



**M/577**

Brussels, 29.7.2021  
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**COMMISSION IMPLEMENTING DECISION**

**of 29.7.2021**

**on a standardisation request to the European Committee for Standardisation as regards  
space heating appliances in support of Regulation (EU) No 305/2011 of the European  
Parliament and of the Council**

(Only the English, French and German texts are authentic)

# COMMISSION IMPLEMENTING DECISION

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## on a standardisation request to the European Committee for Standardisation as regards space heating appliances in support of Regulation (EU) No 305/2011 of the European Parliament and of the Council

(Only the English, French and German texts are authentic)

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<sup>1</sup>, and in particular Article 10(1) thereof,

Whereas:

- (1) Regulation (EU) No 305/2011 of the European Parliament and of the Council<sup>2</sup> lays down harmonised conditions for the marketing of construction products, in order to enhance their free movement in the internal market.
- (2) In accordance with Article 17(3) of Regulation (EU) No 305/2011, harmonised standards are to provide the methods and criteria for assessing the performance of construction products in relation to their essential characteristics, which according to Article 3(2) of that Regulation are to be laid down in harmonised technical specifications in relation to the basic requirements for construction works.
- (3) Harmonised standards contribute to the free movement of construction products in the Union. Given that such standards are technology-neutral and performance-based, they also contribute to ensuring equal conditions of competition among economic operators dealing with these products, in particular small and medium-sized enterprises. Indirectly those standards also contribute to lower sales costs, benefitting consumers in particular.
- (4) Regulation (EU) No 305/2011 replacing Council Directive 89/106/EEC on construction products<sup>3</sup> has introduced one new basic requirement for construction works, namely sustainable use of natural resources. Moreover, the contents of other

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<sup>1</sup> OJ L 316, 14.11.2012, p. 12.

<sup>2</sup> Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 laying down harmonised conditions for the marketing of construction products and repealing Council Directive 89/106/EEC (OJ L 88, 4.4.2011, p. 5).

<sup>3</sup> Council Directive 89/106/EEC of 21 December 1988 on the approximation of laws, regulations and administrative provisions of the Member States relating to construction products (OJ L 40, 11.2.1989, p. 12).

basic requirements for construction works have been adapted in line with technical and societal developments.

- (5) Several harmonised standards and draft harmonised standards have been developed in support of Directive 89/106/EEC on the basis of standardisation mandate M/129 issued in 1999 to CEN and CENELEC concerning standards for space heating appliances. These harmonised standards need to be replaced to take into account the changes introduced by Regulation (EU) No 305/2011, in particular regarding basic requirements for construction works.
- (6) The intention to request drafting of harmonised standards in support of Regulation (EU) No 305/2011 is stated in Action 9 of the Annex to The annual Union work programme for European standardisation for 2020<sup>4</sup>.
- (7) CEN has indicated that the work covered by the request falls within its area of competence.
- (8) It is therefore appropriate to request CEN to revise and to draft new harmonised standards and to finalise the draft standards for space heating appliances in support of Regulation (EU) No 305/2011.
- (9) The assessment methods and criteria to be included in harmonised standards in relation to their essential characteristics should take into account the state of the art and current practice, in order to enable those standards to adequately serve the public interest by facilitating the fulfilment of basic requirements for construction works.
- (10) Pursuant to Article 17(3) of Regulation (EU) No 305/2011, harmonised standards are to, where appropriate and without endangering the accuracy, reliability or stability of the results, provide methods less onerous than testing for assessing the performance of the construction products in relation to their essential characteristics.
- (11) Since essential characteristics of construction products have been defined in Article 2(4) of Regulation (EU) No 305/2011 as those characteristics of the construction product which relate to the basic requirements for construction works, the standardisation requests should aim at dealing with all the existing standardisation needs for the products to be covered by them in relation to those basic requirements for construction works.
- (12) Standardisation activities should not cover areas where standardisation needs cannot be identified in relation to given basic requirements for construction works or parts of them.
- (13) In accordance with the second subparagraph of Article 17(3) of Regulation (EU) No 305/2011, when provided for in the relevant mandate, a harmonised standard is to refer to intended uses of products to be covered by it. In order to ensure the pertinence of the assessment methods and criteria chosen, harmonised standards should refer to intended uses of products to be covered by them.
- (14) Harmonised standards should contain precise rules on how to express and declare the performance of construction products covered by them, in relation to all their essential characteristics or parts of them.
- (15) Commission Communication on The European Green Deal<sup>5</sup> has identified construction as one of the areas to be addressed when transforming the Union's

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<sup>4</sup> COM(2019) 486 final of 28 October 2019.

<sup>5</sup> COM(2019) 640 final of 11 December 2019.

economy for a sustainable future. As part of that transformation the Commission will review Regulation (EU) No 305/2011 to ensure that the design of new and renovated buildings at all stages is in line with the needs of the circular economy, and lead to increased digitalisation and climate-proofing of the building stock. It is therefore necessary to include requirements for harmonised standards on sustainable use of natural resources.

- (16) In general, harmonised standards should entail only one assessment method in relation to any given essential characteristic. This method could possibly consist of alternatively testing or calculation.
- (17) In accordance with Article 27(2) of Regulation (EU) No 305/2011, where classes of performance in relation to the essential characteristics of construction products are not established by the Commission, they may be established by the European standardisation bodies in harmonised standards, on the basis of a revised mandate. Given that all such classes are not established by the Commission in relation to space heating appliances, it is appropriate to request that such classes are established by CEN.
- (18) In order to ensure sufficient performance levels for space heating appliances, CEN should establish in harmonised standards threshold levels in relation to essential characteristics to be fulfilled by those construction products in Member States.
- (19) Pursuant to the first subparagraph of Article 17(4) of Regulation (EU) No 305/2011 the European standardisation bodies are to determine in harmonised standards the applicable factory production control, which is to take into account the specific conditions of the manufacturing process of the construction product concerned. Pursuant to that Article the harmonised standard is also to include technical details necessary for the implementation of the system of assessment and verification of constancy of performance.
- (20) Harmonised standards should therefore enable the economic operators to provide all the necessary information about the performance of construction products covered by those standards, and thus facilitate the free movement of those products in the internal market.
- (21) Harmonised standards should also furnish Member State authorities with all the necessary means to set requirements for the performance of construction products covered by those standards, in relation to their essential characteristics, which could impact the fulfilment of the basic requirements for construction works.
- (22) In addition, harmonised standards should cater for sufficient means for the final users of construction products covered by them to fulfil all the information needs of those users.
- (23) In order to fulfil the requirements set out in Article 17 of Regulation (EU) No 305/2011, notably to reach the necessary level of transparency and legal clarity, each drafted or revised harmonised standard should systematically include clear and concise information on the results of the CEN standardisation work. That information is necessary in order to facilitate the work of market surveillance authorities, assist notified bodies in performing their functions, and provide manufacturers, especially small and medium-sized enterprises using a harmonised standard, with working tools enabling them to fully benefit from harmonisation.

- (24) Harmonised standards should be drafted and revised by consistently applying relevant rules for drafting standards, to ensure that they are of an appropriate quality, and should reflect the generally acknowledged state of the art.
- (25) The European standardisation organisations have agreed to follow the Guidelines for the execution of standardisation requests<sup>6</sup>.
- (26) 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.
- (27) 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 and should report regularly on the execution of that request. CEN should also provide the Commission and its contractors assigned to standardisation tasks with access to all documentation referred to in draft standardisation documents.
- (28) 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 they consider 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.
- (29) In accordance with Article 10(3) of Regulation (EU) No 1025/2012 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.
- (30) 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.
- (31) Given that several harmonised standards have been drafted on the basis of Standardisation mandate M/129 in support of Directive 89/106/EEC, replaced by Regulation (EU) No 305/2011, and this Decision provides for a basis to complete work on certain draft harmonised standards based on that mandate, it is appropriate to provide for the end of validity of the Standardisation mandate M/129, as regards the product areas and harmonised standards dealt with in this Decision.
- (32) The European standardisation organisations, the European stakeholders' organisations receiving Union financing and the Standing Committee on Construction established by Article 64 of Regulation (EU) No 305/2011 have been consulted.
- (33) The Committee established by Article 22 of Regulation (EU) No 1025/2012 did not deliver an opinion within the time limit laid down by its chair,

HAS ADOPTED THIS DECISION:

#### *Article 1*

##### Requested standardisation activities

The European Committee for Standardisation (CEN) is requested to draft new harmonised standards listed in Table 1 of Annex I to this Decision and to revise existing harmonised standards listed in Table 2 of that Annex in support of Regulation (EU) No 305/2011 for space heating appliances by the deadlines set in that Annex.

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<sup>6</sup> SWD(2015) 205 final of 27 October 2015.

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

CEN shall provide the Commission with the titles of the requested harmonised standards in all the official languages of the Union.

#### *Article 2* Work programme

CEN shall prepare a draft work programme indicating all the standards listed in Annex I, the responsible technical bodies and a timetable for the execution of the requested standardisation work in line with the deadlines set out in that Annex.

CEN shall submit the draft work programme to the Commission by 17 September 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

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.

CEN shall submit the first annual report to the Commission by 30 July 2022. Subsequent annual reports shall be submitted to the Commission by 31 October each year.

CEN shall provide the Commission with the final report by 31 October 2024.

CEN shall promptly report to the Commission any major concerns relating to the scope of the request referred to in Article 1 and the deadlines set in Annex I.

#### *Article 4* Validity of the standardisation request

If CEN does not accept the request referred to in Article 1 of this Decision 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 31 December 2024.

#### *Article 5* Expiry of existing standardisation request

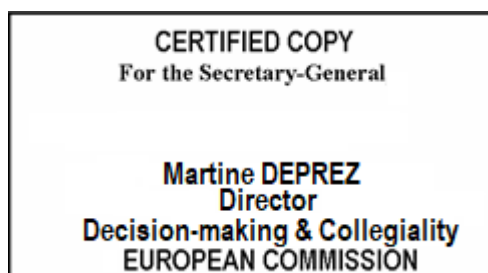
Standardisation mandate M/129 may not constitute a basis for standardisation activities as regards the product areas and harmonised standards referred to in Article 1 of this Decision.

*Article 6*

This Decision is addressed to the European Committee for Standardisation.

Done at Brussels, 29.7.2021

*For the Commission*  
*Thierry BRETON*  
*Member of the Commission*





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ANNEXES 1 to 2

**ANNEXES**

**to the**

**COMMISSION IMPLEMENTING DECISION**

**on a standardisation request to the European Committee for Standardisation as regards  
space heating appliances in support of Regulation (EU) No 305/2011 of the European  
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## ANNEX I

### **List of new European standards to be drafted, list of existing standards to be revised and list of draft standards to be completed as referred to in Article 1**

**Table 1: New European standard to be drafted and deadlines for its adoption**

| Reference information   | Deadline for the adoption by CEN |
|---|----------------------------------|
| <p>1. <b>Residential solid fuel burning appliances intended for mechanical fuelling with wood pellets and for manual fuelling with other solid fuel</b></p> <p>prEN 16510-2-7:xxx - Residential solid fuel burning appliances – Part 2-7: Combination appliances fired by wood logs and pellets</p> | 1 January 2024                   |

**Table 2: List of existing standards to be revised and deadlines for their adoption**

| Reference information  | Deadline for the adoption by CEN |
|--|----------------------------------|
| <p>1. <b>Residential solid fuel burning freestanding appliances intended for space heating</b></p> <p>Revision of EN 13240:2001, EN 13240:2001/A2:2004, EN 13240:2001/AC:2006 and EN 13240:2001/A2:2004/AC:2007 - Room heaters fired by solid fuel — Requirements and test methods</p> <p>as</p> <p>EN 16510-2-1:xxx - Residential solid fuel burning appliances – Part 2-1: Roomheaters</p>   | 1 April 2022                     |
| <p>2. <b>Residential solid fuel burning built-in appliances intended for space heating</b></p> <p>Revision of EN 13229:2001, EN 13229:2001/A1:2003, EN 13229:2001/ A2:2004, EN 13229:2001/AC:2006 and EN 13229:2001/A2:2004/AC:2007 - Inset appliances including open fires fired by solid fuels — Requirements and test methods</p> <p>as</p> <p>EN 16510-2-2:xxx - Residential solid fuel burning appliances – Part 2-2: Inset appliances including open fires</p> | 1 April 2022                     |

| Reference information  | Deadline for the adoption by CEN |
|--|----------------------------------|
| <p>3. <b>Residential solid fuel burning appliances intended for cooking and space heating</b></p> <p>Revision of EN 12815:2001, EN 12815:2001/A1:2004, EN 12815:2001/AC:2006 and EN 12815:2001/A1:2004/AC:2007 - Residential cookers fired by solid fuel — Requirements and test methods</p> <p>as</p> <p>EN 16510-2-3:xxx - Residential solid fuel burning appliances – Part 2-3: Cookers</p>   | 1 April 2022                     |
| <p>4. <b>Residential solid fuel burning appliances intended for hot water preparation and space heating</b></p> <p>Revision of EN 12809:2001, EN 12809:2001/A1:2004, EN 12809:2001/A1:2004/AC:2007 and EN 12809:2001/AC:2006- Residential Independent boilers burning solid fuel – Nominal heat output up to 50 kW</p> <p>as</p> <p>EN 16510-2-4:xxx - Residential solid fuel burning appliances – Part 2-4: Independent boiler appliances – Nominal heat output up to 50 kW</p> | 1 April 2022                     |
| <p>5. <b>Residential solid fuel burning appliances intended for space heating fired by wood pellets</b></p> <p>Revision of EN 14785:2006 - Residential space heating appliances fired by wood pellets - Requirements and test methods</p> <p>as</p> <p>EN 16510-2-6:xxx - Residential solid fuel burning appliances – Part 2-6: Mechanical by wood pellets fed roomheaters, inset appliances and cookers</p>   | 1 April 2022                     |
| <p>6. <b>Residential solid fuel burning appliances intended for slow heat release</b></p> <p>Revision of EN 15250:2007 - Slow heat release appliances fired by solid fuel – Requirements and test methods</p> <p>as</p> <p>EN 16510-2-5:xxx - Residential solid fuel burning appliances – Part 2-5: Slow heat release appliances</p>   | 1 January 2023                   |
| <p>7. <b>Residential solid fuel burning appliances intended for sauna heating</b></p>  | 1 January 2024                   |

| Reference information  | Deadline for the adoption by CEN |
|--|----------------------------------|
| Revision of EN 15821:2010 – Multi-firing sauna stoves fired by natural wood logs – Requirements and test methods   |                                  |
| <p>8. <b>Residential liquid fuel burning appliances intended for space heating</b></p> <p>Revision of EN 1:1998 and EN 1:1998/A1:2007 – Flued oil stoves with vaporizing burners</p> | 1 April 2023                     |

## ANNEX II

### **Requirements for the standards referred to in Article 1**

#### **Part A. General requirements for standards listed in Annex I**

##### 1. Legal structures to be supported by the harmonised standards

The harmonised standards shall support the establishment of a harmonised system as set out in Regulation (EU) No 305/2011.

The harmonised standards shall provide the methods and the criteria for assessing the performance of construction products in relation to their essential characteristics. Those essential characteristics shall be taken into account from the beginning and throughout the standardisation process.

##### 2. Product scope

The liquid and solid fuel burning local space heating products covered by this standardization request are the following:

roomheaters for solid fuel;

inset appliances including open fires for solid fuel;

cookers for solid fuel;

independent boiler appliances for solid fuel – Nominal heat output up to 50 kW;

slow heat release appliances for solid fuel;

mechanical by wood pellets fed roomheaters, inset appliances and cookers;

combination appliances fired by wood logs and pellets;

multi-firing sauna stoves fired by natural wood logs;

oil stoves.

The intended use of the covered products is space heating in residential buildings. These products may be fitted with a boiler (integral part of the appliance containing water to be heated up) for the supply of hot water for central heating systems.

Appliances intended purely for central heating systems (a maximum of losses towards the room of 6 %) are not covered by this request.

Some products covered by this request may be used as well for cooking.

##### 3. Potential uses

The liquid and solid fuel burning local space heating products covered by this standardization request could be used for the following:

space heating in residential buildings;

premises of the residential building to be heated directly or indirectly via supply of hot water for central heating systems;

premises of the residential building for cooking.

#### 4. Descriptive features

The appropriate functioning of the products covered by this request depends on several necessary features which shall be taken into account in the standardisation work based on this request. These descriptive features are outlined in point 3 of Part B and in point 3 of Part C.

#### 5. Applicable system of assessment and verification of constancy of performance

For liquid and solid fuel burning local space heating products covered by this request and by Commission Decision 1999/471/EC<sup>1</sup>, taking into account the essential characteristics and the intended uses of the products, the applicable system for assessment and verification of constancy of performance (AVCP) is System 3.

#### 6. Acceptability criteria

- 6.1. For publishing in the *Official Journal of the European Union* the references of the harmonised standards listed in Annex I, as laid down in Article 17 of Regulation (EU) No 305/2011, these standards are to fulfil the requirements of the harmonised system set out in or by means of that Regulation.
- 6.2. This entails in particular that their essential characteristics correspond to this standardisation request, that their content is in line with the general principles applicable to standardisation under Regulation (EU) No 305/2011, and that the procedures in place for verification before their adoption of their quality have been followed.
- 6.3. The standards shall only contain unequivocal dated normative references to other CEN standards or parts thereof. These standards or parts thereof may neither be in conflict with Union law nor provide for discretion where such discretion has not been laid down in Union law.
- 6.4. Standards shall not include normative references to other standards or parts thereof other than those fulfilling the conditions set out in points 6.1, 6.2. and 6.3, namely standards of other standardisation bodies.

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<sup>1</sup> Commission Decision of 29 June 1999 on the procedure for attesting the conformity of construction products pursuant to Article 20(2) of Council Directive 89/106/EEC as regards space heating appliances, OJ L 184, 17.7.1999, p. 37.

## Part B. Specific requirements for standards listed in Table 1 of Annex I

### 1. Requirements for all standards

Standards shall reflect the state of art.

The harmonised standards shall refer to intended uses of products to be covered by them, as laid down in point 2 of part B.

CEN may establish in the harmonised standards classes and threshold levels for performance in relation to the essential characteristics of those products, taking into account Commission Regulation (EU) 2015/1185<sup>2</sup> and Commission Regulation (EU) 2015/1189<sup>3</sup>.

The applicable rules for factory production control and the technical details necessary for the implementation of the system of assessment and verification of constancy of performance shall also be specified in the harmonised standards.

For the basic requirement for construction works (BWR) number 7, sustainable use of natural resources, the harmonised standards shall identify and enumerate all the relevant elements of performance related to the whole life cycle of the products concerned. This standardisation work shall be based on the modules included in standard EN 15804:2012+A2:2019. CEN shall follow the general alignment between EN 15804 and the concept of product environmental footprint (FEP).

During the standardisation work, CEN shall determine all necessary product category rules to enable the whole life cycle analysis of the products concerned and the declaration of their performance in relation to the essential characteristic environmental sustainability. This shall comprise in particular the definition of the scenarios required for this complete period, including the reference service life, where appropriate.

The harmonised standards shall also prescribe that, when a manufacturer wants to declare the performance of its product in relation to the essential characteristic environmental sustainability, the manufacturer shall present in the declaration of performance the results of the assessment of all those elements of performance specified in the harmonised standard in question.

### 2. Requirements for specific standards

CEN shall draft new harmonised standards, containing the essential characteristics listed in points 2.1. to 2.7.

#### 2.1. BWR 1: Mechanical resistance and stability

|                          |              |
|--------------------------|--------------|
| Essential characteristic | EN 16510-2-7 |
| Load bearing capacity    |              |

#### 2.2. BWR 2: Safety in case of fire

<sup>2</sup> Commission Regulation (EU) 2015/1185 of 28 April 2015 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for solid fuel space heaters (OJ L 193, 21.7.2015, p. 1).

<sup>3</sup> Commission Regulation (EU) 2015/1189 of 28 April 2015 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for solid fuel boilers (OJ L 193, 21.7.2015, p. 100).

**Table 3: Essential characteristics**

|                                     |              |
|-------------------------------------|--------------|
| Essential characteristic            | EN 16510-2-7 |
| Protection of combustible materials |              |

## 2.3. BWR 3: Hygiene, health and the environment

The emissions of combustion products are to be evaluated at nominal heat output and at part load heat output, if part load is specified.

**Table 4: Essential characteristics**

|                         | Essential characteristics                   | EN 16510-2-7 |
|-------------------------|---|--------------|
| [Nominal heat output]   | Carbon monoxide emission (CO)               |              |
|                         | NOx emissions                               |              |
|                         | Emission of organic gaseous compounds (OGC) |              |
|                         | Particulate matter emissions (PM)           |              |
| [Part load heat output] | Carbon monoxide emission (CO)               |              |
|                         | NOx emissions                               |              |
|                         | Emission of organic gaseous compounds (OGC) |              |
|                         | Particulate matter emissions (PM)           |              |

**Table 5: Threshold levels for emissions according to appliance types**

| Emission                               | Appliance types  | Threshold at 13 % O <sub>2</sub> |
|--|--|----------------------------------|
| <b>Organic gaseous compounds (OGC)</b> | open fronted solid fuel local space heaters  | 120 mgC/m <sup>3</sup>           |
|  | closed fronted solid fuel local space heaters using solid fuel other than compressed wood in the form of pellets including cookers |                                  |
|  | closed fronted solid fuel local space heaters using compressed wood in form of pellets including cookers                           | 60 mgC/m <sup>3</sup>            |
| <b>Carbon monoxide (CO)</b>            | open fronted solid fuel local space heaters  | 2000 mg/m <sup>3</sup>           |
|  | closed fronted solid fuel local space heaters using solid fuel other than compressed wood in the form of pellets including cookers | 1500 mg/m <sup>3</sup>           |
|  | closed fronted solid fuel local space heaters using  | 300 mg/m <sup>3</sup>            |

|  |  |                       |
|--|--|-----------------------|
|  | compressed wood in form of pellets including cookers   |                       |
| <b>Nitrogen oxides (NOx)</b><br>expressed as NO <sub>2</sub> | open fronted solid fuel local space heaters, closed fronted solid fuel local space heaters and cookers using biomass           | 200 mg/m <sup>3</sup> |
|  | open fronted solid fuel local space heaters, closed fronted solid fuel local space heaters and cookers using fossil solid fuel | 300 mg/m <sup>3</sup> |
| <b>Particulate matter (PM)</b>                               | open fronted solid fuel local space heaters  | 50 mg/m <sup>3</sup>  |
|  | closed fronted solid fuel local space heaters using solid fuel other than compressed wood in the form of pellets and cookers   | 40 mg/m <sup>3</sup>  |
|  | closed fronted solid fuel local space heaters using compressed wood in form of pellets   | 20 mg/m <sup>3</sup>  |

The threshold levels set out in Table 5 for OGC, CO, NOx and PM shall be applied for the performance assessed at nominal heat output.

#### 2.4. BWR 4: Safety and accessibility in use

The data for the installation to a chimney are to be evaluated at nominal heat output, at safety test heat output and at part load heat output, if part load is specified.

**Table 6: Essential characteristics**

|  | Essential characteristics                  | EN 16510-2-7 |
|--|--|--------------|
| Data for installation to a chimney at nominal heat output                              | Flue gas outlet temperature                |              |
|  | Minimum flue draught                       |              |
|  | Flue gas mass flow                         |              |
| Data for installation to a chimney at part load heat output, if part load is specified | Flue gas outlet temperature                |              |
|  | Minimum flue draught                       |              |
|  | Flue gas mass flow                         |              |
| Data for installation to a chimney regarding fire safety at safety test heat output    | Fire safety of installation to the chimney |              |

#### 2.5. BWR 5: Protection against noise

No standardisation needs identified.

#### 2.6. BWR 6: Energy economy and heat retention

The heat output and the heat losses of the product are to be evaluated at nominal heat output and at part load heat output, if part load is specified.



**Table 7: Essential characteristics**

|  |  |              |
|--|--|--------------|
|  |  | EN 16510-2-7 |
| <b>Appliance's thermal output and energy efficiency, to be evaluated at nominal heat output</b>                              | Space heat output  |              |
|  | Water heat output, if existing   |              |
|  | Efficiency   |              |
| <b>Appliance's thermal output and energy efficiency, to be evaluated at part load heat output, if part load is specified</b> | Space heat output  |              |
|  | Water heat output, if existing   |              |
|  | Efficiency   |              |
| <b>Space heating efficiency</b>  | Seasonal space heating efficiency at appliance's nominal heat output                     |              |
|  | Energy efficiency  |              |
|  | Electric power consumption at appliance's nominal and part load heat output, if existing |              |
|  | Standby mode power consumption, if existing  |              |

**Table 8: Threshold levels of seasonal space heating energy efficiency according to appliance types**

| <b>Appliance types</b>   | <b>Threshold level</b> |
|--|------------------------|
| open fronted solid fuel local space heaters  | 30 %                   |
| closed fronted solid fuel local space heaters using solid fuel other than compressed wood in the form of pellets | 65 %                   |
| closed fronted solid fuel local space heaters using compressed wood in the form of pellets                       | 79 %                   |

**Table 9: Energy efficiency classification based on the energy efficiency index (EEI)**

| Energy efficiency class | Energy efficiency index (EEI) |
|-------------------------|-------------------------------|
| A++                     | $EEI \geq 130$                |
| A+                      | $107 \leq EEI < 130$          |
| A                       | $88 \leq EEI < 107$           |
| B                       | $82 \leq EEI < 88$            |
| C                       | $77 \leq EEI < 82$            |
| D                       | $72 \leq EEI < 77$            |
| E                       | $62 \leq EEI < 72$            |
| F                       | $42 \leq EEI < 62$            |
| G                       | $EEI < 42$                    |

2.7. BWR 7: Sustainable use of natural resources

**Table 10: Essential characteristics and their elements**

|  | EN 16510-2-7 |
|--|--------------|
| Environmental sustainability:<br>Global Warming Potential total (GWP-total)<br>Global Warming Potential (GWP-fossil)<br>Global Warming Potential (GWP-biogenic)<br>Global Warming Potential land use and land use change (GWP-luluc)<br>Depletion potential of the stratospheric ozone layer (ODP)<br>Acidification potential, Accumulated Exceedance (AP)<br>Eutrophication potential, Fraction of nutrients reaching freshwater end compartment (EP-freshwater)<br>Eutrophication potential, Fraction of nutrients reaching freshwater end compartment (EP-marine)<br>Eutrophication potential, Accumulated Exceedance (EP-terrestrial)<br>Formation potential of tropospheric ozone (POCP)<br>Abiotic depletion potential for non-fossil resources (ADP-minerals&metals)<br>Abiotic depletion potential for fossil resources (ADP-fossil)<br>Water (user) deprivation potential, deprivation-weighted water consumption (WDP)<br>Hazardous waste disposed<br>Non-hazardous waste disposed |              |

|   |  |
|---|--|
| Radioactive waste disposed  |  |
| Use of renewable primary energy excluding renewable primary energy resources used as raw materials                      |  |
| Use of renewable primary energy resources used as raw materials   |  |
| Total use of renewable primary energy resources (primary energy and primary energy resources used as raw materials)     |  |
| Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials              |  |
| Use of non-renewable primary energy resources used as raw materials   |  |
| Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials) |  |
| Use of secondary material   |  |
| Use of renewable secondary fuels  |  |
| Use of non-renewable secondary fuels  |  |
| Use of net fresh water  |  |
| Components for re-use   |  |
| Materials for recycling   |  |
| Materials for energy recovery   |  |
| Exported energy   |  |

3. Descriptive features to be dealt with in the specific standards

The products covered by the standards listed in Table 1 of Annex I are to contain certain specific features, varying by each standard and products covered by it. Those features shall be described in the harmonised standard, where appropriate, in order to ensure the correct functioning of the products in question.

**Table 11: Descriptive features**

|  |              |
|--|--------------|
|  | EN 16510-2-7 |
| Data for potential use with room ventilation systems: type of appliance (in relation to its tightness to the room) |              |
| Data for the building's statics: appliance's mass  |              |
| Materials and construction elements:<br>(a) general stresses;<br>(b) integral boiler or heat exchanger.            |              |
| Risk of burning fuel falling out   |              |
| Temperature rise in the fuel storage   |              |

|  |  |
|--|--|
| Temperature rise of the operating components   |  |
| Spillage of flue gases into the room:<br>(a) possible spillage of CO, if relevant for the fuel type;<br>(b) open operation.        |  |
| Cleanability<br>(a) heating surfaces;<br>(b) flueways;<br>(c) ashpan;<br>(d) bottomgate;<br>(e) damper;<br>(f) fan-cut-out-device. |  |
| Strength and leak tightness of boiler shells   |  |

## Part C. Specific requirements for revision of existing standards listed in Table 2 of Annex I

### 1. Requirements for all standards

Standards shall reflect the state of art.

The harmonised standards shall refer to intended uses of products to be covered by them, as laid down in point 2 of part B.

CEN is authorised to establish in the harmonised standards classes and threshold levels for performance in relation to the essential characteristics of those products, taking into account Regulation (EU) 2015/1185 and Regulation (EU) 2015/1189.

The applicable rules for factory production control and the technical details necessary for the implementation of the system of assessment and verification of constancy of performance shall also be specified in the harmonised standards.

For the basic requirement for construction works number 7, sustainable use of natural resources, the harmonised standards shall identify and enumerate all the relevant elements of performance related to the whole life cycle of the products concerned. This standardisation work shall be based on the modules included in standard EN 15804:2012+A2:2019. CEN shall follow the general alignment between EN 15804 and the concept of product environmental footprint (FEP).

During the standardisation work, CEN shall determine all necessary product category rules, to enable the whole life cycle analysis of the products concerned and the declaration of their performance in relation to the essential characteristic environmental sustainability. This shall comprise in particular the definition of the scenarios required for this complete period, including the reference service life, where appropriate.

The harmonised standards shall also prescribe that, when a manufacturer wants to declare the performance of its product in relation to the essential characteristic environmental sustainability, the manufacturer shall present in the declaration of performance the results of the assessment of all those elements of performance specified in the harmonised standard in question.

### 2. Requirements for specific standards

CEN shall draft new harmonised standards, containing the essential characteristics listed in points 2.1. to 2.7.

#### 2.1. BWR 1: Mechanical resistance and stability

|                            |   |
|----------------------------|---|
| [Essential characteristic] | EN 16510-2-1,<br>EN 16510-2-5,<br>EN 16510-2-6,<br>EN 15821 |
| Load bearing capacity      |   |

2.2. BWR 2: Safety in case of fire

**Table 12: Essential characteristics**

|                                     |   |
|-------------------------------------|---|
| Essential characteristic            | EN 16510-2-1,<br>EN 16510-2-2,<br>EN 16510-2-3,<br>EN 16510-2-4,<br>EN 16510-2-5,<br>EN 16510-2-6,<br>EN 15821,<br>EN 1 |
| Protection of combustible materials |   |

2.3. BWR 3: Hygiene, health and the environment

The emissions of combustion products are to be evaluated at nominal heat output and at part load heat output, if part load is specified.

**Table 13: Essential characteristics for solid fuel space heating appliances**

|                         |   |   |
|-------------------------|---|---|
|                         |   | EN 16510-2-1, EN 16510-2-2,<br>EN 16510-2-3, EN 16510-2-4,<br>EN 16510-2-5, EN 16510-2-6,<br>EN 15821 |
| [Nominal heat output]   | Carbon monoxide emission (CO)               |   |
|                         | NOx emissions                               |   |
|                         | Emission of organic gaseous compounds (OGC) |   |
|                         | Particulate matter emissions (PM)           |   |
| [Part load heat output] | Carbon monoxide emission (CO)               |   |
|                         | NOx emissions                               |   |
|                         | Emission of organic gaseous compounds (OGC) |   |
|                         | Particulate matter emissions (PM)           |   |

**Table 14: Essential characteristics for oil stoves**

|                       |                               |      |
|-----------------------|-------------------------------|------|
|                       |                               | EN 1 |
| [Nominal heat output] | Carbon monoxide emission (CO) |      |

|                         |   |  |
|-------------------------|---|--|
|                         | NOx emissions                               |  |
|                         | Emission of organic gaseous compounds (OGC) |  |
|                         | Smoke number                                |  |
| [Part load heat output] | Carbon monoxide emission (CO)               |  |
|                         | NOx emissions                               |  |
|                         | Emission of organic gaseous compounds (OGC) |  |
|                         | Smoke number                                |  |

For closed fronted liquid fuel local space heaters, covered by this standardisation request, the threshold level for NOx emissions is to be set at 130 mg/kWh<sub>input</sub>.

**Table 15: Threshold levels for emissions according to solid fuel space heating appliance types**

| <b>Emission</b>  | <b>Appliance types</b>   | <b>Threshold at 13 % O2</b> |
|--|--|-----------------------------|
| <b>Organic gaseous compounds (OGC)</b>                       | open fronted solid fuel local space heaters  | 120 mgC/m <sup>3</sup>      |
|  | closed fronted solid fuel local space heaters using solid fuel other than compressed wood in the form of pellets including cookers |                             |
|  | closed fronted solid fuel local space heaters using compressed wood in form of pellets including cookers                           | 60 mgC/m <sup>3</sup>       |
| <b>Carbon monoxide (CO)</b>                                  | open fronted solid fuel local space heaters  | 2000 mg/m <sup>3</sup>      |
|  | closed fronted solid fuel local space heaters using solid fuel other than compressed wood in the form of pellets including cookers | 1500 mg/m <sup>3</sup>      |
|  | closed fronted solid fuel local space heaters using compressed wood in form of pellets including cookers                           | 300 mg/m <sup>3</sup>       |
| <b>Nitrogen oxides (NOx)</b><br>expressed as NO <sub>2</sub> | open fronted solid fuel local space heaters, closed fronted solid fuel local space heaters and cookers using biomass               | 200 mg/m <sup>3</sup>       |
|  | open fronted solid fuel local space heaters, closed fronted solid fuel local space heaters and cookers using fossil solid fuel     | 300 mg/m <sup>3</sup>       |
| <b>Particulate matter (PM)</b>                               | open fronted solid fuel local space heaters  | 50 mg/m <sup>3</sup>        |
|  | closed fronted solid fuel local space heaters using solid fuel other than compressed wood in the form of pellets and cookers       | 40 mg/m <sup>3</sup>        |

| Emission | Appliance types  | Threshold at 13 % O <sub>2</sub> |
|----------|--|----------------------------------|
|          | closed fronted solid fuel local space heaters using compressed wood in form of pellets | 20 mg/m <sup>3</sup>             |

The threshold levels foreseen in Table 15 for OGC, CO, NO<sub>x</sub> and PM shall be applied for the performance assessed at nominal heat output.

For sauna stoves (EN 15821), the threshold levels for OGC, CO and NO<sub>x</sub> shall also be determined separately.

#### 2.4. BWR 4: Safety and accessibility in use

The data for the installation to a chimney are to be evaluated at nominal heat output, at safety test heat output and at part load heat output, if part load is specified.

**Table 16: Essential characteristics**

|   |  |  |
|---|--|--|
|   |  | EN 16510-2-1, EN 16510-2-2, EN 16510-2-3, EN 16510-2-4, EN 16510-2-5, EN 16510-2-6, EN 15821, EN 1 |
| <b>Data for installation to a chimney at nominal heat output</b>                              | Flue gas outlet temperature                |  |
|   | Minimum flue draught                       |  |
|   | Flue gas mass flow                         |  |
| <b>Data for installation to a chimney at part load heat output, if part load is specified</b> | Flue gas outlet temperature                |  |
|   | Minimum flue draught                       |  |
|   | Flue gas mass flow                         |  |
| <b>Data for installation to a chimney regarding fire safety at safety test heat output</b>    | Fire safety of installation to the chimney |  |

#### 2.5. BWR 5: Protection against noise

No standardisation needs identified.

#### 2.6. BWR 6: Energy economy and heat retention

The heat output and the heat losses of the product are to be evaluated at nominal heat output and at part load heat output, if part load is specified.



**Table 17: Essential characteristics**

|  |  |   |
|--|--|---|
|  |  | EN 16510-2-1, EN 16510-2-2,<br>EN 16510-2-3, EN 16510-2-4,<br>EN 16510-2-5, EN 16510-2-6,<br>EN 15821, EN 1 |
| <b>Appliance's thermal output and energy efficiency, to be evaluated at nominal heat output</b>                              | Space heat output  |   |
|  | Water heat output, if existing   |   |
|  | Efficiency   |   |
| <b>Appliance's thermal output and energy efficiency, to be evaluated at part load heat output, if part load is specified</b> | Space heat output  |   |
|  | Water heat output, if existing   |   |
|  | Efficiency   |   |
| <b>Space heating efficiency</b>  | Seasonal space heating efficiency at appliance's nominal heat output                     |   |
|  | Energy efficiency  |   |
|  | Electric power consumption at appliance's nominal and part load heat output, if existing |   |
|  | Standby mode power consumption, if existing  |   |

**Table 18: Threshold levels of seasonal space heating energy efficiency according to appliance types**

| <b>Appliance types</b>   | <b>Threshold level</b> |
|--|------------------------|
| open fronted solid fuel local space heaters  | 30 %                   |
| closed fronted solid fuel local space heaters using solid fuel other than compressed wood in the form of pellets | 65 %                   |
| closed fronted solid fuel local space heaters using compressed wood in the form of pellets                       | 79 %                   |
| closed fronted liquid fuel local space heaters   | 72 %                   |
| cookers  | 65 %                   |

**Table 19: Energy efficiency classification based on the energy efficiency index (EEI)**

| <b>Energy efficiency class</b> | <b>Energy efficiency index (EEI)</b> |
|--------------------------------|--------------------------------------|
| A++                            | $EEI \geq 130$                       |
| A+                             | $107 \leq EEI < 130$                 |
| A                              | $88 \leq EEI < 107$                  |
| B                              | $82 \leq EEI < 88$                   |
| C                              | $77 \leq EEI < 82$                   |
| D                              | $72 \leq EEI < 77$                   |
| E                              | $62 \leq EEI < 72$                   |
| F                              | $42 \leq EEI < 62$                   |
| G                              | $EEI < 42$                           |

The classification foreseen in Table 19 shall not be applicable to sauna stoves.

2.7. BWR 7: Sustainable use of natural resources

**Table 20: Essential characteristics and their elements**

|   |  |
|---|--|
|   | EN 16510-2-1, EN 16510-2-2, EN 16510-2-3, EN 16510-2-4, EN 16510-2-5, EN 16510-2-6, EN 15821, EN 1 |
| Environmental sustainability:<br>Global Warming Potential total (GWP-total)<br>Global Warming Potential (GWP-fossil)<br>Global Warming Potential (GWP-biogenic)<br>Global Warming Potential land use and land use change (GWP-luluc)<br>Depletion potential of the stratospheric ozone layer (ODP)<br>Acidification potential, Accumulated Exceedance (AP)<br>Eutrophication potential, Fraction of nutrients reaching freshwater end compartment (EP-freshwater)<br>Eutrophication potential, Fraction of nutrients reaching freshwater end compartment (EP-marine)<br>Eutrophication potential, Accumulated Exceedance (EP-terrestrial)<br>Formation potential of tropospheric ozone (POCP)<br>Abiotic depletion potential for non-fossil resources |  |

|  |  |
|--|--|
| <p>(ADP-minerals&amp;metals)</p> <p>Abiotic depletion potential for fossil resources (ADP-fossil)</p> <p>Water (user) deprivation potential, deprivation-weighted water consumption (WDP)</p> <p>Hazardous waste disposed</p> <p>Non-hazardous waste disposed</p> <p>Radioactive waste disposed</p> <p>Use of renewable primary energy excluding renewable primary energy resources used as raw materials</p> <p>Use of renewable primary energy resources used as raw materials</p> <p>Total use of renewable primary energy resources (primary energy and primary energy resources used as raw materials)</p> <p>Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials</p> <p>Use of non-renewable primary energy resources used as raw materials</p> <p>Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials)</p> <p>Use of secondary material</p> <p>Use of renewable secondary fuels</p> <p>Use of non-renewable secondary fuels</p> <p>Use of net fresh water</p> <p>Components for re-use</p> <p>Materials for recycling</p> <p>Materials for energy recovery</p> <p>Exported energy</p> |  |
|--|--|

### 3. Descriptive features to be dealt with in the specific standards

The products covered by the standards listed in Table 2 of Annex I are to contain certain specific features, varying by each standard and products covered by it. Those features shall be described in the harmonised standard, where appropriate, in order to ensure the correct functioning of the products in question.

**Table 21: Descriptive features**

|  |  |
|--|--|
|  | EN 16510-2-1, EN 16510-2-2, EN 16510-2-3, EN 16510-2-4, EN 16510-2-5, EN 16510-2-6, EN 15821, EN 1 |
| Data for potential use with room ventilation systems: type of appliance (in relation to its tightness to the room)                 |  |
| Data for the building's statics: appliance's mass  |  |
| Materials and construction elements:<br>(a) general stresses;<br><br>(b) integral boiler or heat exchanger.                        |  |
| Risk of burning fuel falling out   |  |
| Temperature rise in the fuel storage   |  |
| Temperature rise of the operating components   |  |
| Spillage of flue gases into the room:<br>(a) possible spillage of CO, if relevant for the fuel type;<br>(b) open operation.        |  |
| Cleanability<br>(a) heating surfaces;<br>(b) flueways;<br>(c) ashpan;<br>(d) bottomgate;<br>(e) damper;<br>(f) fan-cut-out-device. |  |
| Strength and leak tightness of boiler shells   |  |