

# UK Furniture Flammability Regulations and Standards: How They are Developed, Implemented and Amended

Terry Edge

Tel: +44(0)207 215 5576

Email: [terry.edge@bis.gsi.gov.uk](mailto:terry.edge@bis.gsi.gov.uk)

# EU Law

Takes precedence over national law

## Three levels (low to high)

- Decision – binding on who it's addressed to (country or company)
- Directive – sets a goal all Member States must achieve; up to each how
- Regulation – must be applied in its entirety across the EU

# Standards

- International ISO – can have national deviations
- Regional – e.g. EN as made by CEN (European Committee for Standardization)
- National – BS EN: must remove conflicting local standards; and BS, national only
- Essentially: standards are not law. They may be referenced in law

# EU Standards

- All standards are voluntary
- Standards are 'harmonised':
  - a) for the purposes of legislation
  - b) when agreed at the standardization level (but not yet in legislation)
- Harmonised standards are adopted by all Member States – any conflicting national standards must be removed within 6 mths

# EU Standards-Making Process

e.g. Furniture Flammability Standard

- European Commission mandates CEN to produce a standard, based on the UK's Furniture Regs
- CEN group members: industry, test house, government, etc, anyone can apply

# EU Standards-making (cont.)

- CEN produce draft standard; all Member States and around another 8 countries consulted – final con stage can take 2 years
- Total process usually takes 3-4 years if agreement made, but can be longer if not
- Standard published: e.g. EN 1021 parts 1 & 2 (cigarette and match test) - BS EN 1021 in UK
- Can be used to demonstrate safety under the General Product Safety Directive
- CEN working group continues with amendments/updates to standard

# General Product Safety Directive

- EU law, implemented in the UK as the General Product Safety Regulations
- Covers the safety of all domestic products
- Requires products to be 'safe'
- Trading Standards (in the UK) must prove in court a product is not safe
- National product regulations take precedence, e.g. UK Furniture Regulations

# National Product Safety Regulations, e.g. UK Furniture Regs

- Generally not allowed because they're a barrier to EU trade
- However, the EU Treaty allows exceptions on safety grounds
- Member State has to prove it has a safety case to answer: national statistics for deaths in furniture fires most convincing



# Why UK Furniture Flammability Regulations Introduced

- Deaths from UK home fires rose from 400 per year at the start of 1960 to 700 by the end of the decade; further increases in the 1970s
- In all: pre-88 – Furniture 7.5% of home fires but 35% of deaths
- PU foam seen as main contributor to rise
- Woolworth's store fire 1979, 10 killed – trigger
- Government lobbied by MPs, fire services, media to introduce flammability provisions
- No European provision

# Early UK Furniture Flammability Legislation

- The Upholstered Furniture (Safety) Regulations 1980 – optional match and cigarette test; then
- The Upholstered Furniture (Safety) (Amendment) Regulations 1983 – compulsory cig, optional match test

# The Furniture and Furnishings (Fire) (Safety) Regulations 1988

- Compulsory cigarette test
- Compulsory match test over PU foam
- Compulsory fillings ('crib 5') test
- Compulsory labelling requirements
- Tests based on BS 5852 1979 & 1982
- Requirements prescriptive - not up to supplier to decide 'safe' (as in GPSR)
- Minor amendments in 1989, 1993, 2010

# The 'Crib 5' Test

- Unique to UK and Ireland (EU has similar Match/Cigarette tests)
- For fillings
- Large ignition source – wooden crib (Scots pine) with crumpled paper, over test cover fabric
- Failure: flame after 10 mins; smoke or heat after 60 mins
- Argument: it's not a direct ignition source vs. it replicates life and it works!

# FFRs apply to

Upholstery – cover fabrics and fillings:

- Intended for home use
- Mattress fillings
- Nursery and Children's furniture
- Garden furniture suitable for indoor use
- Furniture in new caravans
- Fillings of scatter cushions, seat pads and fillings

# Current Review of FFRs

- Universal UK support – all political parties, industry, enforcement, fire services, consumers
- But not amended for over 20 years despite UK policy to review every 3-5 years: officials felt they were working well enough
- Stakeholder pressure on gov. to amend, and clear growing need to update, led to decision to review
- New statistical report first step - Dec 2009

# Current Review of FFRs (Con.)

## Reasons to Review:

- Consultation on FFRs' guidance revealed many areas that need updating
- New products in or out of scope? e.g. mattress toppers
- Testing becoming more difficult, e.g.
  - finding cigarettes for the cigarette test
  - test cover fabric (separate amendment needed)
- Enforcement more difficult: safety threatened
- Grey areas, e.g. overlap with non-domestic fire law

# Current Review of FFRs (Con.)

## Improvement aims:

- Simplify and rationalise
- Maintain current safety levels
- Reduce levels of FR chemicals in furniture (introduce alternative match test)
- Save money for industry, e.g. exclude most fabrics from cigarette test (because they've never failed)
- Long term: possibly revoke when EU is equivalent (European Commission supportive)



# FFRs Amendment Process

## 1) Gather evidence

BIS tendered for a statistical report to discover if the FFRs are still effective, specifically the 'crib 5' test. Needed for gaining Ministerial approval and, eventually, agreement from the European Commission. Report found FFRs still effective at saving lives and money – around 54 lives per year, £140m to economy

# FFRs Amendment Process

## 2) Ministerial Decision to Review

BIS officials put the case to their Minister, using stakeholder input. This time, case was based on the need to update, and that in doing so money would be saved. Minister agreed on basis that current safety levels would be maintained.

# FFRs Amendment Process

- 3) BIS set up Working Groups - stakeholders invited to form groups advising on 3 areas of the review:

Testing

Traceability

Scope

Industry, enforcement authorities, test house experts all contributed in an open process

# FFRs Amendment Process

- 4) Delays, e.g. The Red Tape Challenge:
- New government's drive to cut regulation
  - BIS had to prove case for keeping FFRs
  - Affects future: industry cost savings priority

# FFRs Amendment Process

## 5) Drafting the amendments

BIS convened group of test experts to draft new testing requirements: all now in regulations, i.e. no standard

# FFRs Amendment Process

- 6) Additional substantial amendment
  - BIS is introducing an alternative match test (testing over actual/stylised composites) which should help reduce FR levels by up to 50% and bring significant savings to industry

# FFRs Amendment Process

## Next Steps:

- BIS to finish drafting amended regulations
- Gain Ministerial approval
- Submit to Government regulatory committee
- Go out to public consultation
- Government response – could be lengthy
- Notify European Commission/Member States
- Implementation

Will take about another 18 months

Total process from initial Ministerial decision to implementation:  
around 4 years (longer than normal)

# Future Improvements

- Encourage industry take-up of alternative match test and greener chemicals
- Continue to work with European Commission to rationalise fire safety across Europe
- Investigate new technologies that could reduce FR use further, e.g. 'barrier technology'



# Further Information

- 2009 Statistical Report into Effectiveness of FFRs:

<http://www.bis.gov.uk/files/file54041.pdf>

- FFRs:

<http://www.legislation.gov.uk/ukxi/1988/1324/contents/made>

- Guide to the FFRs:

<http://www.bis.gov.uk/files/file24685.pdf>