COUNCIL OF THE EUROPEAN UNION

Brussels, 29 September 2010

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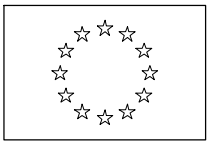
COVER NOTE

from:	Secretary-General of the European Commission, signed by Mr Jordi AYET PUIGARNAU, Director
date of receipt:	29 September 2010
to:	Mr Pierre de BOISSIEU, Secretary-General of the Council of the European Union
Subject:	Commission Delegated Regulation (EU) No ../.../ of 28.9.2010 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to energy labelling of televisions

Delegations will find attached Commission document C(2010) 6619 final.

Encl.: C(2010) 6619 final



EUROPEAN COMMISSION

Brussels, 28.9.2010
C(2010) 6619 final

COMMISSION DELEGATED REGULATION (EU) No …/..

of 28.9.2010

supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to energy labelling of televisions

EXPLANATORY MEMORANDUM

(1) CONTEXT OF THE PROPOSAL

Grounds for and objectives of the proposal

The recast Energy Labelling Directive of the European Parliament and of the Council[1] provides a mandate for the Commission to adopt delegated acts for the indication by labelling and standard product information of the consumption of energy and other resources by energy-related products during use. It requires the Commission to adopt such measures for products which have a significant potential for saving energy, and, where relevant, other resources, and a wide disparity of relevant performance levels for equivalent functionality. A technical, environmental and economic analysis of televisions[2], hereafter called 'preparatory study', followed by an impact assessment, has concluded that both conditions are fulfilled. Consequently, televisions should be covered by a delegated act under the recast Energy Labelling Directive.

The environmental impact of televisions in the EU is significant, and it is mainly related to the electricity consumption in the use-phase. Not only is the number of televisions increasing, but also their average screen size. On the other hand, reliable and easy-to-understand information on their electricity consumption is not available for consumers, resulting in insufficient market transparency and lack of incentives for manufacturers to apply technologies which would lead to reduced energy consumption. The objective of the initiative is therefore to create a harmonised system of energy labelling and standard product information for televisions, which creates market transparency and incentives for innovation. The impact assessment of measures under the ecodesign and energy labelling policies[3] estimated that energy labelling will save at least 15 TWh electricity annually by 2020, in addition to the savings expected from Commission Regulation (EC) No 642/2009 setting ecodesign requirements for televisions[4].

General context

The preparatory study showed that the most significant aspect for improving the environmental performance of televisions is their electricity consumption in on-mode, and cost-effective technologies exist on the market which lead to significant reduction of the electricity consumption of products with equivalent functionality. These technologies are not penetrating the market to a satisfactory extent by market forces alone, because:

– the electricity consumption of televisions has not been a decisive factor for the purchasing decisions of consumers;

– no easily accessed and understood information on electricity consumption, related running costs and potential electricity savings is available, and little awareness of

1 OJ L 153, 18.6.2010, p.1.
2 Available at http://www.ecotelevision.org.
3 SEC(2009) 1011, available at http://ec.europa.eu/energy/efficiency/ecodesign/legislation_en.htm.
4 OJ L 191, 23.7.2009, p. 42.

these issues exists;

– little incentives exist for manufacturers to optimise the electricity consumption.

As a consequence, cost-effective potentials to improve the energy performance of televisions are often not realised.

Existing initiatives at EU and Member State level are not expected to properly correct that market failure. Without taking additional specific measures, the expected electricity consumption of televisions will increase from about 60 TWh in 2005 to 132[5] TWh by 2020 in the EU-27, mainly due to a shift towards larger screen sizes, and an increase in the number of televisions sold and installed in households. It is expected that the ecodesign requirements for the on-mode and standby power consumption of televisions alone, as set out in Commission Regulation (EC) No 642/2009, will lead to a reduction in electricity consumption of 28 TWh annually by 2020.

Additional EU action is therefore required, and it is estimated that an energy labelling scheme pursuant to the recast Energy Labelling Directive will result in additional electricity savings of at least 15 TWh by 2020, and the combined effect of energy labelling and ecodesign requirements set by the current Commission Regulation (EC) No 642/2009 would lead to an annual reduction of at least 43 TWh of electricity consumption by 2020.

Existing provisions in the area of the proposal

In addition to Commission Regulation (EC) No 642/2009, the following measures address the environmental performance of televisions:

– Directive 2002/96/EC[6] of the European Parliament and of the Council of 27 January 2003 on waste electrical and electronic equipment;

– Directive 2002/95/EC[7] of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment;

– Commission Decision 2009/300/EC[8] of 12 March 2009 establishing the revised ecological criteria for the award of the Community Eco-label to televisions;

– Directive 2006/95/EC[9] of the European Parliament and of the Council of 12 December 2006 on the harmonisation of the laws of Member States relating to electrical equipment designed for use within certain voltage limits.

Consistency with other EU policies and objectives

The recast Energy Labelling Directive is an important instrument to achieve the

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5 Of which 130 TWh are related to on-mode, and 2 TWh to standby/off-mode.
6 OJ L 37, 13.2.2003, p. 24.
7 OJ L 37, 13.2.2003, p. 19.
8 OJ L 82, 28.3.2009, p. 3.
9 OJ L 374, 27.12.2006, p. 10.

objective of increasing energy efficiency in the EU by 20% by 2020, and its implementation is one of the priorities of the Energy Efficiency Action Plan[10]. Furthermore, implementation of the recast Energy Labelling Directive contributes to the Community's targets for reducing greenhouse gases. The delegated Regulation on energy labelling of televisions will make a substantial contribution to this process. It is also consistent with the Sustainable Consumption, Production and Industrial Policy Action Plan. Furthermore, the European Economic Recovery Plan[11] underlines that energy efficiency is one of the key priorities, in particular promotion of the rapid take-up of products offering a 'high potential for energy savings', such as televisions.

(2) CONSULTATION OF INTERESTED PARTIES AND IMPACT ASSESSMENT

Consultation of interested parties

Consultation methods, main sectors targeted and general profile of respondents

Experts and stakeholders were consulted from the very beginning of the preparatory study, and, together with ecodesign requirements, energy labelling was discussed in the framework of the 'Ecodesign Consultation Forum' established by the Ecodesign Framework Directive 2009/125/EC[12]. The Consultation Forum is composed of experts from the Member States and a balanced representation of stakeholders, namely environmental and consumer NGOs, retailers and manufacturers. During the meeting of the Consultation Forum of 16 October 2008 the Commission staff presented a working document suggesting an energy efficiency ranking for televisions. In March 2009 the Regulatory Committee under the 'old' Energy Labelling Directive 92/75/EEC endorsed a draft Commission Directive on energy labelling for televisions, which was rejected by the European Parliament in scrutiny on grounds related mainly to the label layout (naming of energy efficiency classes).

Experts were consulted on a draft delegated Regulation supplementing the recast Energy Labelling Directive during February and March 2010. That draft builds on the draft endorsed by the Regulatory Committee in March 2009, but contains the new elements required by the recast Energy Labelling Directive, including adaptation of the label layout (naming of energy efficiency classes 'better' than energy efficiency class 'A'). In addition, it was suggested that the energy efficiency ranking be shifted up by one class such that e.g. energy efficiency class 'A' as proposed in the draft of March 2009 would become energy efficiency class 'B'.

All relevant working documents were circulated to the experts and stakeholders, and published in the Commission's CIRCA system alongside the stakeholder comments received in writing. In addition, the initiative was discussed on many occasions at meetings of Commission staff with stakeholders and Member States, but also with international partners such as the US and in particular California, Japan and Australia, and within the IEA 'Implementing Agreement on Efficient Electrical End-Use Equipment'. The draft delegated Regulation was notified to the WTO/TBT, to ensure that no barrier to trade is introduced.

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10 COM(2006) 545.
11 COM(2008) 800.
12 OJ L 285, 31.10.2009, p. 10.

Summary of responses and how they have been taken into account

In general an energy labelling scheme for televisions pursuant to the recast Energy Labelling Directive is well supported by all stakeholders and by Member States. The following responses on key aspects were received during the recent consultation on the draft delegated Regulation in February and March 2010:

Energy efficiency ranking

A large majority of Member States that provided input, environmental NGOs and consumer NGOs suggested further upgrading the energy efficiency ranking by one additional class, i.e. an upgrade by two classes compared to the draft endorsed by the Regulatory Committee in March 2009, because the latest available market data shows that two models would already achieve energy efficiency class 'A+' according to the ranking suggested in February 2010. Furthermore, the bandwidth of energy efficiency classes 'better than A' should be reduced in order to facilitate fast market transformation.

The industry association of television manufacturers and several manufacturers with small production/sales volumes argued that an upgrade by one class with respect to the draft endorsed by the Regulatory Committee in March 2009 was acceptable, but an upgrade by two classes was too ambitious. In the latter case manufacturers with small production/sales volumes feared that they would have difficulties in procuring from original equipment manufacturers panels which would be needed for achieving higher efficiency classes, because state-of-the-art panels could be made available with priority to manufacturers which order large quantities of panels. This could result in a market disadvantage for manufacturers with small production/sales volumes. However, this was not considered by the other stakeholders and the representatives of the Member States as a generally valid reason for not upgrading by two classes. Furthermore, re-design of models for achieving "better" energy efficiency classes leads to higher costs per product for small volume suppliers, implying a further competitive disadvantage vis-à-vis large volume suppliers.

The delegated Regulation follows the suggestion to further upgrade the energy efficiency ranking and reduce the bandwidth for the efficiency classes 'better than A', so that the Energy Efficiency Index necessary to achieve classes "A" and "B" is now 0.30 and 0.42 instead of 0.50 and 0.64 compared to the draft endorsed in March 2009. With a view to point 3 of Article 10 of the Energy Labelling Directive, which requires the Commission to assess the impact of the act also on costs and the competitiveness of manufacturers, the energy Efficiency Index in the "middle" part of the ranking scale is upgraded by "only" one class compared to the draft endorsed in March 2009, while the boundary of the lowest energy efficiency class G is kept at Energy Efficiency Index 1.00.

As far as timing is concerned, suppliers argued that the timing for label formats with efficiency rankings ranging from A+ to F, A++ to E and A+++ to D should be postponed, because the first label format would be applicable for just about one year only. The delegated Regulation takes this concern into account by requiring the label formats A+ to F, A++ to E and A+++ to D by 2014, 2017 and 2020, respectively.

Furthermore, small volume suppliers requested to consider integrated hard disc and

additional tuner(s) for calculating the Energy Efficiency Index due the additional functionality/service provided, and possible advantages for the environmental performance compared to the situation where such additional functions would be provided by separate "external" devices. Disregarding integrated additional functions would affect mainly small volume suppliers, because they are a design concept which is particularly important for such suppliers. Therefore the calculation of the Energy Efficiency Index contains an additional allowance of 4 Watts for an integrated hard disc, and 4 Watts for one (or more) additional integrated tuners.

Size of the label

It was pointed out by some that the suggested size of the label would be too large for smaller screen sizes, and a smaller label should be provided for.

On the other hand, the suggested size is the minimum that would allow end-users to recognise the label and read its content. Therefore the size was not changed, but for screen sizes below the size corresponding to a screen diagonal of 32 inches a label with transparent background may be used instead of a white background.

Timing

Manufacturers and retailers emphasised that a transitional period of at least four months is needed between the first application date of the new label (12 months after publication in the OJ) and the date of mandatory display of the new energy efficiency classes in advertisements and technical promotional material. This transitional period is necessary for them to adapt and publish their promotional material, catalogues or websites. The draft delegated Regulation therefore integrates this time constraint.

Collection and use of expertise

Scientific/expertise domains concerned

The preparatory study provided the relevant analysis needed for setting up an energy labelling scheme. It was carried out by a consortium of external consultants on behalf of the Commission's Directorate-General for Energy (DG ENER).

Main organisations/experts consulted

The preparatory study was conducted in an open process that took into account input from relevant stakeholders, including manufacturers and manufacturing associations, environmental NGOs, consumer and retail organisations, EU/EEA Member State experts and international organisations such as the International Energy Agency (IEA). The draft measure was notified to the WTO within the TBT agreement.

Summary of advice received and used

No potentially serious risks with irreversible consequences were mentioned.

The technical, market and economic analysis carried out in the framework of the preparatory study resulted in recommendations on ecodesign requirements and energy labelling. These recommendations were used as a basis for suggesting possible energy efficiency classes for public consultation.

Means used to make the expert advice publicly available

The preparatory study was given a dedicated website where interim results and further relevant materials were published regularly for timely stakeholder consultation and input. Written submissions from stakeholders are listed in the final reports. The study website was promoted on the websites of the former Transport and Energy DG (now DG ENER) and the Enterprise and Industry DG.

Impact assessment

An assessment of the impacts was carried out, and several options for improving the environmental impact of televisions, in particular their on-mode power consumption, were considered:

Option 1: No EU action

Option 2: Self-regulation

Option 3: Energy labelling for TVs only

Option 4: Ecodesign requirements only

Option 5: A combination of ecodesign requirements and energy labelling.

Options 1 to 4 were discarded because these options would create market transparency, consumer awareness and incentives for innovations to a limited extent only. Therefore the market failure would persist, and energy efficiency improvements/innovations would take place at a lower rate than desirable.

Under Option 5, improvements that can be achieved with currently available cost-effective technology will be captured by setting ecodesign requirements, while incentives will be created by energy labelling to invest in new energy-efficient technologies and their market penetration will be fostered, thereby ensuring rapid market transformation.

Analysis of the impacts of the sub-options leads to the conclusion that a combination of ecodesign requirements and energy labelling will have the following results:

– the energy labelling scheme creates market transparency for consumers and provides incentives for manufacturers to invest in energy efficiency innovations;

– the ecodesign requirements realise cost-effective improvement potentials for on-mode power consumption;

– the combined effects lead to market transformation yielding significant annual energy savings of 43 TWh by 2020 related to on-mode power consumption (more than the electricity consumption of Romania), assuming an annual improvement triggered by energy labelling of 4%, corresponding to 17.2 Mt CO_2 emissions, compared to a business-as-usual scenario with an expected on-mode electricity consumption of 130 TWh by 2020;

– a clear legal framework is created which ensures fair competition;

– no disproportionate burdens and only small additional costs for manufacturers are created thanks to transitional periods which duly take into account re-design cycles, speed of innovation and return of the associated investments.

(3) LEGAL ELEMENTS OF THE PROPOSAL

Summary of the proposed action

The measure sets out new mandatory information requirements for suppliers placing televisions on the market, and for dealers offering televisions at the point of sale or by distance selling such as via catalogues or the internet. The detailed requirements correspond to the provisions set out in the recast Energy Labelling Directive, including the format of the energy label.

In particular, the scope is aligned with the scope of Commission Regulation (EC) No 642/2009, which covers television sets (display and tuner sold as a unit) and television monitors (display only), while computer monitors are not included.

The energy efficiency ranking is defined in terms of an energy efficiency index, as follows:

Energy efficiency class	Energy Efficiency Index
A+++ (most efficient)	EEI < 0.10
A++	0.10 ≤ EEI < 0.16
A+	0.16 ≤ EEI < 0.23
A	0.23 ≤ EEI < 0.30
B	0.30 ≤ EEI < 0.42
C	0.42 ≤ EEI < 0.60
D	0.60 ≤ EEI < 0.80
E	0.80 ≤ EEI < 0.90
F	0.90 ≤ EEI < 1.00
G	1.00 ≤ EEI

The efficiency index is defined as in Commission Regulation (EC) No 642/2009, and mainly depends on the measured on-mode power consumption of a television and its screen area.

The initial compulsory layout of the label uses an 'A-G' scale, but if a manufacturer achieves a better ranking, e.g. 'A+', this ranking may be shown on the label. The compulsory format is upgraded in three-year intervals starting from 2014, 2017 and

2020, and additional energy efficiency classes 'A+', 'A++', 'A+++', respectively, have to be added to the label, and the colour code of a particular energy efficiency class is 'downgraded'. However, the energy efficiency ranking of a particular model remains unchanged.

Measurement methods and the verification procedure for market surveillance purposes are fully aligned with Commission Regulation (EC) No 642/2009.

Legal basis

The draft delegated Regulation implements the recast Energy Labelling Directive, and in particular Article 11 thereof, which is based on Article 194 of the Treaty on the Functioning of the European Union.

Subsidiarity principle

The adoption of different energy labelling measures for televisions by individual Member States would lead to obstacles to the free movement of goods within the EU. Such measures must therefore be harmonised. In line with the principle of subsidiarity, it is thus appropriate for the measures in question to be adopted at EU level.

Proportionality principle

In accordance with the principle of proportionality, this measure does not go beyond what is necessary in order to achieve the objective.

Choice of instrument

Proposed instrument: delegated Regulation.

The proposed form of action is a Commission delegated Regulation (pursuant to the recast Energy Labelling Directive), because the objectives of the action can be achieved most efficiently by fully harmonised requirements, including timely entry into force, throughout the EU, ensuring free movement of compliant televisions.

(4) BUDGETARY IMPLICATION

The proposal has no implication for the EU budget.

(5) ADDITIONAL INFORMATION

Review/revision/sunset clause

The proposal includes a review clause.

Trade implications

The WTO/TBT was notified to ensure that no barrier to trade is introduced.

European Economic Area

The proposed act concerns an EEA matter and should therefore extend to the European

Economic Area.

COMMISSION DELEGATED REGULATION (EU) No …/..

of 28.9.2010

supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to energy labelling of televisions

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

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

Having regard to Directive 2010/30/EU of the European Parliament and of the Council on the indication by labelling and standard product information of the consumption of energy and other resources by energy-related products[13], and in particular Article 10 thereof,

Whereas:

(1) Directive 2010/30/EU requires the Commission to adopt delegated acts as regards the labelling of energy related products representing significant potential for energy savings and having a wide disparity in performance levels with equivalent functionality.

(2) The electricity used by televisions accounts for a significant share of total household electricity demand in the Union and televisions with equivalent functionality have a wide disparity in terms of energy efficiency. The energy efficiency of televisions can be significantly improved. Televisions should therefore be covered by requirements on energy labelling.

(3) Harmonised provisions for indicating the energy efficiency and consumption of televisions by labelling and standard product information should be established in order to provide incentives for manufacturers to improve the energy efficiency of televisions, encourage end-users to purchase energy-efficient models, reduce the electricity consumption of these products, and contribute to the functioning of the internal market.

(4) The combined effect of the provisions set out in this Regulation and in Commission Regulation (EC) No 642/2009 of 22 July 2009 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for televisions[14] could amounts to annual electricity savings of 43 TWh by 2020, compared to the situation if no measures were taken.

(5) The information provided on the label should be obtained through reliable, accurate and reproducible measurement procedures that take into account the recognised state-

[13] OJ L 153, 18.6.2010, p.1.
[14] OJ L 191, 23.7.2009, p. 42.

of-the-art measurement methods including, where available, harmonised standards adopted by the European standardisation bodies, as listed in Annex I to Directive 98/34/EC of the European Parliament and of the Council of 22 June 1998 laying down a procedure for the provision of information in the field of technical standards and regulations and of rules on Information Society services[15].

(6) This Regulation should specify a uniform design and content for the label for televisions.

(7) In addition, this Regulation should specify requirements as to the technical documentation and the fiche for televisions.

(8) Moreover, this Regulation should specify requirements as to the information to be provided for any form of distance selling, advertisements and technical promotional material of televisions.

(9) In order to encourage the manufacturing of energy efficient televisions suppliers wishing to place on the market televisions that can meet the requirements for higher energy efficiency classes should be allowed to provide labels showing those classes in advance of the date for mandatory display of such classes.

(10) Provision should be made for a review of this Regulation taking into account technological progress,

HAS ADOPTED THIS REGULATION:

Article 1
Subject matter

This Regulation establishes requirements for the labelling and the provision of supplementary product information for televisions.

Article 2
Definitions

In addition to the definitions laid down in Article 2 of Directive 2010/30/EU, the following definitions shall apply:

(1) 'television' means a television set or a television monitor;

(2) 'television set' means a product designed primarily for the display and reception of audiovisual signals which is placed on the market under one model or system designation, and which consists of

(a) a display,

(b) one or more tuner(s)/receiver(s) and optional additional functions for data storage and/or display such as digital versatile disc (DVD), hard disk drive

[15] OJ L 204, 21.7.1998, p. 37.

(HDD) or videocassette recorder (VCR), either in a single unit combined with the display, or in one or more separate units.

(3) 'television monitor' means a product designed to display on an integrated screen a video signal from a variety of sources, including television broadcast signals , which optionally controls and reproduces audio signals from an external source device, which is linked through standardised video signal paths including cinch (component, composite), SCART, HDMI, and future wireless standards (but excluding non-standardised video signal paths like DVI and SDI), but cannot receive and process broadcast signals;

(4) 'on-mode' means the condition where the television is connected to the mains power source and produces sound and picture;

(5) 'home-mode' means the television setting which is recommended by the manufacturer for normal home use;

(6) 'standby-mode(s)' means a condition where the equipment is connected to the mains power source, depends on energy input from the mains power source to function properly and offers the following functions *only*, which may persist for an indefinite time:

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

(b) information or status display.

(7) 'off-mode' means a condition in which the equipment is connected to the mains power source and is not providing any function; the following shall also be considered as off-mode:

(a) conditions providing only an indication of off-mode condition,

(b) conditions providing only functionalities intended to ensure electromagnetic compatibility pursuant to Directive 2004/108/EC of the European Parliament and of the Council[16].

(8) 'reactivation function' means a function facilitating the activation of other modes, including on-mode, by remote switch including remote control, internal sensor, timer to a condition providing additional functions, including on-mode;

(9) 'information or status display' means a continuous function providing information or indicating the status of the equipment on a display, including clocks;

(10) 'forced menu' means a set of television settings, pre-defined by the manufacturer, of which the user of the television must select a particular setting upon initial start-up of the television;

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16 OJ L 390, 31.12.2004, p. 24.

(11) ‘peak luminance ratio’ means the ratio of the peak luminance of the home-mode condition or of the on-mode condition of the television as set by the supplier, as applicable, and the peak luminance of the brightest on-mode condition;

(12) ‘point of sale’ means a location where televisions are displayed or offered for sale, hire or hire purchase;

(13) ‘end-user’ means a consumer buying or expected to buy a television.

Article 3
Responsibilities of suppliers

1. Suppliers shall ensure that:

   (a) each television is supplied with a printed label in the format and containing information as set out in Annex V.

   (b) a product fiche, as set out in Annex III, is made available;

   (c) the technical documentation, as set out in Annex IV, is made available on request to the authorities of Member States and to the Commission;

   (d) any advertisement for a specific television model contains the energy efficiency class, if the advertisement discloses energy-related or price information;

   (e) any technical promotional material concerning a specific television model, which describes its specific technical parameters, includes the energy efficiency class of that model.

2. The energy efficiency classes shall be based on the Energy Efficiency Index calculated in accordance with Annex II.

3. The format of the label set out in Annex V shall be applied according to the following timetable:

   (a) for televisions placed on the market from [date to be inserted: 12 months after publication of this Regulation in the Official Journal of the European Union] labels for televisions with energy efficiency classes:

      (i) A, B, C, D, E, F, G shall be in accordance with point 1 of Annex V or, where suppliers deem appropriate, with point 2 of that Annex;

      (ii) A+ shall be in accordance with point 2 of Annex V;

      (iii) A++ shall be in accordance with point 3 of Annex V;

      (iv) A+++ shall be in accordance with point 4 of Annex V.

   (b) For televisions placed on the market from 1 January 2014 with energy efficiency classes A+, A, B, C, D, E, F, labels shall be in accordance with point

2 of Annex V or, where suppliers deem appropriate, with point 3 of that Annex.

(c) For televisions placed on the market from 1 January 2017 with energy efficiency classes A++, A+, A, B, C, D, E, labels shall be in accordance with point 3 of Annex V or, where suppliers deem appropriate, with point 4 of that Annex.

(d) For televisions placed on the market from 1 January 2020 with energy efficiency classes A+++, A++, A+, A, B, C, D labels shall be in accordance with point 4 of Annex V.

Article 4
Responsibilities of dealers

Dealers shall ensure that:

(a) each television, at the point of sale, bears the label provided by suppliers in accordance with Article 3(1) on the front of the television, in such a way as to be clearly visible;

(b) televisions offered for sale, hire or hire-purchase, where the end-user cannot be expected to see the television displayed, are marketed with the information to be provided by the suppliers in accordance with Annex VI.

(c) any advertisement for a specific television model contains the energy efficiency class, if the advertisement discloses energy-related or price information;

(d) any technical promotional material concerning a specific television model, which describes its specific technical parameters, includes the energy efficiency class of that model.

Article 5
Measurement methods

The information to be provided under Articles 3 and 4 shall be obtained by reliable, accurate and reproducible measurement procedures, which take into account the recognised state-of-the-art measurement methods, as set out in Annex VII.

Article 6
Verification procedure for market surveillance purposes

Member States shall apply the procedure laid down in Annex VIII when assessing the conformity of the declared energy efficiency class.

Article 7
Revision

The Commission shall review this Regulation in the light of technological progress no later than five years after its entry into force.

Article 8
Transitional provision

Articles 3(1)(d) and (e) and Article 4(b), (c) and (d) shall not apply to printed advertisement and printed technical promotional material published before [date to be inserted: 16 months after publication of this Regulation in the Official Journal].

Article 9
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*.

It shall apply from [date to be inserted: 12 months after the publication in the *Official Journal of the European Union* of this Regulation]. However, Article 3(1) (d) and (e) and Article 4(b), (c) and (d) shall apply from [date to be inserted: 16 months after the publication in the *Official Journal of the European Union* of this Regulation]

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

Done at Brussels, 28.9.2010

For the Commission
The President

ANNEX I
Energy efficiency class

The energy efficiency class of a television shall be determined on the basis of its Energy Efficiency Index (EEI) as set out in Table 1. The Energy Efficiency Index of a television shall be determined in accordance with point 1 of Annex II.

Table 1: Energy efficiency class of a television

Energy efficiency class	Energy Efficiency Index
A+++ (most efficient)	EEI < 0.10
A++	0.10 ≤ EEI < 0.16
A+	0.16 ≤ EEI < 0.23
A	0.23 ≤ EEI < 0.30
B	0.30 ≤ EEI < 0.42
C	0.42 ≤ EEI < 0.60
D	0.60 ≤ EEI < 0.80
E	0.80 ≤ EEI < 0.90
F	0.90 ≤ EEI < 1.00
G (least efficient)	1.00 ≤ EEI

ANNEX II
Method for calculating the Energy Efficiency Index and the annual on-mode energy consumption

1. The Energy Efficiency Index (EEI) is calculated as $EEI = P/P_{ref}(A)$, where:

   – $P_{ref}(A) = P_{basic} + A \cdot 4.3224$ Watts/dm^2;

   – $P_{basic} = 20$ Watts for television sets with one tuner/receiver and no hard disc;

   – $P_{basic} = 24$ Watts for television sets with hard disc(s);

   – $P_{basic} = 24$ Watts for television sets with two or more tuners/receivers;

   – $P_{basic} = 28$ Watts for television sets with hard disc(s) and two or more tuners/receivers;

   – $P_{basic} = 15$ Watts for television monitors;

   – A is the visible screen area expressed in dm^2;

   – P is the on-mode power consumption of the television in Watts measured in accordance with Annex VII, rounded to one decimal place.

2. The annual on-mode energy consumption E in kWh is calculated as $E = 1.46 \cdot P$.

3. Televisions with automatic brightness control

   For the purposes of calculating the Energy Efficiency Index and the annual on-mode energy consumption referred to in points 1 and 2, the on-mode power consumption as established according to the procedure set out in Annex VII is reduced by 5% if the following conditions are fulfilled when the television is placed on the market:

   (a) the luminance of the television in the home-mode or the on-mode condition as set by the supplier, is automatically reduced between an ambient light intensity of at least 20 lux and 0 lux,

   (b) the automatic brightness control is activated in the home-mode condition or the on-mode condition of the television as set by the supplier,

ANNEX III
Product Fiche

1. The information in the product fiche of the television shall be provided in the following order, and shall be included in the product brochure or other literature provided with the product:

   (a) supplier's name or trade mark;

   (b) supplier's model identifier; where model identifier means the code, usually alphanumeric, which distinguishes a specific television model from other models of the same trade mark or supplier's name.

   (c) the energy efficiency class of the model in accordance with Annex I, Table 1; where the television has been awarded an 'EU Ecolabel' under Regulation (EC) No 66/2010 of the European Parliament and of the Council[17], this information may be included;

   (d) the visible screen diagonal in centimetres and in inches;

   (e) the on-mode power consumption measured in accordance with the procedure set out in Annex VII;

   (f) the annual energy consumption calculated in accordance with Annex II in kWh per year, rounded to the first integer; it shall be described as: 'Energy consumption XYZ kWh per year, based on the power consumption of the television operating 4 hours per day for 365 days. The actual energy consumption will depend on how the television is used.';

   (g) the standby and off-mode power consumption or both measured in accordance with the procedure set out in Annex VII;

   (h) the screen resolution in physical horizontal and vertical pixel count.

2. One fiche may cover a number of television models supplied by the same supplier.

3. The information contained in the fiche may be given in the form of a copy of the label, either in colour or in black and white. Where this is the case, the information listed in point 1 not already displayed on the label must also be provided.

[17] OJ L 27, 30.1.2010, p. 1.

Annex IV
Technical documentation

The technical documentation referred to in Article 3(1)(c) shall include:

(a) the name and address of the supplier;

(b) a general description of the television model, sufficient for it to be unequivocally and easily identified;

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

(d) where appropriate, the other technical standards and specifications used;

(e) identification and signature of the person empowered to bind the supplier;

(f) test parameters for measurements:

- (i) ambient temperature;
- (ii) test voltage in V and frequency in Hz;
- (iii) total harmonic distortion of the electricity supply system;
- (iv) the input terminal for the audio and video test signals;
- (v) information and documentation on the instrumentation, set-up and circuits used for electrical testing;

(g) on-mode parameters:

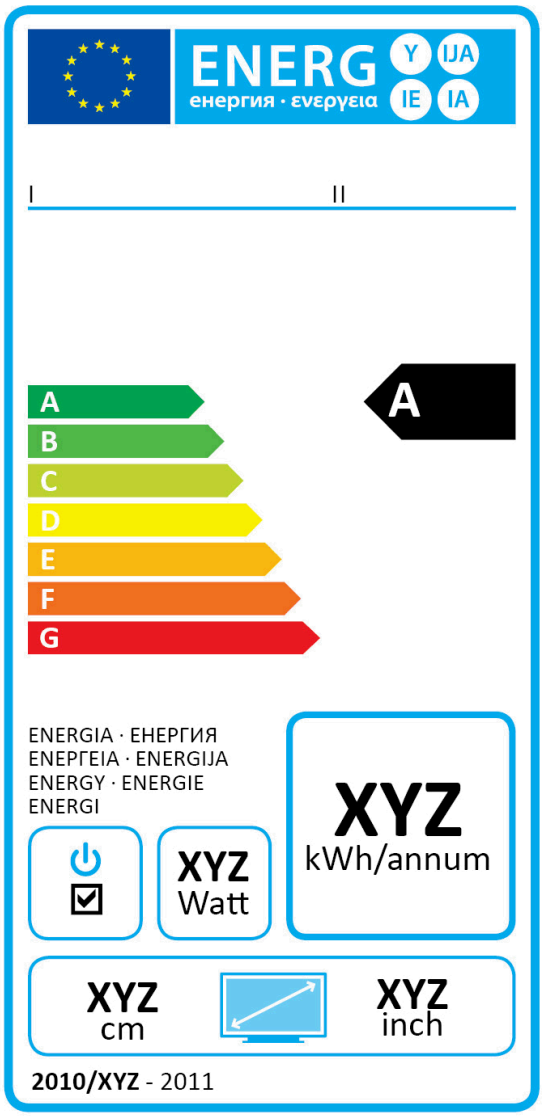
- (i) the power consumption data in Watts rounded to the first decimal place for power measurements up to 100 Watts, and to the first integer for power measurements above 100 Watts;
- (ii) the characteristics of the dynamic broadcast-content video signal representing typical broadcast TV content;
- (iii) the sequence of steps for achieving a stable condition with respect to power consumption;
- (iv) for televisions with a forced menu, the ratio of the peak luminance of the home-mode and the peak luminance of the brightest on-mode condition provided by the television, expressed as a percentage;
- (v) for television monitors, a description of the relevant characteristics of the tuner used for measurements;

(h) for each standby or off-mode:

- (i) the power consumption data in Watts rounded to the second decimal place;
- (ii) the measurement method used;
- (iii) description of how the mode was selected or programmed;
- (iv) sequence of events to reach the mode where the television automatically changes modes.

ANNEX V
Label

1. **LABEL 1**



I, II

III

VII, IV, V

VI

(a) The following information shall be included in the label:

I. supplier's name or trade mark;

II. supplier's model identifier, where 'model identifier' means the code, usually alphanumeric, which distinguishes a specific television model from other models of the same trade mark or supplier's name;

III. the energy efficiency class of the television, determined in accordance with Annex I. The head of the arrow containing the energy efficiency class of the television shall be placed at the same height as the head of the arrow of the relevant energy efficiency class;

IV. on-mode power consumption in Watts, rounded to the first integer;

V. annual on-mode energy consumption calculated in accordance with point 2 of Annex II, in kWh, rounded to the first integer;

VI. visible screen diagonal in inches and centimetres.

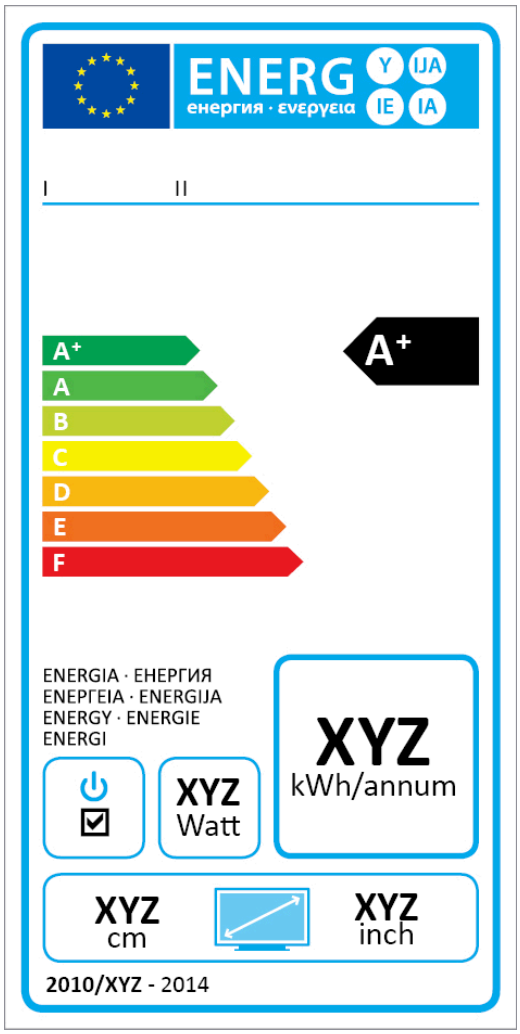
For televisions with an easily visible switch, which puts the television in a condition with power consumption not exceeding 0.01 Watts when operated to the off position, the symbol defined in point 8 of point 5 may be added

Where a model has been granted a 'European Union eco-label' under Regulation (EC) No 66/2010[18] of the European Parliament and of the Council, a copy of the EU eco-label may be added.

(b) The design aspects of the label shall be in accordance with point 5.

[18] OJ L 27, 30.1.2010, p. 1.

2. **LABEL 2**



I, II

III

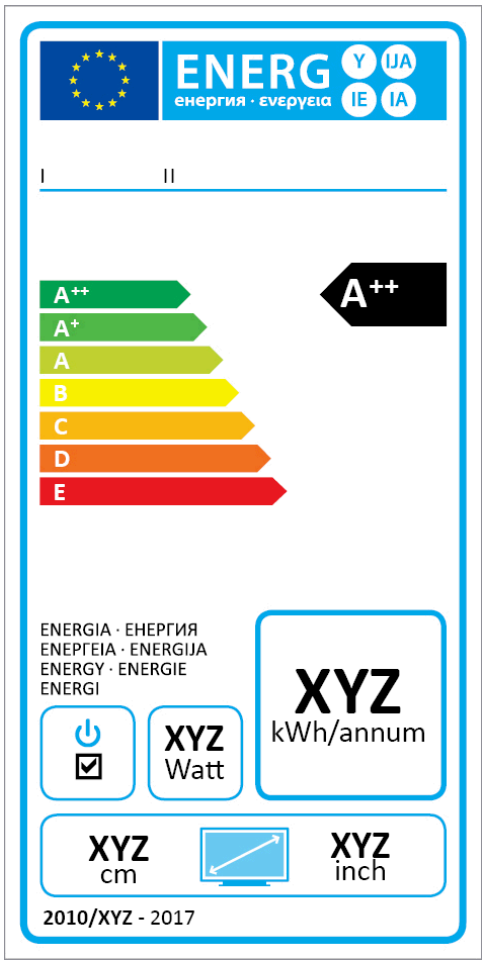
VII, IV, V

VI

(a) The information listed in point 1(a) shall be included in the label.

(b) The design aspects of the label shall be in accordance with point 5.

3. **LABEL 3**



I, II

III

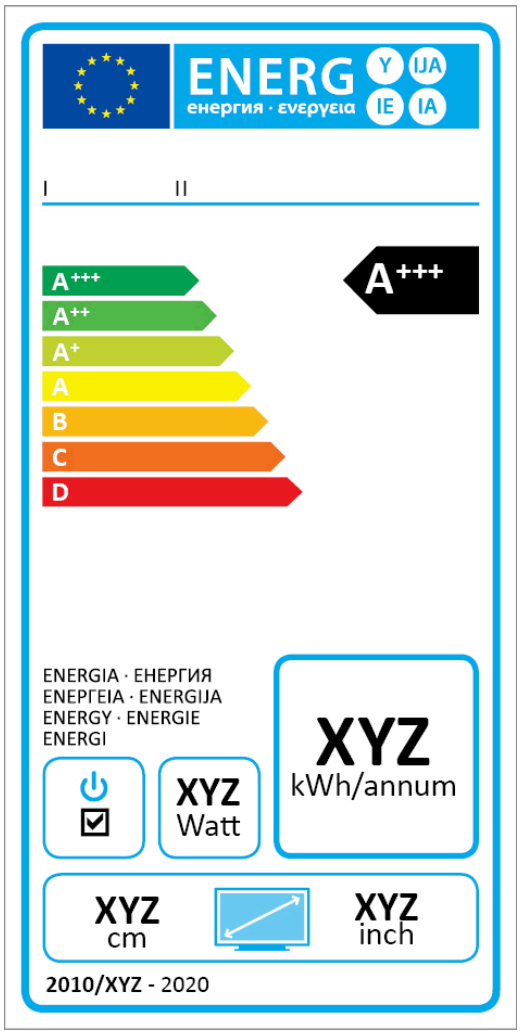
VII, IV, V

VI

(a) The information listed in point 1(a) shall be included in the label.

(b) The design aspects of the label shall be in accordance with point 5.

4. **LABEL 4**



I, II

III

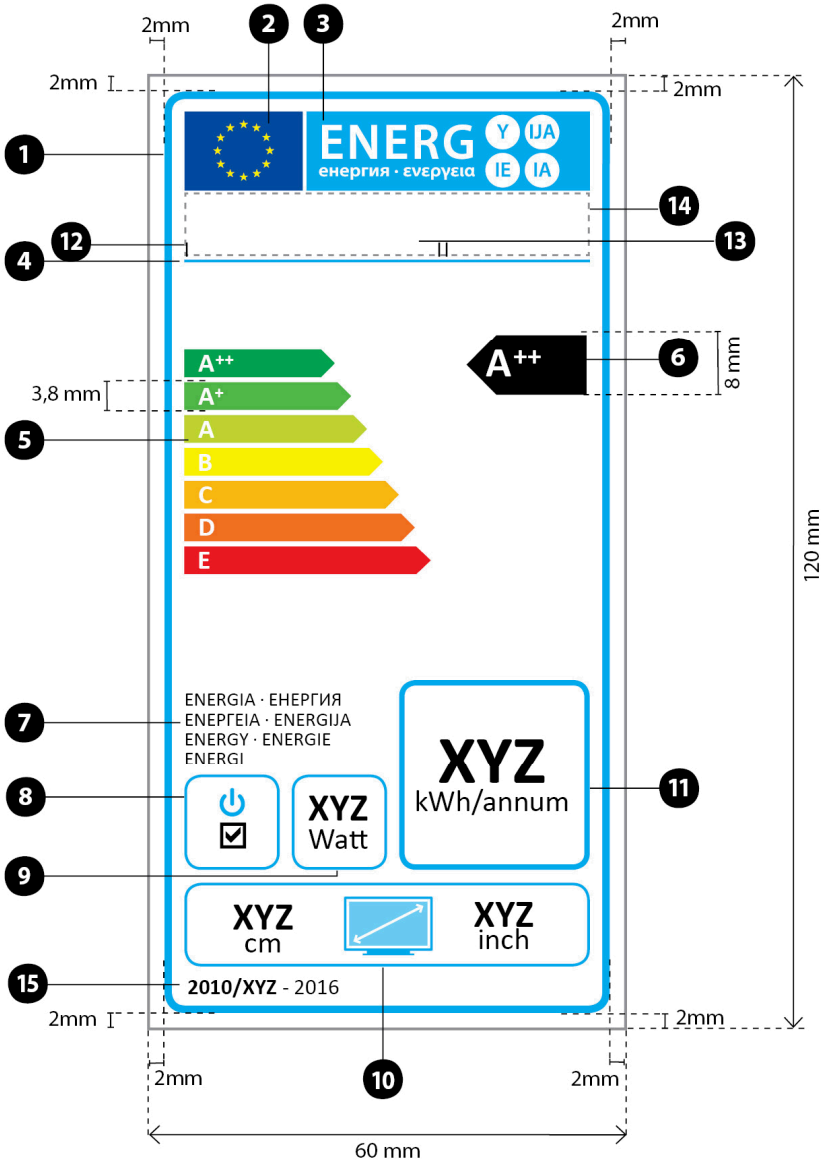
VII, IV, V

VI

(a) The information listed in point 1(a) shall be included in the label.

(c) The design aspects of the label shall be in accordance with point 5.

5. The design of the label shall be the following:



Whereby:

(a) The label shall be at least 60 mm wide and 120 mm high. Where the label is printed in a larger format, its content must nevertheless remain proportionate to the specifications above.

(b) For televisions with screen area above 29 dm^2 the background shall be white. For televisions with screen area of 29 dm^2 or below the background shall be white or transparent.

(c) Colours are CMYK - cyan, magenta, yellow and black and are given following this example: 00-70-X-00: 0 % cyan, 70 % magenta, 100 % yellow, 0 % black.

(d) The label shall fulfil all of the following requirements (numbers refer to the figure above):

❶ **Border stroke:** 3 pt – colour: Cyan 100% – round corners: 3.5 mm.

❷ **EU logo** – colours: X-80-00-00 and 00-00-X-00.

❸ **Label logos:**

colour: X-00-00-00

Pictogram as depicted; EU logo and label logo (combined): width: 51 mm, height: 9 mm.

❹ **Sub-logos border:** 1 pt – colour: Cyan 100% – length: 51 mm.

❺ **A-G scale**

- **Arrow:** height: 3.8 mm, gap: 0.75 mm – colours:
  - 0 Highest class: X-00-X-00,
  - 0 Second class: 70-00-X-00,
  - 0 Third class: 30-00-X-00,
  - 0 Fourth class: 00-00-X-00,
  - 0 Fifth class: 00-30-X-00,
  - 0 Sixth class: 00-70-X-00,
  - 0 Last class: 00-X-X-00.
- **Text:** Calibri bold 10 pt, capitals, white; '+' symbols: Calibri bold 7 pt, capitals, white.

❻ **Energy efficiency class**

- **Arrow:** width: 26 mm, height: 8 mm, 100% black;
- **Text:** Calibri bold 15 pt, capitals, white; '+' symbols: Calibri bold 10 pt, capitals, white.

❼ **Energy**

- **Text:** Calibri regular 7pt, capitals, 100 % black.

❽ **Switch logo:**

- **Pictogram as depicted, Border:** 1 pt – colour: Cyan 100% – round corners: 3.5 mm.

❾ **Text related to on-mode power consumption**:

- **Border:** 1 pt – colour: Cyan 100% – round corners: 3.5 mm.
- **Value:** Calibri bold 14 pt, 100% black.
- **Second line:** Calibri regular 11 pt, 100% black.

❿ **Television screen diagonal size:**

- **Pictogram as depicted**
- **Border**: 1 pt – colour: Cyan 100% – round corners: 3.5 mm.
- **Value:** Calibri bold 14 pt, 100% black. Calibri regular 11pt, 100% black.

⓫ **Text related to annual energy consumption**:

- **Border:** 2 pt – colour: Cyan 100% – round corners: 3.5 mm.
- **Value:** Calibri bold 25 pt, 100% black.
- **Second line:** Calibri regular 11 pt, 100% black.

⓬ **Supplier's name or trade mark**

⓭ **Supplier's model identifier**

⓮ The supplier's name or trade mark and model information should fit in a space of 51x 8 mm.

⓯ **Reference period**

Text: Calibri bold 8 pt
Text: Calibri light 9 pt

ANNEX VI
Information to be provided in the cases where end-users cannot be expected to see the product displayed

1. The information referred to in Article 4 (b) shall be provided in the following order:

   (a) the energy efficiency class of the model as defined in Annex I;

   (b) the on-mode power consumption as referred to in point 1of Annex II;

   (c) the annual power consumption in accordance with point 2 of Annex II;

   (d) the visible screen diagonal.

2. Where other information contained in the product information fiche is also provided, it shall be in the form and order specified in Annex III.

3. The size and font in which all the information referred in this Annex is printed or shown shall be legible.

ANNEX VII
Measurements

1. For the purposes of compliance and verification of compliance with the requirements of this Regulation, measurements shall be made using a reliable, accurate and reproducible measurement procedure that takes into account the generally recognised state of the art measurement methods, 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*.

2. Measurements of on-mode power consumption referred to in point 1 of Annex II

a) General conditions:

(i) measurements shall be made at an ambient temperature of 23° C +/- 5°C;

(ii) measurements shall be made using a dynamic broadcast-content video signal representing typical broadcast TV content; The measurement shall be the average power consumed over ten consecutive minutes;

(iii) measurements shall be made after the television has been in the off-mode for a minimum of one hour immediately followed by a minimum of one hour in the on-mode and shall be completed before a maximum of three hours in on-mode. The relevant video signal shall be displayed during the entire on-mode duration. For televisions that are known to stabilize within one 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;

(iv) measurements shall be made with an uncertainty of less than or equal to 2% at the 95% confidence level;

(v) measurements shall be made with the Automatic Brightness Control function, if such a function exists, made inactive. If the Automatic Brightness Control function exists and cannot be made inactive, then the measurements shall be performed with the light entering directly into the ambient light sensor at a level of 300 lux, or more.

b) Conditions for measuring the on-mode power consumption of televisions:

(i) television sets without forced menu: The power consumption shall be measured in the on-mode condition of the television as delivered by the manufacturer, that is, the brightness controls of the television shall be in the position adjusted by the manufacturer for the end user.

(ii) television sets with forced menu: The power consumption shall be measured in the "home-mode" condition.

(iii) television monitors without forced menu: The television monitor shall be connected to an appropriate tuner. The power consumption shall be measured in the on-mode condition of the television as delivered by the manufacturer, that is, the brightness controls of the television monitor shall be in the position adjusted by the manufacturer for the end user. The

power consumption of the tuner is not relevant for the measurements of on-mode power consumption of the television monitor.

(iii) television monitors with forced menu: The television monitor shall be connected to an appropriate tuner. The power consumption shall be measured in the "home-mode" condition.

(2) Measurements of standby/off-mode power consumption referred to in point 1(g) of Annex III

Measurements of power of 0.50 Watts or greater shall be made with an uncertainty of less than or equal to 2% at the 95% confidence level. Measurements of power of less than 0.50 Watts shall be made with an uncertainty of less than or equal to 0.01 Watts at the 95% confidence level.

(3) Measurements of peak luminance referred to in point 2(c) Annex VIII

(a) Measurements of peak luminance shall be made 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 that does not exceed the average picture level (APL) point where any power limiting occurs in the display luminance drive system.

(c) Measurements of luminance ratio shall be made without disturbing the luminance meter's detection point on the display whilst switching between the home-mode condition or the on-mode condition of the television as set by the supplier, as applicable, and the brightest on-mode condition.

ANNEX VIII
Verification procedure for market surveillance purposes

For the purposes of checking conformity with the requirements laid down in Articles 3 and 4, Member State authorities shall apply the following verification procedure for the on-mode power consumption referred to in point 1 of Annex II and the standby/off-mode power consumption referred to in point 1(g) of Annex III.

(1) Member State authorities shall test one single unit.

(2) The model shall be considered to comply with the declared value of the on-mode power consumption and the declared values for standby and/or off-mode power consumption, if:

(a) the result for on-mode power consumption does not exceed the declared power consumption value by more than 7%; and

(b) the results for standby and off-mode power consumption values, as applicable, do not exceed the declared power consumption values by more than 0.10 Watts; and

(c) the result for the peak luminance ratio is above 60%.

(3) If the results referred to in point(2) (a) or (b) or (c) are not achieved, three additional units of the same model shall be tested.

(4) After three additional units of the same model have been tested, the model shall be considered to comply with the declared value of the on-mode power consumption and the declared values for standby and off-mode power consumption, if:

(a) the average of the results for the latter three units for on-mode power consumption does not exceed the declared power consumption value by more than 7%; and

(b) the average of the results for the latter three units for standby and off-mode conditions , as applicable, does not exceed the declared power consumption values by more than 0.10 Watts; and

(c) the average of the results for the latter three units for the peak luminance ratio is above 60%.

(5) If the results referred to in point (4)(a) or (b) or (c) are not achieved, the model shall be considered not to comply with the requirements.