

TECHNICAL REGULATION ON ECODESIGN REQUIREMENTS FOR SIMPLE SET-TOP BOXES, NO. (XXX) FOR THE YEAR 2012, ISSUED IN ACCORDANCE TO ARTICLE (XXX) AND ARTICLE (XXX) OF STANDARDS AND METROLOGY LAW NO 22/2000

Article 1:

This Technical Regulation shall be referred to as the "Technical Regulation on ecodesign requirements for simple set-top boxes, No. ...".

Article 2:

This Technical Regulation represents an implementing Technical Regulation to Technical Regulation on ecodesign requirements for energy related products, No. xx for 2012 (hereinafter: Framework Technical Regulation), both of which shall be used to establish the ecodesign requirements for simple set-top boxes.

Section 1
Definitions

Article 3:

In addition to the definitions laid down in Article 2 of the Framework Technical Regulation, the following definitions shall apply for the purpose of this implementing Technical Regulation:

3-1 Simple set-top box (SSTB): stand-alone device which, irrespectively of the interfaces used,

(a) has the primary function of converting standard-definition (SD) or high-definition (HD), free-to-air digital broadcast signals to analogue broadcast signals suitable for analogue television or radio;

(b) has no 'conditional access' (CA) function;

(c) offers no recording function based on removable media in a standard library format.

A SSTB can be equipped with the following additional functions and/or components which do not constitute a minimum specification of an SSTB:

(a) time-shift and recording functions using an integrated hard disk;

(b) conversion of HD broadcast signal reception to HD or SD video output;

(c) second tuner.

3-2 Standby mode(s): condition where the equipment is connected to the mains power source, depends on energy input from the mains power source to work as intended and provides only the following functions, 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.

3-3 Reactivation function: 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.

3-4 Information or status display: continuous function providing information or indicating the status of the equipment in a display, including clocks.

3-5 Active mode(s): condition in which the equipment is connected to the mains power source and at least one of the main function(s) providing the intended service of the equipment has been activated.

3-6 Automatic power down: function which switches the active mode of an SSTB into standby mode after a period in the active mode following the last user interaction and/or channel change.

3-7 Second tuner: part of the SSTB available for independent recording while allowing to watch a different programme.

3-8 Conditional access (CA): provider-controlled broadcasting service requiring a market subscription television service.

Section 2 Subject matter and scope

Article 4:

This implementing Technical Regulation establishes ecodesign requirements for simple set-top boxes.

Section 3 Requirements, conformity assessment and market surveillance

Article 5: Ecodesign requirements

5-1 The ecodesign requirements for SSTBs are set out in Annex A.

5-2 The requirements laid down in this implementing Technical Regulation shall prevail over the requirements laid down in Technical Regulation on ecodesign requirements for standby and off mode electric power consumption of electrical and electronic household and office equipment, No. ... for the Year 2012.

Article 6: Conformity assessment

The conformity assessment procedure referred to in Article 10 of the Framework Technical Regulation shall be the internal design control system set out in Annex B to that Technical Regulation or the management system for assessing conformity set out in Annex C to that Technical Regulation.

Article 7: Verification procedure for market surveillance purposes

Surveillance checks shall be carried out in accordance with the verification procedure set out in Annex B to this implementing Technical Regulation.

Article 8: Benchmarks

The indicative benchmarks for the best-performing products and technology currently available on the market are identified in Annex C to this implementing Technical Regulation.

Section 4 Related documents

Article 9:

9-1 This implementing Technical Regulation represents transposition of Commission Regulation (EC) No 107/2009 implementing Directive 2005/32/EC with regard to ecodesign requirements for simple set-top boxes.

9-2 Technical Regulation on ecodesign requirements for energy related products, No. ...

9-3 Standards and Metrology Law, No. 22/2000.

9-5 Instructions on Market Surveillance, No.

Section 5 Entry into force and application

Article 10:

This Technical Regulation shall enter into force on 1/1/2014.

ANNEX A ECODESIGN REQUIREMENTS

SSTBs, placed on the market shall not exceed the following power consumption limits:

	Standby mode	Active mode
Simple STB	0,50 W	5,00 W
Allowance for display function in standby	+ 0,50 W	—
Allowance for hard disk	—	+ 6,00 W
Allowance for second tuner	—	+ 1,00 W
Allowance for decoding HD signals	—	+ 1,00 W

3. Availability of standby mode

~~One year after this Regulation has come into force,~~ SSTBs shall provide standby mode.

4. Automatic power-down

~~One year after this implementing measure has come into force,~~ SSTBs shall be equipped with an 'automatic power-down' or similar function with the following characteristics:

- the SSTB shall be automatically switched from active mode into standby after less than three hours in active mode following the last user interaction and/or a channel change with an alert message two minutes before going into standby mode.
- the 'automatic power-down' function shall be set as default.

5. Measurements

The power consumption referred to in Points 1 and 2 shall be established by a reliable, accurate and reproducible measurement procedure, which takes into account the generally recognised state of the art.

Measurements of power of 0,50 W 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 W shall be made with an uncertainty of less than or equal to 0,01 W at the 95 % confidence level.

6. Information to be provided by the manufacturers for the purposes of conformity assessment

For the purposes of conformity assessment pursuant to Article [65](#), the technical documentation shall contain the following elements:

(a) For standby and active modes

- The power consumption data in Watts rounded to the second decimal place including consumption data for the different additional functions and/or components
- The measurement method used
- Period of measurement
- Description of how the appliance 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

(b) Test parameters for measurements

- Ambient temperature
- Test voltage in V and frequency in Hz
- Total harmonic distortion of the electricity supply system
- The fluctuation of the power supply voltage during the tests
- Information and documentation on the instrumentation, set-up and circuits used for electrical testing
- Input signals in RF (for digital terrestrial broadcasts) or IF (for satellite broadcasts)
- Audio/video test signals as described in the MPEG-2 transport stream
- Adjustment of controls

The power requirements of peripheral devices powered by the STB for broadcast reception, such as active terrestrial antenna, satellite LNB or any cable or telecom modem are not required to be included in the technical documentation.

7. Information to be provided by the manufacturers for the purposes of consumer information

Manufacturers shall ensure that consumers of SSTBs are provided with the power consumption in Watts rounded to the first decimal place of standby and active modes of the SSTB.

ANNEX B VERIFICATION PROCEDURE

When performing the market surveillance checks referred to in Article 15 of the Framework Technical Regulation, the Organization shall apply the following verification procedure for the applicable requirements set out in Annex A, Points 1, 2 and 4, as applicable.

For power consumption requirements larger than 1,00 W:

The Organization shall test one single unit.

The model shall be considered to comply with the provisions set out in Annex A, Points 1 and 2, as applicable, of this implementing Technical Regulation if the results for active and standby mode conditions, as applicable, do not exceed the limit values by more than 10 %.

Otherwise, three more units shall be tested. The model shall be considered to comply with this implementing Technical Regulation if the average of the results of the latter three tests for active and standby mode conditions, as applicable, does not exceed the limit values by more than 10 %.

For power consumption smaller than, or equal to, 1,00 W:

The Organization shall test one single unit.

The model shall be considered to comply with the provisions set out in Annex A, Points 1 and 2, as applicable, of this implementing Technical Regulation if the results for active and/or standby mode conditions, as applicable, do not exceed the limit values by more than 0,10 W.

Otherwise, three more units shall be tested. The model shall be considered to comply with this implementing Technical Regulation if the average of the results of the latter three tests for active and/or standby conditions, as applicable, does not exceed the limit values by more than 0,10 W.

Otherwise, the model shall be considered not to comply.

ANNEX C BENCHMARKS

The following indicative benchmarks are identified for the purpose of reference to the best available technology at the date of adopting this implementing Technical Regulation:

SSTB without any additional features:

- Active mode: 4,00 W
- Standby mode excluding the display function: 0,25 W
- Off-mode: 0 W

SSTB with an integrated hard drive:

- Active mode: 10,00 W
- Standby mode excluding the display function: 0,25 W
- Off-mode 0 W

The above benchmarks are established on the basis of a SSTB with a basic configuration, an 'automatic power down' function and a hard-off switch.