



Compliance of TVs with Energy Label and Ecodesign Requirements WP3 In-store Shop Inspections 2nd Round Results & Analysis



Co-funded by the Intelligent Energy Europe Programme of the European Union Stewart Muir and Tom Lock February 2015 Energy Saving Trust

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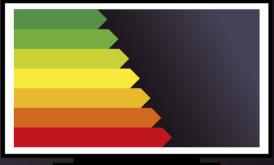
Round 2

- Results
- Commentary and Analysis
- Next Steps





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Compliance of TVs

with Energy Label and Ecodesign Requirements

Recap



Recap of Deliverables

- ComplianTV has performed a second round of shop visits as per **Deliverable 3.1**
- Partners participating: TUB, BIO, EST, SEVEn, AEA
- The 1st round was carried out in late 2013/early 2014
- 100 shops (20 per partner) visited to assess and measure the level of correct Energy Labelling of TVs
- A 2nd round was carried out in late 2014 /early 2015



Round 1; communicating with retailers

- All partners wrote to the retailers visited after round 1
- The communication gave project background, labelling compliance results, recommendations for improvement and details on how results will be used and shared with MSAs
- The project team attempted to get all retailers contacted to respond, comment on the findings and propose actions to improve compliance where necessary
- Most retailers contacted did respond to letters
- Retailers were informed that a second round of visits would take place, after which final results would be communicated to the national MSA







Shop inspection of ASDA under the ComplianTV project

This letter is to inform you of the results of recent shop inspections carried out by the ComplianTV consortium, against the provisions of the EU Energy Labelling Directive.

About ComplianTV

ComplianTV is a project funded by Intelligent Energy Europe, bringing together a consortium of 10 EU partners including Environmental NGOs and consultancies, test laboratories and a trade association. The project wins to support market transformation of televisions towards more energy-efficient products. The project works alongside the EU Energy Labelling (EU No 1062/2010) and Ecodesign Framework Directives (EC No 642/2009) for televisions to ensure that inefficient products are removed from the market, improve performance through competition and guide consumers towards the most efficient products available.

The project aims to contribute to the activities of appointed national Market Surveillance Authorities (MSAs) and an overall increased culture of compliance among retailers and manufacturers. ComplianTV is conducting shop inspections to ensure retailers and manufacturers comply with their responsibilities under these directives, such that expected energy savings through the directives are realised through correct energy labeling and the placing on the market of complianTV, efficient products. The project aims to establish best practice guidelines for retailers and manufacturers and deter 'free riders' who do not meet their responsibilities under the directives. More information about ComplianTV can be found at <u>www.compliantv.eu</u>.

Shop inspection results

Shop inspections were carried out in ASDA by The Energy Saving Trust to assess compliance against the current EU Energy Labelling criteria.

The table below summarises the details of the stores visited:

Name	Address	Date of visit
ASDA Superstore	464 - 504 Old Kent Road, London, SE1 SAG	05/12/2013
ASDA Superstore	Beehive Centre-Coldhams Lane, Cambridge, CB1 3ER	03/12/2013



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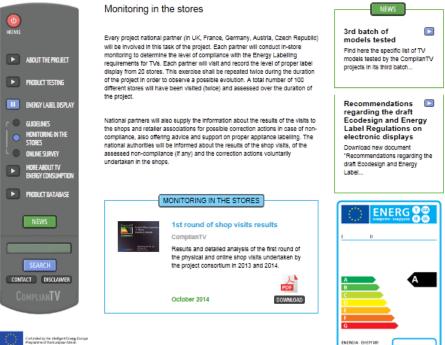
Publishing results and communicating with MSAs



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Round 1 results available at <u>www.compliantv.eu</u>

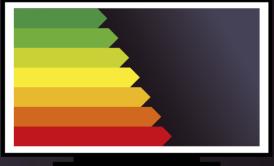
- Individual shops were not named in the report
- National MSAs have been informed of results and proposed corrective actions (round 1 data only is covered in the report shown, right)







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Recap on Methodology



Shop Types

Classifications

- Supermarket
- Department Store
- Electronic Specialist
- Electronic Superstore
- The same shops from round 1 were visited where possible; 86 of the 100 were able to be re-visited
- Some shops had ceased trading since round 1, and were replaced with another of the same type





Selection Criterion

- Shop Selection the strategy for shop selection was decided by partners, but within an agreed framework
- Focus the focus was on small shops or shops with less products in, compared to superstores
- Framework a minimum of 12 of the 20 shops inspected should come from electronic specialists, supermarkets and department stores
- Minimum to qualify, a shop should be selling a minimum of 6 TV units
- Superstores at least 2 superstores should be included in the sample





Shop types inspected by country, both rounds

Country	Total	Department Store	Electronic Specialist	l Sinorma	
Germany	20	3	8	4	5
Austria	20	1	12	6	1
France	20	2	9	5	4
UK	20	3	7	4	6
Czech Republic	20	1	9	7	3
Total	100	10	45	26	19





Shop visits – Reporting & Classification

- All partners wrote up their results from the inspections following a standardised formatted spreadsheet
- Those TVs which were not correctly labelled were classified according to the following:
 - Missing: no label was found
 - Format: label does not fit the colour, size or format required
 - Not visible: label was found but not clearly visible
 - <u>Apply</u>: label does not relate to the TV or model















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Format







Graphical error; hard-off box emptied of the tick

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Format

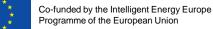


Format error; label must be in colour



Incorrect fonts





Not visible











Shop Inspections

Shop visits – Inspecting Products

- All televisions on display for sale in the shop were included in the inspection. That included:
 - boxed (single and multiple TVs available for purchase) ; and
 - unboxed (usually single display models)
- If multiple boxed TVs were seen with no label present, only one representative boxed model needed to display the label for all identical units of the same model present to be deemed compliant
- Round 1 saw non-compliance measured by both the number of 'units' and 'models' that were not labelled correctly



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Reporting of data 'model' and 'unit' approaches – a recap



Compliance rate of boxed TVs

The 'model' and 'unit' approach

• For round 2, ComplianTV again measured both the 'unit' and 'model' approach for assessing compliance

To define terms:

- 'Model' counting TVs by each unique serial number
- 'Unit' counting all TVs present in the store; ie there are often multiple units of the same model



5 units of 1 model



Compliance rate of boxed TVs

The 'model' and 'unit' approach – legal position

The 'unit' approach is referenced in the TV delegated regulation (below) and ٠ used by MSAs – stating that each TV must bear the label

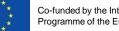
Article 4

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;

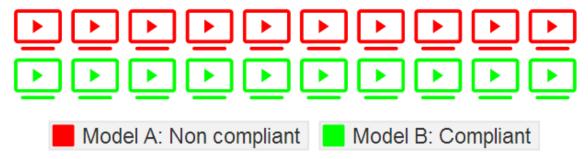




Two approaches, different compliance rates

Example:

Shop selling 10 boxed units of TV model A (all non-compliant) and B (all compliant)



'Unit' approach (round 1):

- 10 correctly labelled TVs of same model = 1 compliance
- 10 incorrectly labelled TVs of same model = 10 non compliances
- Compliance rate = 1/11 = 9%

'Model' approach (rounds 1 & 2):

- 10 correctly labelled TVs of same model = 1 compliance
- 10 incorrectly labelled TVs of same model = 1 non compliance
- Compliance rate = 1/2 = 50%



Compliance of boxed TVs

- Boxed TVs are often sold in multiple units if these are not labelled this can result in high figures for noncompliance if the 'unit' approach is used, compared to the 'model' approach – this was seen in some electronic superstores in round 1
- However the non-compliance of a large number of units can easily be rectified – either by the manufacturer changing the printing on the box to include the energy label, or the retailer using a representative labelled display model to provide the information for the boxed TVs
- MSAs recognise that a representative, labelled unboxed model with multiple unlabelled boxed models results in these boxed models being considered compliant (right)



 Due to the potential for a store's compliance rate to be negatively skewed by a large number of non-compliant boxed TVs, ComplianTV will make comparisons between the two rounds based on the model level calculation

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Methodology used in rounds 1 and 2

Unit

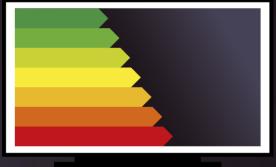
- Round 1: All non-compliant units were counted. Compliant TVs were counted at the model level
- Round 2: After round 1 it was deemed beneficial to also count compliant TVs at the unit level
- The two rounds are not compared at the unit level due to the slight change in methodology; but the round 2 unit comparison is considered to give a more accurate picture of the store's compliance rate than the round 1 unit comparison

Model

- Compliant and non-compliant models were counted in both rounds to allow comparison
- For 24 stores in round 2, the number of compliant boxed models was not recorded, only the units this has been estimated for overall compliance figures
- Analysis of all other data held showed that on average a store has 3.6 units per model (estimated from data for 2819 boxed units in rounds 1 and 2)



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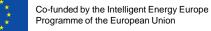
Round 1 recap



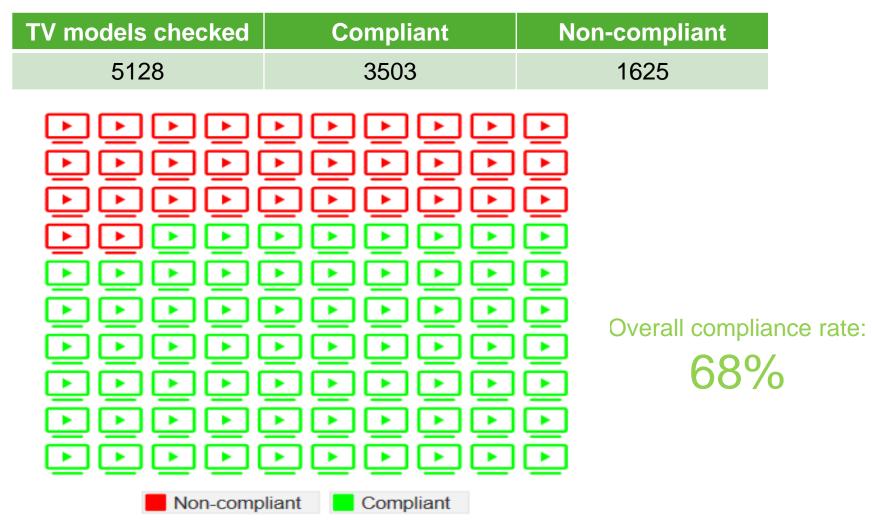
Round 1 - all TVs (by unit)

TVs checked	Compliant	Non-compliant
5890	3503	2387
	 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	 Overall compliance rate 59%



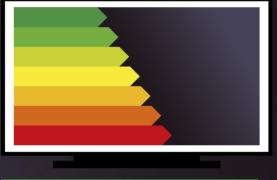


Round 1 - all TVs (by model)





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Top level findings from round 2 (by model)



Round 2

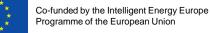
- Both the overall compliance, and that of individual shops was able to be assessed
- An overall increase in compliance was seen
- All comparisons of compliance rates between rounds 1 and 2 are shown using the 'model' approach
- All data for the identity of non-compliant TVs at unit and model level is held. Data on the number of compliant TV models for 24 shops is estimated from the number of units recorded (see slide 22) to give an estimate for these stores and overall compliance figures



Round 2 - all TVs

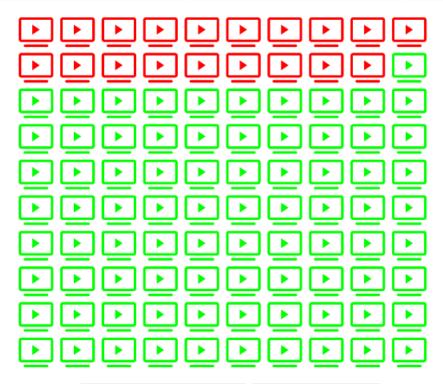
TVs checked	Compliant	Non-compliant
5398	4223	1175
		Overall compliance rate: 78%
		Round 1 compliance by model: 68%
		ncrease = 10
Non-compliant	Compliant	percentage points





Comparison from the 86 stores inspected in both rounds

Round	TVs checked	Compliant	Non-compliant
1	4825	3354	1471
2	4938	4020	918



Overall compliance rate, round 2: 81%

Round 1 compliance across these 86 stores: 70%

Increase = 11percentage points



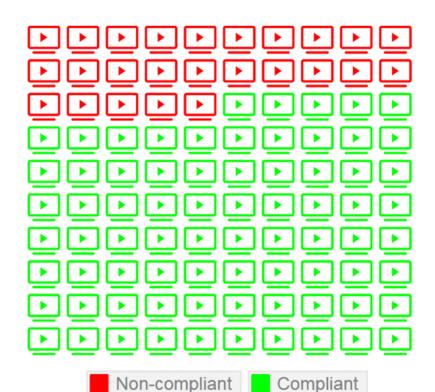




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Comparison from the 64 stores inspected in both rounds where no data was estimated

Round	TVs checked	Compliant	Non-compliant
1	2998	1885	1113
2	2910	2174	736



Round 2 overall compliance rate:

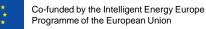
75%

Round 1 overall compliance rate across these 64 stores:

63%

Increase = 12 percentage points

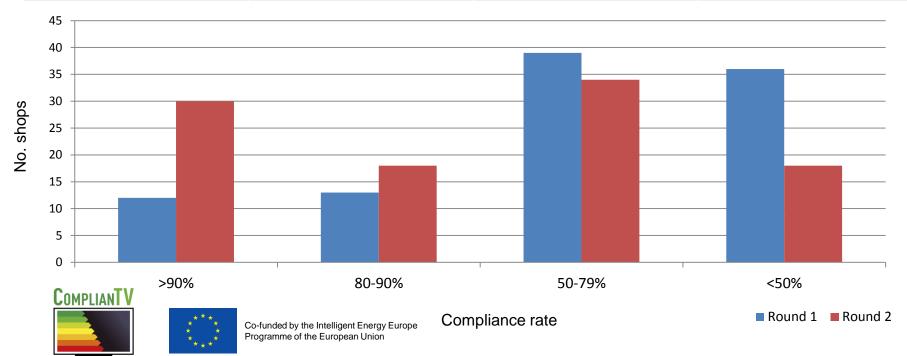




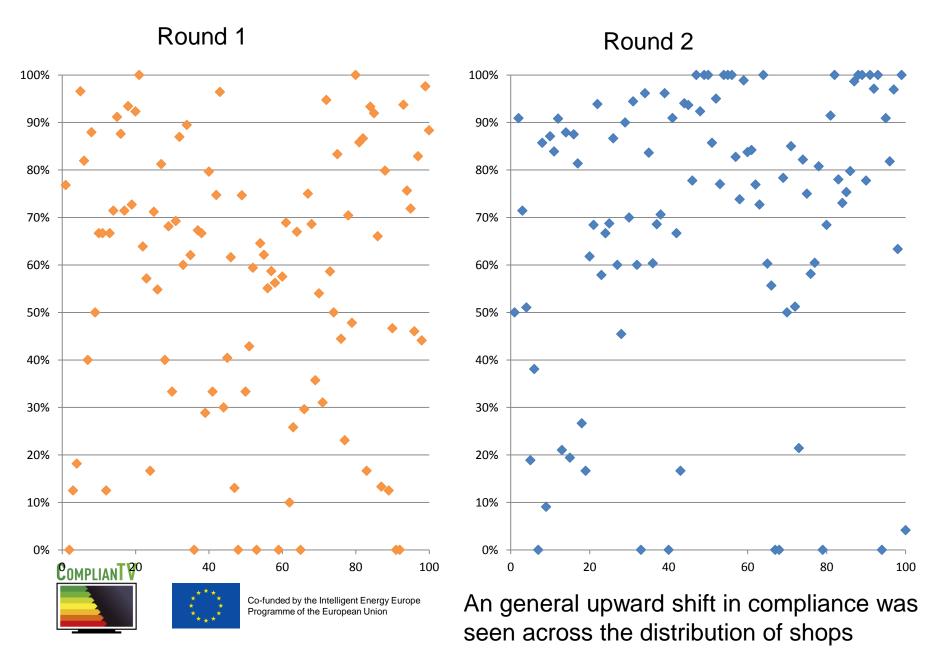
Compliance by individual shop

- Compliance levels have increased since round 1!
- Only 25 of the 100 shops visited in round 1 scored over 80% compliance this increased to 48 in round 2

Compliance level	No. shops (round 1)	No. shops (round 2)	Change
>90%	12	30	个18
80-90%	13	18	个5
50-79%	39	34	√5
<50%	36	18	√18



Compliance rates for all shops

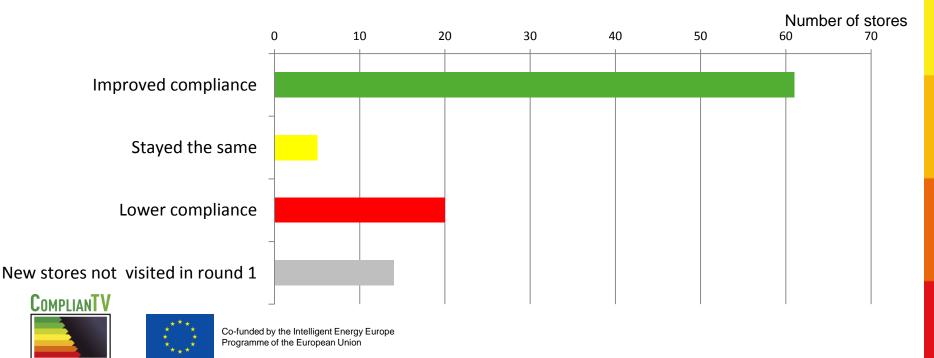


Re-visiting shops from round 1

The project team were able to re-visit 86 of the 100 stores from round 1 to assess the effectiveness of the project's communications.

Results for these shops were as follows:

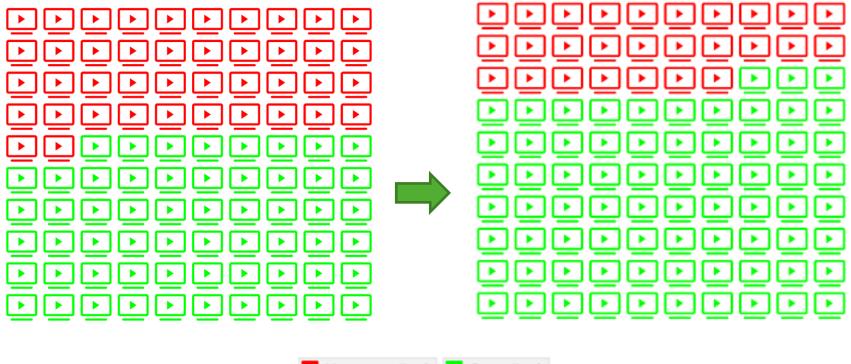
Result	Number of shops
Improved compliance	61
Stayed the same	5
Lower compliance	20
New stores not visited in round 1	14



Effect of action - comparison of the 86 re-visited shops

Round	Mean compliance level		
1	58%		
2	73%		
Increase	15 percentage points		

The average shop compliance level over those re-visited was found to increase



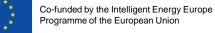
Round 1

Non-compliant

Compliant

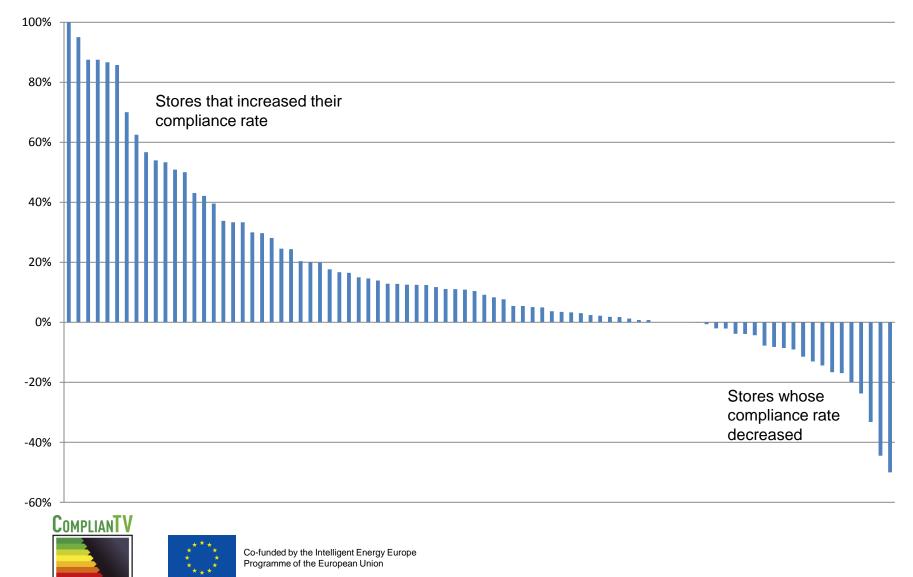
Round 2





Distribution of change in compliance between rounds 1 and 2 (all 86 shops revisited)

Change in compliance (percentage points)



Individual stores – best examples

Round 2 top store in each country for all TV labelling (min. 20 TV models checked)

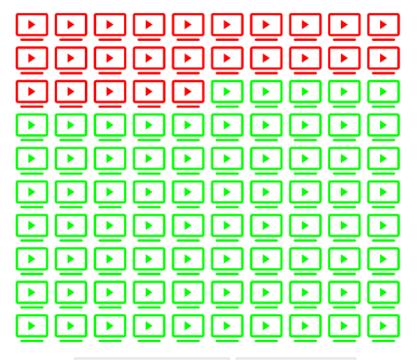
Country	Туре	No. models checked	Compliance rate	
Czech Republic	Electronic specialist	51	100%	
UK	Department store	76	91%	
Germany	Electronic superstore	221	99%	
Austria	Electronic superstore	52	96%	
France	Electronic specialist	38	84%	

Store with highest improvement in each country from round 1 (min. 20 TV models checked, both rounds)

Country	Туре	Round 1		Round 2		Increase (% points)
		No. TVs checked	compliance	No. TVs checked	compliance	(% points)
Czech Rep	Electronic Specialist	45	13%	51	100%	87%
UK	Electronic Specialist	23	48%	22	91%	43%
Germany	Electronic superstore	138	77%	292	91%	15%
Austria	Electronic Specialist	36	64%	49	94%	30%
France	Electronic specialist	33	33%	38	84%	51%

For information only: Round 2 - all TVs by unit

TVs checked	Compliant	Non-compliant
6834	5125	1709



Non-compliant Compliant

Overall compliance rate by unit: 75%

Comparison not made with round 1 (59%) compliant) as calculation uses slightly different methodology (compliant units not counted in round 1).

The 'unit' methodology from round 2 is used by MSAs.





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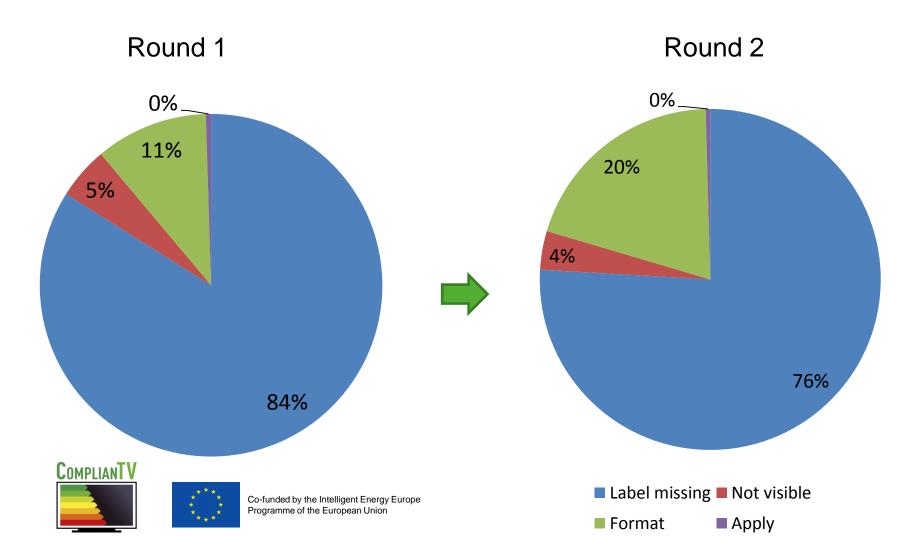
with Energy Label and Ecodesign Requirements

Detailed results and comparisons – by model

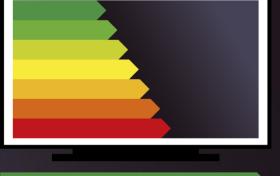


Breakdown of failure types

Proportionately, missing labels went down in round 2 and format errors went up (as a percentage of all non-compliance)



ComplianTV



Compliance of TVs

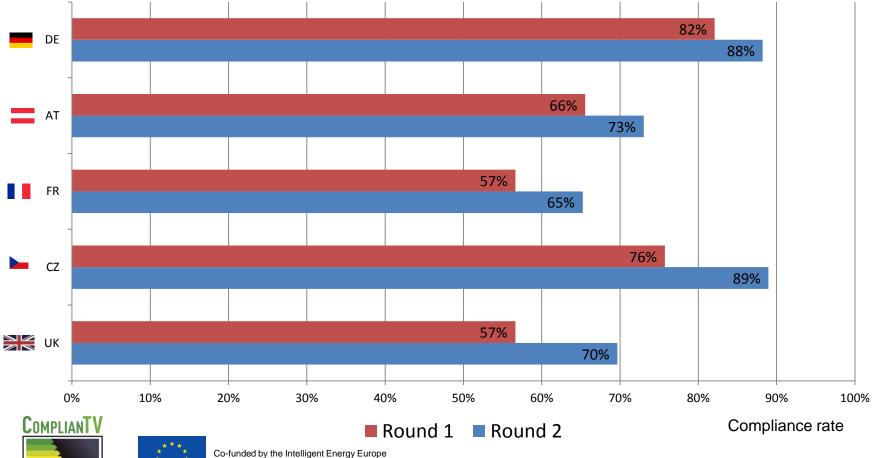
with Energy Label and Ecodesign Requirements

Country comparisons (by model)



Compliance rate by country

- Overall compliance in all nations was seen to increase
- The Czech Republic was top with 89% of all TV models compliant, with Germany in second place
- The UK and Czech Republic saw the largest increase in compliance from round 1



Programme of the European Union



Compliance of TVs

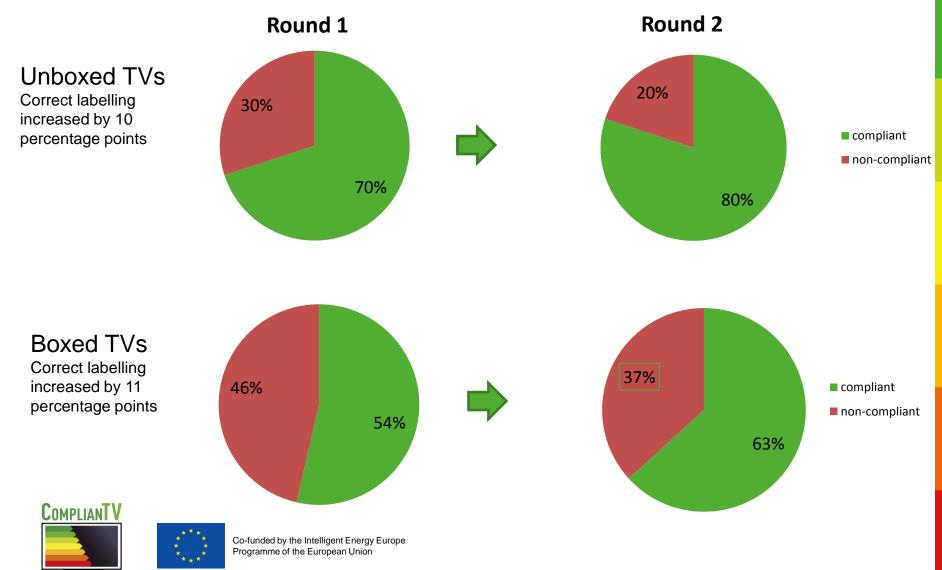
with Energy Label and Ecodesign Requirements

Boxed vs Unboxed TVs (by model)



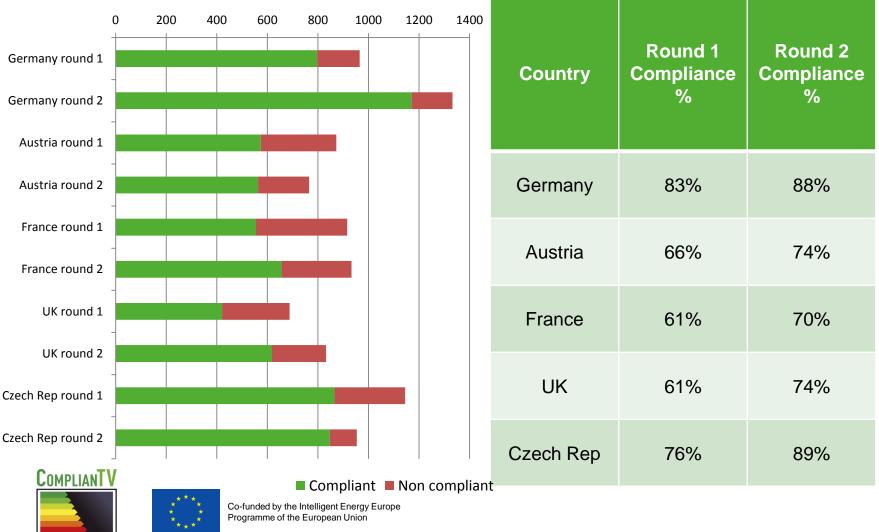
Boxed vs Unboxed, all TVs

 Between rounds 1 and 2 the percentage of compliant TVs was seen to increase for both boxed and unboxed TVs



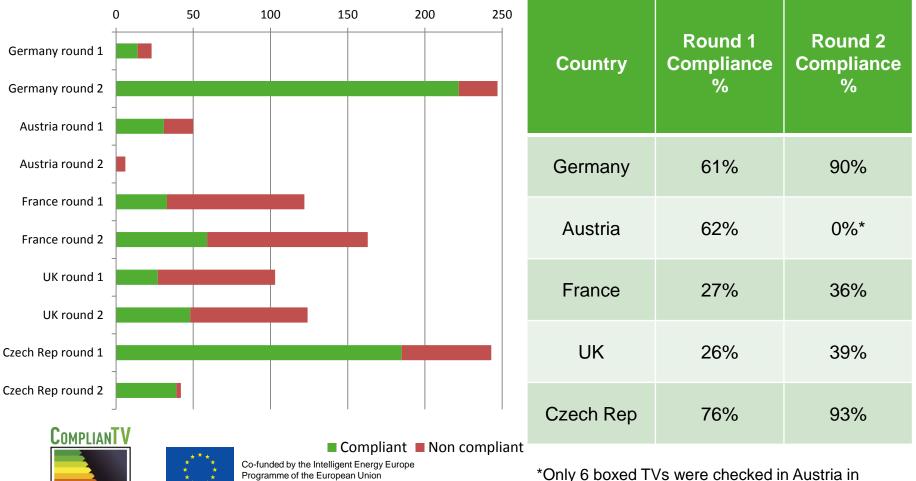
Unboxed TVs by country

- Compliance rates varied between boxed and unboxed TVs in each country.
- This changed as follows between rounds 1 and 2 for unboxed TVs with improvement seen in each country



Boxed TVs by country

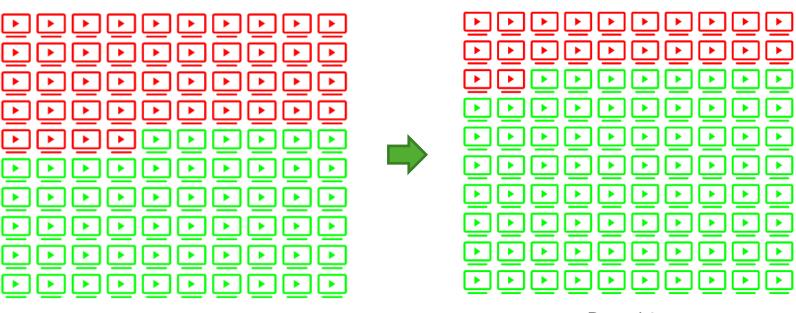
- In percentage terms, 4 of the 5 countries improved at labelling boxed TVs in round 2. Austria's decrease was mainly due to fact only one store checked had boxed TVs (and only 6 were present)
- Unlabelled boxed TVs appeared to more of a problem in the UK and France
- Experience in the UK anecdotally showed several retailers with large amounts of boxed TVs were unaware of labelling regulations for boxed TVs



round 2, all of which were non-compliant

Unboxed TV labelling, individual shops

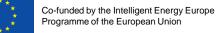
- Labelling of unboxed TVs is a good measure of the level of engagement of the retailer and the effectiveness of their procedures
- For labelling unboxed TVs, the average compliance rate for a store in round 1 was 56%
- This increased to 71% in round 2

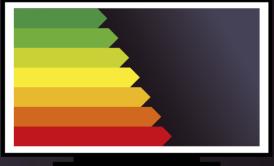


Round 2









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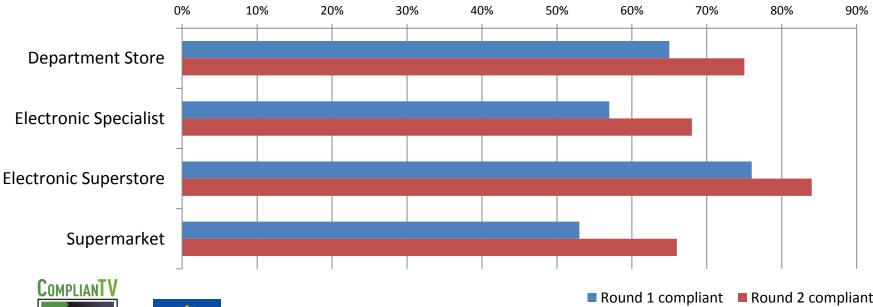
Shop type (by model)



Shop types; overall comparison with round 1

Shop Type	Round 1	Round 2	Increase
	% compliant	% compliant	(precentage points)
Department Store	65%	75%	10%
Electronic Specialist	57%	68%	11%
Electronic Superstore	76%	84%	8%
Supermarket	53%	66%	13%

Each category of shop increased their compliance in round 2, with supermarkets making ٠ the largest improvement





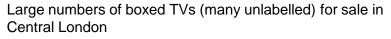
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Round 1 compliant Round 2 compliant

Shop types; comparison with round 1

- How does this change in compliance by shop type break down between boxed and unboxed TVs?
- Labelling of unboxed TVs is almost always the responsibility of the retailer. An improvement in this may suggest an increase in engagement from the retailer
- Labelling of boxed TVs can be carried out by both retailer and manufacturer. While the retailer has ultimate responsibility to display the label, the manufacturer can make the process easier by printing the label on the box.
- Increases in the compliance rate of boxed TVs therefore could be due to either party.
- On the whole an improvement was made in labelling boxed TVs, (except in in Austria where only 6 were checked in round 2)







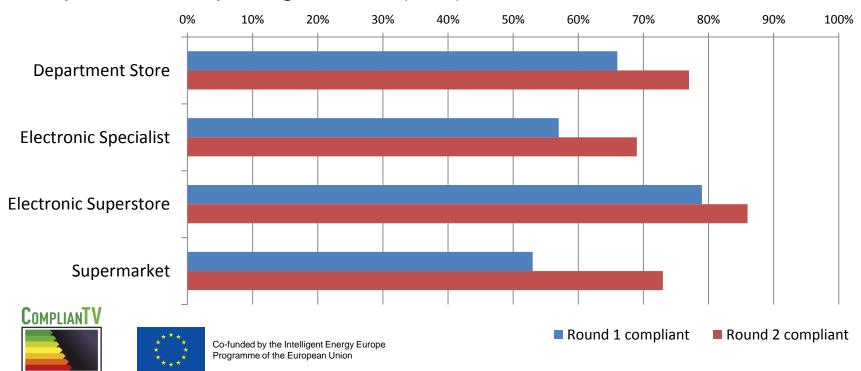


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Unboxed TV compliance by shop type

Shop Type	Round 1	Round 2	Increase
	% compliant	% compliant	(percentage points)
Department Store	66%	77%	11%
Electronic Specialist	57%	69%	12%
Electronic Superstore	79%	86%	7%
Supermarket	53%	73%	20%

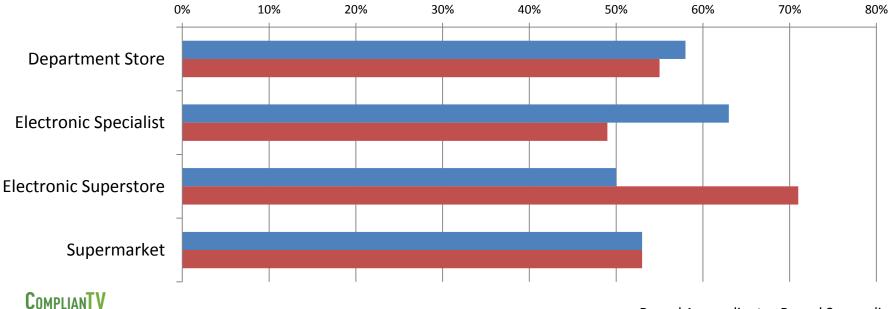
• All shops types experienced a percentage increase in round 2, with supermarkets improving the most (20%)



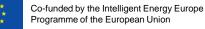
Boxed TV compliance by shop type

Shop Type	Round 1	Round 2	Increase
	% compliant	% compliant	(percentage points)
Department Store	58%	55%	-3%
Electronic Specialist	63%	49%	-14%
Electronic Superstore	50%	71%	21%
Supermarket	53%	53%	0%

 On the model level, electronic superstores were seen to improve significantly since round 1. Multiple units of boxed TVs are more common in electronic superstores than the other types. 'Unit' level compliance in electronic superstores in round 2 was 63%.







Round 1 compliant Round 2 compliant



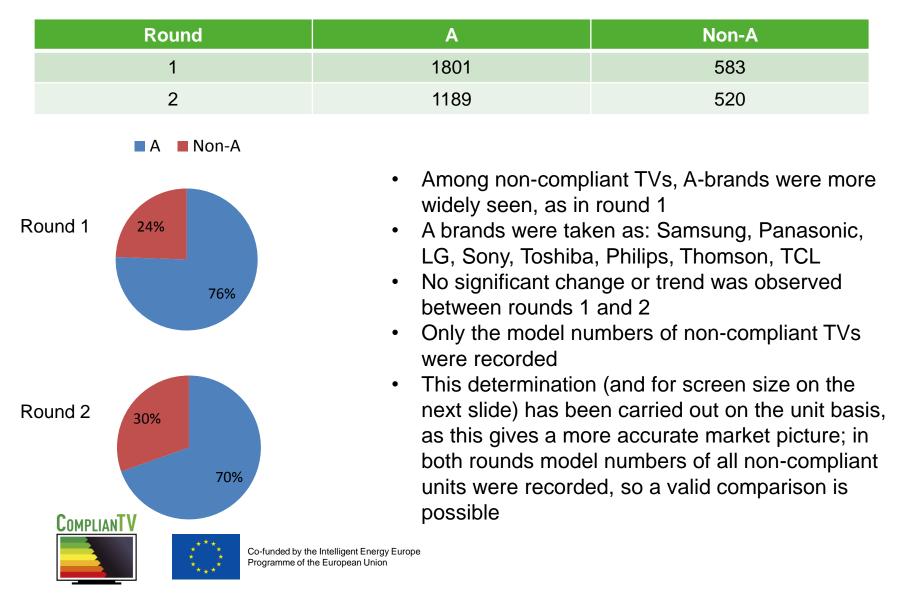
Compliance of TVs

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Brand and screen size analysis – by unit

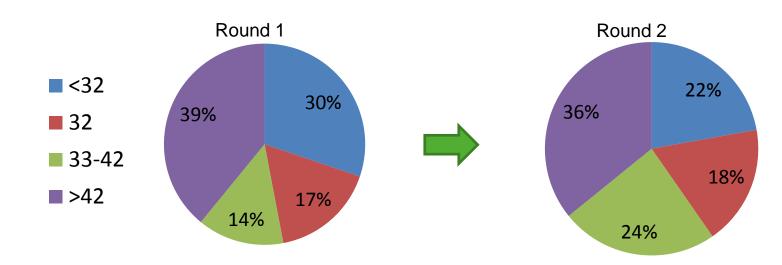


Split of non-compliance by brand type (A brand, non-A brand)



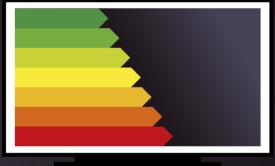
By screen size

Screen size (inches)	Amazon Sales market share (Q2, 2013)	EU-24 market share by screen size (Michel et al, 2013)	Round 1	Round 2
<32	32%	30%	470 (30%)	362 (22%)
32	23%	29%	261 (17%)	292 (18%)
33-42	28%	28%	216 (14%)	383 (24%)
>42	17%	13%	607 (39%)	576 (36%)





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Compliance of TVs

with Energy Label and Ecodesign Requirements

Commentary and Analysis



Key findings: Shop Types

- In round 2, electronic superstores again came out on top for labeling of all TVs at 84%. Supermarkets and electronic specialists were lowest at 66% and 68% respectively.
- An overall improvement was seen in all shop types at the model level. The gap between highest and lowest remained around the same since round 1, when the difference was 23% (22% in round 2).
- Electronic superstores were again best at ensuring unboxed TVs were labelled (86% compliant 79% in round 1). Supermarkets saw the biggest improvement in this area (20%).
- The worst labeller of boxed TVs in round 1, electronic superstores improved well in this area in round 2, moving from 50% to 71% compliance (model level). Department stores saw a small decrease in this area (58% to 55%). Anecdotally, some good practice was seen in this area, where the common problem is large multiples of the same boxed TV on sale with no energy label. Instances were seen where boxed models were displayed with a labelled unboxed model, resulting in compliance. In addition, some manufacturers were seen to have printed the label on boxes in round 2, when this was not seen in round 1. However, overall boxed compliance remains much lower than unboxed compliance (63% vs 80%)
- The problem of large amounts of unlabeled boxed TVs in superstores is reduced, but still prevalent. In round 2, 6 of the 26 electronic superstores had over 10 boxed units unlabeled. In round 1, this occurred in 8 of the 26 stores sampled

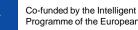




Key findings: Shop Types – recommendations for improvement

- **Electronic superstores** labelling of unboxed models now at 86%. A large improvement with • boxed labelling was seen, but issues remain with large numbers of boxed TVs not displaying the label
- Electronic specialists labelling of unboxed TVs now at 69% (up from 57%). An improvement ٠ since round 1, but still many unboxed TVs are not displaying the label. Boxed TV compliance saw a decrease of 14%, but this was from a relatively small sample (80 sampled in round 1, 35 in round 2). Anecdotally, smaller shops did not appear as aware of the regulations or engaged on labelling as superstores.
- **Department stores** A good improvement seen in the labelling of unboxed TVs (77% up from • 66%), and some positive responses from round 1 communications. Still some issues with boxed TVs, with round 2 compliance lower than round 1 and still only slightly above 1 in 2 (round 1: 58%, round 2: 55%).
- **Supermarkets** overall, supermarkets improved labelling the most (13%). Unboxed labelling • improved from 53% to 73%. Boxed labelling stayed the same at 53%. However, due to the relatively high number of boxed TVs usually present (176 across 19 stores checked), improvement can be made on this rate of 1 of every 2 non-compliant at the model level.
- Again in round 2, it was seen that department stores, electronic superstores and ٠ supermarkets could make quick, significant improvements by rectifying the issue of missing labels on multiple numbers of boxed TVs





Key findings: Failure Classification

- Again the most common cause of non-compliance was a missing label; this was the reason for 76% of non-compliances in round 2
- In round 2, 'format' errors were seen to increase as an overall percentage of all non-compliance, going from 10% to 20% (possibly due to the decrease in missing labels seen)
- Some stores have responded to communication about this, pledging to rectify the error. However it may take time to see an improvement in this area, as models with this error are still in the supply chain

Boxed vs unboxed

- Increases seen in compliance between rounds 1 and 2 were similar in percentage points terms for boxed (11%) and unboxed TVs (10%). In terms of actual TVs, this equated to a further 78 boxed and 642 unboxed compliant TVs in round 2.
- However, there remains scope for improvement in boxed TV labelling

ComplianTV

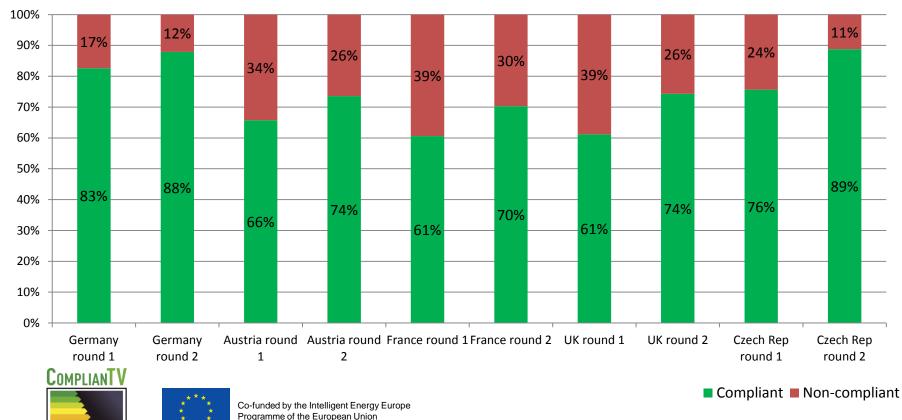






Key findings: by country

- An interesting comparison made in round 1 assessed retailers' engagement on labelling is the compliance rate of **unboxed** TVs by country.
- In round 1, shops in Germany saw the highest levels of correctly labelled unboxed models (83%), with shops in France lowest (60%). In round 2, the Czech Republic had the highest at 89%, with France again lowest at 70%.
- Overall however, findings from round 2 suggest retailer engagement has increased.



Other key findings:

No strong trends were observed in either round from the analysis of compliance rate by screen size. But the data collected does provide interesting market insights.

- Screen size data is only held for non-compliant TVs from shop visits, but this should be representative of the general distribution of TVs on the market.
- The split of TVs smaller than 32" decreased by 8%
- An increase of 10% was seen in the number between 33" and 42"
- The proportion of very large TVs (>42") and the popular 32" size stayed about the same

Screen size (inches)	Amazon Sales market share (Q2, 2013)	EU-24 market share by screen size (Michel et al, 2013)	Round 1	Round 2
<32	32%	30%	470 (30%)	362 (22%)
32	23%	29%	261 (17%)	292 (18%)
33-42	28%	28%	216 (14%)	383 (24%)
>42	17%	13%	607 (39%)	576 (36%)





Key findings: by country

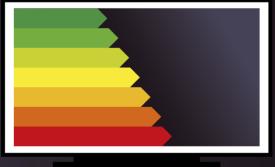
- All countries improved their overall compliance rate
- The Czech Republic had the highest overall compliance in round 2, with Germany second. Each country did however inspect a different split of shop types.
- Partners from France and UK inspected electronic superstores in both rounds with problems labelling boxed TVs, which contributed to lower overall compliance rates in those countries. This did see an improvement in round 2 from round 1, but was still significant. France did see an increase in round 2 from 27% to 36% in boxed TV labelling and the UK went from 26% to 39%.
- However, this was much less of a problem in the Czech Republic in round 2 than in round 1, who saw an improvement in boxed TV labelling from 76% to 93%
- The German national partner also inspected large amounts of boxed TVs in electronic superstores in round 2 (many fewer were checked in round 1) - boxed TV compliance was seen to be high in round 2, at 90%.

Overall

• TV energy labelling compliance has improved in round 2. The project's communications with retailers appear to have been effective and contributed to this. Of re-visited stores, only 5 retailers showed a decrease in compliance of 20 percentage points or more, whereas 27 improved by 20 percentage points or more.







Compliance of TVs

with Energy Label and Ecodesign Requirements

Outputs & Next Steps



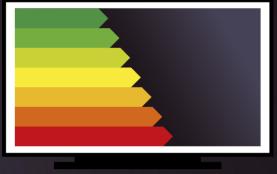
Communicating the results – round 2

Procedure:

- Outputs of the Shop Inspections to be provided to shops and retail associations, issuing any corrective actions, and providing advice
- Inform the MSA of the outputs / actions agreed to be undertaken by the shop in case of non-compliance.
- If non-compliance persists, recommended MSA formally inspects
- A template letter will be issued for partners to use
- A tracking tool will be implemented to log discussions, actions and resolutions







Compliance of TVs

with Energy Label and Ecodesign Requirements

Thank you for your attention.

Contact and more information:

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