EUROPEAN COMMISSION
DIRECTORATE-GENERAL FOR ENERGY

Directorate C - Renewables, Research and Innovation, Energy Efficiency
C.4 - Energy Efficiency: Buildings and Products

Brussels
ENER.C.4/

DISCUSSION PAPER

Subject: Possible amendments to 2019 Commission Regulations with regard to energy labelling and ecodesign requirements

1. HORIZONTAL AMENDMENTS

1.1. Energy labelling

In order to increase clarity with regard to "declared" values and the difference between a parameter and a value, the Commission proposes to introduce the following common amendments in Commission Delegated Regulations 2019/2013, 2019/2014, 2019/2015, 2019/2016, 2019/2017 and 2019/2018 (article and annex numbering will be adapted to specific regulations):

1. A new recital is introduced:

   "Technical documentation should be sufficient to allow market surveillance authorities to check the values published on the label and in the product information sheet. In accordance with Article 12 of Regulation 2017/1369, values for the measured and calculated parameters of the model should be entered into the product database."

2. The following recital is added to all regulations (or replacing recital 14 for Regulation 2019/2013 and 17 for Regulation 2019/2016).

   "To improve the effectiveness and credibility of this Regulation and to protect consumers, products that automatically alter their performance in test conditions with the objective of reaching a more favourable level for any of the parameters specified in this Regulation should not be allowed to be placed on the market"

3. Article 3(1)(b) is modified:
   - Current text: "*b) the parameters of the product information sheet, as set out in Annex V, are entered into the product database*"

- New text: "*b) **the values** of the parameters included in the product information sheet, as set out in Annex V, are entered into **the public part of** the product database.*"

4. The following definition is added to annex I: In case of Regulation 2019/2015, the following definition replaces the definition at Annex I, point (42):

   "'declared values' means the values provided by the supplier for the stated, calculated or measured technical parameters, in accordance with Article 3(1)(d) and Annex VI, for the verification of compliance by the Member State authorities."

5. Annex VI, point 1 is replaced as follows: (excluding Regulation 2019/2015)

   1. *The technical documentation referred to in point 1(d) of Article 3 shall include the following elements:*

   (a) a general description of the model allowing it to be unequivocally and easily identified, including ~~a list of all equivalent models, including~~ model identifier~~s~~;

   (b) references to the harmonised standards applied or other measurement standards used;

   (c) specific precautions to be taken when the model is assembled, installed, maintained or tested;

   (d) the values for the technical parameters set out in Table X; these values are considered as the declared values for the purpose of the verification procedure in Annex IX;

   (e) the details and the results of calculations performed in accordance with Annex IV, if not covered sufficiently in Table X;

   (f) testing conditions if not described sufficiently in point (b);

   (g) a list of all equivalent models, including model identifiers

   These elements shall also constitute the mandatory specific parts of the technical documentation that the supplier shall enter into the database, pursuant to article 12.5 of Regulation 2017/1369.

   Annex VI, point 1(e) of Regulation 2019/2015 is replaced by the following:

   (e) the declared values for the following technical parameters; these values are considered as the declared values for the purpose of the verification procedure in Annex IX;

6. Annex IX, first sentence, reads as follows:

Kommentert [A1]: Regulation 2019/2014: there are two points, the first one for washing machines and the second one for washer dryers.
1. *For household washing machines, the technical documentation referred to in point 1(d) of Article 3 shall include the following elements:*

2. *For household washer-dryers, the technical documentation referred to in point 1(d) of Article 3 shall include the following elements:*

*The verification tolerances set out in this Annex relate only to the verification by Member State authorities of the **declared values** and shall not be used by the supplier as an allowed tolerance to establish the values in the technical documentation.*

1.2. Ecodesign

In parallel, to ensure coherence, the following amendments could be proposed for Commission Ecodesign Regulations 2019/1781, 2019/2019, 2019/2020, 2019/2021, 2019/2022, 2019/2023 and 2019/2024:

7. Recitals 16 of regulation 2019/2022 (dishwashers), 17 of regulations 2019/2023 (washing machines/washer dryers), 2019/2019 (fridges) and 2019/2024 (fridges with a direct sale function), 20 of regulations 2019/2021 (displays) and 2019/2020 (light sources)~~ing~~, read as follows:

   To ensure the effectiveness and credibility of the Regulation and to protect consumers, products that automatically alter their performance in test conditions to improve with the objective of reaching a more favourable level for any of the parameters specified in this Regulation should not be allowed to be placed on the market

8. The following paragraph is added to article 6 of regulations 2019/2019, 2019/2022 and 2019/2023 and article 7 of regulation 2019/2020:

   A software update shall never have the effect of changing the product's performance in a way that makes it non-compliant with the ecodesign requirements applicable for the declaration of conformity.

~~8.~~9. The following definition is added to Annex I of all regulations except 2019/2020:~~.~~ ~~In case of Regulation 2019/2020, the following definition replaces the definition at Annex I, point (52):~~

   "'declared values' means the values provided by the supplier for the stated, calculated or measured technical parameters in accordance with Article 4.2, for the verification of compliance by the Member State authorities."

   In case of Regulation 2019/2020, the following definition replaces the definition at Annex I, point (52):

   "'declared values' means the values provided by the supplier for the stated, calculated or measured technical parameters in accordance with Article 5.2 and article 5.4, for the verification of compliance by the Member State authorities."

~~9.~~10. Annex IV first sentence of regulations 2019/2019, 2019/2020, 2019/2021, 2019/2022, 2019/2023 and 2019/2024, and annex III first sentence of regulation 2019/1781 reads as follows:

   *The verification tolerances defined in this Annex relate only to the verification by Member State authorities of the **declared values** and shall not be used by the manufacturer, importer or authorised representative 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.*

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Certain other amendments will be proposed which are “product specific” and which are considered necessary for clarity, addressing shortcomings or to make minor corrections and to ensure coherence between the energy labelling and the ecodesign Regulations. These are set out in the tables below.

2. SPECIFIC AMENDMENTS RELATED TO ENERGY LABELLING

2.1. Commission Delegated Regulation (EU) 2019/2013 supplementing Regulation (EU) 2017/1369 of the European Parliament and of the Council with regard to energy labelling of electronic displays

Provision	Current text	Amended text	Rationale
Article 1.2 (g)	Electronic displays that are components or subassemblies of products ~~covered by implementing measures adopted under Directive 2009/125/EU~~[1].	(g) electronic displays that are components or subassemblies of products **and which are not placed on the market and/or put into service as individual parts for end-users or the environmental performance of which cannot be assessed independently** ;	For coherence with ED. If on-mode consumption cannot be measured, the test cannot run. Moreover, the energy label of a displays integrated in a big appliance seems not having value.
Article 1.2		(h) electronic ~~industrial displays~~ displays for industrial applications in hostile environments	For coherence with ED (cf. proposals below).
The definition of "integrated" is necessary for Article 2		(21) '~~displays for industrial applications in hostile environments~~*~~industrial display~~*' means an electronic display designed and intended for hostile environments for measuring, testing and process monitoring and control. It design must provide at least minimum level of ingress protection ~~of IP65 **according to EN60529**~~for dust tightness and water projected by a nozzle against enclosure from any direction, and, in addition include at least **three** of the following properties: suitability for regular use in ambient temperatures above 40°C, ~~minimum level of~~	Related to the previous item (for industrial displays to be excluded from scope, a detailed definition is necessary). See comments in the Ecodesign section ~~Alternatively, a definition referring to ED was preferable.~~

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Kommentert [A2]: Reference to the standard added in recital 10 to explain these requirements set as IP65. To be clarified also in Guidelines.

[1] Directive 2009/125/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for the setting of ecodesign requirements for energy-related products (OJ L 285, 31.10.2009, p.10).

		~~ingress protection of IP65 according to EN60529,~~ EMC immunity suitable for industrial environments~~EMI shield enclosure against external interference~~, conformal coating of electronic components~~material~~, assembly potting, advanced dimming for sunlight readability, impermeable enclosed circuit boards, integrated impact resistant screen~~laminated shatterproof glass.~~, ~~gaskets sealing the display;~~	
Recitals	(10) Electronic displays for professional use such as video-editing, computer-aided design, graphics or for the broadcast sector, possess enhanced performance and very specific features that, although usually involving higher energy use, should be not subject to on-mode energy efficiency requirements set for more generic products.	(10) Electronic displays for professional use such as video-editing, computer-aided design, graphics or for the broadcast sector, possess enhanced performance and very specific features that, although usually involving higher energy use, should be not subject to on-mode energy efficiency requirements set for more generic products. **Electronic displays for industrial applications in hostile environments have specific and high requirements, such as those for ingress protection at level 65 of EN 60259 and can hardly comply with eco-design requirements set for products design for use in less hostile conditions.**	See Ecodesign .
Annex III After 2.(f) ❿,		'If the display does not support HDR, the HDR pictogram and the letters of energy efficiency classes are not displayed'. The screen pictogram, indicating screen size and resolution, may be vertically centered in the area below the indication of the energy consumption.	No indication exists for displays that may not have the HDR feature implemented. (the initial Commission proposal did not need any position adjustment when the HDR feature was missing)

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Annex V, below Table 4		Changes to the information provided in accordance with rows 1, 2, 21, 22, 23 and 24 in table 4 shall not be relevant for the purposes of point 4 of Article 4 of Regulation (EU) 2017/1369.	Rows not relevant for **equivalence** (e.g. model identifier, although obvious)
Annex VI Table 5		**Table 5 could be replaced as shown below**	Details overlooked Table 5 and 6 totally replaced for clarity of the amendment.
Annex IX		**Table 6 could be replaced as shown below**	

Table 5

		Parameter value and precision	**Unit**	**Declared value**
	General			
1	Supplier's name or trade mark	TEXT		
2	Supplier's model identifier	TEXT		

3	Energy efficiency class for Standard Dynamic Range (SDR)	[A/B/C/D/E/F/G]			A - G	
4	On mode power demand in Standard Dynamic Range (SDR)	XXX,X			W	
5	Energy efficiency **class for High Dynamic Range** (HDR), **if implemented**	[A/B/C/D/E/F/G] or n.a.			A - G	
6	On mode power demand in High Dynamic Range (HDR)	XXX,X			W	
7	Off mode, power demand	X,X			W	
8	Standby mode power demand	X,X			W	
9	Networked standby mode power demand	X,X			W	
10	Electronic display category	[television/ monitor/ signage / other]			TEXT	
11	Size ratio	XX	:	XX		
12	Screen resolution (pixels)	X	×	X		
13	Screen diagonal	XXX,X			cm	
14	Screen diagonal (calculated)	XX			inches	
15	Visible screen area	XXXX,X			dm^2	

16	Panel technology used	TEXT		
17	Automatic Brightness Control (ABC) available	[YES/NO]		
18	Voice recognition sensor available	[YES/NO]		
19	Room presence sensor available	[YES/NO]		
20	Image refresh frequency rate	XXX	Hz	
21	Minimum guaranteed availability of software and firmware updates **(from the date of end of the placement on the market, as from Annex II E, point 1 of Commission Regulation (EU) 2019/2021)**:	X	Years	
22	Minimum guaranteed availability of spare parts **(from the date of end of the placement on the market, as from Annex II D, point 1 of Commission Regulation (EU) 2019/2021)**:	X	Years	
23	Minimum guaranteed product support **(from the date of end of the placement on the market)**:	X	Years	
~~24~~	~~Ambient temperature~~	~~XX,XX~~	~~ºC~~	
~~25~~	~~Test voltage~~	~~X~~	~~V~~	
~~26~~	~~Frequency~~	~~X,X~~	~~Hz~~	

Kommentert [A3]: Testing conditions (rows 24-27) eliminated

~~27~~	~~Total harmonic distortion (THD) of the electricity supply system~~	~~X~~	~~%~~	
	For On-mode			
29	Peak white luminance of the brightest on mode configuration	XXXX	cd/m²	
30	Peak white luminance of the normal configuration	XXXX	cd/m²	
31	Peak white luminance ratio (calculated) **(Value row 6 above divided by value row 5 above times 100)**	XX,X	%	
	For APD			
29	Duration of the on mode condition, before the electronic display reaches automatically standby, or off mode, or another condition which does not exceed the applicable power demand requirements for off mode and/or standby mode.	XX:XX	mm:ss	
30	For televisions: the value of the time before the television automatically reaches standby, or off-mode, or another condition which does not exceed the applicable power consumption requirements for off-mode and/or standby-mode following the last user	XX:XX	mm:ss	

	interaction;			
31	For televisions equipped with room presence: the value of the time before the television automatically reaches standby, or off-mode, or another condition which does not exceed the applicable power consumption requirements when no presence is detected;	XX:XX	mm:ss	
32	Other electronic displays than televisions and broadcast displays: The value of the time before the television automatically reaches standby, or off-mode, or another condition which does not exceed the applicable power consumption requirements when no input is detected;	XX:XX	mm:ss	
	For ABC If available and activated by default (as from Annex VI, Table 4)			
33	Percentage of power reduction due to ABC action between the 100 lux and 12 lux ambient light conditions.	XX,X	%	
34	On mode power at 100 lux ambient light	XXX,X	W	

	at the ABC sensor			
35	On mode power at 12 lux ambient light at the ABC sensor	XXX,X	W	
36	Screen luminance at 100 lux ambient light at the ABC sensor	XXX	cd/m²	
37	Screen luminance at 60 lux ambient light at the ABC sensor	XXX	cd/m²	
38	Screen luminance at 35 lux ambient at the ABC sensor	XXX	cd/m²	
39	Screen luminance at 12 lux ambient light at the ABC sensor	XXX	cd/m²	
	For Power Supply			
40	Power supply (internal or external, only if bundled with the display)	Standard reference (if any)	TEXT	
41	Input voltage	XXX,X	V	
42	Output voltage	XXX,X	V	
43	**Input current (max)**	**XX,X**	**A**	
44	**Output current (min)**	**XX.X**	**A**	

Table 6: Verification tolerances

Parameter	Verification tolerances
On mode power demand ($P_{measured}$, Watts)	The determined value* shall not exceed the declared value by more than 7 %.
Off mode, standby, and networked standby mode power demand in Watts, as applicable.	The determined value* shall not exceed the declared value by more than 0,10 Watt if the declared value is 1,00 Watt or less, or by more than 10 % if the declared value is more than 1,00 Watt.
Visible screen area	The determined value* shall not be lower than the declared value by more than 1 %.
The screen resolution in horizontal and vertical pixels	The determined value* shall not deviate from the declared value.
Peak white luminance	The determined value shall not be lower than the declared value by more than 6 %
Duration of the on mode condition, before the electronic display reaches automatically standby, or off mode, or another condition which does not exceed the applicable power consumption requirements for off mode and/or standby mode.	The determined value shall not exceed the declared value by more than 10 seconds

2.2. Commission Delegated Regulation (EU) 2019/2014 supplementing Regulation (EU) 2017/1369 of the European Parliament and of the Council with regard to energy labelling of household washing machines and household washer-dryers and repealing Commission Delegated Regulation (EU) No 1061/2010 and Commission Directive 96/60/EC

Provision	Current text	Amended text	Rationale
Recital 14	The relevant product parameters should be measured using reliable, accurate and reproducible methods. Those methods should take into account recognised state-of-the-art measurement methods including, where available, harmonised standards adopted by the European standardisation bodies, as listed in Annex I to Regulation (EU) No 1025/2012 of the European Parliament and of the Council.	The relevant product parameters should be measured **or calculated** using reliable, accurate and reproducible methods. Those methods should take into account recognised state-of-the-art measurement methods including, where available, harmonised standards adopted by the European standardisation bodies, as listed in Annex I to Regulation (EU) No 1025/2012 of the European Parliament and of the Council.	Some product parameters are not measured but calculated. This text is standard.
Annex IV, point 3	3. WASHING EFFICIENCY INDEX The washing efficiency index of household washing machines and of the washing cycle of household washer-dryers (I_W) and the washing efficiency index of the complete cycle of household washer-dryers (J_W) shall be calculated 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 take into account the generally recognised state-of-the-art, and rounded to two decimal places.	3. WASHING EFFICIENCY INDEX The washing efficiency index of household washing machines and of the washing cycle of household washer-dryers (I_W) and the washing efficiency index of the complete cycle of household washer-dryers (J_W) shall be calculated 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 take into account the generally recognised state-of-the-art, and rounded to ~~two~~ three decimal places.	This modification is necessary: - ~~–~~because, in the current text, there is no indication on how the value of the washing efficiency index on the PIS should be calculated. - for consistency with Annex V and Annex VI

		For household washing machines with a rated capacity higher than 3kg and for the washing cycle of household washer-dryers with a rated capacity higher than 3kg, the I_W indicated on the Product Information Sheet shall be the minimum value between the washing efficiency index at rated washing capacity, half of the rated washing capacity, and quarter of the rated washing capacity. **For household washing machines with a rated capacity lower than or equal to 3 kg and for the washing cycle of household washer-dryers with a rated capacity lower than or equal to 3 kg, the I_W indicated on the Product Information Sheet shall be the washing efficiency index at rated washing capacity.** **For household washer-dryers with a rated capacity higher than 3 kg, the J_W indicated on the Product Information Sheet shall be the minimum value between the washing efficiency index at rated capacity and half of the rated capacity.** **For household washer-dryers with a rated capacity lower than or equal to 3 kg, the J_W indicated on the Product Information Sheet shall be the washing efficiency index at rated capacity.**	
Annex IV,	4. RINSING EFFECTIVENESS	4. RINSING EFFECTIVENESS	This modification is necessary because in the current text, there is no indication on how the

point 4	The rinsing effectiveness of household washing machines and of the washing cycle of household washer-dryers (I_R) and the rinsing effectiveness of the complete cycle of household washer-dryers (J_R) shall be calculated 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 method based on the detection of the linear alkylbenzene sulfonate (LAS) marker, and rounded to one decimal place.	The rinsing effectiveness of household washing machines and of the washing cycle of household washer-dryers (I_R) and the rinsing effectiveness of the complete cycle of household washer-dryers (J_R) shall be calculated 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 method based on the detection of the linear alkylbenzene sulfonate (LAS) marker, and rounded to one decimal place. **For household washing machines with a rated capacity higher than 3 kg and for the washing cycle of household washer-dryers with a rated capacity higher than 3kg, the I_R indicated on the Product Information Sheet shall be the maximum value between the rinsing effectiveness at rated washing capacity, half of the rated washing capacity, and quarter of the rated washing capacity.** **For household washing machines with a rated capacity lower than, or equal to 3 kg and for the washing cycle of household washer-dryers with a rated capacity lower than, or equal to 3 kg, no value shall be indicated for I_R on the Product Information Sheet.** **For household washer-dryers with a rated capacity higher than 3kg, the J_R indicated on**	value of the rinsing effectiveness on the PIS should be calculated.

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		the Product Information Sheet shall be the maximum value between the rinsing effectiveness at rated capacity and half of the rated capacity. **For household washer-dryers with a rated capacity lower than, or equal to 3 kg, no value shall be indicated for J_R on the Product Information Sheet.**	
Annex IV, point 11	A new point is added.	**11. SPIN SPEED** **The spin speed of a household washing machine and of the washing cycle of a household washer-dryer shall be measured or calculated at the highest spin speed option for the eco 40-60 programme 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 take into account the generally recognised state-of-the-art, and rounded to the nearest integer.**	This modification is necessary because in the current text, there is no indication on how the values of the spin speed on the PIS should be determined.
Annex V, Table 5	Table 5 is replaced by another one.	Please see below (a third decimal has been added to the values of washing efficiency index, one decimal added to the values of remaining moisture content, acronym EEI_W has been spelt out).	This modification is necessary because in the current text, there is a discrepancy between the Annex IV, PIS (Annex V) and TD (Annex VI) for ~~these~~~~is parameters~~these parameters.

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Annex V, Table 6	Table 6 is replaced by another one.	Please see below (a third decimal has been added to the values of washing efficiency index, one decimal added to the values of remaining moisture content, Energy consumption is calculated per cycle for both the washing cycle of the household washer dryer and the wash and dry cycle of the household washer dryer and not per kg per cycle, Maximum temperature inside the treated textile (°C) for the washing cycle of the household washer-dryer, using the eco 40-60 programme, has been slightly reworded, Maximum temperature inside the treated textile (°C) for the washing cycle of the household washer-dryer, using the wash and dry cycle has been added).	This modification is necessary because in the current text, there is a discrepancy between the Annex IV, PIS (Annex V) and TD (Annex VI) for ~~this~~ these parameters.
Annex VI, Table 7	Table 7 is replaced by another one.	Table 7 is modified, see below: A third decimal has been added for the washing efficiency index I_W at rated, half and quarter rated capacity, one decimal has been added for remaining moisture content.	Consistency with the requirements on the same parameters in the ecodesign regulation. Consistency with the measurements methods and calculations (Annex IV)
Annex VI, Table 8	Table 8 is replaced by another one.	Table 8 is modified, see below : A third decimal has been added for the washing efficiency index I_W and J_W for all listed capacities, one decimal has been added for remaining moisture content.	Consistency with the requirements on the same parameters in the ecodesign regulation. Consistency with the measurements methods and calculations (Annex IV)
Annex	Information to be provided in the case of distance	Information to be provided in the case of distance	Erroneous reference to be corrected (the label

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VIII, paragraph 1	selling through the internet 1. The appropriate label made available by suppliers in accordance with point 1(g) of Article 3 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 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.	selling through the internet 1. The appropriate label made available by suppliers in accordance with point 1(g) of Article 3 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 **Annex III** ~~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.	size is in Annex III, not IV)
Annex IX, point 7	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.	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 **the second paragraph** of this Annex **or** points 3 ~~and~~ **or** 6.	This point should be modified to include the non-compliance for the circumvention (in paragraph 2 of this Annex); if not, this specific non-compliance will not be subject to a mandatory reporting to other MS and COM. In the ecodesign regulation, ~~it is written~~ "or" is written and not "and~~",~~ "; "or" is correct because if only one of points 3 or 6 happen there should be a report to other MS and COM.

Annex V

(amended) Table 5

Content, order and format of the product information sheet

Supplier's name or trade mark:				
Supplier's address [b] :				
Model identifier:				
General product parameters:				
Parameter	Value	Parameter	Value	
Rated capacity [a] (kg)	x,x	Dimensions in cm	Height	x
			Width	x
			Depth	x
Energy efficiency index[a] (EEI_W)	x,x	Energy efficiency class[a]	[A/B/C/D/E/F/G][c]	
Washing efficiency index[a]	**x,xx**x	Rinsing effectiveness (g/kg)[a]	x,x	
Energy consumption in kWh per cycle, based on the eco 40-60 programme. Actual energy	x,xxx	Water consumption in litre per cycle, based on the eco 40-60 programme. Actual water consumption will depend on how the appliance is used and on the hardness of the	x	

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consumption will depend on how the appliance is used.			water.		
Maximum temperature inside the treated textile[a] (°C)	Rated capacity	x	Remaining moisture content[a] (%)	Rated capacity	**x,x**
	Half	x		Half	**x,x**
	Quarter	x		Quarter	**x,x**
Spin speed [a] (rpm)	Rated capacity	x	Spin-drying efficiency class[a]	[A/B/C/D/E/F/G][c]	
	Half	x			
	Quarter	x			
Programme duration [a] (h:min)	Rated capacity	x:xx	Type	[built-in/free-standing]	
	Half	x:xx			
	Quarter	x:xx			
Airborne acoustical noise emissions in the spinning phase[a] (dB(A) re 1 pW)	x		Airborne acoustical noise emission class[a] (spinning phase)	[A/B/C/D][c]	
Off-mode (W)	x,xx		Standby mode (W)	x,xx	

Delay start (W) (if applicable)	x,xx	Networked standby (W) (if applicable)	x,xx
Minimum duration of the guarantee offered by the supplier [b]:			
This product has been designed to release silver ions during the washing cycle		**[YES/NO]**	
Additional information:			
Weblink to the supplier's website, where the information in point 9 of Annex II to Commission Regulation (EU) 2019/2023[1] [b] is found:			

[a] for the eco 40-60 programme.
[b] changes to these items shall not be considered relevant for the purposes of paragraph 4 of Article 4 of Regulation (EU) 2017/1369.
[c] if the product database automatically generates the definitive content of this cell the supplier shall not enter these data

(amended) Table 6

Content, order and format of the product information sheet

Supplier's name or trade mark:			
Supplier's address ([c]):			
Model identifier:			
General product parameters:			
Parameter	Value	Parameter	Value

Rated capacity (kg)	Rated capacity ([b])	x,x	Dimensions in cm	Height	x
	Rated washing capacity ([a])	x,x		Width	x
				Depth	x
Energy Efficiency Index	EEI_W ([a])	x,x	Energy efficiency class	EEI_W ([a])	[A/B/C/D/ E/F/G][d]
	EEI_{WD} ([b])	x,x		EEI_{WD} ([b])	[A/B/C/D/ E/F/G][d]
Washing efficiency index	I_W ([a])	**x,xxx**	Rinsing effectiveness (g/ kg dry textile)	I_R ([a])	x,x
	J_W ([b])	**x,xxx**		J_R ([b])	x,x
Energy consumption in kWh ~~per kg~~ per cycle, for the washing cycle of the household washer-dryer, using the eco 40-60 programme at a combination of full and partial loads. Actual energy consumption will depend on how the appliance is used	x,xxx		Energy consumption in kWh ~~per kg~~ per cycle, for the wash and dry cycle of the household washer-dryer at a combination of full and half loads. Actual energy consumption will depend on how the appliance is used	x,xxx	

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Water consumption in litre per cycle, for the eco 40-60 programme at a combination of full and partial loads. Actual water consumption will depend on how the appliance is used and on the hardness of the water	x		Water consumption in litre per cycle, for the wash and dry cycle of the household washer-dryer at a combination of full and half loads. Actual water consumption will depend on how the appliance is used and on the hardness of the water	x	
Maximum temperature inside the treated textile (°C) for the washing cycle of the household washer-dryer**, using the eco 40-60 programme** ~~(a)~~**.**	Rated washing capacity	x	**Maximum temperature inside the treated textile (°C) for the washing cycle of the household washer-dryer, using the wash and dry cycle.**	**Rated capacity**	**x**
	Half	x			
	Quarter	x		**Half**	**x**
Spin speed (rpm) ([a])	Rated washing capacity	x	Remaining moisture content (%) ([a])	Rated washing capacity	**x,x**
	Half	x		Half	**x,x**
	Quarter	x		Quarter	**x,x**
Eco 40-60 programme duration (h:min)	Rated washing capacity	x:xx	Spin-drying efficiency class ([a])	[A/B/C/D/E/F/G] ([d])	

	Half	x:xx			
	Quarter	x:xx			
Airborne acoustical noise emissions during the spinning phase for the eco 40-60 washing cycle at rated washing capacity (dB(A) re 1 pW)	x		wash and dry cycle duration (h:min)	Rated capacity	x:xx
				Half	x:xx
Type	[built-in/free-standing]		Airborne acoustical noise emission class for the spinning phase for the eco 40-60 programme at rated washing capacity	[A/B/C/D] ([d])	
Off-mode (W)	x,xx		Standby mode (W)	x,xx	
Delay start (W) (if applicable)	x,xx		Networked standby (W) (if applicable)	x,xx	
Minimum duration of the guarantee offered by the supplier ([c]):					
This product has been designed to release silver ions during the washing cycle	**[YES/NO]**				

Additional information:
Weblink to the supplier's website, where the information in point 9 of Annex II to Regulation (EU) 2019/2023 is found ([b]):

([a]) for the eco 40-60 programme

([b]) for the wash and dry cycle

([c]) changes to these items shall not be considered relevant for the purposes of paragraph 4of Article 4 of Regulation (EU) 2017/1369.

([d]) if the product database automatically generates the definitive content of this cell the supplier shall not enter these data.

Annex VI

(amended) Table 7

Technical parameters of the model and their declared values for household washing machines

PARAMETER	**DECLARED VALUE**	UNIT
Rated capacity for the eco 40-60 programme, at 0,5 kg intervals (c)	X,X	kg
Energy consumption of the eco 40-60 programme at rated capacity ($E_{W,full}$)	X,XXX	kWh/cycle
Energy consumption of the eco 40-60 programme at half rated capacity ($E_{W,½}$)	X,XXX	kWh/cycle
Energy consumption of the eco 40-60 programme at quarter rated capacity ($E_{W,1/4}$)	X,XXX	kWh/cycle
Weighted energy consumption of the eco 40-60 programme (E_W)	X,XXX	kWh/cycle
Standard energy consumption of the eco 40-60 programme (SCE_W)	X,XXX	kWh/cycle
Energy Efficiency Index (EEI_W)	X,X	-
Water consumption of the eco 40-60 programme at rated capacity ($W_{W,full}$)	X,X	L/cycle
Water consumption of the eco 40-60 programme at half rated capacity ($W_{W,½}$)	X,X	L/cycle
Water consumption of the eco 40-60 programme at quarter rated capacity ($W_{W,1/4}$)	X,X	L/cycle

Weighted water consumption (W_W)	X	L/cycle
Washing efficiency index of the eco 40-60 programme at rated capacity (I_w)	**X,XXX**	-
Washing efficiency index of the eco 40-60 programme at half rated capacity (I_w)	**X,XXX**	-
Washing efficiency index of the eco 40-60 programme at quarter rated capacity (I_w)	**X,XXX**	-
Rinsing effectiveness of the eco 40-60 programme at rated capacity (I_R)	X,X	g/kg
Rinsing effectiveness of the eco 40-60 programme at half rated capacity (I_R)	X,X	g/kg
Rinsing effectiveness of the eco 40-60 programme at quarter rated capacity (I_R)	X,X	g/kg
Programme duration of the eco 40-60 programme at rated capacity (t_w)	X:XX	h:min
Programme duration of the eco 40-60 programme at half rated capacity (t_w)	X:XX	h:min
Programme duration of the eco 40-60 programme at quarter rated capacity (t_w)	X:XX	h:min
Temperature reached for minimum 5 min inside the load during eco 40-60 programme at rated capacity	X	°C

(T)		
Temperature reached for minimum 5 min inside the load during eco 40-60 programme at half rated capacity (T)	X	°C
Temperature reached for minimum 5 min inside the load during eco 40-60 programme at quarter rated capacity (T)	X	°C
Spin speed in the spinning phase of the eco 40-60 programme at rated capacity (S)	X	rpm
Spin speed in the spinning phase of the eco 40-60 programme at half rated capacity (S)	X	rpm
Spin speed in the spinning phase of the eco 40-60 programme at quarter rated capacity (S)	X	rpm
Remaining moisture content for the eco 40-60 programme at rated capacity (D_{full})	**X,X**	%
Remaining moisture content for the eco 40-60 programme at half rated capacity ($D_{1/2}$)	**X,X**	%
Remaining moisture content for the eco 40-60 programme at quarter rated capacity ($D_{1/4}$)	**X,X**	%
Weighted remaining moisture content (D)	X	%
Airborne acoustical noise emissions during eco 40-60	X	dB(A) re 1 pW

programme (spinning phase)		
Power consumption in 'off mode' (P_o)	X,XX	W
Power consumption in 'standby mode' (P_{sm})	X,XX	W
Does 'standby mode' include the display of information?	Yes/No	-
Power consumption in 'standby mode' (P_{sm}) in condition of networked standby (if applicable)	X,XX	W
Power consumption in 'delay start' (P_{ds}) (if applicable)	X,XX	W

(amended) Table 8

Technical parameters of the model and their declared values for household washer-dryers

PARAMETER	**DECLARED VALUE**	UNIT
Rated capacity for the washing cycle, at 0,5 kg	X,X	kg

intervals (c)		
Rated capacity for the wash and dry cycle, at 0,5 kg intervals (d)	X,X	kg
Energy consumption of the eco 40-60 programme at rated washing capacity ($E_{W,full}$)	X,XXX	kWh/cycle
Energy consumption of the eco 40-60 programme at half of the rated washing capacity ($E_{W,½}$)	X,XXX	kWh/cycle
Energy consumption of the eco 40-60 programme at a quarter of the rated washing capacity ($E_{W,1/4}$)	X,XXX	kWh/cycle
Weighted energy consumption of the eco 40-60 programme (E_W)	X,XXX	kWh/cycle
Standard energy consumption of the eco 40-60 programme (SCE_W)	X,XXX	kWh/cycle
Energy Efficiency Index of the washing cycle (EEI_W)	X,X	-
Energy consumption of the wash and dry cycle at rated capacity ($E_{WD,full}$)	X,XXX	kWh/cycle
Energy consumption of the wash and dry cycle at half rated capacity ($E_{WD,½}$)	X,XXX	kWh/cycle
Weighted energy consumption of the wash and dry cycle (E_{WD})	X,XXX	kWh/cycle
Standard energy consumption of the wash and dry	X,XXX	kWh/cycle

cycle (SCE_{WD})		
Energy Efficiency Index of the wash and dry cycle (EEI_{WD})	X,X	-
Water consumption of the eco 40-60 programme at rated washing capacity ($W_{W,full}$)	X,X	L/cycle
Water consumption of the eco 40-60 programme at half of the rated washing capacity ($W_{W,½}$)	X,X	L/cycle
Water consumption of the eco 40-60 programme at a quarter of the rated washing capacity ($W_{W,1/4}$)	X,X	L/cycle
Weighted water consumption of the washing cycle (W_W)	X	L/cycle
Water consumption of the wash and dry cycle at rated capacity ($W_{WD,full}$)	X,X	L/cycle
Water consumption of the wash and dry cycle at half rated capacity ($W_{WD,½}$)	X,X	L/cycle
Weighted water consumption of the wash and dry cycle (W_{WD})	X	L/cycle
Washing efficiency index of the eco 40-60 programme at rated washing capacity (I_w)	**X,XXX**	-
Washing efficiency index of the eco 40-60 programme at half rated washing capacity (I_w)	**X,XXX**	-

Washing efficiency index of the eco 40-60 programme at quarter rated washing capacity (I_w)	**X,XXX**	-
Washing efficiency index of the wash and dry cycle at rated capacity (J_w)	**X,XXX**	-
Washing efficiency index of the wash and dry cycle at half rated capacity (J_w)	**X,XXX**	-
Rinsing effectiveness of the eco 40-60 programme at rated washing capacity (I_R)	X,X	g/kg
Rinsing effectiveness of the eco 40-60 programme at half rated washing capacity (I_R)	X,X	g/kg
Rinsing effectiveness of the eco 40-60 programme at quarter rated washing capacity (I_R)	X,X	g/kg
Rinsing effectiveness of the wash and dry cycle at rated capacity (J_R)	X,X	g/kg
Rinsing effectiveness of the wash and dry cycle at half rated capacity (J_R)	X,X	g/kg
Programme duration of the eco 40-60 programme at rated washing capacity (t_w)	X:XX	h:min
Programme duration of the eco 40-60 programme at half rated washing capacity (t_w)	X:XX	h:min
Programme duration of the eco 40-60 programme at	X:XX	h:min

quarter rated washing capacity (t_w)		
Cycle duration of the wash and dry cycle at rated capacity (t_{WD})	X:XX	h:min
Cycle duration of the wash and dry cycle at half rated capacity (t_{WD})	X:XX	h:min
Temperature reached for minimum 5 min inside the load during eco 40-60 programme at rated washing capacity (T)	X	°C
Temperature reached for minimum 5 min inside the load during eco 40-60 programme at half rated washing capacity (T)	X	°C
Temperature reached for minimum 5 min inside the load during eco 40-60 programme at quarter rated washing capacity (T)	X	°C
Temperature reached for minimum 5 min inside the load in the washing cycle during wash and dry cycle at rated capacity (T)	X	°C
Temperature reached for minimum 5 min inside the load in the washing cycle during wash and dry cycle at half rated capacity (T)	X	°C
Spin speed in the spinning phase of the eco 40-60 programme at rated washing capacity (S)	X	rpm

Spin speed in the spinning phase of the eco 40-60 programme at half rated washing capacity (S)	X	rpm
Spin speed in the spinning phase of the eco 40-60 programme at quarter rated washing capacity (S)	X	rpm
Remaining moisture content for the eco 40-60 programme at rated washing capacity (D_{full})	**X,X**	%
Remaining moisture content for the eco 40-60 programme at half rated washing capacity ($D_{1/2}$)	**X,X**	%
Remaining moisture content for the eco 40-60 programme at quarter rated washing capacity ($D_{1/4}$)	**X,X**	%
Weighted remaining moisture content after washing (D)	X	%
Final moisture content after drying	X,X	%
Airborne acoustical noise emissions during eco 40-60 programme (spinning phase)	X	dB(A) re 1 pW
Power consumption in 'off mode' (P_o)	X,XX	W
Power consumption in 'standby mode' (P_{sm})	X,XX	W
Does 'standby mode' include the display of information?	Yes/No	-
Power consumption in 'standby mode' (P_{sm}) in	X,XX	W

condition of networked standby (if applicable)		
Power consumption in ‘delay start’ (P_{ds}) (if applicable)	X,XX	W

2.3. Commission Delegated Regulation (EU) 2019/2015 supplementing Regulation (EU) 2017/1369 of the European Parliament and of the Council with regard to energy labelling of light sources and repealing Commission Delegated Regulation (EU) No 874/2012

Provision	Current text	Amended text	Rationale
New recital		The relevant product parameters should be measured or calculated using reliable, accurate and reproducible methods. Those methods should take into account recognised state-of-the-art measurement methods including, where available, harmonised standards adopted by the European standardisation bodies, as listed in Annex I to Regulation (EU) No 1025/2012 of the European Parliament and of the Council.	Some product parameters are not measured but calculated. This text is standard.
Article 2, point (3)	'containing product' means a product containing one or more light sources, or separate control gears, or both. Examples of containing products are luminaires that can be taken apart to allow separate verification of the contained light source(s), household appliances containing light source(s), furniture (shelves, mirrors, display cabinets) containing light source(s). If a containing product cannot be taken apart for verification of the light source and separate control gear, the entire containing product is to	Article 2, point (3) is replaced by the following: 'containing product' means a **containing product for light sources or a containing product for separate control gears or both.** **'containing product for light sources' means a product containing one or more light sources, from which all contained light sources can be removed for verification.**	Stakeholders flagged that the current definition of 'containing products' might create legal uncertainty when correlated with other definitions (e.g. of light sources). The updated definition also aims to clarify that some products, e.g. fridges or dishwashers should not be seen as light sources.

Kommentert [A4]: Text to be finalised based on the written comment that will be received.

	be considered a light source;	**'containing product for separate control gears' means a product containing one or more separate control gears, from which all contained separate control gears can be removed for verification.** Examples of 'containing products **for light sources**' are luminaires that can be taken apart to allow separate verification of the contained light source(s), household appliances containing light source(s), furniture (shelves, mirrors, display cabinets) containing light source(s). ~~If a containing product cannot be taken apart for verification of the light source and separate control gear, the entire containing product is to be considered a light source~~	
Annex III, point 1	The label shall be: - for the standard-sized label at least 36 mm wide and 75 mm high; - for the small-sized label (width less than 36 mm) at least 20 mm wide and 54 mm high.	The label shall be: - for the standard-sized label at least 36 mm wide and ~~75~~**72** mm high; - for the small-sized label (width less than 36 mm) at least 20 mm wide and 54 mm high.	To correct an error in the regulation. The current text mentions a label height of 75 mm, but it should be 72 mm, in accordance with the drawings.
Annex IV, point 1(a)	in radiological and nuclear medicine installations, as defined in Article 3 of Council Directive 2009/71/Euratom ([1]); (Footnote 1) Council Directive	in radiological and nuclear medicine installations that are subject to radiation safety standards as set out in Council Directive ~~2009/71~~**2013/59**/EURATOM ([1]);	To correct an erroneous reference (to a wrong EURATOM Directive)

<table>
<tr><td></td><td>2009/71/Euratom of 25 June 2009 establishing a Community framework for the nuclear safety of nuclear installations (OJ L 172, 2.7.2009, p. 18).</td><td>(1) Council Directive 2013/59/Euratom of 5 December 2013 laying down basic safety standards for protection against the dangers arising from exposure to ionising radiation (OJ L 13, 17.1.2014, p. 1).</td><td></td></tr>
<tr><td>Annex V, point 1, Table 3</td><td><table><tr><td>Energy consumption in on-mode (kWh/1 000 h)</td><td>x</td><td>Energy efficiency class</td><td>[A/B/C/D/E/F/G] (b)</td></tr></table></td><td><table><tr><td>Energy consumption in on-mode (kWh/1 000 h), rounded up to the nearest integer</td><td>x</td><td>Energy efficiency class</td><td>[A/B/C/D/E/F/G] (b)</td></tr></table></td><td>To clarify the rule for rounding the figure on energy consumption.</td></tr>
<tr><td>Annex V, point 1, Table 3</td><td><table><tr><td>Useful luminous flux (Φuse), indicating if it refers to the flux in a sphere (360°), in a wide</td><td>x in [sphere/wide cone/narrow cone]</td><td>Correlated colour temperature, rounded to the nearest 100 K, or the range of correlated colour temperatures, rounded</td><td>[x/x…x]</td></tr></table></td><td><table><tr><td>Useful luminous flux (Φuse), indicating if it refers to the flux in a sphere (360°), in a wide cone</td><td>x in [sphere/wide cone/narrow cone]</td><td>Correlated colour temperature, rounded to the nearest 100 K, or the range of correlated colour temperatures, rounded to the</td><td>[x/x…x/x or x (or x…)]</td></tr></table></td><td>To further clarify the available options for declaring the figure(s) for Correlated colour temperature. The current options include a single value and a (continuous) range of values. The suppliers flagged that a number of discrete steps should also be allowed (e.g. 2700 K or 3500 K).</td></tr>
</table>

	cone (120°) or in a narrow cone (90°) | | to the nearest 100 K, that can be set |	(120°) or in a narrow cone (90°) | | nearest 100 K, that can be set |	
Annex V, point 1, Table 3	[new row]	**Lifetime ($L_{70}B_{50}$) expressed in hours** | **x** | |	To add a technical parameter that is missing from the product information sheet
Annex V, point 1, Table 7	Rated light source luminous flux Φ (lm) | Claimed equivalent incandescent light source power (W)	~~Rated~~ Light source luminous flux Φ (lm) | Claimed equivalent incandescent light source power (W)	To amend the text in the table header for making it clearer. The current text contains the word 'rated', which is neither defined, nor necessary and was therefore removed.
Annex VI, point 1(e)	[new text]	**(4a) peak luminous intensity in cd for directional light sources (DLS);** **(7a) R9 colour rendering index value for LED and OLED light sources;** **(7b) survival factor for LED and OLED light sources;** **(7c) lumen maintenance factor for LED and**	To add to the technical documentation some technical parameters that are missing, but are necessary for verifying the information in the product information sheet.

		OLED light sources; **(7d) lifetime $L_{70}B_{50}$ for LED and OLED light sources;**	
Annex VI, point 1(e)(5)	correlated colour temperature (CCT) in K for FL and HID light sources;	correlated colour temperature (CCT) in K ~~for FL and HID light sources~~	To further clarify this technical parameter required in the technical documentation. The CCT applies to all technologies, not only to FL and HID.
Annex IX	[New text]	**Where a model has been designed to be able to detect it is being tested (e.g. by recognising the test conditions or test cycle), and to react specifically by automatically altering its performance during the test with the objective of reaching a more favourable level for any of the parameters specified in this Regulation or included in the technical documentation or included in any of the documentation provided, the model and all equivalent models shall be considered not compliant.**	Consistency across regulations
Annex IX, point 1 2nd	The Member State authorities shall verify 10 units of the light source model for point 2(c) of this Annex. The verification tolerances are laid	In Annex IX, point 1, second paragraph is replaced by the following:	To correct a mistake. The current text wrongly refers to Table 6 instead of Table 9.

<table>
<tr><td>sentence</td><td>down in Table 6 of this Annex.</td><td>‘The Member State authorities shall verify 10 units of the light source model for point 2(c) of this Annex. The verification tolerances are laid down in Table 9 of this Annex.’</td><td></td></tr>
<tr><td>Annex IX, Table 9</td><td><table><tr><td>Flicker [Pst LM] and stroboscopic effect [SVM]</td><td>10</td><td>The determined value shall not exceed the declared value by more than 10 %.</td></tr></table></td><td><table><tr><td>Flicker [P_{st} LM] and stroboscopic effect [SVM]</td><td>10</td><td>The determined value shall not exceed the declared value by more than 0,1.</td></tr></table></td><td>To compensate for some low tolerances calculated in relation to small numbers (less than one unit).</td></tr>
<tr><td>Annex IX, Table 9</td><td><table><tr><td>Lumen maintenance factor (for FL and HID)</td><td>10</td><td>The determined value shall not be less than 90 % of the declared value.</td></tr><tr><td>Survival factor (for FL and HID)</td><td>10</td><td>The determined value shall not be less than the declared value.</td></tr></table></td><td><table><tr><td>~~Lumen maintenance factor (for FL and HID)~~</td><td>~~10~~</td><td>~~The determined value shall not be less than 90 % of the declared value.~~</td></tr><tr><td>~~Survival factor (for FL and HID)~~</td><td>~~10~~</td><td>~~The determined value shall not be less than the declared value.~~</td></tr></table></td><td>To remove unnecessary rows from the table of verification tolerances.

Lumen maintenance factor and survival factor for FL and HID are not defined or required values, therefore no tolerances are needed.</td></tr>
<tr><td>Annex IX, Table 9</td><td><table><tr><td>Luminous peak intensity</td><td>10</td><td>The determined value shall not deviate</td></tr></table></td><td><table><tr><td>Peak luminous intensity [cd]</td><td>10</td><td>The determined value shall not deviate from the declared value by</td></tr></table></td><td>To use the correct terminology ‘peak luminous intensity’ and maintain coherence with other parts of the text.</td></tr>
</table>

	[cd] | | from the declared value by more than 25 %.	| | more than 25 %.	The text currently in the table reads ‘luminous peak intensity’.

2.4. Commission Delegated Regulation (EU) 2019/2016 supplementing Regulation (EU) 2017/1369 of the European Parliament and of the Council with regard to energy labelling of refrigerating appliances and repealing Commission Delegated Regulation (EU) No 1060/2010

Provision	Current text	Amended text	Rationale
Recital 16	The relevant product parameters should be measured using reliable, accurate and reproducible methods. Those methods should take into account recognised state-of-the-art measurement methods including, where available, harmonised standards adopted by the European standardisation bodies, as listed in Annex I to Regulation (EU) No 1025/2012 of the European Parliament and of the Council.	The relevant product parameters should be measured **or calculated** using reliable, accurate and reproducible methods. Those methods should take into account recognised state-of-the-art measurement methods including, where available, harmonised standards adopted by the European standardisation bodies, as listed in Annex I to Regulation (EU) No 1025/2012 of the European Parliament and of the Council.	Some product parameters are not measured but calculated. This text is standard.
Article 2, point 31	'mobile refrigerating appliance' means a refrigerating appliance that can be used where there is no access to the mains electricity grid and that uses extra low-voltage electricity (< 120V DC) or fuel or both as the energy source for the refrigeration functionality, including a refrigerating appliance that, in addition to extra low voltage electricity or fuel, or both, can be electric mains operated. *An appliance placed on the market with an AC/DC converter is not a mobile refrigerating appliance*;	No proposal	One manufacturer and some Member States have raised their concerns with '*An appliance placed on the market with an AC/DC converter is not a mobile refrigerating appliance*;' This was included to close a potential loophole and introduced by IT during the regulatory committee. The manufacturer claims that some appliances, i.e. mobile refrigerating appliances with fan and integrated AC/DC converter' are now unintentionally in the scope of the regulation and have to comply with requirements they cannot meet. IT is against changing the definition; they

			state that their manufacturers already adapted their products.
Annex I, point 4	'freezing capacity' means the amount of fresh foodstuffs that can be frozen in a freezer compartment in 24 h; it shall not be lower than 4,5 kg per 24 h per 100 litres of volume of the freezer compartment, with a minimum of ~~2,0~~ kg/24h	'freezing capacity' means the amount of fresh foodstuffs that can be frozen in a freezer compartment in 24 h; it shall not be lower than 4,5 kg per 24 h per 100 litres of volume of the freezer compartment, with a minimum of **2,6** kg/24h	To correct an inconsistency in the Regulation
Annex IV, point 1(i)	for 4-star compartments, the specific freezing capacity shall be such that the freezing time to bring the temperature of the light load ~~(3,5 kg/100 l)~~ from +25 to - 18 °C at an ambient temperature of 25 °C, is smaller than or equal to 18,5 h;	for 4-star compartments, the specific freezing capacity shall be such that the freezing time to bring the temperature of the light load ~~(3,5 kg/100 l)~~ from +25 to - 18 °C at an ambient temperature of 25 °C, is smaller than or equal to 18,5 h;	To correct an inconsistency in the Regulation
Annex VI, bottom of Table 7	Additional information: The references of the harmonised standards or other reliable accurate and reproducible methods applied: A list of all equivalent models, including model identifiers:	~~Additional information:~~ ~~The references of the harmonised standards or other reliable accurate and reproducible methods applied:~~ ~~A list of all equivalent models, including model identifiers:~~	Included in Annex VI, point 1 (b) and (d) to align the regulations
Annex IX, Table 8, verification tolerances for E16 and E32	The determined value (a) shall not be more than 10 % higher than the declared value.	The determined value (a) shall not be more than 10 % **or 16 Watt hour (Wh)** higher than the declared value**, whichever value is higher**	The values of E16 and E32 are very small. A 10% tolerance is not easy to achieve for these small values, therefore an absolute value is added.

2.5. Commission Delegated Regulation (EU) 2019/2017 supplementing Regulation (EU) 2017/1369 of the European Parliament and of the Council with regard to energy labelling of household dishwashers and repealing Commission Delegated Regulation (EU) No 1059/2010

Provision	Current text	Amended text	Rationale
Recital 14	The relevant product parameters should be measured using reliable, accurate and reproducible methods. Those methods should take into account recognised state-of-the-art measurement methods including, where available, harmonised standards adopted by the European standardisation bodies, as listed in Annex I to Regulation (EU) No 1025/2012 of the European Parliament and of the Council.	The relevant product parameters should be measured **or calculated** using reliable, accurate and reproducible methods. Those methods should take into account recognised state-of-the-art measurement methods including, where available, harmonised standards adopted by the European standardisation bodies, as listed in Annex I to Regulation (EU) No 1025/2012 of the European Parliament and of the Council.	Some product parameters are not measured but calculated. This text is standard.
Annexe II, Table 1		Table 1 is modified, see below: The title of the table has been reworded.	Typological error
Annex VI, Table 4		Table 4 is modified, see below: The title of the table has been reworded.	
Annex IX, point 7	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	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	This point should be modified to include the non-compliance for the circumvention (in paragraph 2 of this Annex); if not, this specific non-compliance will not be subject to a mandatory reporting to other MS and

	3 and 6.	model according to **the second paragraph** of this Annex **or** points 3 ~~and~~ **or** 6.	COM. In the ecodesign regulation, ~~it is written~~ "or" is written and not "and~~". ";~~ "or" is correct because if only one of points 3 or 6 happens there should be a report to other MS and COM.

Annexe II

(Amended) Table 1

~~Energy efficiency classes of electronic displays~~ **Energy efficiency classes of household dishwashers**

Energy efficiency class	Energy Efficiency Index
A	EEI < 32
B	32 ≤ EEI < 38
C	38 ≤ EEI < 44
D	44 ≤ EEI < 50
E	50 ≤ EEI < 56
F	56 ≤ EEI < 62
G	EEI ≥ 62

Annex VI

(Amended) Table 4

~~Information to be included in the technical documentation~~ **Technical parameters of the model and their declared values for household dishwashers**

PARAMETER	**DECLARED VALUE**	UNIT
Eco programme energy consumption (EPEC) rounded to three decimal places	X,XXX	kWh/cycle
Standard programme energy consumption (SPEC) rounded to three decimal places	X,XXX	kWh/cycle
Energy Efficiency Index (EEI)	X,X	-
Eco programme water consumption (EPWC) rounded to one decimal place	X,X	l/cycle
Cleaning performance index (I_C)	X,XX	-
Drying performance index (I_D)	X,XX	-
Duration of the eco programme (T_t) rounded to the nearest minute	X:XX	h:min
Power consumption in off-mode (P_o) rounded to two	X,XX	W

decimal places		
Power consumption in standby mode (P_{sm}) rounded to two decimal places	X,XX	W
Does standby mode include the display of information?	Yes/No	-
Power consumption in standby mode (P_{sm}) in condition of networked standby (if applicable), rounded to two decimal places	X,XX	W
Power consumption in delay start (P_{ds}) (if applicable) rounded to two decimal places	X,XX	W
Airborne acoustical noise emissions	X	dB(A) re 1 pW

2.6. Commission Delegated Regulation (EU) 2019/2018 supplementing Regulation (EU) 2017/1369 of the European Parliament and of the Council with regard to energy labelling of refrigerating appliances with a direct sales function

Provision	Current text	Amended text	Rationale
Recital 12	The relevant product parameters should be measured using reliable, accurate and reproducible methods. Those methods should take into account recognised state-of-the-art measurement methods including, where available, harmonised standards adopted by the European standardisation bodies, as listed in Annex I to Regulation (EU) No 1025/2012 of the European Parliament and of the Council.	The relevant product parameters should be measured **or calculated** using reliable, accurate and reproducible methods. Those methods should take into account recognised state-of-the-art measurement methods including, where available, harmonised standards adopted by the European standardisation bodies, as listed in Annex I to Regulation (EU) No 1025/2012 of the European Parliament and of the Council.	Some product parameters are not measured but calculated. This text is standard.
Annex III.1.2 VIII, for refrigerated vending machines, first dash	the temperature at the top: the maximum measured product temperature of the compartment(s) wit chilled operating temperatures, in degrees Celcius (°C) and rounded to the nearest integer, as set out in Table 4;	'- the temperature at the top: the maximum measured product temperature of the compartment(s) wit chilled operating temperatures, in degrees Celcius (°C) and rounded to the ~~nearest integer~~ **first decimal place**, as set out in Table 4;'	To address an inconsistency in the regulation
Annex IX, Second sentence	The values and classes on the label or in the product fiche shall not be more favourable for the supplier than the values reported in the technical documentation	The values and classes on the label or in the **product** ~~fiche~~ **information sheet** shall not be more favourable for the supplier than the values reported in the technical documentation	Mistake in the wording

3. SPECIFIC AMENDMENT RELATED TO ECODESIGN

3.1. Commission Regulation (EU) 2019/1781 of 1 October 2019 laying down ecodesign requirements for electric motors and variable speed drives pursuant to Directive 2009/125/EC of the European Parliament and of the Council, amending Regulation (EC) No 641/2009 with regard to ecodesign requirements for glandless standalone circulators and glandless circulators integrated in products and repealing Commission Regulation (EC) No 640/2009

Provision	Current text	Amended text	Rationale
Annex I.2 point (1)	rated efficiency (η_N) at the full, 75 % and 50 % rated load ~~and voltage (U_N)~~, determined based on the 50 Hz operation and 25 °C ambient reference temperature, rounded to one decimal place;	rated efficiency (η_N) at the full, 75 % and 50 % rated load**, and rated voltage (U_N)**, determined based on the 50 Hz operation and 25 °C ambient reference temperature, rounded to one decimal place;	Correction of a mistake that was already present in the original regulation.
Penultimate paragraph of Annex I.4	The information referred to in points (1) and (2) as well as the year of manufacture shall be durably marked on or near the rating plate of the VSD. Where the size of the rating plate makes it impossible to mark all the information referred to in point (1) only the ~~rated efficiency~~ at (90;100) shall be marked.	The information referred to in points (1) and (2) as well as the year of manufacture shall be durably marked on or near the rating plate of the VSD. Where the size of the rating plate makes it impossible to mark all the information referred to in point (1) only the **power losses** at (90;100) shall be marked.	Current formulation is not consistent with the rest of the text: point (1) of Annex I.4 refers to power losses, not to rated efficiency.
The following paragraph is inserted before the last paragraph of Annex II.1		**However, for the seven operating points specified in Annex I.2 point (13), the losses shall be determined by either direct input-output measurement or by calculation.**	The method currently proposed in annex II.1 is not suited for the seven operating points specified in Annex I.2 point (13)
The following line of Annex I.1 is amended as follows	From 1 July 2021:	From 1 July 2021 **for all motors in scope, except for Ex eb increased safety motors with a rated output equal to or above 0,12 kW and equal to or below 1 000 kW, with 2, 4, 6 or 8 poles, and for single-phase motors with a rated output equal to or above 0,12 kW, for which the date is 1 July 2023**:	Align the date of entry of application of the information requirements with that of the energy efficiency requirements
The following sentence in Annex	Energy efficiency for motors, expressed in International Energy efficiency classes (IE), is set out in Tables 1, 2 and 3, for different values of the	Energy efficiency ~~for~~ **of** motors, expressed in International Energy efficiency classes (IE), is set out in Tables 1 **to 6**~~, 2 and 3,~~ for different values of	Allowing 60 Hz motors to be tested at 60Hz, and clarify which requirement apply in the

I.1 is updated:	motor rated output power P_N. IE classes are determined at rated output power (P_N), rated voltage (U_N), based on the 50 Hz operation and 25 °C ambient reference temperature.	the motor rated output power P_N**, at 50 Hz or 60 Hz**. IE classes are determined at rated output power (P_N), rated voltage (U_N), and based on ~~the 50 Hz operation and~~ 25 °C ambient reference temperature. For 50/60 Hz motors, the requirements above shall be met at both 50 Hz and 60 Hz.	case of 50/60 Hz motors (motors rated for both frequencies).
Minimum efficiencies tables for 60 Hz motors are added to Annex I.1, and numbering of all tables is updated		[Add minimum efficiencies tables for 60 Hz motors to Annex I.1, and update numbering of all tables]	
The following text is added at the end of Annex I.1, just before the last sentence.		To determine the minimum efficiency of 60 Hz motors at a rated power not provided in Tables 4, 5 and 6, the following rule shall be used: - The efficiency of a rated power at or above the midpoint between 2 consecutive values from the tables shall be the highest of the two efficiencies. - The efficiency of a rated power below the midpoint between 2 consecutive values from the tables shall be the lowest of the two efficiencies.	Interpolation rule for 60Hz motors, adapted from the standard.
Annex I.2 point (1)	(1) rated efficiency (η_N) at the full, 75 % and 50 % rated load and voltage (U_N), determined based on the 50 Hz operation and 25 °C ambient reference temperature, rounded to one decimal place;	(1) rated efficiency (η_N) at the full, 75 % and 50 % rated load and voltage (U_N), determined based on ~~the 50 Hz operation and~~ 25 °C ambient reference temperature, rounded to one decimal place;	Allowing 60 Hz motors to be tested at 60Hz
In Annex I.2, update the	~~For 50/60 Hz and 60 Hz motors, the information set out in points (1) and (2) above may be provided for the 60 Hz operation in addition to the values at 50 Hz, with clear indication of the applicable~~	For 50 Hz and 60 Hz motors, the data set out above is provided at the applicable frequency, while for 50/60 Hz motors the relevant data is to be provided	Clarify which information is to be provided for which motor (50 Hz, 60 Hz, and 50/60 Hz)

following sentence	~~frequencies.~~	at both frequencies.	
In annex II.1, the following sentence is deleted:	~~For 60 Hz motors, equivalent values of the rated output power (P_N) and rated voltage (U^N) for the 50 Hz operation shall be calculated based on the values applicable at 60 Hz.~~		Allowing 60 Hz motors to be tested at 60Hz (sentence not needed any more).

formaterte: Engelsk (Storbritannia)

3.2. Commission Regulation (EU) 2019/2019 of 1 October 2019 laying down ecodesign requirements for refrigerating appliances pursuant to Directive 2009/125/EC of the European Parliament and of the Council and repealing Commission Regulation (EC) No 643/2009

Provision	Current text	Amended text	Rationale
Article 2, point 22	'freezing capacity' means the amount of fresh foodstuffs that can be frozen in a freezer compartment in 24 h; it shall not be lower than 4,5 kg per 24 h per 100 litres of volume of the freezer compartment, with a minimum of ~~2,0~~ kg/24 h;'	'freezing capacity' means the amount of fresh foodstuffs that can be frozen in a freezer compartment in 24 h; it shall not be lower than 4,5 kg per 24 h per 100 litres of volume of the freezer compartment, with a minimum of **2,6** kg/24 h;'	To correct an inconsistency in the Regulation
Article 2, point 28	'mobile refrigerating appliance' means a refrigerating appliance that can be used where there is no access to the mains electricity grid and that uses extra low-voltage electricity (< 120V DC) or fuel or both as the energy source for the refrigeration functionality, including a refrigerating appliance that, in addition to extra low voltage electricity or fuel, or both, can be electric mains operated. *An appliance placed on the market with an AC/DC converter is not a mobile refrigerating appliance*;	No proposal	One manufacturer and some Member States have raised their concerns with '*An appliance placed on the market with an AC/DC converter is not a mobile refrigerating appliance*;' This was included to close a potential loophole and introduced by IT during the regulatory committee. The manufacturer claims that some appliances, i.e. mobile refrigerating appliances with fan and integrated AC/DC converter' are now unintentionally in the scope of the regulation and have to comply with requirements they cannot meet. IT is against changing the definition; they state that their manufacturers already adapted their products.
Article 6	The manufacturer, importer or authorised representative shall not place on the market	The manufacturer, importer or authorised representative shall not place on the market	Alignment with other regulations

	products designed to be able to detect they are being tested (e.g. by recognising the test conditions or test cycle), and to react specifically by automatically altering their performance during the test with the aim of reaching a more favourable level for any of the parameters declared by the manufacturer, importer or authorised representative in the technical documentation or included in any of the documentation provided. The energy consumption of the product and any of the other declared parameters shall not deteriorate after a software or firmware update when measured with the same test standard originally used for the declaration of conformity, except with explicit consent of the end-user prior to update.	products designed to be able to detect they are being tested (e.g. by recognising the test conditions or test cycle), and to react specifically by automatically altering their performance during the test with the aim of reaching a more favourable level for any of the parameters declared by the manufacturer, importer or authorised representative in the technical documentation or included in any of the documentation provided. The energy consumption of the product and any of the other declared parameters shall not deteriorate after a software or firmware update when measured with the same test standard originally used for the declaration of conformity, except with explicit consent of the end-user prior to update**. No performance change shall occur as result of rejecting the update.** **A software update shall never have the effect of changing the product's performance in a way that makes it non-compliant with the ED requirements applicable for declaration of conformity'**	
Annex II, point 2(f)	For 4-star compartments, the specific freezing capacity shall be such that the freezing time to bring the temperature of the light load ~~(3,5 kg/100 l)~~ from +25 to - 18 °C at an ambient temperature of 25 °C, is smaller than or equal to 18,5 h.	For 4-star compartments, the specific freezing capacity shall be such that the freezing time to bring the temperature of the light load from +25 to - 18 °C at an ambient temperature of 25 °C, is smaller than or equal to 18,5 h.	To correct an inconsistency in the Regulation

Annex IV, Table 6, verification tolerances for E16 and E32	The determined value (a) shall not be more than 10 % higher than the declared value.	The determined value (a) shall not be more than 10 % **or 16 Watt hour (Wh)** higher than the declared value**, whichever value is higher**	The values of E16 and E32 are very small. A 10% tolerance is not easy to achieve for these small values, therefore an absolute value is added.

3.3. Commission Regulation (EU) 2019/2020 of 1 October 2019 laying down ecodesign requirements for light sources and separate control gears pursuant to Directive 2009/125/EC of the European Parliament and of the Council and repealing Commission Regulations (EC) No 244/2009, (EC) No 245/2009 and (EU) No 1194/2012

Provision	Current text	Amended text	Rationale
Article 2, point (4)	'containing product' means a product containing one or more light sources, or separate control gears, or both. Examples of containing products are luminaires that can be taken apart to allow separate verification of the contained light source(s), household appliances containing light source(s), furniture (shelves, mirrors, display cabinets) containing light source(s). If a containing product cannot be taken apart for verification of the light source and separate control gear, the entire containing product is to be considered a light source;	'containing product' means a containing product for light sources or a containing product for separate control gears or both. 'containing product for light sources' means a product containing one or more light sources, from which all contained light sources can be removed for verification, such as . luminaires that can be taken apart to allow separate verification of the contained light source(s), household appliances containing light source(s), furniture (shelves, mirrors, display cabinets) containing light source(s). 'containing product for separate control gears' means a product containing one or more separate control gears, from which all contained separate control gears can be removed for verification. Examples of 'containing products for light sources' are luminaires that can be taken apart to allow separate verification of the contained	The current definition of 'containing products' might create legal uncertainty when correlated with other definitions (e.g. of light sources). The updated definition also aims to clarify that some products, e.g. fridges or dishwashers should not be seen as light sources.

Kommentert [A5]: Text to be finalised based on the written comment that will be received.

		light source(s), household appliances containing light source(s), furniture (shelves, mirrors, display cabinets) containing light source(s).	
Article 7	The manufacturer, importer or authorised representative shall not place on the market products designed to be able to detect they are being tested (e.g. by recognising the test conditions or test cycle), and to react specifically by automatically altering their performance during the test with the aim of reaching a more favourable level for any of the parameters declared by the manufacturer, importer or authorised representative in the technical documentation or included in any of the documentation provided. The energy consumption of the product and any of the other declared parameters shall not deteriorate after a software or firmware update when measured with the same test standard originally used for the declaration of conformity, except with explicit consent of the end-user prior to the update.	The manufacturer, importer or authorised representative shall not place on the market products designed to be able to detect they are being tested (e.g. by recognising the test conditions or test cycle), and to react specifically by automatically altering their performance during the test with the aim of reaching a more favourable level for any of the parameters declared by the manufacturer, importer or authorised representative in the technical documentation or included in any of the documentation provided. The energy consumption of the product and any of the other declared parameters shall not deteriorate after a software or firmware update when measured with the same test standard originally used for the declaration of conformity, except with explicit consent of the end-user prior to the update. **No performance change shall occur as result of rejecting the update.** **A software update shall never have the effect of changing the product's performance in a way that makes it non-compliant with the ecodesign requirements applicable for the declaration of conformity.**	Alignment with other regulations

Annex II, point 2, Table 4	Stroboscopic effect for LED and OLED MLS: SVM ≤ 0,4 at full-load (except for HID with Φuse > 4 klm and for light sources intended for use in outdoor applications, industrial applications or other applications where lighting standards allow a CRI< 80)	Stroboscopic effect for LED and OLED MLS: SVM ≤ 0,9 at full-load (except for light sources intended for use in outdoor applications, industrial applications or other applications where lighting standards allow a CRI < 80) From 1 September 2023: SVM ≤ 0,4 at full-load (except for light sources intended for use in outdoor applications, industrial applications or other applications where lighting standards allow a CRI < 80)	Proposal to amend the limit value for stroboscopic effect, which industry considers technically impossible to achieve for several types of light sources. The proposal builds on the text in the regulation adopted, as well as on the further evidence made available through the testing carried out by the MS and suppliers of light sources.
Annex II, point 3(d)(1)	The information specified in point 3(c)(2) of this Annex shall also be contained in the technical documentation file drawn up for the purposes of conformity assessment pursuant to Article 8 of Directive 2009/125/EC.	The information specified in point 3(c)(1) of this Annex shall also be contained in the technical documentation file drawn up for the purposes of conformity assessment pursuant to Article 8 of Directive 2009/125/EC.	To correct an erroneous reference (to a wrong point in art. 3)
Annex III, point 1(c)	in radiological and nuclear medicine installations, as defined in Article 3 of Council Directive 2009/71/EURATOM ([3]) (Footnote 3) Council Directive 2009/71/Euratom of 25 June 2009 establishing a Community framework for the nuclear safety of	in radiological and nuclear medicine installations that are subject to radiation safety standards as set out in Council Directive **2013/59/**EURATOM ([3]); **([3]) Council Directive 2013/59/Euratom of 5 December 2013 laying down basic safety**	To correct an erroneous reference (to a wrong EURATOM Directive)

	nuclear installations (OJ L 172, 2.7.2009, p. 18).	**standards for protection against the dangers arising from exposure to ionising radiation (OJ L 13, 17.1.2014, p. 1).**	
Annex III, point 2, new letter	N/A	(f) separate control gears specifically used in: refrigerating appliances as defined in Commission Regulation (EU) 2019/2019([16a]), dishwashers as defined in Commission Regulation (EU) 2019/2022([16b]), washing machines and washer-dryers as defined in Commission Regulation (EU) 2019/2023([16c]), refrigerating appliances with a direct sales function as defined in Commission Regulation (EU) 2019/2024([16d]), domestic ovens, hobs and range hoods as defined in Commission Regulation (EU) No 66/2014([16e]). ([16a]) Commission Regulation (EU) 2019/2019 of 1 October 2019 laying down ecodesign requirements for refrigerating appliances pursuant to Directive 2009/125/EC of the European Parliament and of the Council and repealing Commission Regulation (EC) No 643/2009 (OJ L 315, 5.12.2019, p. 187). ([16b]) Commission Regulation (EU) 2019/2022 of 1 October 2019 laying down ecodesign requirements for household dishwashers pursuant to Directive 2009/125/EC of the European Parliament and of the Council amending Commission Regulation (EC) No 1275/2008 and repealing Commission	To insert an exemption for separate control gears that are components of household appliances, as proposed by Applia. These control gears are in a special situation because: (i) their energy efficiency is part of the overall energy efficiency of products that are already regulated; and (ii) the control gears are physically a part of bigger integrated control boards that regulate other functions of the white goods. Thus, it is hard to separate and measure/test the components that control the light sources.

Kommentert [A6]: Could be seen as 'components and sub-assemblies', therefore no exemption would be necessary.

		Regulation (EU) No 1016/2010 (OJ L 315, 5.12.2019, p. 267). ([16c]) Commission Regulation (EU) 2019/2023 of 1 October 2019 laying down ecodesign requirements for household washing machines and household washer-dryers pursuant to Directive 2009/125/EC of the European Parliament and of the Council, amending Commission Regulation (EC) No 1275/2008 and repealing Commission Regulation (EU) No 1015/2010 (OJ L 315, 5.12.2019, p. 285). ([16d]) Commission Regulation (EU) 2019/2024 of 1 October 2019 laying down ecodesign requirements for refrigerating appliances with a direct sales function pursuant to Directive 2009/125/EC of the European Parliament and of the Council (OJ L 315, 5.12.2019, p. 313). ([16e]) Commission Regulation (EU) No 66/2014 of 14 January 2014 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for domestic ovens, hobs and range hoods (OJ L 29, 31.1.2014, p. 33).	
Annex III, point 3(s)	halogen light sources with blade contact-, metal lug-, cable-, litz wire- or non-standard customised electrical interface, specifically designed and marketed for industrial or professional electro-heating equipment (e.g. stretch blow-moulding process in PET-Industry, 3D-printing, gluing, inks, paint and coating	In Annex III, point 3(s) is replaced by the following: **Incandescent light sources with** blade contact-, metal lug-, cable-, litz wire- or non-standard customised electrical interface, encasing made from quartz-glass tubes, specifically designed	To clarify a definition and make it more specific, as proposed by industry stakeholders.

	hardening);	and marketed for industrial or professional electro-heating equipment (e.g. stretch blow-moulding process in PET-Industry, 3D-printing, **photovoltaic and electronic manufacturing processes, drying or hardening of adhesives,** inks, paints or coatings);	
Annex III, point 3(w)	**white** light sources which (1) are designed and marketed specifically for scene-lighting use in film-studios, TV-studios and locations, and photographic-studios and locations, or for stage-lighting use in theatres, during concerts or other entertainment events; and which: (2) provide two or more of the following specifications: (a) LED with high CRI > 90; (b) GES/E40, K39d socket with changeable Colour Temperature down to 1 800 K (undimmed), used with low voltage power supply; (c) LED rated at 180W and greater and arranged to direct output to an area smaller	light sources that (1) are designed and marketed specifically for scene-lighting use in film-studios, TV-studios and locations, and photographic-studios and locations, or for stage-lighting use in theatres, during concerts or other entertainment events; and that (2) meet **at least one** of the following specifications: (a) LED **with power ≥ 180 W** and CRI > 90; (b) GES/E40, K39d socket with changeable Colour Temperature down to 1 800 K (undimmed), used with low voltage power supply; (c) LED **with power ≥ 180 W** and arranged to direct output to an area	To clarify an exemption for certain light sources used in theatre and entertainment applications. The clarification was requested by the industry.

	than the light emitting surface; (d) DWE lamp type which is a tungsten lamp defined by its wattage (650 W) voltage (120 V) and terminal type (pressure screw terminal); (e) white bi-colour LED sources; (f) fluorescent tubes: Min BI Pin T5 and Bi Pin T12 with CRI ≥ 85 and CCT 2 900, 3 000, 3 200, 5 600 or 6 500 K.	smaller than the light emitting surface; (d) **Incandescent light source** that is DWE type and has 650 W power, 120 V voltage and pressure screw terminal; (e) **LED with power ≥ 180 W** that allows the user to set different correlated colour temperatures for the emitted light; (f) LFL T5 with G5 cap and LFL T12 with G13 cap, with CRI ≥ 85 and CCT 2 900, 3 000, 3 200, 5 600 or 6 500 K.	
Annex III, new point 3(x)	N/A	incandescent DLS fulfilling all of the following conditions: E27 cap, clear envelope, power ≥ 100 W and ≤ 400 W, CCT ≤ 2 500 K, specifically designed and marketed for infrared heating.	To introduce an exemption for clear lamps used primarily for infrared heating. The industry considers that not having such an exemption will seriously impact several sectors (e.g. restaurants, poultry farming) that use incandescent lamps also as heat sources. Valid alternatives for dual purpose lamps (lighting + heating) are not available.
Annex IV, Table 6	**Flicker [P_{st} LM] and stroboscopic effect [SVM]** | 10 | The determined value shall not exceed the declared value by more than 10 %.	**Flicker [P_{st} LM] and stroboscopic effect [SVM]** | 10 | The determined value shall not exceed the declared value by more than 0,1.	To compensate for some low tolerances calculated in relation to small numbers (less than one unit).

3.4. Commission Regulation (EU) 2019/2021 of 1 October 2019 laying down ecodesign requirements for electronic displays pursuant to Directive 2009/125/EC of the European Parliament and of the Council, amending Commission Regulation (EC) No 1275/2008 and repealing Commission Regulation (EC) No 642/2009

Provision	Current text	Amended text	Rationale
Article 1.2 (g)	(g) displays that are components or subassemblies of products ~~covered by implementing measures adopted under Directive 2009/125/EU[2].~~	(g) electronic displays that are components or subassemblies of products **and which are not placed on the market and/or put into service as individual parts for end-users or the environmental performance of which cannot be assessed independently**;	Scope (exemption expanded) A number of displays are components or subassemblies of a number of very different products with specificities of the product and that are integrated in such a way that it is exceedingly difficult if not impossible to separately assess requirements
Article 1.2		(h) electronic displays for industrial applications in hostile environments~~industrial displays~~	Scope (~~reduced~~clarification). Reference to the products group updated as proposed by Italy
Article 2		(21) 'displays for industrial applications in hostile environments' means an electronic display designed and intended for hostile environments for measuring, testing and process monitoring and control. It design must provide at least minimum level of ingress protection for dust tightness and water projected by a	Definition of the item in previous row (if industrial displays are to be excluded from scope, a detailed definition is necessary to avoid possible loopholes).

[2] Directive 2009/125/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for the setting of ecodesign requirements for energy-related products (OJ L 285, 31.10.2009, p.10).

		nozzle against enclosure from any direction, and, in addition include at least **three** of the following properties: suitability for regular use in ambient temperatures above 40°C, EMC immunity suitable for industrial environments, conformal coating of electronic components, assembly potting, advanced dimming for sunlight readability, impermeable enclosed circuit boards, integrated impact resistant screen.~~21) *'industrial display'* means an electronic display designed and used in hostile environments for measuring, testing and process monitoring and control. Its design must include at least **three** of the following properties: suitability for regular use in ambient temperatures above 40°C, minimum level of ingress protection of IP65 according to EN60529, EMI shield enclosure against external interference, conformal coating material, assembly potting, advanced dimming for sunlight readability, impermeable enclosed circuit boards, integrated laminated shatterproof glass, gaskets sealing the display;~~	Previous definition included a reference to an EN standard, not mentioned in an amended recital. EN60529 IP65 includes: 6=No ingress of dust; complete protection against contact (dust-tight). , 5= Water projected by a nozzle (6.3 mm (0.25 in)) against enclosure from any direction with no effect
Recitals	(10) Electronic displays for professional use such as video-editing, computer-aided design, graphics or for the broadcast sector, possess enhanced performance and very specific features that, although usually involving higher energy use, should be not subject to on-mode energy efficiency requirements set for more generic products.	(10) Electronic displays for professional use such as video-editing, computer-aided design, graphics or for the broadcast sector, possess enhanced performance and very specific features that, although usually involving higher energy use, should be not subject to on-mode energy efficiency requirements set for more generic products. **Electronic displays for industrial applications in hostile environments have specific and high requirements, such as those for ingress protection at level 65 of EN 60259 and can hardly comply with eco-design requirements set for products design for use in less hostile conditions.**	Recital necessary for mentioning EN standard and the specific ingress protection level required (IP65) in the definition. Paragraph appended not to renumber recitals or not to append it out of place.
Annex I,	'(5) '*microLED display'* means an electronic display where individual pixels are lit using	'(5) *'microLED display'* means an electronic display where individual pixels are lit using microscopic LED	technology agnosticism

Kommentert [A7]: Reference to the standard added in recital 10 to explain these requirements set as IP65. To be clarified also in Guidelines.

Definitions	microscopic ~~GaN~~ LED technology;'	technology;'	Technologies other than GaN exist or may exist in future. (Definition proposed by a MS that asked the amendment after the vote, on the day after)
	==	'(38) 'HD resolution' means 1980 x 1080 pixels or 2 073 600 pixels;	New definition to have HD (see also further in Annex II). In current text HD resolution is indicated at 2 138 400 (
	==	(39) 'UHD-4k resolution' means 3840 x 2160 pixels or 8 294 400 pixels.'	New definition to have UHD (see also further in Annex II). In current text UHD resolution is indicated correctly, but for analogy to the previous and conciseness in Annex II
Annex II, header of Table 1,	EEI_{max} for electronic displays with resolution up to ~~2 138 400 pixels~~ (HD)	EEI_{max} for electronic displays with resolution up to HD	**The result of 1980x1080 is not correct (see new calculation result in definition 38)**
	EEI_{max} for electronic displays with resolution above ~~2 138 400 pixels~~ (HD) and up to ~~8 294 400 pixels~~ (UHD-4k)	EEI_{max} for electronic displays with resolution above HD and up to UHD-4k	idem
	EEI_{max} for electronic displays with resolution above ~~8 294 400 pixels~~ (UHD-4k) and for MicroLED displays	EEI_{max} for electronic displays with resolution above UHD-4k and for MicroLED displays	For homogeneity with previous change

Annex II, point D.5.(a)	(a) Availability of spare parts: (a) manufacturers, importers or authorised representatives of electronic displays shall make available to professional repairers at least the following spare parts: internal power supply, connectors to connect external equipment (cable, antenna, USB, DVD and Blue-Ray), ~~capacitors~~, batteries and accumulators, DVD/Blue-Ray module if applicable and HD/SSD module if applicable for a minimum period of seven years after placing the last unit of the model on the market;		(a) Availability of spare parts: (a) manufacturers, importers or authorised representatives of electronic displays shall make available to professional repairers at least the following spare parts: internal power supply, connectors to connect external equipment (cable, antenna, USB, DVD and Blue-Ray), batteries and accumulators, DVD/Blue-Ray module if applicable and HD/SSD module if applicable for a minimum period of seven years after placing the last unit of the model on the market;		Capacitors are a standard component, largely available by a number of manufacturers of electronic components. No repairer would look for the original spare part, also in the light of a likely higher cost and longer delivery time. However there is no consensus, as removing the requirement implies no need of removing them with commonly available tools.
Annex IV Table 3, last row	~~Weight of plastic components as qualified in Annex II, point D.2~~	~~The determined value* shall not be different from the declared value by more than 5 grams~~	Maximum concentration values of halogenated flame retardants in the enclosure and stand	The determined value shall be not exceed 0,1 % by weight in homogeneous materials of ~~bromine and 0.1 % by weight of chlorine~~any halogenated flame retardant.	Tolerance needed in case plastics contain recycled polymers. Threshold coherent with RoHS, POP and REACH legislation. This WEEE will be recyclable, at end of life. E.g. in RoHS, Annex II: [M]aximum concentration values tolerated by weight in homogeneous materials: Polybrominated biphenyls (PBB) (0,1 %) Polybrominated diphenyl ethers (PBDE) (0,1 %)

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3.5. Commission Regulation (EU) 2019/2022 of 1 October 2019 laying down ecodesign requirements for household dishwashers pursuant to Directive 2009/125/EC of the European Parliament and of the Council amending Commission Regulation (EC) No 1275/2008 and repealing Commission Regulation (EU) No 1016/2010

~~N/A~~

Provision	Current text	Amended text	Rationale
Recital 12	The relevant product parameters should be measured using reliable, accurate and reproducible methods. Those methods should take into account recognised state-of-the-art measurement methods including, where available, harmonised standards adopted by the European standardisation bodies, as listed in Annex I to Regulation (EU) No 1025/2012 of the European Parliament and of the Council.	The relevant product parameters should be measured **or calculated** using reliable, accurate and reproducible methods. Those methods should take into account recognised state-of-the-art measurement methods including, where available, harmonised standards adopted by the European standardisation bodies, as listed in Annex I to Regulation (EU) No 1025/2012 of the European Parliament and of the Council.	Some product parameters are not measured but calculated. This text is standard.
Annex IV, point 7	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) or (6).	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 **the second paragraph of this Annex or** points (3) or (6).	This point should be modified to include the non-compliance for the circumvention (in paragraph 2 of this Annex); if not, this specific non-compliance will not be subject to a mandatory reporting to other MS and COM.

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formaterte: Engelsk (Storbritannia)

3.6. Commission Regulation (EU) 2019/2023 of 1 October 2019 laying down ecodesign requirements for household washing machines and household washer-dryers pursuant to Directive 2009/125/EC of the European Parliament and of the Council, amending Commission Regulation (EC) No 1275/2008 and repealing Commission Regulation (EU) No 1015/2010

~~N/A~~

Provision	Current text	Amended text	Rationale
Recital 13	The relevant product parameters should be measured using reliable, accurate and reproducible methods. Those methods should take into account recognised state-of-the-art measurement methods including, where available, harmonised standards adopted by the European standardisation bodies, as listed in Annex I to Regulation (EU) No 1025/2012 of the European Parliament and of the Council.	The relevant product parameters should be measured **or calculated** using reliable, accurate and reproducible methods. Those methods should take into account recognised state-of-the-art measurement methods including, where available, harmonised standards adopted by the European standardisation bodies, as listed in Annex I to Regulation (EU) No 1025/2012 of the European Parliament and of the Council.	Some product parameters are not measured but calculated. This text is standard.
Annex III, point 2	~~3~~2. WASHING EFFICIENCY INDEX The washing efficiency index of household washing machines and of the washing cycle of household washer-dryers (I_W) and the washing efficiency index of the complete cycle of household washer-dryers (J_W) shall be calculated 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 take into account the generally recognised state-of-the-art, and	~~3~~2. WASHING EFFICIENCY INDEX The washing efficiency index of household washing machines and of the washing cycle of household washer-dryers (I_W) and the washing efficiency index of the complete cycle of household washer-dryers (J_W) shall be calculated 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 take into account the generally recognised state-of-the-art, and	This modification is necessary: A precision of three decimals is necessary for the verification of compliance with the ecodesign requirement (for example Iw > 1,03)

Formatert: Mellomrom Før: Automatisk, Etter: Automatisk

	rounded to two decimal places.	rounded to ~~two~~ **three** decimal places.	
Annex IV, point 7	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) or (6).	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 **the second paragraph of this Annex or** points (3) or (6).	This point should be modified to include the non-compliance for the circumvention (in paragraph 2 of this Annex); if not, this specific non-compliance will not be subject to a mandatory reporting to other MS and COM.

formaterte: Gjennomstreking

formaterte: Skrift: Fet

formaterte: Engelsk (USA)

formaterte: Skrift: Fet

formaterte: Skrift: Ikke Fet

formaterte: Engelsk (Storbritannia)

3.7. Commission Regulation (EU) 2019/2024 of 1 October 2019 laying down ecodesign requirements for refrigerating appliances with a direct sales function pursuant to Directive 2009/125/EC of the European Parliament and of the Council

N/A