



European
Commission



Electronic Displays:

*Ecodesign requirements
review*

**Consultation Forum
6 July 2017**

European Commission
Directorate General Energy
Energy Efficiency

Outline

- Feedback portal mechanism and WTO notification:
SUMMARY
- Proposed adjustments:
 - Timing
 - Scope
 - On-mode (seen for labelling)
 - Stand-by
 - Dismantling/disassembling (and plastic marking)
 - Information requirements

Feedback portal/WTO comments

- **16 comments from the Feedback portal**
- **5 comments via WTO: Korea, Japan, USA (3)**
- General: concerns on the scope (displays integrated), on the dismantling requirement (reference to glue)
- Display industry: EEI ambition, 0.3W for standby, ...

Scope: rationale

- For EE requirements the rationale was avoiding loopholes, with same/similar displays marketed under different categories.
- Clarifications requested on exclusions (e.g. vehicles, products exempted from WEEE, industrial equipment, etc), LED tiles...
- For EoL requirements, the rationale was that everything becoming WEEE should be treated according to the same rules.
- Displays integrated into other products: the rationale was "one single set of rules on displays" to avoid different requirements depending on where the (possibly) same display is integrated (e.g. the display in a computer monitor compared to that in an integrated desktop or the display in a professional refrigerator compared to that in a domestic refrigerator or in a washing machine or dishwasher).

Laundry washer



Dishwasher



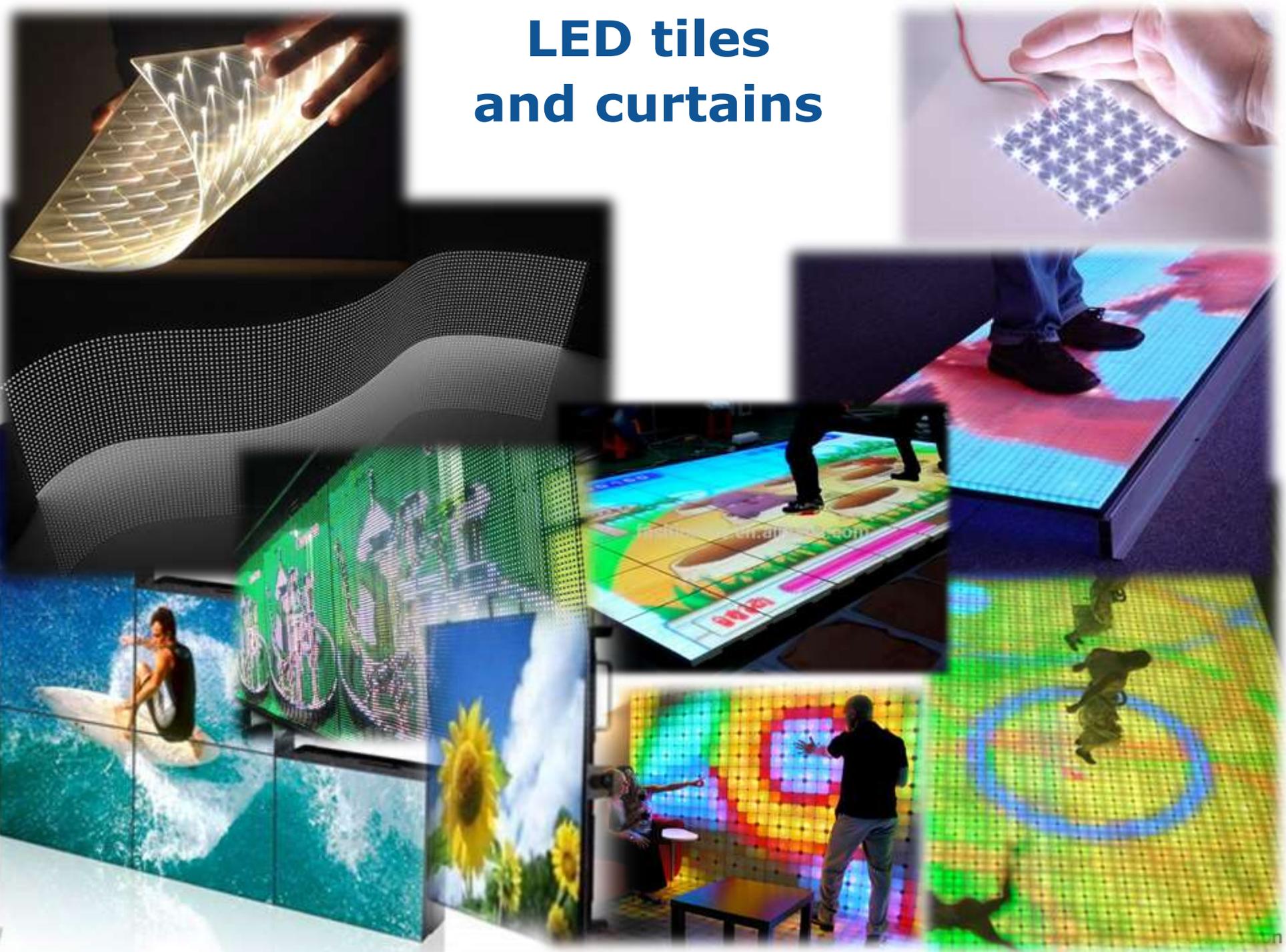
Computer monitor



Integrated desktop



LED tiles and curtains



Timing

- **TIER 1: beginning 2020**
(12 months after entry into force, aligned with labelling)
- **TIER 2: 1 January 2022**
- **TIER 3: 1 January 2024**

Proposed changes ⇒

Proposed SCOPE

- **TVs and computer displays:** fully into scope
- **Professional displays** such as enhanced performance, broadcast, security): a (specific) *standby* + *EoL*, no *on-mode* requirements
- **Signage and similar:** a (specific) *standby* + *EoL* and future amendment/review on *on-mode* requirements
- Displays **integrated** into something (in the scope of WEEE) or "to be" integrated into: out of scope here but vertical regulation would set the same requirements, if any, covered by Ecodesign (such as computers, fridges, washing machines, dishwashers, ...)
- Completely out:
 - All that are out of scope from WEEE (Annex VII $\leq 100\text{cm}^2$, displays "for" vehicles, spaceships, etc.)
 - Covered by other legislation (e.g. Medical products)
 - For industrial use (separated or to be integrated into)

STAND-BY

Televisions and computer displays

- OFF MODE: **0.25W**
- STAND-BY: **0.5W** (including wake-up from non-network ports)
- NETWORK STANDBY: **2.0W** (but to be explicitly enabled)
- Allowances for status display, etc. (touch displays? fast start?)

Professional displays (broadcast, security, etc.)

- Specific allowances/wording (e.g. in respect to switching into use modes other than on)

Signage and other products

- Now under horizontal standby, to be included here

Disassembling/Dismantling

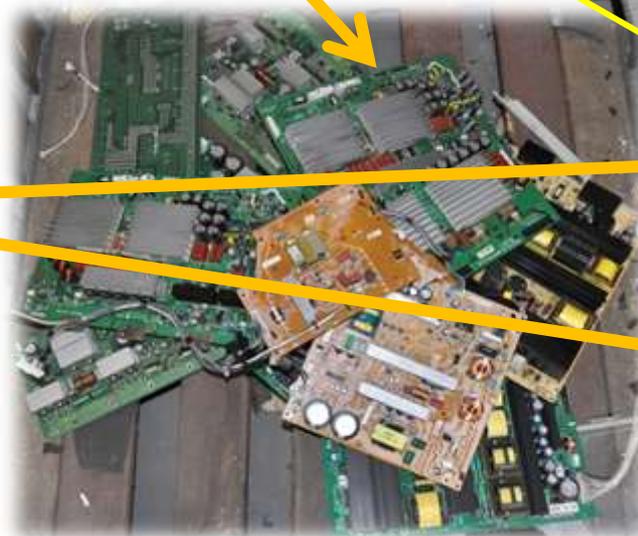
Disassembling

- Reversible process, for repair and for reuse



Dismantling:

- End of life, irreversible treatment, damaging tolerated unless harmful



Dismantling (modified language)

Manufacturers shall ensure that joining, fastening or sealing techniques do not prevent to remove *readily** the components listed in point 1 of Annex VII of Directive 2012/19/EU, when present.

The sequence of dismantling operations, tools or technologies needed to access the targeted components shall be documented as from Annex IV.3, including for each necessary operation, the type of joining, fastening or sealing techniques to be unlocked and tools required.

The requirement shall not be applied to products listed in article 2 point 2 of Directive 2006/66/EC.

~~Exemptions apply where non-removable joining and sealing techniques are required to assure safety, quality or functionality.~~

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*Wording from the Battery directive to indicate quickly, safely, without spillage, etc.
Standard needed for objective compliance check (e.g. $x \text{ N/m}^2$, Pa...)*

Batteries Directive

Article 11

Removal of waste batteries and accumulators

Member States shall ensure that manufacturers design appliances in such a way that waste batteries and accumulators can be readily removed. Where they cannot be readily removed by the end-user, Member States shall ensure that manufacturers design appliances in such a way that waste batteries and accumulators can be readily removed by qualified professionals that are independent of the manufacturer. Appliances in which batteries and accumulators are incorporated shall be accompanied by instructions on how those batteries and accumulators can be safely removed by either the end-user or by independent qualified professionals. Where appropriate, the instructions shall also inform the end-user of the types of battery or accumulator incorporated into the appliance.

Plastic marking

In transitional methods the reference to marking standards for plastics with FR listed in the WEEE directive (currently only BFR).

2.2. If flame retardants are present, they shall be marked according to available standards and using the following notation:

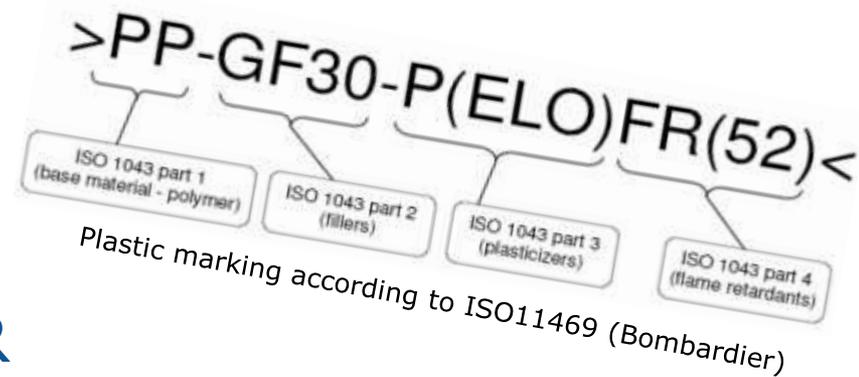
'x-FR-y'

where:

x= abbreviated term for the polymer used

FR = abbreviation meaning 'flame retardant'

y= standard code number of the flame retardant used.



Standard n°	Title
ISO 11649	Plastics -- Generic identification and marking of plastics products
ISO 1043-1	Plastics -- Symbols and abbreviated terms -- Part 1: Basic polymers and their special characteristics
ISO 1043-2	Plastics -- Symbols and abbreviated terms -- Part 2: Fillers and reinforcing materials
ISO 1043-3	Plastics -- Symbols and abbreviated terms -- Part 3: Plasticizers
ISO 1043-4	Plastics -- Symbols and abbreviated terms -- Part 4: Flame retardants
ISO 1629	Rubber and latices -- Nomenclature
ISO 18064	Thermoplastic elastomers -- Nomenclature and abbreviated terms

Example 1: Polypropylene containing a mixture of 25% by mass of fibreglass and 15% by mass of mineral powder
 >PP-(GF25+MD15)<

Example 2: Polyamide 66 containing a mixture of 15% by mass of mineral powder and 25% by mass of glass fibre and, additionally, red phosphorus (52) as a flame retardant
 >PA66-(GF25+MD15)FR(52)<

INFORMATION REQUIREMENTS

Information sheet

- For some products almost the same information is required for ecodesign and for labelling: an opportunity to include all info in one set (in the product database, to automatically generate standardised sheets in all EU languages)?

Signage displays

- No energy requirements have been set because no data is available but provision of data is objected... Testing standard necessary (transitional methods).

Questions? Comments?

