

EUROPEAN COMMISSION

> Brussels, XXX [...](2018) XXX draft

ANNEXES 1 to 6

# ANNEXES

to the

# **COMMISSION REGULATION**

implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for household dishwashers,

and repealing Regulation (EU) No 1016/2010 with regard to ecodesign requirements for household dishwashers and amending Regulation (EC) No 1275/2008 with regard to ecodesign requirements for standby and off mode electric power consumption of electrical and electronic household and office equipment

# ANNEX I

# **Definitions applicable for the Annexes**

- (1) 'Place setting' means a defined set of tableware for use by one person;
- (2) 'Serving pieces' means items for the preparation and serving of food which can include pots, serving bowls, serving cutlery and a platter;
- (3) 'Rated capacity' means the maximum number of place settings together with the serving pieces, as declared by the manufacturer, which can be treated in a household dishwasher in one cycle when loaded in accordance with the manufacturer's instructions;
- (4) 'Programme' means a series of operations that are pre-defined and are declared by the manufacturer as suitable for specified levels of soil or types of load, or both;
- (5) 'Programme duration' means the time that elapses from the initiation of the programme until the completion of the programme, excluding any delay start and any interactive mode;
- (6) 'Cycle' means a complete dishwashing process as defined by the selected programme, consisting of a series of different operations including cleaning, rinsing, and, if applicable, drying;
- (7) 'Eco programme' means the programme or cycle declared by the manufacturer as suitable to clean normally soiled tableware and used to assess the compliance with the specific ecodesign requirements of this Regulation;
- (8) 'Off-mode' means a condition in which the equipment is connected to the mains power source and is not providing any function; the following shall also be considered as off mode:

a) conditions providing only an indication of off-mode;

b) conditions providing only functionalities intended to ensure electromagnetic compatibility pursuant to Directive 2004/108/EC;

(9) 'Standby mode' means a condition where the equipment is connected to the means power source, and provides only the following functions, which may persist for an indefinite time:

a) reactivation function, or reactivation function and only an indication of enabled reaction function, and/or

b) information or status display, and/or

- c) safety function;
- (10) 'Interaction mode' means a condition in which the equipment is connected to the mains power source and provides functionalities intended for interaction with the user such as programme set-up, delay start set-up, or information to the user;
- (11) 'Delay start' means a condition in which the equipment automatically starts its main function at a later time as programmed by the user;
- (12) 'Active mode' means a condition in which the equipment is connected to the mains power source and at least one of the main function(s) providing the intended service of the equipment has been activated;
- (13) 'Main function(s)' means the main service(s) for which a product is designed for, and that correspond to the intended use of the product;

- (14) 'Network standby' is defined as in Regulation (EC) No 1275/2008;
- (15) 'Equivalent model' means a model with the same relevant technical and performance characteristics but placed on the market under a different model identifier;
- (16) 'Spare part' means a separate part that can replace a part with the same or similar function in an appliance;
- (17) 'Necessary spare part' means a spare part necessary for the use of the appliance that cannot function as intended without that part;
- (18) 'Professional repairer' means an operator or undertaking which provides services of repair and maintenance of household appliances, or distribution of repair equipment, tools or spare parts for household appliances.

# ANNEX II Ecodesign requirements

# 1. THE ECO PROGRAMME

- (a) For the requirements set out in points 2 and 3, the eco programme shall be used. This programme shall be:
- clearly identifiable and named 'eco' on the programme selection device of the household dishwasher and on the household dishwasher display, if any, and on the relevant network application, if any;
- set as the default programme for household dishwashers equipped with automatic programme selection or any function maintaining the selection of a programme;
- alternatively, available for selection without the need to select a specific temperature or load, if there is no automatic programme selection.

The name 'eco' shall be used exclusively for this programme. The only other additional information which may be combined with the term 'eco' is temperature.

(b) Other programme names that could divert the user from using the eco programme such as 'normal', 'daily', 'regular', 'standard' or similar, shall not be used on the machine.

## 2. ENERGY EFFICIENCY REQUIREMENTS

# From 1 April 2021:

- (a) the Energy Efficiency Index (EEI) shall be less than 63 for household dishwashers with a rated capacity of more than 7 place settings;
- (b) the Energy Efficiency Index (EEI) shall be less than 71 for household dishwashers with a rated capacity equal to or less than 7 place settings;

# From 1 April 2024:

(a) the Energy Efficiency Index (EEI) shall be less than 58 for household dishwashers with a rated capacity equal to or more than 10 place settings and a width greater than 50 cm.

The Energy Efficiency Index (EEI) shall be calculated in accordance with Annex II.

# 3. FUNCTIONAL REQUIREMENTS

## From 1 April 2021:

- (a) the Cleaning Efficiency Index  $(I_C)$  shall be greater than 1.12;
- (b) the Drying Efficiency Index  $(I_D)$  shall be greater than 1.08.

The Cleaning Efficiency Index ( $I_C$ ) and the Drying Efficiency Index ( $I_D$ ) shall be calculated in accordance with Annex II.

## 4. LOW POWER MODES

# From 1 April 2021:

(a) The household dishwasher shall have an off-mode or a stand-by mode or both. The power consumption of these modes shall not exceed 0.5 W. By exception, if the stand-by mode includes the display of information or status, the power consumption of the stand-by mode shall not exceed 0.8 W.

- (b) If the household dishwasher has the provision of network standby, the power consumption of this mode shall not exceed 2.0 W.
- (c) After switching on the household dishwasher, it shall be in interaction mode. Interaction mode shall enable the user to switch to active mode, to delay start or to network standby, depending on the functionalities provided by the household dishwasher.
- (d) In interaction mode, if there is no interaction with the equipment for 15 minutes, the household dishwasher shall switch automatically to off-mode, standby mode or network standby.
- (e) If the household dishwasher has the provision of a delay start, the power consumption of this condition shall not exceed 6.0 W. The delay start shall not be programmed for more than 24h.
- (f) The standby mode and network standby shall switch to interaction mode in the case of reactivation by the user or reactivation through the network connection.
- (g) After the end of a programme and therefore of the active mode, the household dishwasher shall be in interaction mode.
- (h) If the delay start or the active mode is interrupted by the user, either through direct interaction or through a network connection, the household dishwasher shall switch to interaction mode.
- (i) The above requirements are without prejudice to emergency measures.

## 5. RESOURCE EFFICIENCY REQUIREMENTS

## From 1 April 2021:

(1) Availability of necessary spare parts

Manufacturers or importers of household dishwashers shall make available necessary spare parts for household dishwashers for a minimum period of seven years after placing the last unit of the model on the market.

The list of necessary spare parts concerned by this measure and the procedure for ordering them shall be publicly available, for example on the manufacturer's website, at the latest two years after the placing on the market of the first unit of a model or of an equivalent model and until the end of the period of availability of these necessary spare parts, and the list shall contain at least the following:

- Motor
- Circulation and drain pump
- Heaters and heating elements
- Door hinge and seal
- Piping and related equipment including all hoses, valves and filters
- Structural and interior parts related to door assemblies, spray arms, seals and interior racks.
- Printed circuit boards

- Liquid crystal displays.
- (2) Maximum delivery time of necessary spare parts

During the period mentioned under (1), the manufacturer or importer shall deliver the necessary spare parts for household dishwasher within three weeks after having received the request.

- (3) Access to Repair and Maintenance Information
  - (a) After a period of two years after the placing on the market of the first unit of a model or of an equivalent model, the manufacturer or importer shall provide unrestricted access to the appliance repair and maintenance information to professional repairers upon their request. The manufacturer's website, or an equivalent means of information, shall indicate the process for repairers to make such a request and standard forms as appropriate.
  - (b) Before granting such a request and provided it does not cause undue delay to the timeframe mentioned under (2), manufacturers or importers may require the professional repairer to declare that:

i. The repairer complies with the applicable regulations for repairers of electrical equipment in the Member State where the professional repairer operates. Reference to an official registration system covering this compliance, where such system exists in the Member State where the professional repairer operates, shall be provided in support of the declaration.

ii. The repairer is covered by relevant insurance, covering liabilities resulting from its activity, as required in the Member State where the professional repairer operates.

- (c) The appliance repair and maintenance information referred to in (a) shall include:
  - an unequivocal appliance identification;
  - a disassembly map and exploded view;
  - technical manuals;
  - list of necessary repair and test equipment;
  - component and diagnosis information (such as minimum and maximum theoretical values for measurements);
  - wiring and connection diagrams;
  - diagnostic fault and error codes (including manufacturer-specific codes); and
  - data record information.
- (d) Manufacturers or importers may charge reasonable and proportionate fees for access to the repair and maintenance information. A fee is not reasonable or proportionate if it discourages access by failing to take into account the extent to which the independent operator uses it.
- (4) Information requirements for refrigerant gases

Household dishwashers equipped with a heat pump shall clearly and permanently display on the exterior of the appliance, for example on the back panel, the chemical

name or equivalent reference of the principal component of the refrigerant gas used. Where the refrigerant gas is covered by Regulation (EU) No 517/2014, the requirements of that regulation will apply.

(5) Requirements for disassembly for the purpose of repair and for material recovery and recycling while avoiding pollution.

Household dishwashers shall be designed so that the access to and the removal of the following components (when present) is possible without the use of any tool which is not readily available for purchase:

- printed circuit boards (larger than 10 cm<sup>2</sup>);
- electrolyte capacitors containing substances of concern (height > 25 mm, diameter > 25 mm or proportionately similar volume).
- liquid crystal displays;
- batteries;
- motor;
- piping and related equipment including all hoses, valves and filters;
- heat pump.

Manufacturers shall document the sequence of dismantling operations needed to access the components listed above, including for each of these operations, the type and the number of fastening techniques(s) to be unlocked, and tool(s) required. This information should be accessible under the same conditions as the repair and maintenance information under (3).

## 6. INFORMATION REQUIREMENTS

## From 1 April 2021:

User instructions shall be provided on a free access website of the manufacturer, their authorised representative and importers, and possibly in the form of a user manual or set of documents, and shall include:

- (a) information that the eco programme is suitable to clean normally soiled tableware, that for this use, it is the most efficient programme in terms of its combined energy and water consumption and that it is used to assess the compliance with the EU Ecodesign legislation;
- (b) information that loading the machine up to the capacity indicated by the manufacturer will contribute to energy and water savings and information on correct loading of tableware and main consequences of incorrect loading;
- (c) information that manual pre-rinsing of tableware items leads to increased water and energy consumption and is not recommended;
- (d) information that washing tableware in a dishwasher usually consumes less energy and water than hand dishwashing when the dishwasher is used according to the manufacturer's instructions;
- (e) indicative information on the programme duration, energy and water consumption for all programmes that offer a complete cycle.

The user instructions shall also include instructions for the user to perform maintenance operations and operations for the purpose of ensuring durability and repair, in addition to any instructions automatically delivered by the appliance when equipped with this feature. Such instructions shall as a minimum include instructions for:

- (a) correct installation (including level positioning, connection to mains, connection to water inlets, cold and/or hot if appropriate);
- (b) correct dosage of detergent, salt and other additives, and consequences of inadequate dosage;
- (c) foreign object removal from the appliance;
- (d) periodic cleaning, including optimal frequency, and procedure;
- (e) door opening between cycles, if appropriate;
- (f) periodic checks of filters, including optimal frequency, and procedure;
- (g) identification of errors, the meaning of the errors, and the action required, including identification of errors requiring professional assistance;
- (h) access to professional repair (internet webpages, addresses, contact details);
- (i) implications of self-repair or non-professional repair for the legal guarantee, and when applicable, also to the commercial guarantee;
- (j) information on the period during which the spare parts necessary for the use of the household dishwasher are available.

# 6.1. TECHNICAL DOCUMENTATION

# From 1 April 2021:

The technical documentation for the purposes of conformity assessment pursuant to Article 4 shall contain the following elements:

(a) A copy of the information provided in accordance with point 6(1)(e) and the results of the calculations undertaken in accordance with Annex III.

The publication of the elements in the product database, according to [labelling regulation on household dishwashers], Article 3(1)(b), replaces the obligation of including such elements in the technical documentation.

(b) A list of all equivalent household dishwasher models.

Where the information included in the technical documentation for a particular model has been obtained

- (a) from an equivalent model of the same or a different manufacturer, or
- (b) by calculation on the basis of design or extrapolation from another model of the same or a different manufacturer, or both,

the technical documentation shall include the details of such calculation, the assessment undertaken by manufacturers to verify the accuracy of the calculation and, where appropriate, the declaration of identity between the models of different manufacturers.

#### ANNEX III Measurement and calculation methods

For the purposes of compliance and verification of compliance with the requirements of this Regulation, measurements and calculations shall be made using harmonised standards the reference numbers of which have been published for this purpose in the *Official Journal of the European Union*, or other reliable, accurate and reproducible methods, which takes into account the generally recognised state-of-the-art, and in line with the following provisions.

Numbers shall be rounded to the nearest integer in accordance with B.3 Rule B of ISO 80000-1:2009. If the rounding takes place in decimals, the omitted places shall not be filled with zeros.

## 1. ENERGY EFFICIENCY INDEX

For the calculation of the Energy Efficiency Index (EEI) of a household dishwasher model, the Eco programme energy consumption (EPEC) of the household dishwasher is compared to its standard programme energy consumption (SPEC).

(a) The Energy Efficiency Index (EEI) is calculated as follows and rounded to one decimal place:

$$EEI = \frac{EPEC}{SPEC} \times 100$$

Where:

EPEC = Eco programme energy consumption of the household dishwasher;

SPEC = standard programme energy consumption of the household dishwasher.

- (b) The standard programme energy consumption (SPEC) is calculated in kWh/cycle as follows:
  - (i) for household dishwashers with rated capacity  $ps \ge 10$  and width > 50 cm:

 $SPEC = 0.025 \times ps + 1.350$ 

(ii) for household dishwashers with rated capacity ps  $\leq 9$  and/or household dishwashers with a width  $\leq 50$  cm:

$$SPEC = 0.090 \times ps + 0.450$$

where ps = number of place settings

# 2. CLEANING EFFICIENCY INDEX

For the calculation of the Cleaning Efficiency Index  $(I_C)$  of a household dishwasher model, the cleaning efficiency of Eco programme is compared to the cleaning efficiency of a reference dishwasher.

(a) The Cleaning Efficiency Index (I<sub>C</sub>) is calculated as follows and rounded to two decimal places:

$$\ln I_C = \frac{1}{n} \times \sum_{i=1}^n \ln \left( \frac{C_{T,i}}{C_{R,i}} \right)$$

where:

 $C_{T,i}$  is the cleaning efficiency of the Eco programme of the household dishwasher under test for one test run (i)

 $C_{R,i}$  is the cleaning efficiency of the reference dishwasher for one test run (i)

n is the number of test runs.

(b) The cleaning efficiency (C) is the average of the soil score of each load item after completion of a standard cleaning cycle. The soil score is calculated as shown in Table 1:

Number of small dot-shaped soil particles	Total soiled area (A <sub>S</sub> )	Soil score
( <b>n</b> )	in mm <sup>2</sup>	
n = 0	$A_{\rm S} = 0$	5 (most efficient)
$0 < n \le 4$	$0 < A_S \leq 4$	4
$4 < n \le 10$	$0 < A_S \leq 4$	3
10 < n	$4 < A_S \leq 50$	2
Not applicable	$50 < A_S \le 200$	1
Not applicable	$200 < A_{\rm S}$	0 (least efficient)

#### Table 1 Calculation of the soil score

## 3. DRYING EFFICIENCY INDEX

For the calculation of the Drying Efficiency Index  $(I_D)$  of a household dishwasher model, the drying efficiency of the Eco programme is compared to the drying efficiency of a reference dishwasher.

(a) The Drying Efficiency Index (I<sub>D</sub>) is calculated as follows and rounded to two decimal places:

$$\ln I_D = \frac{1}{n} \times \sum_{i=1}^n \ln(\frac{D_{T,i}}{D_{R,i}})$$

where:

 $D_{T,i}\xspace$  is the drying efficiency of the ECO programme of the household dishwasher under test for one test run (i)

 $D_{R,i}$  is the drying efficiency of the reference dishwasher for one test run (i)

n is the number of test runs,

(b) The drying efficiency (D) is the average of the wet score of each load item after completion of a standard cleaning cycle. The wet score is calculated as shown in Table 2:

Number of water traces (W <sub>T</sub> ) or wet streak	Total wet area (Aw) in	Wet score
$(W_S)$	mm <sup>2</sup>	
$W_T = 0$ and $W_S = 0$	Not applicable	2 (most
		efficient)
$1 < W_T \le 2 \text{ or } W_S = 1$	$Aw \leq 50$	1
$2 < W_T \text{ or } W_S = 2$ or $W_S = 1$ and $W_T = 1$	Aw > 50	0 (least efficient)

# ANNEX IV

# Verification procedure for market surveillance purposes

1. Verification of ecodesign specific parameters

The verification tolerances defined in this Annex relate only to the verification of the declared parameters by Member State authorities and shall not be used by the manufacturer or importer as an allowed tolerance to establish the values in the technical documentation or in interpreting these values with a view to achieving compliance or to communicate better performance by any means.

When verifying the compliance of a product model with the requirements laid down in this Regulation pursuant to Article 3(2) of Directive 2009/125/EC, for the requirements referred to in this Annex, the authorities of the Member States shall apply the following procedure:

- (1) The Member State authorities shall verify one single unit of the model.
- (2) The model shall be considered to comply with the applicable requirements if:
  - (a) the values given in the technical documentation pursuant to point (2) of Annex IV to Directive 2009/125/EC (declared values), and, where applicable, the values used to calculate these values, are not more favourable for the manufacturer or importer than the results of the corresponding measurements carried out pursuant to paragraph (g) thereof; and
  - (b) the declared values meet any requirements laid down in this Regulation, and any required product information published by the manufacturer or importer does not contain values that are more favourable for the manufacturer or importer than the declared values; and
  - (c) when the Member State authorities test the unit of the model, the determined values (the values of the relevant parameters as measured in testing and the values calculated from these measurements) comply with the respective verification tolerances as given in Table 3.
- (3) If the results referred to in point (2)(a) or (b) are not achieved, the model and all models that have been listed as equivalent household dishwasher models in the manufacturer's or importer's technical documentation shall be considered not to comply with this Regulation.
- (4) If the result referred to in point (2)(c) is not achieved, the Member State authorities shall select three additional units of the same model for testing. As an alternative, the three additional units selected may be of one or more different models that have been listed as equivalent models in the manufacturer's or importer's technical documentation.
- (5) The model shall be considered to comply with the applicable requirements if, for these three units, the arithmetical mean of the determined values complies with the respective verification tolerances given in Table 3.
- (6) If the result referred to in point (5) is not achieved, the model and all models that have been listed as equivalent household dishwasher models in the manufacturer's or importer's technical documentation shall be considered not to comply with this Regulation.

(7) The Member State authorities shall provide all relevant information to the authorities of the other Member States and to the Commission without delay after a decision being taken on the non-compliance of the model according to points (3) and (6).

Member States' authorities shall use measurement procedures which take into account the generally recognised, state-of-the-art, reliable, accurate and reproducible measurement methods, including methods set out in documents whose reference numbers have been published for that purpose in the Official Journal of the European Union. The Member State authorities shall use the measurement and calculation methods set out in Annex III.

The Member State authorities shall only apply the verification tolerances that are set out in Table 3 and shall use only the procedure described in points 1 to 7 for the requirements referred to in this Annex. No other tolerances, such as those set out in harmonised standards or in any other measurement method, shall be applied.

Parameter	Verification tolerances
Eco programme energy	The determined value shall not exceed the declared value of
consumption (EPEC)	EPEC by more than 5 %. Where three additional units need
	to be selected, the arithmetic mean of the determined values
	of these three units shall not exceed the declared value of
	EPEC by more than 5 %.
Cleaning efficiency index $(I_C)$	The determined value shall not be less than the declared
	value of $I_C$ by more than 14 %.
Drying efficiency index (I <sub>D</sub> )	The determined value shall not be less than the declared
	value of I <sub>D</sub> by more than 12 %.
Power consumption in off	The determined value of power consumption Poff shall not
mode (P <sub>off</sub> )	exceed the declared value by more than 10%.
Power consumption in	The determined value of power consumption $P_{sm}$ shall not
standby mode (P <sub>sm</sub> )	exceed the declared value by more than 10%.
Power consumption in	The determined value of power consumption $P_{ns}$ shall not
network standby (P <sub>ns</sub> )	exceed the declared value by more than 10%.
Power consumption in delay	The determined value of power consumption $P_{ds}$ shall not
start (P <sub>ds</sub> )	exceed the declared value by more than 10%.
Duration of the interaction	The determined value of duration T <sub>im</sub> shall not exceed the
mode (T <sub>im</sub> )	declared value by more than 10%.

 Table 3 - Verification tolerances

# 2. Verification of resource efficiency parameters

When verifying the compliance of a product model with one of the requirements referred to under Annex II point 5, the following procedure shall apply:

# (1) Availability of necessary spare parts

the verification of compliance to this requirement shall be planned by the Market Surveillance Authority at one or more times chosen randomly in the following period:

- (a) More than two years after the first product of the model under verification is placed on the market; if this event is not known by the market surveillance authority, the date of declaration of conformity of the model can be used as the beginning of the two year period;
- (b) Less than seven years after the last product of the model under verification is placed on the market; if this event is not known by the market surveillance authority, the date of declaration of conformity of the model can be used as the beginning of the seven year period.

The market surveillance authorities shall: (i) check that the list of necessary spare parts and the procedure for ordering them are publicly available and check that the list of necessary spare parts cover the items listed in point (1); (ii) select one or more of the items in the list of point (1) and order the said item(s) from the manufacturer or importer, following the relevant procedure; (iii) check that the part delivered corresponds to the order. In the event that the items delivered do not correspond to the order, the order shall be repeated.

The manufacture or importer is considered as not fulfilling the Regulation's requirement if the list of necessary spare parts or the procedure for ordering them are not publicly available, or if the necessary spare parts selected are not available for order or if the delivered items do not correspond to the order for two separate orders of the same parts.

(2) <u>Necessary spare parts maximum delivery time</u>

Market surveillance authorities shall verify that the necessary spare parts ordered under the previous point (1) have been delivered within three weeks. The date of the order shall be the starting date of the three weeks period. In the event that the parts ordered are delivered correctly but not within the three weeks period, the market surveillance authority shall repeat the verification with another sample of necessary spare parts.

A manufacturer or importer is considered as not fulfilling the Regulation's requirements if, for the same product, three discrete orders of necessary spare parts do not meet the three weeks maximum delivery time without acceptable justification of an event of force majeure.

(3) Access to Repair and Maintenance Information

Market surveillance authorities shall check that the access to repair and maintenance information is provided and includes the information requested. The market surveillance authorities may organise a blind test with a professional repairer meeting the conditions listed under point (3) to verify that the information is accessible to professional repairers in non-discriminatory conditions.

A manufacturer or importer is considered as not fulfilling the Regulation's requirement if the access to information is denied, or if the conditions of access are considered discriminatory or if the information provided does not correspond to the information listed under point (3) or to the sub-set of information requested by the repairer on this list.

# (4) Information requirements for refrigeration gases

Market surveillance authorities shall access the relevant parts of the appliance (heat pump) and check that the chemical name, or an equivalent reference, of the principal component of the refrigerant gas is visibly and legibly marked on the exterior of the appliance. The market surveillance authorities shall ask the manufacturer to show evidence, for example through the documentation of chemicals used in production, that the name or reference corresponds to the refrigerant gas used for this model. A reference, other than the scientific name of the chemical, is considered equivalent if it is commonly used and understandable by recyclers in the Member State concerned. More than one reference can be used for the same chemical if the manufacturer considers it useful.

A manufacturer or importer is considered as not fulfilling the Regulation's requirement if no marking is found, or if (at least one of) the reference(s) used is not considered understandable or if there is no evidence that the refrigerant used corresponds to the name or reference marked. Where the refrigerant gas is covered by Regulation (EU) No 517/2014, the verification procedure implemented by the Member State in implementation of that Regulation replaces the procedure above.

# (5) <u>Requirements for disassembly for the purpose of repair and for material recovery and</u> recycling while avoiding pollution

Market surveillance authorities shall disassemble with commonly available tools the components listed under point (5) when present in the appliance, or a selection of them, following the manufacturer's instructions and check that the type and the number of fastening techniques(s) to be unlocked and the tool(s) required correspond to the document provided.

A manufacturer or importer is considered as not fulfilling the Regulation's requirements if the documentation required is not available or if the operation requires a tool which is not common or not readily available for purchase, or if the type or number of fastening techniques differs significantly from the type documented.

If the compliance of a manufacturer or importer with the requirements above is considered as unsatisfactory, the market surveillance authority shall take appropriate measures to ensure compliance. The manufacturer shall then take subsequent corrective actions, amendments and/or supplements as requested by the market surveillance authorities and provide proof of compliance within a period of 1 month.

#### ANNEX V Benchmarks

# 1. INDICATIVE BENCHMARKS FOR HOUSEHOLD DISWASHERS ON WATER AND ENERGY CONSUMPTION, AIRBORNE ACOUSTICAL NOISE EMISSIONS AND PROGRAMME DURATION

At the time of entry into force of this Regulation, the best available technology on the market for household dishwashers in terms of their energy efficiency, energy and water consumption, cleaning and drying efficiency, airborne acoustical noise emissions and programme duration for the ECO cycle is identified as follows:

- (1) Household dishwashers with 14 place settings (without heat pump technology):
  - (a) energy consumption: 0.67 kWh/cycle;
  - (b) water consumption: 9.9 litres/cycle;
  - (c) airborne acoustic noise emissions: 44 dB(A);
  - (d) programme duration: 222 minutes (3 hours and 42 minutes).
- (2) Household dishwashers with 13 place settings (with heat pump technology):
  - (a) energy consumption: 0.55 kWh/cycle;
  - (b) water consumption: 8.8 litres/cycle;
  - (c) airborne acoustic noise emissions: 46 dB(A);
  - (d) programme time: 295 minutes (4 hours and 55 minutes).
- (3) Household dishwashers with 10 place settings:
  - (a) energy consumption: 0.66 kWh/cycle;
  - (b) water consumption: 9.5 litres/cycle;
  - (c) airborne acoustic noise emissions: 44 dB(A);
  - (d) programme duration: 195 minutes (3 hours and 15 minutes).
- (4) Household dishwashers with 6 place settings:
  - (a) energy consumption: 0.62 kWh/cycle;
  - (b) water consumption: 8.0 litres/cycle;
  - (c) airborne acoustic noise emissions: 48 dB(A);
  - (D) programme duration: 225 minutes (3 hours and 45 minutes).

# 2. INDICATIVE BENCHMARKS FOR HOUSEHOLD DISHWASHERS ON AVAILABILITY OF NECESSARY SPARE PARTS AND DELIVERABLE TIME OF SPARE PARTS

At the time of entry into force of this Regulation, the fastest delivery times of spare parts for household dishwasher are between 7 and 10 days. The longest availability of necessary spare parts of household dishwashers is around 10 years.

# ANNEX VI

# List of energy-using products covered by Annex I, point 1 to Regulation (EC) No 1275/2008

1. Household appliances

Washing machines

Clothes dryers

Cooking

Electric ovens

Electric hot plates

Microwave ovens

Toasters

Fryers

Grinders, coffee machines and equipment for opening or sealing containers or packages

Electric knives

Other appliances for cooking and other processing of food, cleaning, and maintenance of clothes

Appliances for hair cutting, hair drying, tooth brushing, shaving, massage and other body care appliances

Scales