



Department
for Business
Innovation & Skills

**FURNITURE AND FURNISHINGS
(FIRE) (SAFETY) REGULATIONS
1988**

**Consultation on proposed
amendments to Schedule 5 - the
Match Test - Part 1 and Schedule 4
- the Cigarette Test**

AUGUST 2014

**Annex 8: Proposed amendments to schedule 5 - the match test -
part 1 and schedule 4 - the cigarette test - of the furniture and
furnishings (fire) (safety) regulations 1988 - response form**

The Department may, in accordance with the Code of Practice on Access to Government Information, make available, on public request, individual responses.

The closing date for this consultation is 7th October 2014.

Please provide answers to any of the questions below, and provide any additional response you believe is appropriate, headed:

Your name:

Redacted

Organisation (if applicable): Centre for Fire and Hazard Science, University of Central Lancashire

Address: J B Firth Building, Preston, PR1 2HE, UK

Please return completed forms to:

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London SW1 0ET

Telephone: 020 7215 5576
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Please tick boxes below which best describe you or your organisation.

	Organisation type
	Business representative organisation/trade body
	Central government
	Charity or social enterprise
	Individual
	Large business (over 250 staff)
	Legal representative
	Local Government
	Medium business (50 to 250 staff)
	Micro business (up to 9 staff)
	Small business (10 to 49 staff)
	Trade union or staff association
X	Other (please describe): University

Please note: in addition to the consultation questions below, we would be very grateful if you could also answer the questions from the Impact Assessment which follow them.

Consultation questions:

Question 1: Do you think this proposal will achieve its aims of: helping to make UK furniture greener, save money to industry and making UK furniture more fire safe?

Comments: Yes. Periodic reassessment is always valuable, although likely to face opposition from vested interests. Fire deaths are in decline. Furniture manufacturers are cutting costs by using other materials, irrespective of the effect it has on fire performance.

Questions 2: Do you think that paragraphs 19-22 accurately set out the need for a change to the current match test?

A X Yes ☐ No ☐ Not sure

Comments: Achieving the balance between large numbers of people being affected by the long-term environmental and toxicological harm of BFRs has to be balanced against the short term highly emotive issue of fire tragedies

Question 3: Do you think the proposed changes are viable (paragraphs 23-29)?

A ☒ Yes ☐ No ☐ Not sure

Comments:

In the 1970-80s a considerable testing programme was undertaken to establish the validity of the test regime of BS 5852. After the meeting attended by Messrs Owen and Edge at the University of Central Lancashire in April 2014, it appeared that no baseline testing had been undertaken to quantify the effects of the changes that were about to take place. This is understandable, as the changes are currently only in draft form. However, in the run up to the changes, manufacturers will have prototypes meeting the existing and new regulations which I imagine you could persuade them to provide for such a purpose.

Question 4: What are your views on the inclusion of currently unregulated materials (paragraphs 27-29)?

Comments: My experience of 30 years work in fire retardancy is that manufacturers respond to pressure to reduce costs by optimising their product to meet the specific requirements of regulatory tests. Changing the test (by including unregulated materials) may eliminate some particularly hazardous filling materials (but we haven't cut up enough chairs to know the extent of the problem).

Question 5: Do you agree with the benefits BIS believes the changes will bring?

A ☒ Yes ☐ No ☐ Not sure

Comments: Quantification of the benefit of reducing the amount of hazardous substances in our environment is very difficult. If the harm from BFRs were proven, the clean-up costs would be enormous. The new regulations are likely to increase the work of fire test laboratories in the short term, which will probably outweigh any benefit to manufacturers from the removal of the cigarette ignition test. Perhaps the greatest benefit would result from the progressive harmonisation of European furniture flammability regulation, particularly to UK companies with expertise in meeting those regulations.

Question 6: What is your view on BIS's reasons for bringing forward the changes (paragraphs 41-42)?

Comments: There is no reason to delay changes such as these, which will have a positive impact on fire safety and the environment.

Question 7: General rating of the proposals.

On a scale of 1 to 5, 5 being the highest, grade your overall approval of the proposals

	5	4	3	2	1
Right problems identified	X				
Range of options wide enough	X				
Preferred options well chosen	X				

Question 8: Do you have any other comments that might aid the consultation process as a whole?

Comments:

Most UK fire victims (both deaths and injuries) result from inhalation of toxic fire effluents. On numerous occasions it has been shown that fire effluent toxicity has been made worse by the use of gas phase flame retardants (particularly halogenated flame retardants, e.g. BFRs), which inhibit the flaming reactions that "clean-up" the smoke, resulting in more carbon monoxide and hydrogen cyanide.

We have done a number of fire tests on new and secondhand UK fire retardant labelled furniture. We experienced some difficulty in igniting the new furniture with four sheets of newspaper and a match spread across corner of the seat (we didn't always get it burning), but had no difficulty in igniting the secondhand furniture with the same ignition source. This suggests that the fire retardancy may not be durable, and is ineffective in the hands of those most likely to die or suffer serious injury fire. It also implies that the fire retardant may be migrating from the furniture to household dust etc.

Colleagues from three Fire and Rescue Services (Lancashire, Greater Manchester and West Midlands) have observed that most domestic fire deaths occur to people on the periphery of society, usually living in squalid conditions. They are very unlikely to have furniture that was less than five years old.

Upholstered furniture and bedding remains the largest, most accessible and most flammable fuel source in domestic properties (typically 20 to 50 kg per living room/bedroom). The biggest cause of death and injury from fire is the inhalation of toxic effluents, (first causing incapacitation, preventing escape, followed by asphyxiation, causing death), yet there is absolutely no regulation on fire toxicity in the UK, outside the mass transport industries. Moreover, certain synthetic materials containing nitrogen (such as polyacrylonitrile "acrylic", polyurethane, and Nylon) produce toxicologically significant quantities of hydrogen cyanide, dwarfing the carbon monoxide, particularly when the fire grows and becomes ventilation controlled. Tests for materials (fabrics, foams etc.) already exist for regulation of fire toxicity, although ideally further validation could be undertaken based on results of full-scale fire tests. **The biggest single improvement to fire safety in domestic dwellings would be achieved by simple assessment of the fire toxicity in under-ventilated conditions.**

Below are the additional questions from the Impact Assessment. Please respond to them on this part of the form.

Apologies, I have no contribution to make in this section.

Q1: Is the assumption on the cost of testing above right in your view? Could you provide evidence supporting your arguments?

Q2: Do you have any evidence that could help to refine this cost estimates?

Q3: Are there any other costs not included here that should be included? Please provide evidence supporting your arguments.

Q4: Do you agree with the assumption that there will be minimal losses of stock given the transition period? What is your normal turnover of stock?

Q5: Do you agree with the assumption on annual cost savings to UK based companies testing of fabrics for the cigarette test? Could you provide information on the cost of the cigarette testing for your company?

Q6: Do you agree with the range of cost savings above? What are the cost savings most likely to be for your company?

Q7: Are there any other methodologies you think would be more appropriate?

Q8: Do you agree with the cost estimates above? Could you provide alternative estimates? Could you provide estimates of cost savings for upholstered garden furniture and/or caravan upholstered furniture?

Q9: Do you agree with the assumptions above towards calculating the total annual amount of treated fabric? Please provide evidence supporting your arguments.

Q10: Are there any other unquantified costs or benefits? If possible, please provide evidence supporting your arguments.

Q11: Is this a fair reflection of how smaller businesses will be affected? Please provide evidence supporting your arguments.

Q12: Are the familiarisation cost savings, in time, between options 2 and 4 an accurate reflection of the difference? Please provide evidence supporting your arguments.

Q13: Do the cost saving time profiles accurately reflect the timings of cost savings your business expect to see?

Thank you for your views on this consultation. Thank you for taking the time to let us have your views. We do not intend to acknowledge receipt of individual responses unless you tick the box below.

Please acknowledge this reply ☐

At BIS we carry out our research on many different topics and consultations. As your views are valuable to us, would it be okay if we were to contact you again from time to time either for research or to send through consultation documents?

X Yes, (particularly if fire related)

☐ No

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