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COMMISSION REGULATION (EU) No .../..

of **XXX**

amending Commission Regulation (EC) No 1275/2008 with regard to ecodesign requirements for standby, off mode electric power consumption of electrical and electronic household and office equipment and amending Commission Regulation (EC) No 642/2009 with regard to ecodesign requirements for televisions

(Text with EEA relevance)

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(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to 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 products¹, and in particular Article 15(1) thereof,

After consulting the Ecodesign Consultation Forum,

Whereas:

- (1) Article 16 (2) of Directive 2005/32/EC establishing a framework for the setting of ecodesign requirements for energy-using products foresees an implementing measure reducing standby losses for a group of products as one of the priority measures.
- (2) Networked standby electric power consumption of electrical and electronic household and office equipment had been addressed by the technical, environmental and economic study on standby and off mode losses carried out in 2006/2007. The study concluded that network connectivity was to become a common feature of household and office equipment. The Regulatory Committee on the Ecodesign of Energy-using Products of 21 June 2008 recommended to address networked standby in a separate process due to a lack of data at the time being.
- (3) The Ecodesign Work Plan 2009-2011 identified networked standby as one of the priorities. Accordingly, the Commission in 2010/2011 carried out a preparatory study which analysed the technical, environmental and economic aspects of networked standby. The study was developed together with stakeholders and interested parties from the EU and third countries, and the results were made publicly available.
- (4) The study estimated the power consumption of electrical and electronic household and office equipment products sold in the Community related to conditions providing networked standby to be 54 TWh in 2010, corresponding to 23 Mt CO₂ emissions. Without taking specific measures, the consumption is predicted to increase to 90 TWh in 2020. It was concluded that the electricity consumption related to networked standby can be significantly reduced. This Regulation should increase the market penetration of technologies yielding improved energy efficiency for networked standby leading to estimated energy savings of 36 TWh in 2020 and 49 TWh in 2025, compared to a business-as-usual scenario.

¹ OJ L 285, 31.10.2009, p. 10.

- (5) Given that the functionalities in conditions of standby and networked standby are interlinked and the product scope is equivalent, the Ecodesign Consultation Forum of 14 September 2011 supported the view that the ecodesign requirements regarding networked standby should be established through an amending act to the existing Commission Regulation (EC) No 1275/2008².
- (6) The review of the requirements for standby and off mode, and networked standby should be done together. Given that the review date laid down in Commission Regulation (EC) No 1275/2008 is prior to the entry into force of the first stage of the networked standby requirements, the review date of the regulation is postponed by one year.
- (7) Given that televisions being subject to a product-specific ecodesign implementing measure were exempted from the scope of Commission Regulation (EC) No 1275/2008, ecodesign requirements for networked standby related to televisions are included in Commission Regulation (EC) No 642/2009³ with regard to ecodesign requirements for televisions. The technical, environmental and economic study on networked standby estimated that ecodesign requirements for networked standby of televisions lead to estimated savings of 10 TWh by 2020.
- (8) For coffee machines, the Ecodesign Consultation Forums⁴ of 16 December 2011 and 18 April 2012 supported the view that a product-specific implementing measure should not be adopted but that the standby requirements of Commission Regulation (EC) No 1275/2008 should be made more explicit for coffee machines.
- (9) This regulation introduces specifications for the application of the power management requirements to coffee machines with regard to the default delay time after which the equipment is automatically switched into standby/off mode.
- (10) It can be concluded from the technical, environmental and economic study on household coffee machines carried out in the context of the Ecodesign-Directive that a limitation of the delay time after which coffee machines are automatically switched into standby/off mode will result in additional annual savings of more than 2 TWh by 2020. These savings have not been considered in the savings assumptions for Commission Regulation (EC) No. 1275/2008.

HAS ADOPTED THIS REGULATION:

Article 1

Amendments to Regulation (EC) No 1275/2008

Regulation (EC) No 1275/2008 is amended as follows:

- (1) The title is replaced by the following:

"Commission Regulation (EC) No 1275/2008 of 17 December 2008 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to

² OJ L 339, 18.12.2008, p. 45.

³ OJ L 191/42, 23.07.2009, p.42

⁴ OJ L 190, 18.7.2008, p. 22.

ecodesign requirements for standby and off mode, and networked standby electric power consumption of electrical and electronic household and office equipment"

- (2) Article 1 is replaced by the following:

"Article 1 Subject matter and scope

This Regulation establishes ecodesign requirements related to standby and off mode, and networked standby electric power consumption for the placing on the market of electrical and electronic household and office equipment.

This Regulation shall not apply to electrical and electronic household and office equipment placed on the market with a low voltage external power supply."

- (3) The following definitions are added in Article 2:

"Definitions

10. 'network' means a communication infrastructure with a topology of links, an architecture including the physical components, organisational principles, communication procedures and formats (protocols);
11. 'networked standby' means a condition in which the equipment is able to resume a function through a remotely initiated trigger via a network connection;
12. 'remotely initiated trigger' means a signal that comes from outside the equipment via a network;
13. 'network port' means a wired or wireless physical interface of the network connection located at the equipment through which the equipment is able to be remotely activated;
14. 'network availability' means the capability of the equipment to resume functions after a remotely initiated trigger has been detected by a network port;
15. 'networked equipment' means equipment that has the ability to connect to a network and has one or more network ports;
16. 'networked equipment with high network availability' (HiNA equipment) means an equipment with one or more of the following functionalities but no other, as the main function(s): router, network switch, wireless network access point (not being a terminal), hub, modem, VoIP telephone, video phone;
17. networked equipment with high network availability functionality' (equipment with HiNA functionality) means equipment with the functionality of a router, network switch, wireless network access point (not being a terminal) or combination thereof included, but not being HiNA equipment;
18. 'router' means a network device that, as its primary function, determines the optimal path along which network traffic should be forwarded.

Routers forward packets from one network to another, based on network layer information (L3);

19. 'network switch' means a network device that, as its primary function, filters, forwards, and distributes frames based on the destination address of each frame. All switches operate at least at the data link layer (L2);
20. 'wireless network access point' means a device that, as its primary function, provides IEEE 802.11 (Wi-Fi) connectivity to multiple clients.
21. 'hub' means a network device that contains multiple ports and is used to connect segments of a Local Area Network;
22. 'modem' means a device that, as its primary function, transmits and receives digitally-modulated analogue signals over a wired or optical network;
23. 'printing equipment' means equipment that generates paper output from electronic input. Printing equipment may have additional functions and may be marketed as a multifunctional device or multifunctional product.
24. 'large format printing equipment' means printing equipment designed for printing on A2 media and larger, including those designed to accommodate continuous-form media above or equal to 406 mm wide;
25. 'tele-presence system' means a system for high-definition video conferencing and collaboration which includes a user interface, a high-definition camera, a display, a sound system and processing capabilities for encoding and decoding of video and audio;
26. 'household coffee machine' means a non-commercial appliance to be used to brew coffee;
27. 'drip filter household coffee machine' means a household coffee machine which uses percolation to extract the coffee;
28. 'heating element' means a component of the coffee machine which converts electricity into heat to warm up water;
29. 'cup preheating' means a function which allows to warm cups that are stored at or on the coffee machine
30. 'brewing cycle' means the process that has to be accomplished to produce coffee"

- (4) Article 3 is replaced by the following:

"Article 3
Ecodesign requirements

The ecodesign requirements related to standby and off mode, and networked standby electric power consumption are set out in Annex II."

- (5) Article 7 is replaced by the following:

"Article 7
Revision

The Commission shall review this Regulation no later than 7 January 2016, in the light of technological progress. The review will in particular address the requirements for standby/off mode and the appropriateness and level of the

requirements for networked standby with regard to the third stage of implementation (2019).

The results of the review shall be presented to the Ecodesign Consultation Forum."

- (6) Article 8 is replaced by the following:

*"Article 8
Entry into force*

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

Point 1 of Annex II shall apply as from 7 January 2010.

Point 2 of Annex II shall apply as from 7 January 2013.

Point 3 Annex II shall apply as from 1 January 2015.

Point 4 Annex II shall apply as from 1 January 2017.

Point 5 Annex II shall apply as from 1 January 2019.

Point 6 Annex II shall apply as from 1 January 2015.

Point 7 Annex II shall apply as from 1 January 2015.

This Regulation shall be binding in its entirety and directly applicable in all Member States."

- (7) Annex II is amended as follows:

- a) Point 2, paragraph d, is replaced by the following:

"(d) Power management for all equipment other than networked equipment

When equipment is not providing the main function, and other energy-using product(s) are not dependent on its functions, equipment shall, unless inappropriate for the intended use, offer a power management function, or a similar function, that switches equipment after the shortest possible period of time appropriate for the intended use of the equipment, automatically into:

- standby mode, or
- off mode, or
- another condition which does not exceed the applicable power consumption requirements for off mode and/or standby mode when the equipment is connected to the mains power source.

The power management function shall be activated."

- b) The following is added as new points 3, 4, 5, 6, 7.

"3. As of 1 January 2015:

(a) Possibility to deactivate wireless network connection(s)

If networked equipment has the ability to connect to a wireless network, equipment shall offer the possibility for the user to deactivate the wireless network

connection(s). This requirement does not apply to products which rely on a single wireless network connection for intended use and have no wired network connection.

(b) Power management for networked equipment

When networked equipment is not providing a main function and other energy-using product(s) are not dependent on its functions, equipment shall, unless inappropriate for the intended use, offer a power management function, or a similar function, that switches equipment after the shortest possible period of time appropriate for the intended use of the equipment, automatically into a condition having networked standby.

In a condition providing networked standby, the power management function may switch equipment automatically into standby mode or off mode or another condition which does not exceed the applicable power consumption requirements for standby and/or off mode.

The power management function, or a similar function, shall be available for all network ports of the networked equipment.

The power management function, or a similar function, shall be activated, unless all network ports are deactivated. In that case the power management function, or a similar function, shall be activated if any of the network ports is activated.

The period of time after which the power management function, or a similar function, switches the equipment automatically into a condition providing networked standby shall not exceed 20 minutes.

(c) Networked equipment that has one or more standby modes shall comply with the requirements for these standby mode(s) when all network ports are deactivated.

(d) Networked equipment other than HiNA equipment shall comply with the provisions under 2(d) when all network ports are deactivated.

(e) Power consumption in a condition providing networked standby:

The power consumption of HiNA equipment or equipment with HiNA functionality in a condition providing networked standby into which the equipment is switched by the power management function, or a similar function shall not exceed 12,00 W.

The power consumption of other networked equipment in a condition providing networked standby into which the equipment is switched by the power management function, or a similar function, shall not exceed 6,00 W.

The power consumption limits as stipulated above shall not apply to:

- (a) printing equipment with a power supply of a rated power larger than 750 W;
- (b) large format printing equipment;
- (c) tele-presence systems.

4. As of 1 January 2017:

(a) Networked equipment that has one or more standby mode(s) shall comply with the requirements for these standby mode(s) when all wired network ports are disconnected and when all wireless network ports, are deactivated.

(b) Networked equipment other than HiNA equipment shall comply with the provisions under 2(d) when all wired network ports are disconnected and when all network ports are deactivated.

(c) Power consumption in a condition providing 'networked standby':

The power consumption of HiNA equipment or equipment with HiNA functionality, in a condition providing networked standby into which the equipment is switched by the power management function, or a similar function, shall not exceed 8,00 W.

The power consumption of other networked equipment in a condition providing networked standby into which the equipment is switched by the power management function, or a similar function, shall not exceed 3,00 W.

The power consumption limits as stipulated above shall not apply to large format printing equipment.

5. As of 1 January 2019: The power consumption of networked equipment other than HiNA equipment or equipment with HiNA functionality, in a condition providing networked standby into which the equipment is switched by the power management function, or a similar function, shall not exceed 2,00 W.

6. As of 1 January 2015:

For coffee machines, the delay time after which the product switches automatically into the modes and conditions as referred to in Annex II, point 2, paragraph d) shall be as follows:

- For domestic drip filter coffee machines storing the coffee in an insulated jug, a maximum time of one minute after the completion of the last brewing cycle;
- For domestic drip filter coffee machines storing the coffee in a non-insulated jug, a maximum time of 40 minutes after the completion of the last brewing cycle or 30 minutes after the completion of a descaling or self-cleaning process;
- For domestic coffee machines other than drip filter coffee machines, a maximum time of 30 minutes after the completion of the last brewing cycle or a maximum of 30 minutes after the activation of the heating element, or a maximum of 60 minutes after the activation of the cup preheating function, or a maximum time of 30 minutes after the completion of a descaling or self-cleaning process, unless an alarm that requires users' intervention to prevent possible damages or accidents has been triggered.

Until that date the ecodesign requirements set out in Annex II.2.d shall not apply

7. Product information requirements

As of 1 January 2015, the following information for networked equipment shall be visibly displayed on free accessible websites of manufacturers:

(a) For each standby and/or off mode and the condition providing networked standby into which the equipment is switched by the power management function or similar function:

- the power consumption data in Watts rounded to the first decimal place
- the period of time after which the power management function, or a similar function, switches the equipment automatically into standby and/or off mode and/or the condition providing networked standby."

c) Point 3 is replaced by new point 8:

"8. Measurements

The power consumption referred to in points 1(a), 1(b), 2(a), 2(b), 3(e) and 4(c) shall be established by a reliable, accurate and reproducible measurement procedure, which takes into account the generally recognised state of the art."

d) Point 4 is replaced by new point 9:

"9. Information to be provided by manufacturers

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

(a) for each standby and/or off mode:

- the power consumption data in Watts rounded to the first decimal place,
- the measurement method used,
- description of how the equipment mode was selected or programmed,
- sequence of events to reach the mode where the equipment automatically changes modes,
- any notes regarding the operation of the equipment,
- if applicable, the default time after which the power management function, or similar function, has switched the equipment into the applicable mode or condition;

(b) for networked equipment:

- the number and type of network ports and, except for wireless network ports, where these ports are located at the equipment; in particular it shall be noted if the same physical network port accommodates several types of network ports;
- whether all network ports are deactivated before delivery;
- whether the equipment qualifies as HiNA equipment or equipment with HiNa functionality; if no information is provided the equipment is considered not to be HiNA equipment or equipment with HiNA functionality;

and for each type of network port:

- the default time after which the power management function, or a similar function, switches the equipment into a condition providing networked standby,
- the trigger that is used to reactivate the equipment,
- the (maximum) performance specifications,

- the (maximum) power consumption of the equipment in a condition providing networked standby into which the power management function, or a similar function, will switch the equipment into, if only this port is used for remote activation.

If no information is provided, the equipment is considered not to be networked equipment unless it provides the functionalities of a router, network switch, wireless network access point (not being a terminal), hub, modem, VoIP telephone, video phone.

(c) test parameters for measurements:

- ambient temperature,
- test voltage in V and frequency in Hz,
- total harmonic distortion of the electricity supply system,
- information and documentation on the instrumentation, set-up and circuits used for electrical testing;

(d) the characteristics of equipment relevant for assessing conformity with the requirements set out in point 1(c), or the requirements set out in points 2(c) and/or 2(d) and/or 3(b), as applicable, including the time taken to automatically reach standby, or off mode, or another condition which does not exceed the applicable power consumption requirements for off mode and/or standby mode.

In particular, if applicable, a technical justification shall be provided that the requirements set out in point 1(c), or the requirements set out in points 2(c) and/or 2(d) and/or 3(b), are inappropriate for the intended use of equipment. The need for maintaining one or more network connections or waiting for a remotely initiated trigger is not considered a technical justification for the exemption from the requirements set out in 2(d) in the case of equipment that is not defined as networked equipment by the manufacturer."

(8) The following is added to Annex III:

"Regarding the requirements set out in Annex II, point 2(d) Member State authorities shall use the applicable procedure above to measure the power consumption after the power management function, or similar function, has switched the equipment into the applicable mode or condition.

Regarding the requirements set out in Annex II, points 3(c) and 4(a) Member States authorities shall use the applicable procedure above, after having deactivated and/or disconnected, as applicable, all network ports of the unit.

When performing the market surveillance checks referred to in Article 3(2) of Directive 2009/125/EC, the authorities of the Member States shall apply the following verification procedure for the requirements set out in Annex II, points 3 and 4, as applicable.

Member States authorities shall test one single unit as follows:

If the equipment has, as indicated in the technical documentation, one type of network port and if several ports of that type are available, one of these ports is randomly chosen and that port is connected to the appropriate network complying with the maximum specification of the port. In case of multiple wireless ports of the

same type, the other wireless ports shall be deactivated if possible. If only one port is available, that port is connected to the appropriate network complying with the maximum specification of the port.

The unit is put in the on mode. Once the proper working of the unit in the on mode is established, the unit is allowed to go into the condition providing networked standby and the power consumption is measured. Then the appropriate trigger is provided to the equipment through the network port and it is checked whether the equipment is reactivated.

If the equipment has, as indicated in the technical documentation, more than one type of network port, for each type of network port one port is randomly chosen and that port is connected to the appropriate network complying with the maximum specification of the port. If for a certain type of network port only one port is available, that port is connected to the appropriate network complying with the maximum specification of the port. Wireless ports not used shall be deactivated if possible.

For each type of network port the following procedure is repeated. The unit is put in the on mode. Once the proper working of the unit in the on mode is established, the unit is allowed to go into the condition providing networked standby and the power consumption is measured. Then the appropriate trigger is provided to the equipment through the network port and it is checked whether the equipment is reactivated. If one physical network port is shared by several types of (logical) network ports this procedure is repeated for each type of logical network port with the other logical network ports being logical-disconnected.

The model shall be considered to comply with this Regulation if the results for each type of network port do not exceed the limit value by more than 10 %.

Otherwise, three more units shall be tested. The model shall be considered to comply with this Regulation if the average of the results for each type of network port of the latter three tests does not exceed the limit value by more than 10 %.

Otherwise, the model shall be considered not to comply.

In addition to the procedures set out above, Member States authorities shall use reliable, accurate and reproducible measurement procedures, which take into account the generally recognised state of the art, including methods set out in documents the reference numbers of which have been published for that purpose in the *Official Journal of the European Union*."

(9) Annex IV is amended as follows:

The following is added after the last sentence of Annex IV

"Networked standby: 3 W for HiNA equipment; 1 W or lower for non-HiNA equipment."

Article 2

Amendments to Regulation (EC) No 642/2009

Regulation (EC) No 642/2009 is amended as follows:

- (1) In Article 2, the following definitions are added:
12. 'network' means a communication infrastructure with a topology of links, an architecture including the physical components, organisational principles, communication procedures and formats (protocols);
 13. 'network port' means a wired or wireless physical interface of the network connection located at the television through which the television is able to be remotely activated;
 14. 'networked television' means a television that has the ability to connect to a network and has one or more network ports;
 15. 'network availability' means the capability of the television to resume functions after a remotely initiated trigger has been detected by a network port;
 16. 'remotely initiated trigger' means a signal that comes from outside the television via a network;
 17. 'networked standby' means a condition in which the television is able to resume a function through a remotely initiated trigger via a network connection;
 18. 'networked television' with high network availability functionality' (a television with HiNA functionality) means a television with the functionality of a router, network switch, wireless network access point (not being a terminal) or combination thereof included.
 19. 'router' means a network device that, as its primary function, determines the optimal path along which network traffic should be forwarded. Routers forward packets from one network to another, based on network layer information (L3).
 20. 'network switch' means a network device that, as its primary function, filters, forwards, and distributes frames based on the destination address of each frame. All switches operate at least at the data link layer (L2).
 21. 'wireless network access point' means a device that, as its primary function, provides IEEE 802.11 (Wi-Fi) connectivity to multiple clients.
- (2) Annex I is amended as follows:
- a) The following is added as new point 3
 - "3. NETWORKED STANDBY POWER CONSUMPTION
 1. As of 1 January 2015:
 - (a) Possibility to deactivate wireless network connection(s)If a networked television has the ability to connect to a wireless network, it shall offer the possibility for the user to deactivate the wireless network connection(s). This requirement does not apply to products which rely on a single wireless network connection for intended use and have no wired network connection.
 - (b) Power management for networked televisions

When a networked television is not providing a main function and other energy-using product(s) are not dependent on its functions, the television shall, unless inappropriate for the intended use, offer a power management function, or a similar function, that switches the television after the shortest possible period of time appropriate for the intended use of the equipment, automatically into a condition providing networked standby.

The period of time after which the power management function, or a similar function, switches the equipment automatically into a condition providing networked standby shall not exceed 20 minutes.

In a condition providing networked standby, the power management function may switch equipment automatically into standby mode, or off mode or another condition which does not exceed the applicable power consumption requirements for off mode and/or standby mode.

The power management function, or a similar function, shall be available for all network ports of the networked television.

The power management function, or a similar function, shall be activated, unless all network ports are deactivated. In that case the power management function, or a similar function, shall be activated if any one of the network ports is activated.

(c) A networked television that has one or more standby modes shall comply with the requirements for these standby mode(s) when all network ports are deactivated.

(d) Power consumption in a condition providing networked standby:

The power consumption of television with HiNA functionality, in a condition providing networked standby into which the equipment is switched by the power management function, or a similar function, shall not exceed 12,00 W.

The power consumption of televisions without HiNA functionality in a condition providing networked standby into which the equipment is switched by the power management function, or a similar function, shall not exceed 6,00 W.

2. As of 1 January 2017:

(a) A networked television that has one or more standby modes shall comply with the requirements for these standby mode(s) when all wired network ports are disconnected and when all wireless network ports are deactivated.

(b) A networked television shall comply with the provisions under 2.2 (d) when all wired network ports are disconnected and when all network ports are deactivated.

(c) Power consumption in a condition providing networked standby:

The power consumption of television with HiNA functionality, in a condition providing networked standby into which the equipment is switched by the power management function, or a similar function, shall not exceed 8,00 W.

The power consumption of televisions without HiNA functionality in a condition of networked standby into which the equipment is switched by the power management function, or a similar function, shall not exceed 3,00 W.

3. As of 1 January 2019:

The power consumption of televisions without HiNA functionality in a condition of networked standby into which the equipment is switched by the power management function, or a similar function, shall not exceed 2,00 W."

- b) Point 3 becomes point 4
- c) Point 4 becomes point 5
- d) Point 5 becomes point 6
- e) In point 5.1 (new point 6.1), the following is added after (d) as new point (e):
 - "(e) for networked standby
 - the number and type of network ports and, except for wireless network ports, where these ports are located at the television; in particular it shall be noted if the same physical network port accommodates several types of network ports;
 - whether all network ports are deactivated before delivery;
 - whether the equipment qualifies as equipment with HiNA functionality; if no information is provided the equipment is considered not to be HiNA equipment or equipment with HiNA functionality;"
- f) In point 5.1 (new point 6.1), the following is added after new point (e) as new point (f):
 - "(f) for each type of network port:
 - the default time after which the power management function, or a similar function, switches the television into a condition providing networked standby,
 - the trigger that is used to reactivate the equipment,
 - the (maximum) performance specifications,
 - the (maximum) power consumption of the equipment in a condition providing networked standby into which the power management function, or a similar function, will switch the equipment into, if only this port is used for remote activation.

If no information is provided, the equipment is considered not to be networked equipment."
- g) Point 5.1 (e) becomes new point 6.1 (g)
- h) In point 5.2 (new point 6.2), the second indent is replaced by the following:
 - for each standby and/or off mode and the condition providing networked standby, the power consumption data in Watts rounded to the second decimal place;"

(3) Annex II is amended as follows:

Point 2 is replaced by the following:

"2. Measurements of standby/off-mode, and networked standby power consumption

Measurements of the power consumption referred to in Annex I, Part 2 and 3 shall fulfil all of the following conditions:

The power consumption referred to in points 2.1(a), 2.1(b), 2.2(a), 2.2(b), 3.1(d) and 3.2(c) shall be established by a reliable, accurate and reproducible measurement procedure, which takes into account the generally recognised state of the art."

- (4) Annex III is replaced by the following:

"Verification Procedure

A. Verification Procedure for requirements established in parts 1, 2, 4 and 5 of Annex I.

1. When performing the market surveillance checks referred to in Article 3(2), of Directive 2009/125/EC, the authorities of the Member States shall apply the following verification procedure for the requirements set out in Annex I, parts 1, 2, 4 and 5.

Authorities of the Member States shall test one single television unit.

The model shall be considered to comply with the provisions set out in Annex I, if:

- (a) the result for on-mode power consumption does not exceed the applicable limit value set out in Annex I, point 1 and 2 of Part 1 by more than 7 %; and
- (b) the results for off-mode/standby conditions, as applicable, do not exceed the applicable limit values set out in Annex I, point 1(a) 1 (b), 2 (a) and 2 (b) of Part 2 by more than 0.10 Watt; and
- (c) the result for the peak luminance ratio set out in Annex I, Part 5 does not fall below 60%.

If the results referred to in point 1.1(a) or 1.1(b) or 1.1(c) are not achieved, three additional units of the same model shall be tested.

2. After three additional units of the same model have been tested, the model shall be considered to comply with the requirements set out in Annex I, if:

- (a) the average of the results for the latter three units for on-mode power consumption does not exceed the applicable limit value set out in Annex I, point 1 and 2 of Part 1 by more than 7 %; and
- (b) the average of the results for the latter three units for off-mode/standby conditions, as applicable, do not exceed the applicable limit values set out in Annex I, point 1 (a), 1 (b), 2 (a) and 2 (b) of Part 2 by more than 0.10 Watt; and
- (c) the average of the results for the latter three units for the peak luminance ratio set out in Annex I, Part 5 does not fall below 60%.

If the results referred to in point 1.2(a) and 1.2(b) and 1.2(c) are not achieved, the model shall be considered not to comply with the requirements.

B. Verification Procedure for requirements established in part 3 of Annex I

When performing the market surveillance checks referred to in Directive 2009/125/EC, Article 3(2), the authorities of the Member States shall apply the following verification procedure for the requirements set out in Annex I, points 1(d) and 2(c) of Part 3, as applicable. They shall use the applicable procedure below, after having deactivated and/or disconnected, as applicable, all network ports of the unit.

Member States authorities shall test one single unit as follows:

If the television has, as indicated in the technical documentation, one type of network port and if several ports of that type are available, one of these ports is randomly chosen and that port is connected to the appropriate network complying with the maximum specification of the port. In case of multiple wireless ports of the same type the other wireless ports shall be deactivated if possible. If only one port is

available, that port is connected to the appropriate network complying with the maximum specification of the port.

The unit is put in the on mode. Once the proper working of the unit in the on mode is established, the unit is allowed to go into the condition providing networked standby and the power consumption is measured. Then the appropriate trigger is provided to the television through the network port and it is checked whether the equipment is reactivated.

Where the equipment has, as indicated in the technical documentation, more than one type of network port, for each type of network port one port is randomly chosen and that port is connected to the appropriate network complying with the maximum specification of the port. If for a certain type of network port only one port is available, that port is connected to the appropriate network complying with the maximum specification of the port. Wireless ports not used shall be deactivated if possible.

For each type of network port the following procedure is repeated. The unit is put in the on mode. Once the proper working of the unit in the on mode is established, the unit is allowed to go into the condition providing networked standby and the power consumption is measured. Then the appropriate trigger is provided to the television through the network port and it is checked whether the television is reactivated.

The model shall be considered to comply with this Regulation if the results for each type of network port do not exceed the limit value by more than 7 %.

Otherwise, three more units shall be tested. The model shall be considered to comply with this Regulation if the average of the results for each type of network port of the latter three tests does not exceed the limit value by more than 7 %.

Otherwise, the model shall be considered not to comply.

C. Conformity check

For the purpose of checking conformity with the requirements, the authorities of the Member States shall use the procedure set out in Annex II and reliable, accurate and reproducible measurement procedures, which take into account the generally recognised state of the art measurement methods, including methods set in documents the reference numbers of which have been published for that purpose in the *Official Journal of the European Union*."