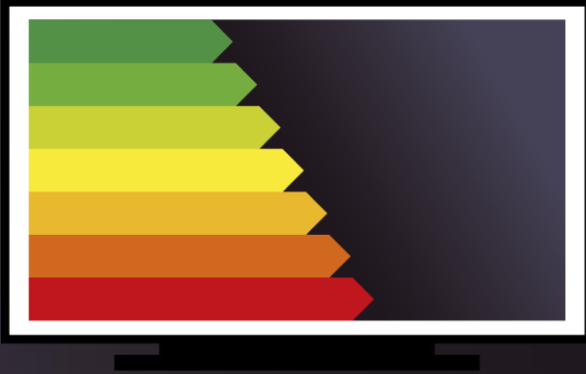


# COMPLIANTV



**Compliance of TVs and Monitors**  
with Energy Label and Ecodesign Requirements

## Evaluation of Physical TV Testing D3.3

Gergana Dimitrova,  
Johanna Emmerich,  
& Tom Lock

September 2015



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# Contents

- Project Aims and Objectives
- Method
- Results
- Commentary
- Dissemination
- Remedy Actions



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# Project Aims and Objectives

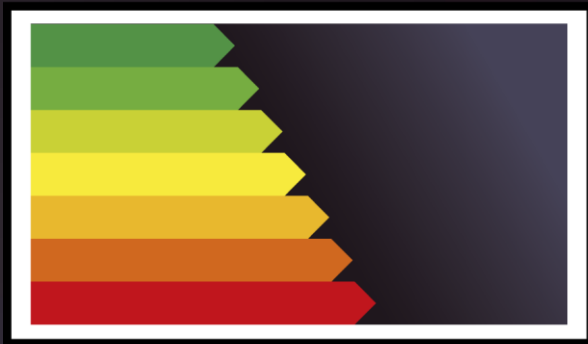
The project aims at providing a fully-fledged and detailed methodological guidance to allow EU Member States and MSAs to face the new legislative and market challenges for TV sets in an effective and cost-efficient way. The project has the objectives of:

- Analysing the implication of the new Energy Labelling and Ecodesign Directive on the market surveillance activities by carrying out ad-hoc surveys
- Assessing the compliance of TV sets in the framework of the new Energy Labelling and Ecodesign regulations, through verification procedures.
- Improving the know-how and testing capability of laboratories with regard to the new and complex measurement method for measuring energy efficiency of TVs.
- Evaluating the outcomes of the product tests carried out and proposing corrective approaches to manufacturers and retailers.



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## Method



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# Method (1/6)

- Objective to test 201 TV units against the technical and information requirements of the EL & ED regs.
- Testing performed by the consortium partners: VDE, ipi and Re/genT
- Measurements made in line with IEC 62087 & EN 50564
- To provide clarity to the market, and to consult on process with the MSAs, it was necessary to set out and declare how the Consortium interpreted specific requirements – Testing Interpretation document



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# Method (2/6)

- A TV market analysis was conducted to prepare a product selection methodology; once finalised, these model lists were published online for all 4 batches
- As part of the selection process, the Consortium distinguished between A and non-A brands. A brands were defined as: LG, Panasonic, Philips, Samsung, Sony, TCL, Thomson and Toshiba
- The testing was divided into 4 batches: the first batch contained 60 units, the second 40, third 62 and the fourth 10 units. The remaining units were allocated for step 2 testing



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# Method (3/6)

- The first batch constituted 57 LCD TVs and 3 plasmas, with a split of 36 A and 24 non-A brands
- The screen sizes of the 60 models were split evenly between 4 size groups: <32", 32", 33-42", >42". These were the most commonly bought TVs between 2012-14, as a consequence models <16" and >55" were excluded.
- The Consortium were keen to take an intelligence led approach to model selection from batch to batch.
- The results of the first batch of testing were used to inform the model selection and targeting approach for batches 2 and 3.



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# Method (4/6)

- There was greater targeting of non-A brand TVs in batches 2 and 3 as they were found to have a higher instance of failures in batch 1.
- The proportion of A-brand to non-A brand TVs evolved:

Batch	Quantity	A brand	Non-A brand	% non-A brand
1	60	36	24	40
2	40	12	28	70
3	62	27	35	56
4	10	2	8	80
TOTAL	172	77	95	55



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# Method (5/6)

- The selection approach for batch 3 also incorporated the following aspects:
  - As a minimum, TVs could not be selected if they were placed on the market before May 2014
  - TV brands not already included in batches 1 & 2 were prioritised
  - Display technologies such as OLED, full/edge LED backlight, multiple tuners, 3D were included
  - Models with high EEC declarations were targeted A++/A+
  - Those models sold in more than one country were prioritised in order to expand the reach and impact of the project



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# Method (6/6)

Brands that failed the technical ecodesign requirements (batch 1-3) and where remedy actions were carried out form the 4<sup>th</sup> batch of models tested by CompliantTV:

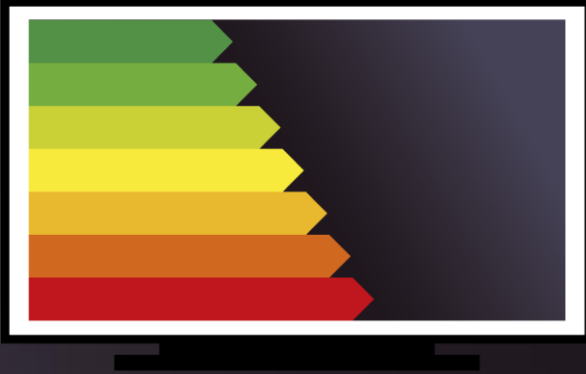
10 TV models:

- 2 A-brands and 8 non-A brands
- 60% of the models are with high efficiency declaration (A+)



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**Compliance of TVs and Monitors**  
with Energy Label and Ecodesign Requirements

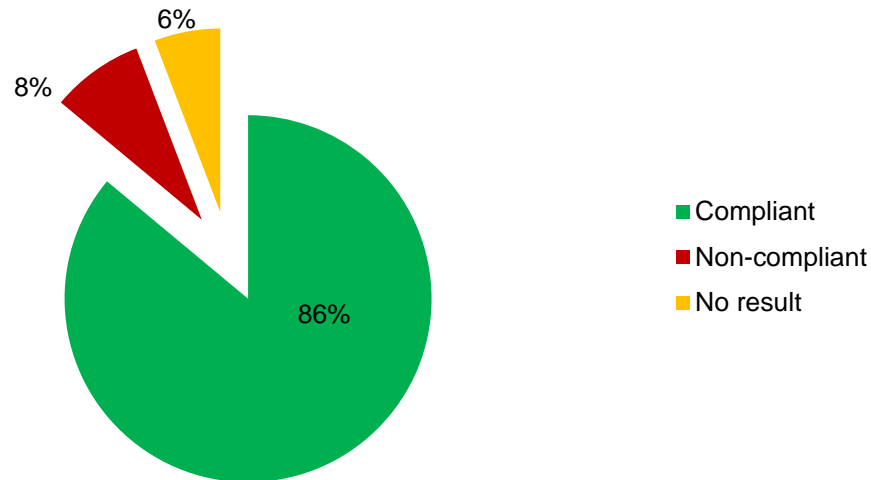
## Results – Technical Requirements



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# Overall – Technical Pass/Fail (%)

## Technical ecodesign requirements Batch 1, 2, 3 & 4

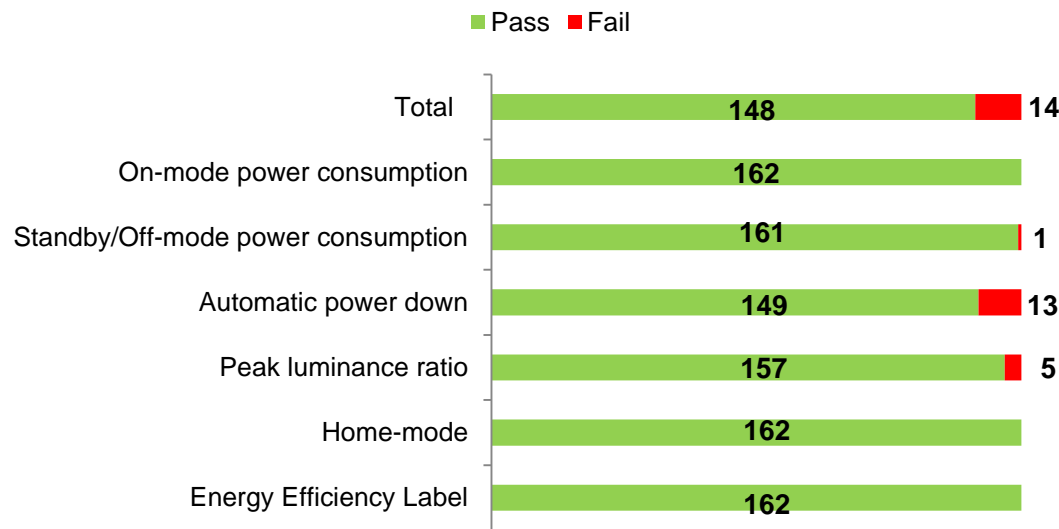


Sample size = 172



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# Classification of Failure Type



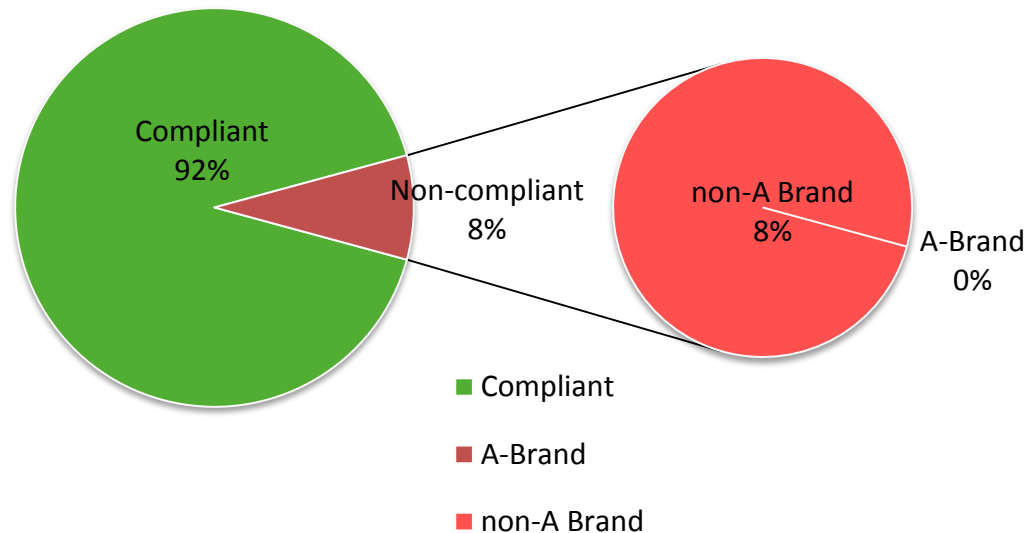
Sample size = 162. There were 10 products which could not be assessed for step 2 testing



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# Failure split by brand classification

## Physical Testing Compliance by Brand

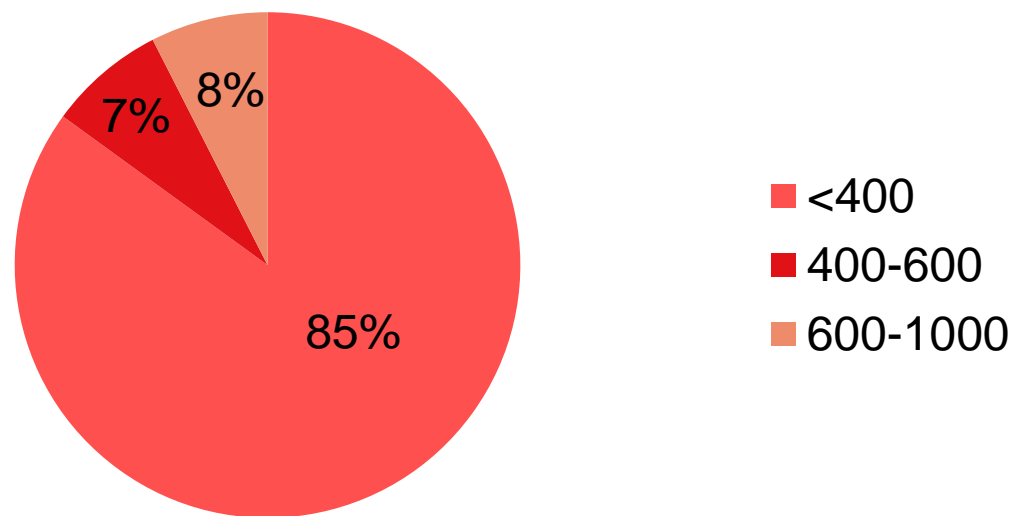


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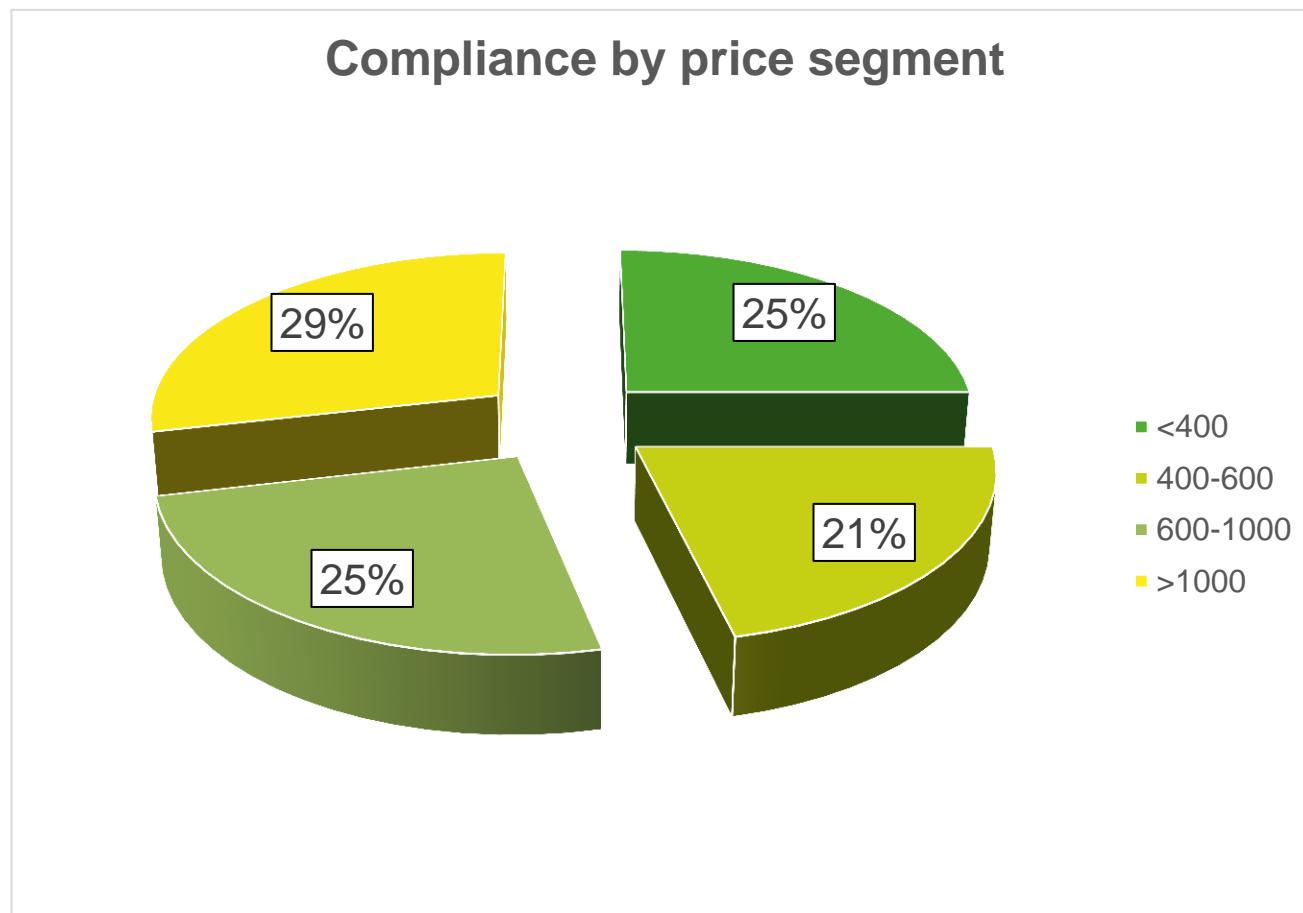
Sample size = 162.

# Failure split by price segment

## Non-compliance by price segment (%)

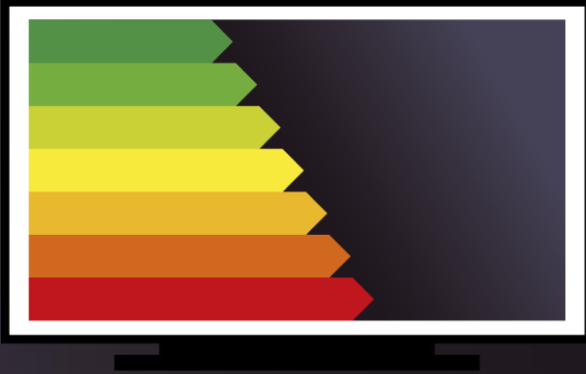


# Compliance split by price segment





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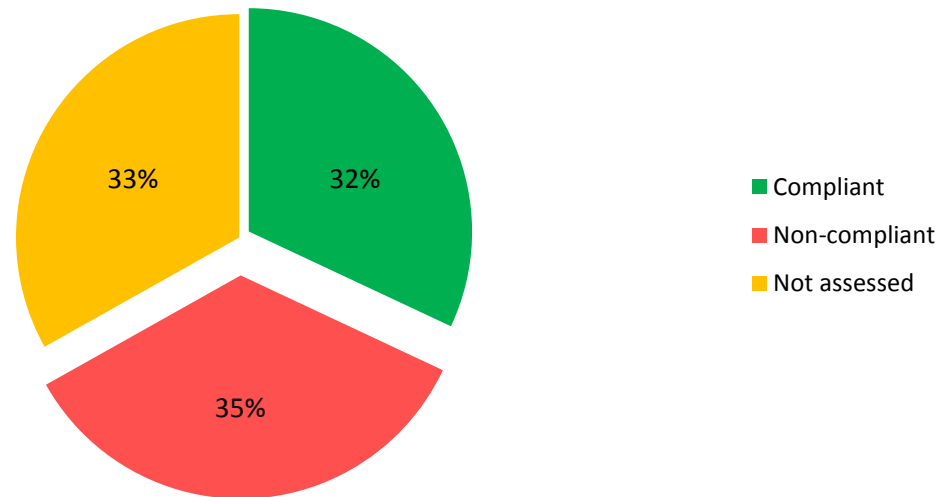
## Results – Information Requirements



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# Overall Pass/Fail (%) – Energy Labelling

## Information requirements: Energy labelling Batch 1, 2, 3 & 4



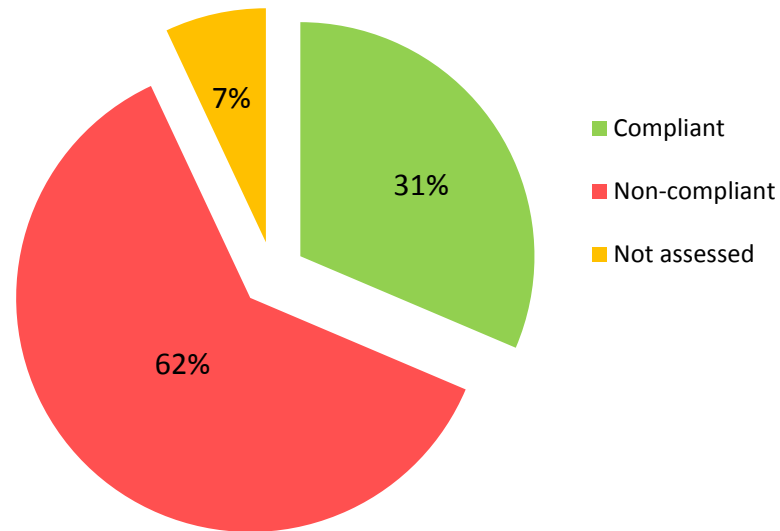
An example of an information requirement under the TV energy labelling regulation would be the need for to have a product fiche available



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# Overall Pass/Fail (%) – Ecodesign

Information requirements: Ecodesign  
Batch 1, 2, 3 & 4



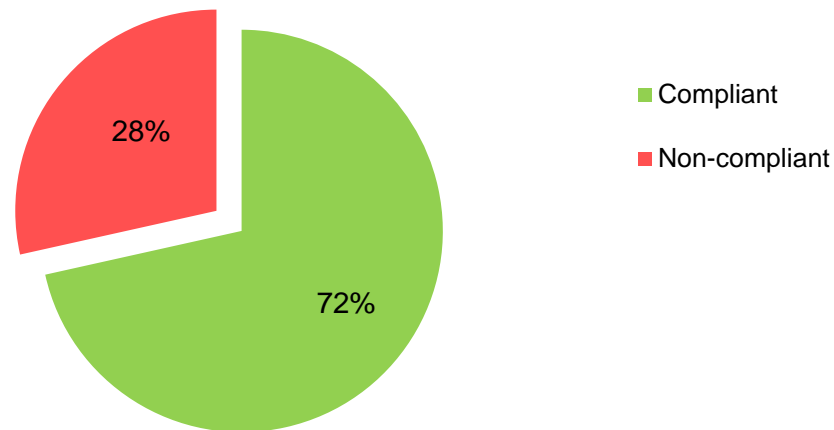
An example of an information requirement under the TV ecodesign regulation would be the publically available information on websites



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# Overall Pass/Fail (%) – Energy Label Format

## Energy label format requirements Batch 1, 2, 3 & 4



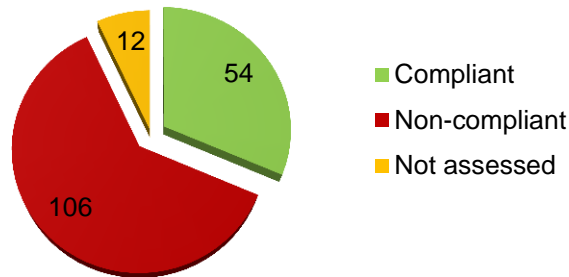
An example of a format failure is the label being produced in an incorrect format e.g. size, shape, colour.



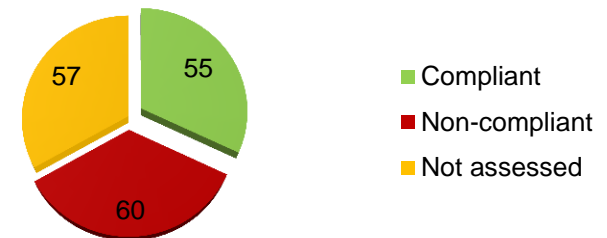
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# Classification of Failure Type

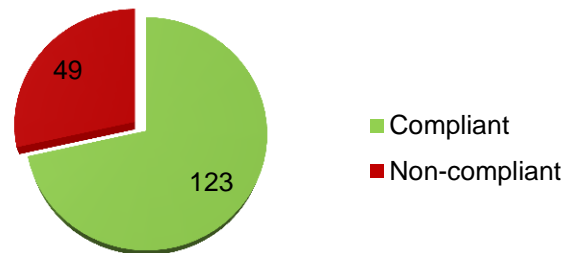
**Publicly available information**  
Batch 1, 2, 3 & 4



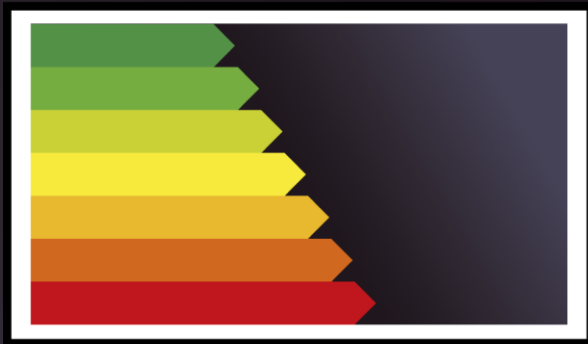
**Product fiche**  
Batch 1, 2,3 & 4



**Energy label format**  
Batch 1, 2, 3 & 4



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## Commentary



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# Step 1: all 172 TVs

32 Suspicious cases

Discussion with manufacturers

10 accept

17 challenge

5 Test results revised

STEP 2

open 1

7 TVs found

9 Not found on market

14 Not compliant

8 compliant

10 No results

10

4

3

5

9

1

# Commentary

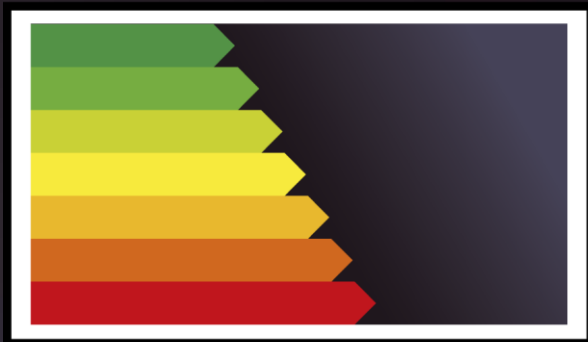
- There were 10 models that failed step 1 testing which could not go forward to step 2;
- In 9 of the 10 cases a further 3 models could not be sourced from the market (despite best endeavours).
- In one case, 3 further units were sourced, but arrived already open (suspected of having been re-sold)
- Of the 7 models that went to step 2 testing, 4 continued to be non-complaint and 3 cases became compliant.
- Nearly a third of the suspicious cases after step 1 testing were accepted by manufacturers, negating the cost for step 2 testing



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## Dissemination



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# Dissemination

- The dissemination of the results is many and varied
- All the MSAs have been written to with the results
- Each National Partner in the project will also either hold or speak at relevant, national events
- Further examples of dissemination are included in the proceeding slides, for example:
  - The database on the project's website  
[www.compliantTV.eu](http://www.compliantTV.eu)
  - On display at the ECEEE Summer Study in June 2015
  - During the project's final event in September



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Compliance of TVs with Energy Label and Ecodesign Requirements

HOME

ABOUT THE PROJECT

PRODUCT TESTING

ENERGY LABEL DISPLAY

MORE ABOUT TV ENERGY CONSUMPTION

PRODUCT DATABASE

NEWS

SEARCH

CONTACT DISCLAIMER

COMPLIANTTV

## Product Database

-- filter by brand name --

-- filter by country --

Search in TV model name

-- filter by efficiency class --

reset all filters

Compliance Status:

✓ — compliant

✗ — non-compliant

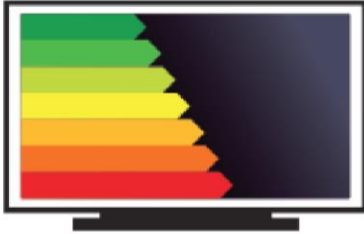
No. ↓	Brand name	Product	Countries where model is/was available on the market	Energy Efficiency Class (declared/measured)		Overall compliance
1	Finlux	32F7020-T	UK	A	A	✓
2	Grundig	22 VLE 8220 BG	DE	B	B	✓
3	Hannspree	AD40UMBB / HSG1241	UK	A	A	✓
4	LG	47LM760S-ZB	ES	A+	A+	✓
5	LG	32LS5600-ZC	UK	A	A	✓
6	Medion	P14090 / MD21168	ES	A	B	✗
7	Odys	Base 24 / X800004	ES	A	A	No result <sup>1</sup>
8	Panasonic	TX-L47E5B	UK	A+	A+	✓
9	Philips	42PDL6907K/12	DE	A+	A+	✓
10	Samsung	UE32F6400AW	ES	B	B	✓



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Compliance of TVs with Energy Label and Ecodesign Requirements

Tested: 162 TVs

Inspected: 100 Physical Shops, twice

Results: 2013 to 2015. For more information visit [www.complianttv.eu](http://www.complianttv.eu)

On-mode Power Consumption

Standby/Off-mode Power Consumption

Home Mode

Energy Efficiency Class

Peak Luminance Ratio

Automatic Power Down

Energy Label Format

Product Fiche

Publicly Available Information

A



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Compliance of TVs with Energy Label and Ecodesign Requirements

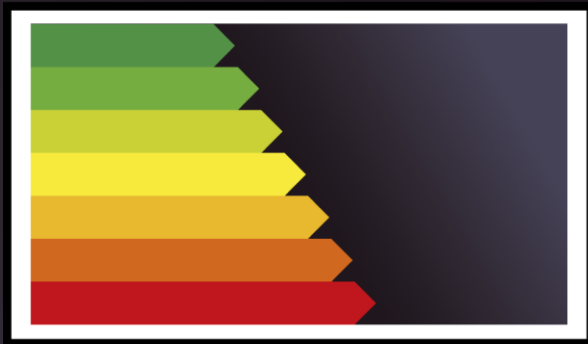
## Final project event

3. September 2015 | Brussels, Rue de la Science, 14 B-1040, DigitalEurope



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## Remedy Actions



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# Remedy Action (1/2)

- All technical and information requirement non-compliances have been followed up with manufacturers and suppliers according to the remedy action procedure
- Remedy actions have either been:
  - Proposed by the manufacturer/supplier, reviewed by the Remedy Action Board, and either accepted or refined and then implemented; or
  - In the case of no response, been forwarded directly for action to the relevant MSA



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# Remedy Action (2/2)

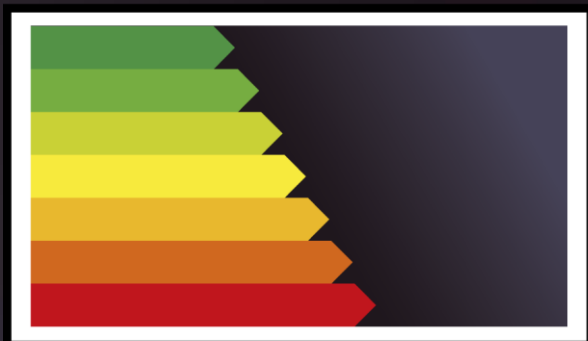
- Remedy actions resulting from technical fails have been subject to inclusion within a batch 4 of testing – in order to verify the correct implementation of the action
- All the results of the remedy action procedure are published on the product database on the CompliantTV website



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with Energy Label and Ecodesign Requirements

Thank you for  
your attention.

Contact and more information:

CompliantTV project

[www.complianttv.eu](http://www.complianttv.eu)

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Tom Lock / Energy Saving Trust

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