



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

ANNEXES 1 to 9

ANNEXES

to the

Commission Delegated Regulation

**supplementing Regulation (EU) 2017/1369 of the European Parliament and of the
Council with regard to energy labelling of electronic displays**

repealing

Regulation (EU) No 1062/2010 with regard to energy labelling of televisions

ANNEX I

Definitions

In addition to the definitions set out in Regulation (EU) 2107/1369 and Article 2 of this Regulation, the following definitions shall apply:

- (1) *'Display mechanism'* means any screen, including tactile screen, or other visual technology used for displaying internet content to users;
- (2) *'Nested display'* means visual interface where an image or data set is accessed by a mouse click, mouse roll-over or tactile screen expansion of another image or data set;
- (3) *'Tactile screen'* means a screen responding to touch, such as that of a tablet computer, slate computer or a smartphone;
- (4) *'Alternative text'* means text provided as an alternative to a graphic allowing information to be presented in non-graphical form where display devices cannot render the graphic or as an aid to accessibility such as input to voice synthesis applications;
- (5) *'By default'* means a specific a feature or setting that is activated or set at the factory and available when the customer uses the product for the first time or after performing a "reset to factory settings" action, if foreseen by the product;
- (6) *'Forced menu'* means a specific menu, appearing upon initial start-up of the display or upon a reset to factory settings, offering a set of display settings, pre-defined by the manufacturer;
- (7) *'Grade 1 monitor'* means a monitor for high-level technical quality evaluation of images at key points in a production or broadcast workflow, such as image capture, post- production, transmission and storage;
- (8) *'Pixel'* means the smallest area of the optical image that can be faithfully reproduced where the aspect ratio of a pixel is 1:1;
- (9) *'ABC'* means Automatic Brightness Control and refers to the self-acting mechanism that, when enabled, controls the brightness of a display as a function of the ambient light level illuminating the display in front;
- (10) *'Brightest on-mode condition'* (often termed *'shop mode'*) means the mode of the electronic display, pre-set by the manufacturer, which provides an acceptable picture with the highest measured luminance. This includes a pre-set mode incorporated for use specifically in the context of demonstrating the electronic display, for example in high illumination (retail) conditions and not involving an auto power-off if no user action is detected;
- (11) *'Circumvention device'* or *'defeat device'* means any control device, software, component or part that alters the energy consumption of a product during any test procedure, resulting in measurements that are not representative of the products' true characteristics that occur during normal use under comparable conditions.
- (12) *'Disassembly'* means reversible taking apart of an assembled product into constituent materials and/or components without functional damage that would preclude reassembling, reuse or refurbishment of the product';
- (13) *'Dismantling'* means possibly irreversible taking apart of an assembled product into constituent materials and/or components;

- (14) *‘Electronic display audio system’* means the electronics of the audio processing and audio power - amplifier systems that are contained in the same unit casing as the display;
- (15) *‘Flame retardant’* or *‘fire retardant’* means a substance that markedly retards the propagation of a flame;
- (16) *‘HDR’* means High Dynamic Range and is a method to increase the ratio of light to dark of the image of an electronic display by using metadata generated in the creation of the video material that guides the display management to produce a contrast range and colour rendering more natural to the human eye than that achieved by non-HDR compatible displays;
- (17) *‘Normal configuration’* (also known as *‘Home configuration’*, *‘Standard mode’*, or *‘Home mode’*) means a display screen setting which is recommended to the end-user by the manufacturer from the initial set up menu or the factory setting that the display product has for the intended product use. It must deliver the optimal quality for the end user in a typical domestic or office environment. The normal configuration is the condition in which the declared values for off mode, standby mode, networked standby mode and on mode are measured;
- (18) *‘Homogeneous material’* means one material of uniform composition throughout or a material, consisting of a combination of materials, that cannot be disjointed or separated into different materials by mechanical actions such as unscrewing, cutting, crushing, grinding and abrasive processes;
- (19) *‘Forced menu’* means a specific menu, appearing upon initial start-up of the display or upon a reset to factory settings, offering a set of alternative display settings, pre-defined by the manufacturer;
- (20) *‘Luminance’* means the photometric measure of the luminous intensity per unit area of light traveling in a given direction, expressed in units of candelas per square meter (cd/m^2);
- (21) *‘On mode’* means a condition in which the product is connected to a power source, has been activated and is providing one or more of its display functions;
- (22) *‘Off mode’* means a condition in which the equipment is connected to the mains power source and is not providing any function;
- (23) *‘Equivalent model’* means a model which has the same technical characteristics relevant for the label and the same product information sheet, but which is placed on the market or put into service by the same supplier as another model with a different model identifier;
- (24) *‘Reactivation function’* means a function that via a remote switch, a remote control unit, an internal sensor, a timer or, for networked displays, the network, provides a switch from any standby mode to a mode, other than off-mode, providing additional functions;
- (25) *‘Fast start’* or *‘Quick start’* means an enhanced reactivation function capable of completing the transition into "on mode" in a shorter time than that of the normal reactivation function;
- (26) *‘Room presence sensor’* or *‘gesture detection sensor’* or *‘occupancy sensor’* means a sensor monitoring and reacting to the movements in the space around the product

whose signal can trigger the switching to on-mode. Lack of movement detection for a predetermined time can be used to switch into a standby mode;

- (27) ‘*Screen area*’ means the viewable screen area of the electronic display calculated by multiplying the maximum viewable image width by the maximum viewable image height along the surface of the panel (both flat or curved);
- (28) ‘*Standby mode*’ means a condition where the electronic display is connected to the mains or DC power source, depends on energy input from that source to work as intended and provides only the following functions, which may persist for an indefinite time:
- reactivation function, or reactivation function and only an indication of enabled reactivation function; and/or
 - information or status display;
- (29) ‘*Reactivation function*’ means a function facilitating the activation of other modes, including active mode, by remote switch, including remote control, internal sensor, timer to a condition providing additional functions, including the main function;
- (30) ‘*Television*’ means a product designed primarily for the display and reception of audiovisual signals and which consists of an electronic display and one or more tuner(s)/receiver(s);
- (31) ‘*Tuner*’ or ‘*Television tuner*’ means an electronic circuit in digital TV that detects TV broadcast signal, such as terrestrial digital or satellite but not unicast, and facilitates the selection of a TV channel from a group of network channels;
- (32) ‘*USB*’ means Universal Serial Bus.

ANNEX II

A: Energy Efficiency classes

The energy efficiency class of electronic display shall be determined on the basis of its Energy Efficiency Index (EEI) as set out in Table 1. The Energy Efficiency Index (EEI) of an electronic display shall be determined in accordance with part B of this Annex.

Table 1: Energy efficiency classes of electronic displays

Energy Efficiency Class	Energy Efficiency Index (EEI)
A (most efficient)	$EEI < 0.30$
B	$0.30 \leq EEI < 0.40$
C	$0.40 \leq EEI < 0.50$
D	$0.50 \leq EEI < 0.60$
E	$0.60 \leq EEI < 0.75$
F	$0.75 \leq EEI < 0.90$
G (least efficient)	$0.90 \leq EEI$

B: Energy Efficiency Index (EEI)

The Energy Efficiency Index (EEI) of the electronic display shall be calculated using the following equation:

$$EEI = \frac{(P_{measured} + 1)}{(3 \times [90 \times \tanh(0,02 + 0,004 \times (A - 11)) + 4] + 3) + corr_{lum}}$$

Where:

A represents the viewing surface area in dm²;

P_{measured} is the measured power in on-mode set as indicated in **Table 2**;

corr_{lum} is a correction factor set as indicated in **Table 3**.

Table 2: *P_{measured}* measurement

Dynamic Range level	<i>P_{measured}</i>
Standard Dynamic Range (SDR): <i>P_{measured}_{SDR}</i>	Power demand in Watts (W) in on-mode, measured using a reliable, accurate and reproducible test method to determine the average power required by the electronic display when displaying standardised dynamic broadcast content moving picture test sequences. Where allowances are relevant they should be deducted from <i>P_{measured}</i> for the EEI calculation.

High Dynamic Range (HDR) $P_{measured_{HDR}}$	Power demand in Watts (W) in on-mode, measured as for $P_{measured}$ but with the HDR functionality activated by metadata in the standardised HDR dynamic broadcast content moving picture test sequence. Where allowances are relevant they should be deducted from $P_{measured}$
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Table 3: $corr_{lum}$ value

Display type	$corr_{lum}$ value
Television	0.0
Monitor	0.0
Signage	$0.00062 * (lum - 500) * A^1$

¹ where “lum” is the peak white luminance, in cd/m^2 , of the brightest pre-set mode of the display and A is the display area in dm^2

C: Allowances

Allowances reducing the value of $P_{measured}$ for the purposes of calculating the EEI.

(1) Audio System

An electronic display may use an on-mode condition for the audio system (*audio-set*) that may disable or minimise the power demand of that audio system during the on-mode power measurement (to obtain $P_{measured}$) for the purposes of calculating the EEI. The *audio-set* condition must be achievable through the display product remote control or through an externally accessible control or through a network interface. Information describing the procedure to establish the *audio-set* condition must be provided as required in Annex II.F. If it is not provided, then the on-mode power requirement must be measured for EEI calculation purposes with the audio system condition meeting the on-mode testing requirements of a suitable harmonised measurement standard.

(2) Display products with ABC enabled by default

Electronic displays shall qualify for a 15% reduction in $P_{measured}$, in the calculation of the EEI if they meet all of the following requirements:

- (a) ABC is enabled by default in the normal configuration of the display product and persists in any other configuration unless switched off by the user;
- (b) The value of $P_{measured}$, in the normal configuration, is measured, with ABC off or if ABC cannot be switched off, in an ambient light condition of 100lux measured at the ABC sensor;
- (c) The value of $P_{measured}$ with ABC switched off shall be equal to or greater than the on-mode power measured with ABC switched on in an ambient light condition of 100lux measured at the ABC sensor;
- (d) With ABC switched on, the measured value of the on-mode power must decrease by 20% or more when the ambient light condition, measured at the ABC sensor, is reduced from 100 lux to 12lux;

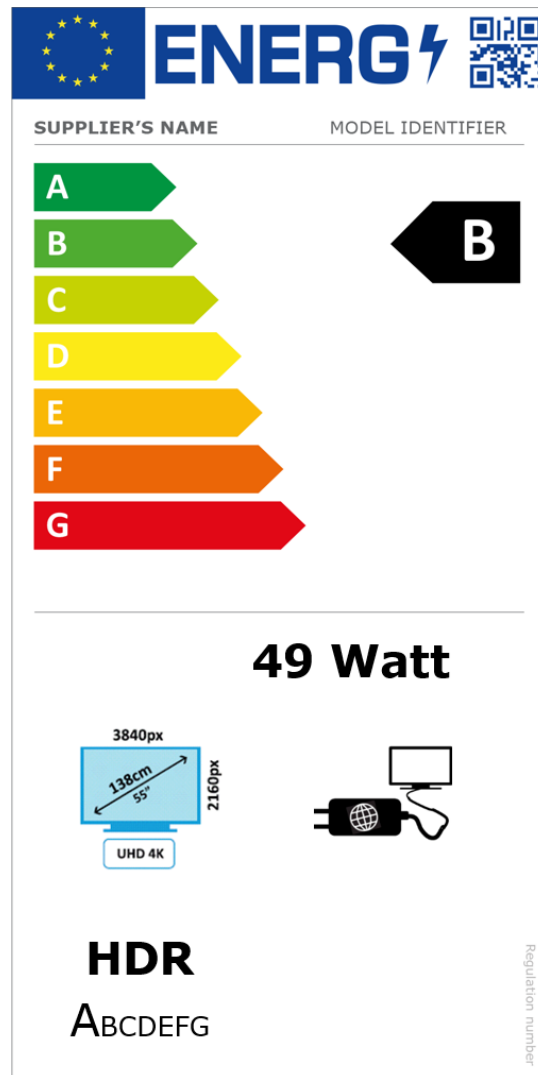
- (e) The ABC control of display screen luminance with changes in the ambient light condition measured at the ABC sensor must meet all of the following characteristics,
- The measured screen luminance at 60 lux is between 65% and 95% of the screen luminance measured at 100 lux;
 - The measured screen luminance at 35 lux is between 50% and 80% of the screen luminance measured at 100 lux; and
 - The measured screen luminance at 12 lux is between 35% and 70% of the screen luminance measured at 100 lux.

(3) Display products requiring an external standardised AC to DC EPS

For display products supplied with a standardised DC power connection and placed on the market without the suitable standardised external AC to DC power supply in the packaging, $P_{measured}$ for the purposes of the EEI calculation shall be the DC input power.

ANNEX III
Label for electronic displays

(1) Label:



(2) The following information shall be included in the label for electronic displays:

- I supplier's name or trade mark;
- II supplier's model identifier, meaning the code, usually alphanumeric, which distinguishes a display model from other models with the same trade mark or supplier's name;
- III the energy efficiency class determined in accordance with Annex II.A when using $P_{measured_{SDR}}$. The head of the arrow containing the energy efficiency class of the electronic display shall be placed at the same height as the head of the arrow of the relevant energy efficiency class;
- IV the energy efficiency class determined in accordance with Annex II.A when using $P_{measured_{HDR}}$;
- V on-mode power consumption in Watts, rounded to the first integer when playing content with SDR;
- VII visible screen diagonal in centimetres and inches;

VII horizontal and vertical resolution in pixels;

IX common name for the given combination of resolution level and screen ratio (optional);

X EPS logo, if the display is placed on the market with a standardised external power supply (dimmed if not included in the packaging).

(label to be updated when final design choice is made)

ANNEX IV

Measurement and calculation methods

For the purposes of compliance and verification of compliance with the applicable requirements of this Regulation, measurements and calculations shall be made using harmonised standards, the reference numbers of which have been published in the *Official Journal of the European Union* or using other reliable, accurate and reproducible methods which take into account the generally recognised state-of-the-art, and produce results deemed to be of low uncertainty. They shall meet the technical definitions, conditions, equations and parameters set out in this Annex.

1. MEASUREMENTS OF ON-MODE POWER DEMAND

Measurements of the on mode power demand shall fulfil all of the following conditions:

- (1) Conditions of electronic displays for measuring the on-mode power demand:
 - (a) electronic displays without forced menu: the power demand shall be measured in the on-mode condition of the electronic display as delivered by the supplier, that is, the controls affecting the brightness (peak luminance) of the electronic display shall be in the position adjusted by the supplier for the end-user;
 - (b) electronic displays with forced menu: the power demand shall be measured in the normal configuration condition;
 - (c) where an electronic display has an *audio-set* condition, this shall be activated during on-mode power demand measurements according to the instructions provided under Annex VI.5.(d)
- (2) General conditions:
 - (a) measurements shall be made at an ambient temperature of 23 °C +/- 5 °C;
 - (b) measurements shall be made using a standardised dynamic broadcast video signal test loops representing typical broadcast content for electronic displays. For the HDR measurement the electronic display must automatically and correctly respond to the HDR metadata in the test loop. The measurement shall be the average power consumed over 10 consecutive minutes;
 - (c) measurements shall be made after the electronic display has been in the off-mode for a minimum of 1 hour immediately followed by a minimum of 1 hour in the on-mode and shall be completed before a maximum of 3 hours in on-mode. The relevant video signal shall be displayed during the entire on-mode duration. For electronic displays that are known to stabilise within 1 hour, these durations may be reduced if the resulting measurement can be shown to be within 2 % of the results that would otherwise be achieved using the durations described here;
 - (d) where the ABC function exists, measurements shall be made with it switched off. If the ABC function cannot be switched off, then the measurements shall be performed in an ambient light condition of 100 lux measured at the ABC sensor.

2. MEASUREMENTS OF PEAK LUMINANCE

Measurements of the peak luminance shall fulfil both of the following conditions:

- (1) measurements of peak luminance shall be made with the display in SDR and not HDR mode with a luminance meter detecting that portion of the screen exhibiting a full (100 %) white image which is part of a 'full screen test' test pattern. The average picture level (APL) of the test pattern must not exceed the point where the electronic display luminance is affected by power limiting or other irregularities in the pixel drive system of the electronic display;
- (2) measurements of luminance shall be made without disturbing the luminance meter's detection point on the electronic display. The required measurements are the value of peak white luminance in the home-mode/standard mode condition and the value of peak white luminance in the brightest on-mode condition. The latter setting should be as provided for in Annex IV point (c) iii.

ANNEX V
Product information sheet

The information in the product information sheet shall entered in the product registration database. The product manual or other literature provided with the product shall clearly indicate the link to the model in the database (as a Uniform Resource Locator-URL or QR-code or product registration number).

	INFORMATION	Value and precision	Unit	Notes
1.	Supplier's name, registered trade name or registered trade mark and contact details		TEXT	
2.	Supplier's model identifier or code		TEXT	univocally distinguishes a specific electronic display model from other models with the same trade mark or supplier's name;
3.	Energy Efficiency class (standard mode)	[A/B/C/D/E/F/G]		
4.	On-mode power demand for standard Definition Range (SDR)	X,X	W	Rounded to the first decimal place for power values below 100 W, and rounded to the first integer for power values from 100 W
5.	Display category		TEXT	Television, Monitor, Signage,
6.	Energy Efficiency class (HDR)	[A/B/C/D/E/F/G]		
7.	On-mode power demand in High Definition Range (HDR) mode	X,X	W	Rounded to the first decimal place for power values below 100 W, and rounded to the first integer for power values from 100 W
8.	off-mode, power demand	X,X	W	
9.	standby power demand	X,X	W	
10.	networked standby power demand	X,X	W	
11.	Size ratio		:	E.g. 16:9
12.	Screen diagonal	X,X /X inches	cm/inc hes	In cm according to the International System of Units (SI) (and, optionally, according to the imperial system). Size in cm rounded to the first decimal place (in inches, rounded to the integer place)
13.	Visible screen area	X,X	cm ²	rounded to the first decimal
14.	Screen resolution (pixels)	H x V	pixels	horizontal and vertical pixels
15.	Panel technology used		TEXT	LCD, LED LCD, QLED LCD, OLED, Microled LED, QDLEDSLED, FED, EPD, Other
16.	Automatic Brightness Control (ABC) available	[YES/NO]		Must be activated as default.
17.	Voice recognition sensor available	[YES/NO]		
18.	If a room presence sensor is available, the time set by default for triggering the switch from on-mode to off, standby or network standby	[YES/NO]		Must be activated as default.
19.	Image refresh frequency rate	X	Hz	
20.	Power supply type:			Either <i>a</i> , <i>b</i> , <i>c</i> or <i>d</i> below
<i>a.</i>	Internal power supply spare part code		TEXT	
<i>b.</i>	External power supply (non standard) spare part code		TEXT	
<i>c.</i>	External and standardised (included in the	Standard name	TEXT	

	product box)				
		Input voltage	X	V	
		Current frequency	XX	Hz	
		Output voltage	X	V	
<i>d.</i>	External and standardised (if not included in the product box)	Standard name		TEXT	
		Required output voltage	X,X	V	
		Required delivered current	X,X	A	

The information contained in the product information sheet may be provided in the form of a copy of the label.

ANNEX VI
Technical documentation

The technical documentation referred to in Article 3(e) shall include:

- (1) Identification data (general description of the model):
 - (a) Brand and model identifier;
 - (b) supplier's name, address, registered trade name.
- (2) References to the harmonised standards applied, other measurement standards and specifications used in measuring the technical parameters and calculations performed.
- (3) Specific precautions to be taken when the model is assembled, installed and tested.
- (4) Measured technical parameters of the model and calculations performed with the measured parameters.

The measured technical parameters as listed in Table 4 shall be entered in the product registration database.

Table 4: Measured technical parameters

		Value and precision	Unit	Notes
	General			
1.	ambient temperature	XX,XX	°C	
2.	test voltage	X	V	
3.	frequency	X,X	Hz	
4.	total harmonic distortion (THD) of the electricity supply system			
	For On-mode			
5.	peak luminance of the brightest on mode condition	X	cd/m ²	
6.	peak luminance of the normal configuration	X	cd/m ²	
7.	Calculated Peak Luminance ratio	X,X	%	Value Row 6 above Value Row 5 above X 100
	For Automatic power down (APD):			
8.	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.	mm:ss		
	For Automatic Brightness Control (ABC)			if available and activated by default:
9.	average on-mode power demand of the electronic display at an ambient light intensity, measured at the Automatic Brightness Control	X,X	W	

	(ABC) sensor of the display product, of 100 lux and 12 lux.			
	percentage of power reduction due to ABC action between the 100 lux and 12 lux ambient light conditions.	XX,X	%	

- (5) Additional information requirements:
- (a) Input terminal for the audio and video test signals used for testing;
- (b) Information and documentation on the instrumentation, set-up and circuits used for electrical testing;
- (c) Any other testing condition not described or determined in point (b);
- (d) For On-mode:
- the characteristics of the dynamic broadcast-content video signal representing typical broadcast TV content; for the HDR dynamic broadcast content video signal the display must be automatically switched to HDR mode by the HDR metadata of that signal;
 - the sequence of steps for achieving a stable condition with respect to power demand level;
 - the picture settings used for the brightest peak luminance measurement and the test pattern for the video signal used for the measurement; and
 - information describing the procedure to establish the *audio-test* condition. If no information is provided it shall be assumed that the audio system does not have an *audio-test* condition and that the audio system power shall be included in the declared average on-mode power.
- (e) For standby and off mode:
- the measurement method used;
 - description of how the mode was selected or programmed including any enhanced reactivation functions;
 - sequence of events to reach the mode where the electronic display automatically changes modes.
- (f) For displays with a designated computer signal interface:
- confirmation that the display product prioritises the computer display power management protocols set out in Point 6.2.3 of Annex II of Regulation (EU) No 617/2013. Any deviation from the protocols should be reported;
- (g) For networked electronic displays only:
- number and type of network interfaces and, except for wireless network interfaces, their position in the electronic display;
 - whether the electronic display qualifies as electronic display with HiNA functionality; if no information is provided the electronic display is considered not to be HiNA display or display with HiNA functionality;
 - information whether networked electronic display provides functionality allowing the power management function and/or the end-user to switch the electronic display being in a condition providing networked standby into

standby mode, or off mode or another condition which does not exceed the applicable power demand requirements for off mode and/or standby mode including enhanced reactivation function power allowance where applicable.

- (h) For each type of network port
- the default time (mm:ss) after which the power management function, switches the display into a condition providing networked standby;
 - the trigger to be used to reactivate the electronic display.
- (6) Where the information included in the technical documentation file for a particular electronic display model has been obtained by calculation on the basis of design, or extrapolation from other equivalent models, the details of such calculations or extrapolations, or both, and of tests undertaken by suppliers to verify the accuracy of the calculations undertaken.
- (7) The contact details of the person empowered to bind the supplier, not uploaded into the database, shall be made available, on request, to market surveillance authorities or to the Commission for carrying out their tasks under this Regulation.

ANNEX VII

Information to be provided in visual advertisements, in promotional material in distance selling and in telemarketing


1. In visual advertisements, for the purposes of ensuring conformity with the requirements laid down in Article 3(1)(e) and Article 4(1)(c), the energy class and the range of efficiency classes available on the label shall be shown with an arrow matching the letter of the energy class, as indicated in Figure 1.
2. In promotional material, for the purposes of ensuring conformity with the requirements laid down in Article 3(1)(f) and Article 4(1)(d) the energy class and the range of efficiency classes available on the label shall be shown with an arrow matching the letter of the energy class, as indicated in Figure 1.
3. Any paper based distance selling must show the the energy class and the range of efficiency classes available on the label shall be shown with an arrow matching the letter of the energy class, as indicated in Figure 1.
4. Telemarketing based distance selling must specifically inform the customer of the energy class of the product and of the range of energy classes available on the label.
5. For all the situations mentioned in points 1 to 4, it must be possible for the customer to access the full label and the product information sheet through a link to the product database website, or to request a printed copy.

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



ANNEX VIII

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

1. The appropriate label made available by suppliers in accordance with Article 3(1)(g) 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. 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 3 of this Annex. If nested display is applied, the label shall appear on the first mouse click, mouse roll-over or tactile screen expansion on the image.
2. The image used for accessing the label in the case of nested display shall:
 - (a) be an arrow in the colour corresponding to the energy efficiency class of the product on the label;
 - (b) indicate on the arrow energy efficiency class of the product in white in a font size equivalent to that of the price; and
 - (c) have one of the following two formats:

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

ANNEX IX

Verification procedure for market surveillance purposes

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

When verifying the compliance of a product model with the requirements laid down in this Delegated Regulation, for the requirements referred to in this Annex, the authorities of the Member States shall apply the following procedure:

- (1) The Member State authorities shall verify one single unit of the model.
- (2) The model shall be considered to comply with the applicable requirements if:
 - (a) the values given in the technical documentation pursuant to Article 3.3 of Regulation (EU) 2017/1369 (declared values), and, where applicable, the values used to calculate these values, are not more favourable for the supplier than the corresponding values given in the test reports; and
 - (b) the values published on the label and in the product information sheet are not more favourable for the supplier than the declared values, and the indicated energy efficiency class is not more favourable for the supplier than the class determined by the declared values; and
 - (c) when the Member State authorities test the unit of the model, the determined values (the values of the relevant parameters as measured in testing and the values calculated from these measurements) comply with the respective verification tolerances as given in Table 1.
- (3) If the results referred to in points 2(a) or (b) are not achieved, the model and all models that have been listed as equivalent household refrigerating appliance models in the supplier's technical documentation shall be considered not to comply with this Delegated Regulation.
- (4) If the result referred to in point 2(c) is not achieved, the Member State authorities shall select three additional units of the same model for testing. As an alternative, the three additional units selected may be of one or more different models that have been listed as equivalent models in the supplier's technical documentation. (5) The model shall be considered to comply with the applicable requirements if for these three units, the arithmetical mean of the determined values complies with the respective tolerances given in Table 1.
- (5) The model shall be considered to comply with the applicable requirements if for these three units, the arithmetical mean of the determined values complies with the respective tolerances given in Table 1.
- (6) If the result referred to in point 5 is not achieved, the model and all models that have been listed as equivalent household refrigerating appliance models in the supplier's technical documentation shall be considered not to comply with this Delegated Regulation.

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

The Member State authorities shall use the measurement and calculation methods set out in Annex IV.

The Member State authorities shall only apply the verification tolerances that are set out in Table 5 and shall only use the procedure described in points 1 to 7 for the requirements referred to in this Annex. No other tolerances, such as those set out in harmonised standards or in any other measurement method, shall be applied.

Table 5. Verification Tolerances

Parameter	Verification tolerances
On mode power demand in Watts	The determined value shall not exceed the declared value by more than 7 %.
Standby, off-mode and networked standby power demand in Watts, as applicable.	The determined value shall not exceed the declared value by more than 0,10 W.
The peak luminance ratio	The determined value shall not be lower than 60 % of the peak luminance of the brightest pre-set on-mode condition provided by the display.’
Visible screen diagonal in inches and centimetres	The determined value ⁽¹⁾ does not deviate more than +/- 1 mm or 0.04 inches from the declared value.
Visible screen area in dm ²	The determined value ⁽¹⁾ does not deviate more than +/- 0.1 dm ² from the declared value.
The screen resolution in horizontal and vertical pixel count	No tolerances; The determined value ⁽¹⁾ does not deviate from the declared value.

⁽¹⁾ In the case of three additional units tested as prescribed in point 3, the determined value means the arithmetic average of the values determined for these three additional units.