



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

ANNEXES 1 to 9

ANNEXES

to the

Commission Delegated Regulation

supplementing Regulation (EU) 2017/1369 of the European Parliament and of the Council with regard to energy labelling of household dishwashers

repealing Commission Delegated Regulation (EU) No 1059/2010

ANNEX I

Definitions applicable for the Annexes

For the purposes of the annexes, the following definitions shall apply:

- (1) '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;
- (2) 'cycle' means a complete cleaning, rinsing, and drying process, as defined by the programme selected, consisting of a series of operations until all activity ceases;
- (3) 'quick response' (QR) code means a matrix barcode included on the energy label of a product model that links to that model's information in the public part of the product registration database;
- (4) 'place settings' means a set of tableware for use by one person, not including serving pieces;
- (5) 'rated capacity' means the maximum number of place settings together with the serving pieces, which can be cleaned and dried in a household dishwasher in one cycle when loaded in accordance with the manufacturer's instructions;
- (6) 'programme duration' means the length of time beginning with the initiation of the programme selected, excluding any user programmed delay, until an end of programme indicator is activated and the user has access to the load;
- (7) 'eco' programme means the name of the programme of a household dishwasher declared by the manufacturer as suitable to clean normally soiled tableware, and to which the information on the energy label and the product information sheet relates;
- (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 2014/30/EU of the European Parliament and of the Council¹;
- (9) 'standby mode' means a condition where the equipment is connected to the mains power source and provides only the following functions, which may persist for an indefinite time:
 - (a) reactivation function, possibly through network connection, or reactivation function and only an indication of enabled reaction function, and/or
 - (b) information or status display, and/or
 - (c) detection function for emergency measures;
- (10) 'delay start' means a condition where the user has selected a specified delay to the beginning of the cycle of the selected programme;
- (11) 'display mechanism' means any screen, including tactile screen, or other visual technology used for displaying internet content to users;

¹ Directive 2014/30/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to electromagnetic compatibility (OJ L 96, 29.3.2014, p. 79).

- (12) 'nested display' means any visual interface where an image or data set is accessed by a mouse click, mouse roll-over or tactile screen expansion of another image or data set;
- (13) 'tactile screen' means a screen responding to touch, such as that of a tablet computer, slate computer or a smartphone;
- (14) 'alternative text' means text provided as an alternative to a graphic allowing information to be presented in non- graphical form where display devices cannot render the graphic or as an aid to accessibility such as input to voice synthesis applications.

ANNEX II

A. Energy efficiency classes

The energy efficiency class of a household dishwasher shall be determined on the basis of its Energy Efficiency Index (EEI) as set out in Table 1.

The EEI of a household dishwasher shall be calculated in accordance with Annex III.

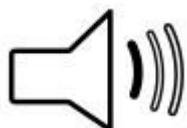


Table 1
Energy efficiency classes

Energy efficiency class	Energy Efficiency Index
A (most efficient)	$EEI < 34$
B	$34 \leq EEI < 39$
C	$39 \leq EEI < 44$
D	$44 \leq EEI < 50$
E	$50 \leq EEI < 56$
F	$56 \leq EEI < 63$
G (least efficient)	$EEI \geq 63$

B. Acoustic airborne noise emission classes

The acoustic airborne noise emission class of a household dishwasher shall be determined on the basis of the acoustic airborne noise emissions as set out in Table 2.

Table 2
Acoustic airborne noise emission classes

Acoustic airborne noise emission class	Symbol on the label	Noise (dB(A))
A		$n < 41$
B		$41 \leq n < 47$
C		$47 \leq n$

ANNEX III

Method for calculating the Energy Efficiency Index

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 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.

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 EEI is calculated as follows and rounded to one decimal place:

$$EEI = (EPEC / SPEC) \times 100$$

where:

EPEC is the eco programme energy consumption of the household dishwasher in kWh/cycle and rounded to three decimal places;

SPEC is the standard programme energy consumption of the household dishwasher.

- (b) The SPEC is calculated in kWh/cycle and rounded to three decimal places as follows:

- (1) for household dishwashers with rated capacity $ps \geq 10$ and width > 50 cm:

$$SPEC = 0,025 \times ps + 1,350$$

- (2) for household dishwashers with rated capacity $ps \leq 9$ or width ≤ 50 cm:

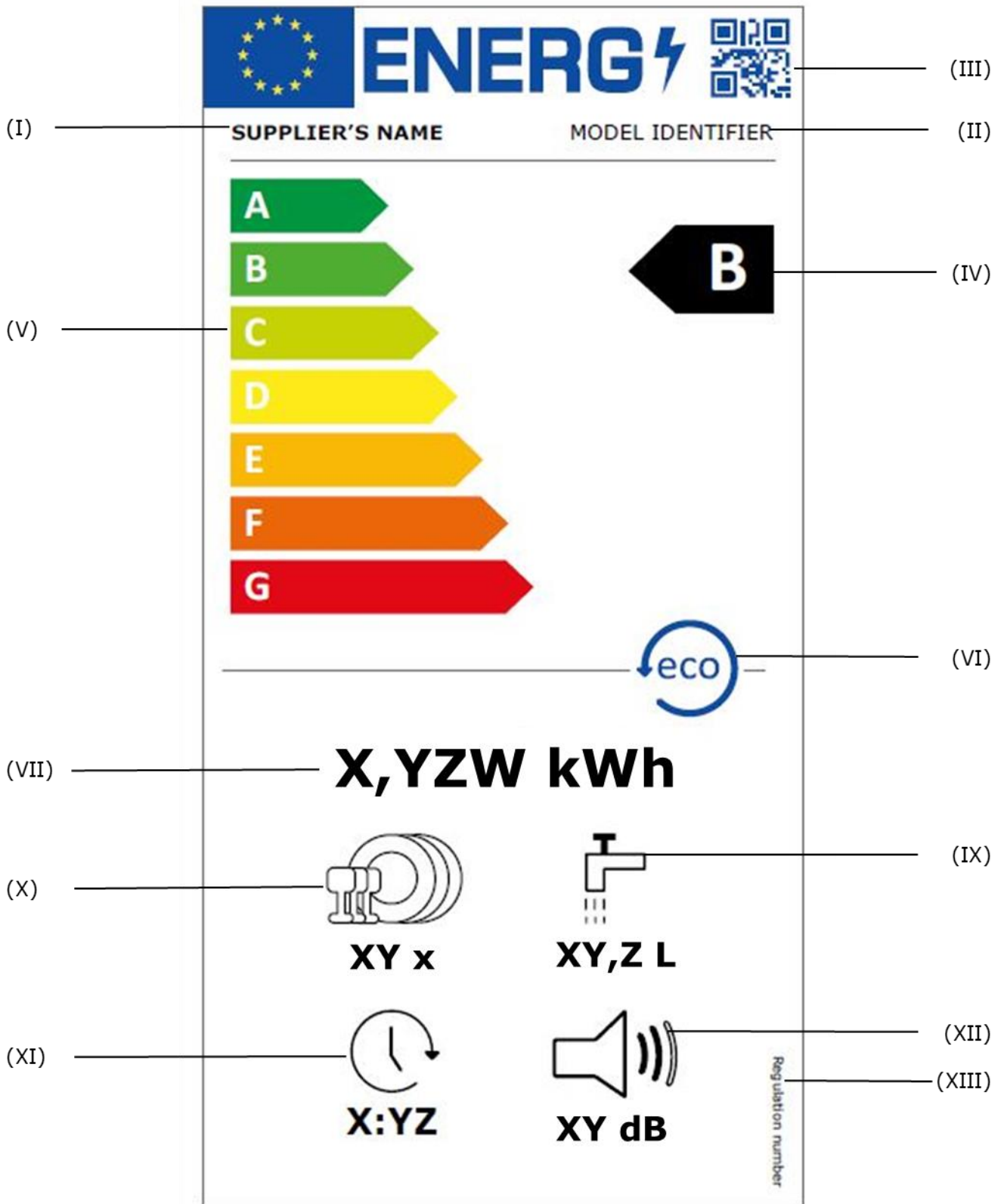
$$SPEC = 0,090 \times ps + 0,450$$

where ps is the number of place settings.

ANNEX IV
Label

1. LABEL

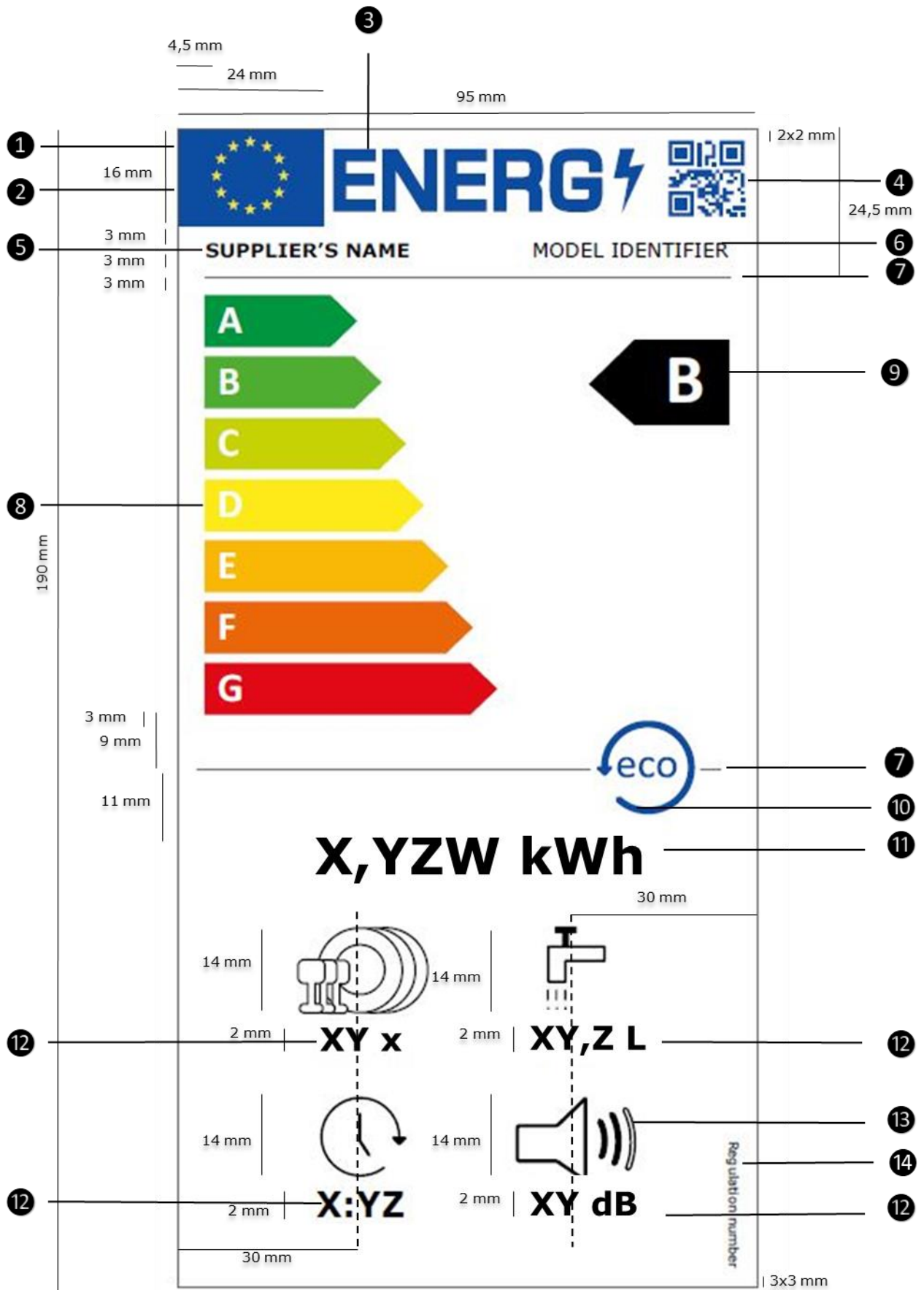
(1) Label



- (2) The following information shall be included in the label:
- I supplier's name or trade mark;
 - II model identifier, meaning the code, usually alphanumeric, which distinguishes a specific household dishwasher model from other models with the same trade mark or supplier's name;
 - III QR code linking to the model information in the product database defined in Article 12 of Regulation (EU) 2017/1369;
 - IV the energy efficiency class determined in accordance with point A of Annex II; the head of the arrow containing the energy efficiency class of the household dishwasher shall be placed at the same height as the head of the arrow of the relevant energy efficiency class;
 - V scale of energy efficiency classes from A to G;
 - VI indication of the 'eco' programme used to test the dishwasher;
 - VII eco programme energy consumption (EPEC) in kWh per cycle, rounded to three decimal places;
 - IX eco programme water consumption (EPWC) in litres per cycle, rounded to one decimal place;
 - X rated capacity in standard place settings, for the eco programme;
 - XI the duration of the eco programme in hh:mm rounded to the nearest minute;
 - XII airborne acoustic noise emissions expressed in dB(A) with respect to 1 pW and rounded to the nearest integer, and symbol of the airborne noise emission class, determined in accordance with point B of Annex II;
 - XIII the number of this Regulation [*OP - please insert the number of this Regulation*].

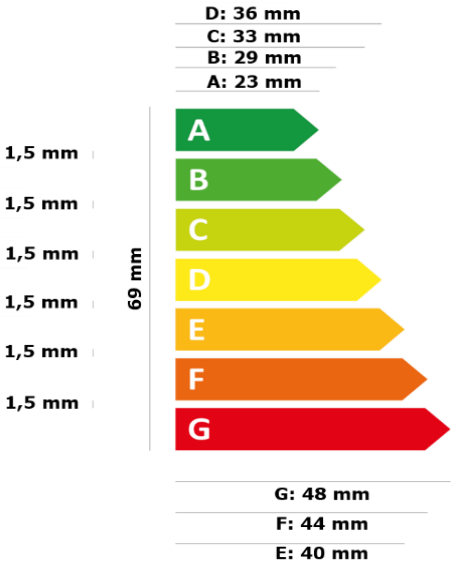
2. LABEL DESIGN

The design of the label shall be as in the figure below.




Whereby:

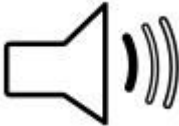
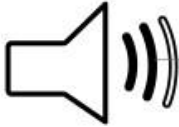
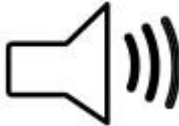
- (a) The background of the label shall be white;
- (b) The single typeface shall be Verdana;
- (c) Colours shall be according to the CMYK – cyan, magenta, yellow and black, colour codes following this example: 0,70,100,0: 0 % cyan, 70 % magenta, 100 % yellow, 0 % black. Black is 0,0,0,100 and white is 0,0,0,0;
- (d) The label shall fulfil all the following requirements (numbers refer to the numbers in the black bullets in the figure above):
 - (1) the border of the label shall have weight of 1 pt;
 - (2) the colour of the background of the EU logo shall be 100,80,0,0 and the colour of the stars shall be 0,0,100,0;
 - (3) the colour of the energy logo shall be 100,80,0,0;
 - (4) the colour of the QR code shall be 100,80,0,0;
 - (5) the supplier’s name shall be in colour black in font bold, 9 pt;
 - (6) the model identifier shall be in colour black in font regular, 9 pt;
 - (7) the dividers shall be 86 mm wide and have a weight of 1 pt. The colour of the divider shall be black;
 - (8) the A to G scale shall be as follows:
 - the colour of the letter indicating energy rating scale shall be white and the font bold, 19 pt;
 - dimensions and colours of the energy rating scale shall be as follows:

Rating scale and class	Colours (CMYK)
	A-class: 100,0,100,0
	B-class: 70,0,100,0
	C-class: 30,0,100,0
	D-class: 0,0,100,0
	E-class: 0,30,100,0
	F-class: 0,70,100,0
	G-class: 0,100,100,0

- (9) the energy efficiency class shall be as follows:
- the rating scale arrow and the energy efficiency class arrow shall be aligned;
 - dimensions and colour shall be as follows:

Rating scale and class	Colours (CMYK)
	<p>The arrow: 0,0,0,100 (black)</p> <p>The letter: 0,0,0,0 (white)</p> <p>The letter font: bold, 33 pt</p>

- (10) the eco programme indicator shall be as follows:
- the colour shall be 100,80,0,0;
 - the circular arrow shall 16 mm large on 15,3 mm high;
 - the letter 'eco' shall be in Verdana bold, 13 pt.
- (11) the EPEC and kWh shall be in colour black and font bold, 26 pt;
- (12) the rated capacity, EPWC, programme duration, airborne acoustic noise emissions and corresponding units shall be in colour black and font bold, 16 pt;
- (13) the airborne acoustic noise emissions logo shall be one of the three following logos in colour black, determined in accordance with point B of Annex II:

Acoustic airborne noise emission class	A	B	C
Logo			

- (14) the Regulation number shall be in colour black and font bold, 6 pt.

ANNEX V
Product information sheet

The product information sheet of household dishwashers shall include the following information in the indicated order:

- (a) supplier's name or trade mark;
- (b) supplier's model identifier, meaning the code, usually alphanumeric, which distinguishes a specific household dishwasher model from other models with the same trade mark or supplier's name;
- (c) indication that the 'eco programme' is the standard cleaning cycle to which the information in the label and the product information sheet relates, that this programme is suitable to clean normally soiled tableware, and that it is the most efficient programme in terms of combined energy and water consumption;
- (d) indication that, independently of the energy efficiency class, all household dishwashers placed on the EU market must comply with the ecodesign requirements on cleaning and drying efficiency provided by Commission Regulation (EU) *[OP - please insert the number of the accompanying Ecodesign Regulation on household dishwashers]*;
- (e) rated capacity, in number of place settings, for the eco programme;
- (f) energy efficiency class of the eco programme, in accordance with Annex II point A;
- (g) eco programme energy consumption (EPEC) in kWh per cycle, rounded to three decimal places. It shall be described as follows: 'Energy consumption "X.YZW" kWh per cycle, based on the eco programme using cold water fill. Actual energy consumption will depend on how the appliance is used';
- (h) eco programme water consumption (EPWC), in litres per cycle, rounded to one decimal place. It shall be described as follows: 'Water consumption "XY.Z" litres per cycle, based on the eco programme. Actual water consumption will depend on how the appliance is used and on the hardness of the water';
- (i) programme duration for the eco programme, in hh:mm and rounded to the nearest minute;
- (j) airborne acoustic noise emissions expressed in dB(A) with respect to 1 pW and rounded to the nearest integer;
- (k) airborne acoustic noise emission class of the eco programme, in accordance with Annex II point B;
- (l) an indication, whether the household dishwasher is intended to be installed as free-standing or built-in;
- (m) the date (day, month, year) of most recent update of the information;
- (n) the date (month, year) when the first product of the model was placed on the EU market;
- (o) the date (month, year) when the last product of the model was placed on the EU market (where relevant);
- (p) time period during which the spare parts necessary for the use of the household dishwasher are available.

ANNEX VI
Technical documentation

1. The technical documentation referred to in Article 3(1)(d) shall include:
- (a) identification and signature of the person empowered to bind the supplier;
 - (b) information as set out in Annex V;
 - (c) information as set out in Table 3;

Table 3
Information to be included in the technical documentation

PARAMETER	UNIT	VALUE
Eco programme energy consumption (EPEC) rounded to three decimal places	kWh/cycle	X.XXX
Standard programme energy consumption (SPEC) rounded to three decimal places	kWh/cycle	X.XXX
Energy Efficiency Index (EEI)	-	XX.X
Eco programme water consumption (EPWC) rounded to one decimal place;	l/cycle	XX.X
Cleaning efficiency index (I_C)	-	X.XX
Drying efficiency index (I_D)	-	X.XX
Duration of the eco programme (T_t) rounded to the nearest minute	hh:mm	XX:XX
Power consumption in ‘off-mode’ (P_o) rounded to two decimal places	W	X.XX
Power consumption in ‘standby mode’ (P_{sm}) rounded to two decimal places	W	X.XX
Does ‘standby mode’ include the display of information?	-	Yes/No
Power consumption in ‘standby mode’ (P_{sm}) in condition of networked standby, rounded to two decimal places	W	X.XX
Power consumption in ‘delay start’ (P_{ds}) rounded to two decimal places	W	X.XX
Airborne acoustical noise emissions	dB(A) re 1 pW	XX

- (d) where appropriate, the references of the harmonised standards applied;

- (e) where appropriate, the other technical standards and specifications used;
- (f) the calculations and the results of calculations performed in accordance with Annex III.

2. Where the information included in the technical documentation for a particular household dishwasher model has been obtained by any of the following methods, or both:

- from a model that has the same technical characteristics relevant for the technical information to be provided but is produced by a different manufacturer;
- by calculation on the basis of design or extrapolation from another model of the same or a different manufacturer,

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 VII

Information to be provided in visual advertisements, in promotional material and in distance selling, except distance selling on the Internet

1. In visual advertisements, for the purposes of ensuring conformity with the requirements laid down in Article 3(1)(e) and Article 4(1)(c), the energy efficiency class and the range of energy efficiency classes available on the label shall be shown with an arrow matching the letter of the energy efficiency class, as indicated in Figure 1.
2. In promotional material, for the purposes of ensuring conformity with the requirements laid down in Article 3(1)(f) and Article 4(1)(d), the energy efficiency class and the range of energy efficiency classes available on the label shall be shown with an arrow matching the letter of the energy efficiency class, as indicated in Figure 1.
3. Any paper based distance selling must show the energy efficiency class and the range of energy efficiency classes available on the label with an arrow matching the letter of the energy efficiency class, as indicated in Figure 1.
4. Telemarketing based distance selling must specifically inform the customer of the energy efficiency class of the product and of the range of energy efficiency classes available on the label, and that they can access the full label and the product information sheet through a free access website, or by requesting a printed copy.



Figure 1: Coloured arrow example, with range of energy classes indicated

5. For all the situations mentioned in points 1 to 4, it must be possible for the customer to access the full label and the product information sheet through a link to the product database website, or to request a printed copy.

ANNEX VIII

Information to be provided in the case of distance selling through the internet

1. The electronic label made available by suppliers in accordance with Article 3(1)(g), with the information required under Annex IV, shall be shown on the display mechanism in proximity to the price of the product. The size shall be such that the label is clearly visible and legible and shall be proportionate to the size specified in point 2 of Annex IV. The label may be displayed using a nested display, in which case the image used for accessing the label shall comply with the specifications laid down in point 2 of this Annex. If nested display is applied, the label shall appear on the first mouse click, mouse roll-over or tactile screen expansion on the image.
2. The image used for accessing the label in the case of nested display shall:
 - (a) be an arrow in the colour corresponding to the energy efficiency class of the product on the label;
 - (b) indicate on the arrow energy efficiency class of the product in white in a font size equivalent to that of the price; and
 - (c) have one of the following two formats:



3. In the case of nested display, the sequence of display of the label shall be as follows:
 - (a) the image referred to in point 2 of this Annex shall be shown on the display mechanism in proximity to the price of the product;
 - (b) the image shall link to the label;
 - (c) the label shall be displayed after a mouse click, mouse roll-over or tactile screen expansion on the image;
 - (d) the label shall be displayed by pop up, new tab, new page or inset screen display;
 - (e) for magnification of the label on tactile screens, the device conventions for tactile magnification shall apply;
 - (f) the label shall cease to be displayed by means of a close option or other standard closing mechanism;
 - (g) the alternative text for the graphic, to be displayed on failure to display the label, shall be the energy efficiency class of the product in a font size equivalent to that of the price.
4. The electronic product information sheet made available by suppliers in accordance with Article 3(1)(h), with the information required under Annex V, shall be shown on the display mechanism in proximity to the price of the product. The size shall be such that the product information sheet is clearly visible and legible. The product information sheet may be displayed using a nested display, in which case the link used for accessing the product information sheet shall clearly and legibly indicate 'Product information sheet'. If nested display is used, the product information sheet shall appear on the first mouse click, mouse roll-over or tactile screen expansion on the link.

ANNEX IX

Verification procedure for market surveillance purposes

The verification tolerances set out in this Annex relate only to the verification of the measured parameters by Member State authorities and shall not be used by the supplier as an allowed tolerance to establish the values in the technical documentation. The values and classes on the label or in the product information sheet shall not be more favourable for the supplier than the values reported in the technical documentation.

When verifying the compliance of a product model with the requirements laid down in this Regulation, 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 Article 3(3) of Regulation (EU) 2017/1369 (declared values), and, where applicable, the values used to calculate these values, are not more favourable for the supplier than the corresponding values given in the test reports and
 - (b) the values published on the label and in the product information sheet are not more favourable for the supplier than the declared values, and the indicated energy efficiency class is not more favourable for the supplier than the class determined by 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 4.
- (3) If the results referred to in points 2(a) or (b) are not achieved, the model and all models that have been listed as equivalent household dishwasher models in the supplier'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 supplier'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 tolerances given in Table 4.
- (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 supplier'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 4 and shall only use 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.

Table 4 - Verification tolerances

Parameter	Verification tolerances
Eco programme energy consumption (EPEC)	The determined value* shall not exceed the declared value of EPEC by more than 5 %.
Eco programme water consumption (EPWC)	The determined value* shall not exceed the declared value of EPWC 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_D)	The determined value shall not be less than the declared value of I_D by more than 12 %.
Programme duration (T_t)	The determined value shall not exceed the declared values T_t by more than 5 %.
Power consumption in off mode (P_o)	The determined value of power consumption P_o shall not exceed the declared value by more than 0,10 W.
Power consumption in standby mode (P_{sm})	The determined value of power consumption P_{sm} shall not exceed the declared value by more than 10% if the declared value is higher than 1,00 W, by more than 0,10 W if the declared value is lower than or equal to 1,00 W.
Power consumption in delay start (P_{ds})	The determined value of power consumption P_{ds} shall not exceed the declared value by more than 10% if the declared value is higher than 1,00 W, by more than 0,10 W if the declared value is lower than or equal to 1,00 W.
Airborne acoustic noise emissions	The measured value shall not exceed the declared value.

* In the case of three additional units tested as prescribed in point 4, the determined value means the arithmetic average of the values determined for these three additional units.