cold start (start position of the tap delivering cold water);
- (d) performance of temperature breaks (automatic reduction of water temperature in absence of mechanical action on the tap);
- (e) performance of thermostatic valves;

(f) performance of electronic tap (automatic start and stop of water flow based on sensors of the users' presence).