An introduction to the Ecodesign Directive

Energy Efficiency Co-ordination Group meeting

28 June 2017
Outline

► Overview
  ● What Ecodesign is
  ● Why it is important

► How it works
  ● Setting priorities
  ● Implementation

► Member State responsibilities
An introduction to the Ecodesign Directive

Outline:
- What it is and why it is important
- Implementation
- Member State Responsibilities
Ecodesign is a form of MEPS (Minimum Energy Performance Standard)
MEPS Designed to be cost effective

- Takes into account capital costs and operating costs over lifetime to find Least Life Cycle Costs
Worldwide uptake of MEPS (2013 data)

From “Impact on the EU’s Ecodesign and Energy/Tyre labelling legislation on third jurisdictions” 2014
Primary EU energy savings from Ecodesign and energy labelling

Data from “Ecodesign Impact Accounting “ 2015,
Graph from “Achievements of appliance energy efficiency standards and labelling programs - a global assessment in 2016”
But - Ecodesign is more than a MEPS

- Considers all environmental impacts of the products over their life cycle, from cradle to grave: including energy in use, embodied energy and non energy related environmental impacts
Other impacts of Ecodesign and Energy Labelling

NB based on ex-ante projections

- 319 Mt CO₂ equivalent (7% of 2010 EU-total) less greenhouse gas emissions
- 336 million m³ drinking water and 0.4 Mt printer paper saving;
- € 112 bn net saving on consumer expenditure (€ 174 bn gross saving, € 62 bn additional capital cost)
- € 57 bn extra revenue for industry, wholesale, retail and installation sector
- 800,000 extra direct jobs for industry, wholesale, retail and installation sector

Data from “Ecodesign Impact Accounting “ 2016
An introduction to the Ecodesign Directive

Outline:

- What it is and why it is important
- Implementation
- Member State Responsibilities
EC lead DGs on Eco-design

Responsibility shared between two Directorate Generals:

- DG Energy
- DG Growth – Internal Market, Industry, Entrepreneurship and SMEs (formerly DG Enterprise & Industry)

With involvement from DG Environment
Ecodesign Framework Directives

Original:
- Eco-design of energy **using** products directive 2005/32/EC

“Recast” in 2009 to be:
- **DIRECTIVE 2009/125/EC** establishing a framework for the setting of Eco-Design requirements for **energy-related** products
- Now includes windows, tyres, insulation etc. that influence energy use
Ecodesign Working Plans

- Start process of selecting product groups for regulation
  - Significant volume of sales and trade, indicatively 200,000 units p.a.
  - Significant environmental impact
  - Significant potential for improvement in terms of its environmental impact without entailing excessive costs

- Set priorities for three year period. Currently 3rd WP 2015-2017

Diagram:
- All energy related products not already covered
- Those meeting market and environmental criteria
- High priorities
Other criteria for Ecodesign

No negative impact on:

- Functionality
- Health and safety
- Affordability
- Industry’s Competitiveness
  - Not imposing proprietary technology on manufacturers
  - No excessive administrative burden for manufacturers
Ecodesign process for a regulation
NB total process ‘typically’ takes 51-52 months

Ecodesign preparatory study methodology

Task 0: Quickscan

Task 1: Scope
Task 2: Markets
Task 3: Users
Task 4: Technologies

Task 5: Base Case
LCA & LCC

Task 6: Design options

Task 7: Scenarios
Ecodesign implementation

- Performance standards may increase in stringency over time – via tiers two or more years apart – within the same regulation.

- Nevertheless a number of older regulations are currently under review

- 3 Voluntary agreements
  (complex STBs, imaging equipment, games consoles)

- 24 Product groups covered by 35 regulations (some of them amendments), starting from 2008, includes:
  - Lighting (used for incandescent lamp phase out)
  - Domestic (e.g. white goods, consumer goods, heating)
  - Industrial (e.g. motors, fans, transformers)
  - Commercial (e.g. computers, refrigeration)

- NB Regulations – direct legislation. Unlike Directives no scope for Member State customisation
Ecodesign regulations by product type

![Graph showing the number of regulations by product type from 2008 to 2016. The graph compares different categories: consumer electronics and ICT, domestic cooking and cleaning, heating and cooling, lighting, motors, pumps and fans, omnibus, professional refrigeration, and transformers.](image)
An introduction to the Ecodesign Directive

Outline:

- What it is and why it is important
- Implementation
- Member State Responsibilities
Consulting and informing stakeholders

- Trade Associations
- Industry
- Professional bodies
- Regional and Local Govt
- Certification testing and inspection orgs
- Environment and consumer NGOs
- Consumers
- Retailers
Ecodesign market surveillance

- Responsibility of each Member State
  - Penalties set by each Member State
  - Level of activity varies
  - Usually combines Ecodesign and Energy Labelling for relevant products

Typical institutional linkages:

- Central Government Ministry
- Market Surveillance Authority (MSA)
- Testing Laboratories
- Products for testing from Manufacturers and Retailers
Co-ordination on market surveillance

- Co-ordination at EU level via the ADCO (Administration Co-operation Group)
- Several collaborative projects addressing market surveillance funded under IEE and H2020.
  - Co-ordinate MS activity
  - Develop and spread best practice
  - Address testing of ‘new’ products
  - Assist MS’s with limited experience and resources