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ANNEXES 1 to 2

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#### to the

#### COMMISSION IMPLEMENTING DECISION

on a standardisation request to the European standardisation organisations as regards energy labelling of solid fuel boilers and packages of a solid fuel boiler, supplementary heaters, temperature controls and solar devices in support of Commission Delegated Regulation (EU) 2015/1187 and as regards ecodesign requirements for solid fuel boilers in support of Commission Regulation (EU) 2015/1189

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## Annex I Requirements for the harmonised standards

#### 1. GENERAL REQUIREMENTS

The harmonised standards must be based on reliable, accurate and reproducible procedures and methods that take into account the generally acknowledgeable state of the art.

The harmonised standards must include product design definitions and the main characteristics of the products. They must 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 testing methods may also be used if necessary to help determine the accuracy of certain methods used.

#### 2. REQUIREMENTS ON THE COVERAGE OF EFFICIENCY OF SOLID FUEL BOILERS

As provided for in Delegated Regulation (EU) 2015/1187 and Regulation (EU) 2015/1189, the harmonised standards must cover the following aspects of the seasonal space heating efficiency (' $\eta_s$ '):

- (a) useful efficiency at rated heat output and at applicable part-load (' $\eta_n$ ' and ' $\eta_p$ ', respectively);
- (b) useful heat output at rated heat output and at applicable part-load (' $P_n$ ' and ' $P_p$ ', respectively);
- (c) electrical efficiency at rated heat output for solid fuel cogeneration boilers  $(\eta_{el,n})$ ;
- (d) electrical power requirement at maximum (i.e. rated) and at minimum (i.e. applicable part load) heat output (' $el_{max}$ ' and ' $el_{min}$ ', respectively);
- (e) standby mode power consumption ( ${}^{\prime}P_{SR}{}^{\prime}$ ).

The aspects listed in the first paragraph must be covered for all solid fuel boilers covered by Delegated Regulation (EU) 2015/1187 and Regulation (EU) 2015/1189, including solid fuel condensing boilers.

The harmonised standards must be based on existing standards for solid fuel boilers that lay down procedures and methods for measuring and calculating energy consumption.

The harmonised standards must also cover for test fuels:

- (a) the characteristics that significantly affect the efficiency of solid fuel boilers;
- (b) the range and/or reference value of the characteristics.

The harmonised standards must cover all test fuels referred to in Delegated Regulation (EU) 2015/1187 and Regulation (EU) 2015/1189 apart from 'non-woody biomass' and test fuels for which the designation starts with 'other'. Ranges and reference values of the characteristics must be based on the real life characteristics of fuels.

#### 3. REQUIREMENTS ON THE COVERAGE OF EMISSIONS OF SOLID FUEL BOILERS

As provided for in Regulation (EU) 2015/1189, the following aspects must be covered by the harmonised standards:

- (a) seasonal space heating emissions of particulate matter, measured by a single gravimetric method excluding any particulate matter formed by organic gaseous compounds when flue gas is mixed with ambient air;
- (b) seasonal space heating emissions of carbon monoxide;
- (c) seasonal space heating emissions of organic gaseous compounds;
- (d) seasonal space heating emissions of nitrogen oxides.

The aspects listed in the first paragraph must be covered for all solid fuel boilers covered by Regulation (EU) 2015/1189, including solid fuel condensing boilers.

The harmonised standards must be based on existing standards for solid fuel boilers that lay down procedures and methods for measuring and calculating emissions of particulate matter, of carbon monoxide, of organic gaseous compounds and of nitrogen oxides.

The harmonised standards must also cover for test fuels:

- (a) the characteristics that significantly affect the emissions of solid fuel boilers;
- (b) the range and/or reference value of the characteristics.

The harmonised standards must cover all test fuels referred to in Regulation (EU) 2015/1189 apart from 'non-woody biomass' and test fuels for which the designation starts with 'other'. Ranges and reference values of the characteristics must be based on the real life characteristics of fuels.

# 4. REQUIREMENTS CONCERNING STANDARDS ON PRODUCT GROUPS AND PARAMETERS OUTSIDE DELEGATED REGULATION (EU) 2015/1187 AND REGULATION (EU) 2015/1189

### 4.1. Requirements on the coverage of solid fuel boilers with a rated heat output of 500-1000 kilowatt

The harmonised standards must cover energy efficiency and pollutant emissions of solid fuel boilers with a rated heat output of 500 to 1 000 kilowatt with a view to supporting the adoption and application of potential future ecodesign requirements for solid fuel boilers. This is without prejudice to the scope and requirements of any future ecodesign regulations. There

is no requirement for the standards to cover solid fuel boilers covered by Directive (EU) 2015/2193 of the European Parliament and of the Council<sup>1</sup>.

If appropriate, measurement methods for efficiency and emissions can be based on full load operation and on on-site methods such as used for inspections of boilers.

#### 4.2. Requirements on the coverage of non-woody biomass boilers

The harmonised standards must cover non-woody biomass boilers as defined in Regulation (EU) 2015/1189 with a view to supporting the adoption and application of potential future ecodesign requirements for such boilers. This is without prejudice to the scope and requirements of any future ecodesign regulations.

The harmonised standards must include such boilers' seasonal space heating efficiency and their specific types of significant pollutant emissions, including emissions of particulate matter, of carbon monoxide, of organic gaseous compounds and of nitrogen oxides. Also emissions of dioxins, of furans and of other types can be covered where relevant.

The harmonised standards must also cover for non-woody biomass test fuels:

- (a) the characteristics that significantly affect the emissions of non-woody biomass boilers;
- (b) the range and/or reference value of the characteristics.

Ranges and reference values of the characteristics must be based on the real life characteristics of fuels used in non-woody biomass boilers.

#### 4.3. Requirements on the coverage of water heating efficiency

The harmonised standards must cover the water heating efficiency of solid fuel combination boilers with a view to supporting the inclusion of such parameter in potential future revision of energy labelling requirements for such boilers. This is without prejudice to the requirements of any future energy labelling regulations.

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Directive (EU) 2015/2193 of the European Parliament and of the Council of 25 November 2015 on the limitation of emissions of certain pollutants into the air from medium combustion plants (OJ L 313, 28.11.2015, p. 1).

# **Annex II Harmonised standards and deadlines for adoption**

**Table 1: Requested harmonised standards** 

Reference information	Deadline for adoption <sup>2</sup>
1. Harmonised standard: <b>Efficiency of solid fuel boilers</b> Adaptation of standard EN 303-5:2012 or any other relevant standard.	03/2017
2. Harmonised standard: <b>Emissions of solid fuel boilers</b> Adaptation of standard EN 303-5:2012 or any other relevant standard.	12/2018
3. Harmonised standard <sup>3</sup> : <b>Solid fuel boilers of 500-1000 kW</b> New standard.	6/2021
4. Harmonised standard <sup>3</sup> : <b>Non-woody biomass boilers</b> Adaptation of standard EN 303-5:2012 or any other relevant standard.	6/2021
5. Harmonised standard <sup>4</sup> : Water heating efficiency of solid fuel combination boilers  Adaptation of standard EN 303-5:2012, EN 13203-2:2015 or any other relevant standard.	6/2021

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<sup>&</sup>lt;sup>2</sup> 'Adoption' refers to the relevant European standardisation organisation making a standard available to its members or the public.

For a product group outside the scope of Delegated Regulation (EU) 2015/1187 and Regulation (EU) 2015/1189.

<sup>&</sup>lt;sup>4</sup> For a parameter outside the scope of Delegated Regulation (EU) 2015/1187 and Regulation (EU) 2015/1189.