



## CONSUMER RELEVANT ECO-DESIGN REQUIREMENTS FOR SIMPLE SET TOP BOXES

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## Summary

In the context of the implementation of the Eco-design of Energy-using Products (EuP) Directive, the European Commission is proposing eco-design requirements for simple set top boxes. These requirements are largely based on the finding of the relevant preparatory study on set top boxes.

This paper outlines the main consumer relevant issues related to the possible eco-design requirements for simple set top boxes and recommends improvement options. We give specific, technical recommendations to increase the energy efficiency of these products and highlight the need for a quick implementation of the future implementing measure. We also stress the importance of providing better information to consumers.

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## **Introduction**

This paper outlines the main consumer relevant issues related to the possible eco-design requirements for simple set top boxes and recommends improvement options. We give specific, technical recommendations to increase the energy efficiency of these products and highlight the need for a quick implementation of the future implementing measure. We also stress the importance of providing better information to consumers.

### **1. Scope and timing**

ANEC and BEUC welcome the introduction of mandatory minimum performance requirements for set top boxes. However, as simple set top boxes are an intermediate technology needed to convert digital into analogue broadcast signals, it is of high importance that mandatory ecodesign requirements are implemented as soon as possible. Every delay in the EuP process would result in a large number of simple set top boxes that do not have to fulfill any ecodesign requirements at all. Assuming that the implementing measure will come into force on 1 January 2009 and taking effect one year later, another 23 million set top boxes that are not required to fulfill any ecodesign requirements will be sold to consumers.

We therefore ask for the Commission to introduce ambitious implementation dates, instead of only referring to time spans after the implementing measure has come into force.

### ***Recommendation***

We ask for the implementation of the first set of thresholds already six months after the implementing measure has come into force.

### **2. Thresholds**

We welcome that the proposed thresholds are in line with the ones proposed in Lot 6 on standby and off-mode losses<sup>1</sup>. Indeed, results from product tests carried out by Stiftung Warentest<sup>2</sup> suggest that the currently proposed values will stimulate real efficiency improvements.

However, the way the thresholds for simple set top boxes with additional functions are displayed (Draft Implementing Measure, p. 3, paragraph 3) leaves room for interpretation. For simple set top boxes with standard definition (SD) and high definition (HD), but without additional functions, there are thresholds for both on-mode and standby / off-mode functions, whereas for simple set top boxes with additional features there are only thresholds for the 'on mode'.

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<sup>1</sup> See: Working document on possible ecodesign requirements for standby and off-mode electric power consumption of electrical and electronic household and office equipment. Brussels, 19 September 2007.

<sup>2</sup> test 02/2007, p. 44-45.

### **Recommendations**

We propose to explicitly integrate the standby and off-mode thresholds for simple set top boxes with additional functions into the text of the implementing measure.

The draft implementing measure provides the same thresholds for simple set top boxes with standard definition (SD) as for high definition (HD), if they are equipped with additional functions. We propose that the thresholds for simple set top boxes with additional functions should be different for standard definition (SD) and high definition (HD), following the logic from the preparatory study on extra allowances for integrated hard disks (+7 W) and a second tuner (+1 W).

Although the majority of the currently sold simple set top boxes are merely focused on digital – analogue conversion without any additional functions, recording to a hard disk becomes an increasingly important feature of simple set top boxes and will gain a significant market share before 2012. ANEC and BEUC therefore call for the implementation of thresholds for simple set top boxes (SD) with additional functions already one and a half years after the implementing measure has come into force.

### **3. Automatic power down (ANNEX I)**

It will be of high importance to set requirements for an automatic power down<sup>3</sup> in the implementing measure. Consumers often leave set top boxes on permanently because they just switch off the TV with its remote control, thus wrongly assuming the set top box to then also be in standby or off-mode. In this on-mode situation, most set top boxes consume maximum power and waste consumers' money without delivering any function. However we doubt that an automatic power down after four hours will avoid unnecessary energy losses and high energy costs for consumers in an effective way.

We need a technical solution that will reduce unnecessary energy losses as much as possible while not disturbing consumers by automatically switching off the set top box while watching TV. We understand that most simple set top boxes currently dominating the market cannot detect whether the TV is in on-mode, standby or off-mode and therefore cannot adjust their mode of operation accordingly. However, we consider it as of high importance to deploy alternative standby mechanisms that combine both, effective power saving and high user convenience. Remote controls that turn both the TV and the set top box into passive standby with one click at the same time are a possibility.

### **Recommendations**

We demand that one year after this implementing measure has come into force all simple STBs shall be equipped with a function that switches these devices from on mode into standby simultaneously when the TV is switched to standby. The definition for "automatic power down" and paragraph 1.4 of the draft implementing measure concerning the automatic power down should be changed accordingly.

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<sup>3</sup> Automatic power down means according to the draft implementing measure a function which switches the on mode into standby after a period in the on mode, following the last user interaction and/or programme change.

Moreover, a definition for “Functional performance” should be added to the Working Document in order to bring together the needs for an energy-saving standby function and an acceptable level of user convenience. We therefore propose to include the following paragraph in the implementing measure under “definitions”:

‘Functional performance’ means a condition in which the simple STB performs at least one of its dedicated key functions such as enabling a TV to display digital broadcasting or to record programmes to a hard disk. Updating a digital programme guide, timer functions and the delivering of digital signals to a TV in standby or off-mode are not considered as key functions.”

#### **4. A hard off-switch is needed**

In order to reduce off-mode power consumption, a *real* off-switch (hard off-switch) should be made mandatory. Only with such an off-switch users will really be in the position to control their standby energy consumption and subsequently the amount of money they pay without benefiting from any function. Since such a hard off-switch would increase the products’ costs by only 2-3 Euro, this would clearly be compensated by the reduced electricity costs for standby and off-mode.

#### ***Recommendation***

We ask for the Commission to complement ANNEX I on ecodesign requirements by the following paragraph:

*“One year after this implementing measure has come into force all simple set top boxes shall be equipped with a hard off-switch that is clearly visible and easy to reach.”*

#### **5. Verification procedure (ANNEX II)**

The current draft implementing measure allows to exceed the limit values by 10% in order to be tested as compliant with the rules. While we accept that every electronic device features slightly different efficiency and standby values, we think that a systematic violation of all ecodesign thresholds by 10% should not be accepted. By accepting this deviation simple set top boxes would be allowed to consume 5.5 Watt instead of the 5.0 Watt proposed in Annex I on ecodesign requirements.

#### ***Recommendation***

The respective paragraphs in Annex II of the draft implementing measure should be aligned with the approach already applied in the draft implementing measure for Lot 6 on standby and off-mode losses<sup>4</sup> and to use the following wording:

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<sup>4</sup> See: Page 5 of the “Working document on possible ecodesign requirements for standby and off-mode electric power consumption of electrical and electronic household and office equipment”. Brussels, 19 September 2007.

*“The model shall be considered to comply with the provisions set out in Annex I of this implementing measure if neither of the results for the standby/off mode and on mode is exceeding the limit values set out in Annex I by more than 10%.*

*Otherwise, three more units shall be tested. The model shall be considered to comply with this implementing measure if the average of the results of the latter three tests for standby/off mode and on mode is not exceeding the limit value set out in Annex I.”*

## **6. User information**

The current lack of user information and awareness results in excessive and unintended electricity use. A prominent example thereof is the off-switch issue: In order to reduce the purchasing price, many producers leave out the hard-off switch, a measure that makes the set top box 2-3 Euro cheaper, but creates much higher annual electricity costs.

We regret that the draft implementing measure solely focuses on technical features without setting requirements for user information.

### ***Recommendation***

We ask for labelling simple set top boxes with information on energy consumption in on-mode, standby and off-mode. This user information should be displayed in the manual and at the point of sale in a clearly visible and understandable way. Moreover, the following information obligations should be introduced to the implementing measure:

*“This device uses energy even in standby mode. Use the main power switch to deactivate the device if not in use.” This information should be visible permanently on the device.*

Simple set top boxes should also be labelled with this following information:

*“Do not dispose of with household waste. Please use your municipal collection point for electric and electronic equipment.”*

This information should be given in the official language of the Member State in which the device is sold. The information should be permanently attached to the simple STB in a clearly visible way.

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