

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): Parker Knoll Upholstery Limited

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Please tick boxes below which best describe you or your organisation.

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

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:

Aim 1: To Make UK Furniture Greener? **NO**

FIRA have demonstrated in their testing research that a reduction in FR chemicals may not be achievable, especially to the level proposed by BIS. Some fabric blends may even require an increase in FR chemicals to ensure they pass the new test requirements.

FIRA research has shown that a reduction of up to 50% may be possible, but only on fabrics with a fibre composition of 100% polyester.

Other fibre compositions such as 100% cotton, acrylic / polyester / cotton blends and leathers do not show that any reduction is achievable.

Furthermore, 50% polyester, 50% viscose blends showed a need for an increase in the use of FR chemicals in order to pass the new match test requirements.

This research based evidence; along with the introduction of requirements for currently unregulated materials to be tested will probably not deliver the 50% overall reductions being suggested in the consultation.

We may actually see an increase in the use of FR chemicals in order to meet the new test requirements and therefore the original aim from BIS to reduce FR chemicals and therefore make UK furniture greener may not be met.

It is possible however, that industry could change the materials used in the product construction, but we are not able to say whether these would be greener (or cheaper) than current materials that we currently use.

One of our back coaters have carried out some match tests, in-house, over the 24-26kg modified foam and compared with the current non modified 22kg foam, they could see no discernable differences in the results, a fail under the current was a fail with the new, a pass with, was a pass on current. I have talked to our UKAS test house, they to date have not been asked to carry-out any testing over the 24-26 foam. FIRA have done a few tests, with mixed results, but on a very limited selection of polyester and a natural fibre fabric.

The 2mm² hole is a 'mystery' beyond comprehension! Two experienced back coaters pointed out that a fabric may not produce a hole on one batch but could (would) on another batch, no extensive testing has been carried out to quantify the results, there is no written standard as to how or when this measurement would be taken or the method, the suggestion of a 'ruler' begs belief, effectively the hole must be 1.6mm in size to have 2mm²! Synthetic fabrics are most vulnerable to 'splitting' even when they still pass the FR test, the amount will vary, even across the width of the sample, even a blend or natural fabric will 'split' on occasions during a pass test, the only way to reduce this is to maintain current FR add-ons as a way of reducing the risks?

Which brings us to how much compound can or not, be applied, to ensure a pass. If the amount of compound is reduced, BIS say by 50%! By the very nature of this the fabric will be 'less safe' in a real life situation, the flame will spread across the 'sofa' quicker, thus affect other furnishings in the room, curtains for example. Calculating how much less 'may' be required is almost impossible, (this not just a coaters ploy I am told) given the 2mm² requirement as above, the compound makes up a part of the cost, It would also mean that all of our current covers would need retesting to confirm they conformed to the new requirements.

We will do a few more test over the 24-26 foam, but the UKAS houses as yet, have no clarification on the method of measuring the 'hole' or which polywrap to use, as no specification has been confirmed. So the results would not be fully relevant.

The compound we use on Parker Knoll fabrics is non brominated product, we do have another which is nearly solely used on high synthetic fabrics which has the new Penta Brominated chemical.

(Our back coater would stress that some Brominated based compounds have been registered under REACH requirements for use in treating textiles. These new proposals seem to completely 'ignore' this fact, REACH is an EU requirement and a change in the FFR is not the place for the UK Government to 'challenge' this requirement.)

We think from the above we can see that back coaters in the UK have little or no faith in the proposals, and a 'they would say that' is not the issue, the changes will reduce product safety, as the current 22kg foam is a 'worst case scenario' covers a multitude of potential fillings within the upholstered product. The response is laid out the Fretwork proposed response, BIS 'calculation' is so far removed from reality to be of no use at all. (If a UKAS test houses losses revenue from not doing Cigarette Test, he will charge more for other tests?)

The claimed reduction in chemical use for 'Greener' furniture, will not be measurable, there may be some on some fabrics but other may need more to pass the Hole test, BIS claims on reduction is greater than the amount we as coaters use!! Less compound = less safe products, California have banned FR chemicals, there is antidotal evidence already that house fires have increased as a result.

Aim 2: To Save Money? NO

If anything, costs will increase due to the extra testing required of previously unregulated materials, the fact that FR Chemicals will not be reduced based on FIRA's testing and the additional cost of changing procedures, communicating results and requirements to the supply chain and also the possible need to change product design as a result.

Even though there is a proposal to remove the cigarette test for those fabrics that pass the match test, testing costs will increase due to the need to test lining materials and other components within 40mm of the cover in cases where the outer cover material is not protective.

Parker Knoll uses several different lining materials dependant on the variety of filling materials offered to the customer.

Cotton cambric lining materials may be used to contain feathers and prevent the quills from protruding through to the surface. Currently these type of lining materials may not be FR treated.

Other types of lining materials may also be used to contain blown fibres. Each type of lining material will need to be tested in conjunction with the outer cover and therefore testing will increase in this respect.

This could mean that testing costs will increase with the need to test each lining material and also an increase in FR treatments may be necessary for some of these materials to pass the new test requirements.

The consideration of currently unregulated materials / components within 40mm of the outer cover may also result in the need to change product design which will also add cost to industry.

There may also be a need to replace current materials used with alternative versions that pass the new modified match test for components which may also increase cost.

Due diligence and the cost of compliance is another additional consideration. How often will the testing need to be repeated on components – will it have to be batch by batch – as quite often recycled materials are used in composite boards and the mix can change from one batch to the next.

There will also be costs associated with familiarisation to the new requirements. The cost of understanding the changes to the regulations and communicating the new requirements throughout the entire global supply chain will be significantly more than estimated by BIS in the impact assessment document which currently states 2 hours. It is likely to take at least 2 hours in dialogue with each supplier before having to then consider managing the change within the business and to manage training and understanding of the proposed regulations of which will involve going overseas to explain the changes.

Parker knoll currently have over 70 suppliers and I have personally spent more time than the estimated 2 hours already on this change with each supplier, therefore I would envisage large costs to be met by our company relating to these changes.

Aim 3: To Make UK Furniture More Fire Safe? UNKNOWN

Proposals to allow fabrics that split to still be used could potentially reduce fire safety as could the removal of the cigarette test. Testing previously unregulated materials could improve safety but we don't feel sufficient evidence exists to make a decision either way.

There are some requirements that have been removed, such as the requirement to carry out the cigarette test on match resistant fabrics. Leathers may pose an issue in this respect as we have observed cigarette test failures on materials that currently pass the match test. Therefore this could potentially be seen as a reduction in fire safety.

The requirements to consider lining materials and other currently unregulated materials within 40mm of the outer cover could be seen as an increase in fire safety as we now have to consider materials that are within the product construction, and this has not been considered previously. However, there is no evidence that this would increase

overall safety as no evidence exists currently to suggest that these unregulated materials are an issue currently and therefore no comparisons can be made.

Parker knoll supplier view point (key fabric supplier below)

The proposed changes are far-reaching. Please refer to our industry view point expressed in a letter from Fedustria which was released last week (letter sent to BIS October 2014)

Specifically on the subject on more or less coating we would like to caution:

A small number of fabrics, *may*, require less coating (fabrics which have a high content of polyester or polypropylene) but others (such as fabrics with acrylic, are not likely to fall into this category).

The change from non-FR to FR-foam is not expected to have a negative impact. However, it is not expected to have a positive impact on the quantity and/or type of coating used!

When comparing the actual FR behaviour of our fabrics against the proposed new FR regulations, one can draw following conclusions:

1 Hole formation

Fabrics containing a majority of synthetic yarns will be subject to an hole formation when exposed to a flame. This is the case for polyester, acrylic, polypropylene, and polyamide.

The new proposal, to replace the current foam by non-combustible foam, will result in an easier pass than on the existing test.

The additional proposal to divide the fabrics into 2 categories has the following implications:

- PROTECTIVE : the fabric carbonates resulting in no hole formation à this will only be the case when there is enough cellulose or protein (ex. Wool) contained in the fabric. Technical fibres such as very expensive aramids are virtually never used in upholstery fabrics.
- NON PROTECTIVE: Hole formation greater than 2mm². The manufacturer is forced to use a carbonating interliner increasing the manufacturing cost. This will be the case for all synthetic yarn based fabrics.

No other solutions are available in the foreseeable future.

Following remark needs to be made: the proposed maximum 2mm² hole formation is not realistic. In fact, holes greater than 10mm² will cause enough smoke creation to diminish the air hence putting out the flame. This can best be observed when testing to Crib5.

Therefore, if the hole formation proposal is carried out, this need to be negotiated to a Minimum of 10mm² and then we would need 2 to 3 years to organize to comply with this. Existing developments cannot be altered overnight and an additional cost to our customers will be inevitable.

2. Surface combustion

This is a common occurrence on (amongst others) acrylic based fabrics, although also appearing on some cellulose based fabrics. None of the new proposals will make this phenomenon easier to control. This will not lead to less use of FR coating on the fabric. The new proposal suggests that less FR coating needs to be used because of health and environmental reasons.

Although not specifically mentioned, the end goal is most likely to forbid the synergy between antimonies and bromides.

However, there is currently no alternative available that provides the same kind of FR results as the synergy between antimonies and bromides (usually decabromodiphenylethane).

Forbidding this chemical would cause major FR issues as no valid alternative is currently available and will most likely not be available in the foreseeable future. The chemical industry has been doing trials on this issue for years now.

There have been thoughts of breakthrough on a few occasions but further investigations have always been disappointing.

Our customers had in fact been informed by the chemical industry of new FR possibilities but in fact, when using industrially have always proven to fail to meet the legal requirements.

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

A ☐ Yes ☒ No ☐ Not sure

Comments: Paragraphs 19-22 all focus on the reduction of FR Chemicals. However the use of FR chemicals in furniture is not a requirement of the test, it is simply required in order to pass the test. Chemical usage is covered in different regulations so should be addressed elsewhere. As the FIRA tests showed, there will be no significant reduction in FR chemicals so whilst the basic reasoning may be valid, it appears misguided.

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

A ☐ Yes ☒ No ☐ Not sure

Comments: The new testing methods have not been thought through and are very labour intensive, costly and confusing. There are too many "if's" involved in the process. Previously materials either passed or failed. Now they can pass but be protective or non

protective; if non-protective, then other materials need to be tested. If a fabric splits by up to 2mm, it passes, over 2mm it fails. There are too many variables for the changes to be viable for UK industry and too much confusion will surround the tests should they go ahead.

Parker Knoll fully supports a reduction in the use of potentially harmful chemicals but also recognise that chemicals used in the production of upholstered furniture are regulated by REACH.

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

Comments: There is too much confusion surrounding these materials and what is in scope and out of scope. As a result of FIRA's testing, there are a number of materials that pass every time and a number that can never pass but are an essential part of the construction of the product (eg webbing). This will mean a complete re-design of the product, adding cost and inconvenience to UK business. There is also no indication of how these materials, which come in many shapes and sizes, are to be tested.

At a recent seminar held at FIRA, Quite a few manufacturers raised concerns over how the wiring will be classified as this will be within 40mm from the visible cover and is not covered by a passing protective material. Similar concerns were raised about riser recliner chairs and the wiring for remote controls which is quite often located underneath the outer visible cover.

These types of concerns will need to be addressed with adequate guidance. Currently there is no written guidance in this respect and this is where the industry is struggling to accurately assess the impact these new requirements will have upon their business. In terms of ensuring compliance, the retailers / manufacturers are indicating that they cannot undertake the risk of categorising fabrics that split or do not split, as in the majority of cases; they will offer both types of material. They will have to assume that a split is likely to occur on the fabrics offered and will take the view that they have to ensure that the product construction offers the protection for the currently unregulated materials.

This will mean that re-design will be likely and possibly a replacement of components that do not pass the test.

The inclusion of currently unregulated materials / components will affect the re-upholstery industry. They will not have the knowledge of the product construction and will therefore only have the option of offering a fabric that is passing and protective (does not split) or using an interliner to cover the product carcass in order to ensure that all components within 40mm are covered with a protective material.

This will add significant cost to supplying a re-furnished item, or, may even increase the risk of non-compliance.

There has been a suggestion from BIS that an exemption list may be possible for certain materials that pass the test and do not form a hole (protective). However, there is no information in the consultation document that explains how this would work and how this will be managed.

Consideration needs to be given as to whether this would mean an exemption list given by material type (generic) or; by the manufacturer of the component (as all chipboards are not manufactured using the same mix of raw materials)?

The test method would need to be very clearly defined. It is important to make it as clear as possible how to test, even if explaining the obvious, so that it can be more easily implemented globally.

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

A

☐ Yes

☒ No

☐ Not sure

Comments: We agree that the list of benefits is good for UK business and the economy but don't agree that any of these benefits can be achieved. We don't believe that furniture will be greener, cost savings will not be achieved, the quantity of non-compliant furniture on the market will probably increase due to the more complex testing procedures and due to the non reduction in FR chemical usage, there will be no change to the disposal of furniture containing hazardous chemicals.

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

Comments: We understand that discussions have been ongoing for some time on an overhaul of the regulations and more clarification is definitely needed. Parker Knoll would have expected all changes to be made at the same time, rather than in part.

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				✓	
Range of options wide enough				✓	
Preferred options well chosen				✓	

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

Whilst we agree in principle to the reasoning behind the changes, we feel that the test methods are overly complex and will hinder UK businesses rather than help and in our opinion the regulations must be looked at as a whole rather than in part.

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

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

No – We disagree that the cost of testing will be reduced.

Parker Knoll Upholstery currently carries approximately 332 different top fabrics and 10 different cover leathers. Also use 5 different invisible linings (Equates to 347 ~~less~~ cigarette tests per testing cycle).

However we use a lining under some parts of the top cover on some models, e.g. arm, cushions filled with feathers have a cambric lining, which is offered in all available top covers, therefore equates to 342 extra new match tests of the top cover + lining composite.

Top cover fabrics used are mostly synthetic blends, most of which are very unlikely to be protective (information from suppliers) so other components within 40mm of cover will have to be considered on all models, as all models are supplied in large range of different fabric and hide top covers. Taking into consideration components likely to be excluded from testing such as woods, Corovin etc. we would have approximately a further 20 components to be tested with the new match test. These components would include:

Silent wire

Spring clips

Stockinette

Polypropylene webbing

Elasticated webbing

Raitex – polyester needle punched nonwoven material

Zips

Silk film / silicon slip film

Velcro

Nylon cord / tapes

Rucking tape

India tape

Button tape

Plastic piping cord

Plastic edge roll

Plastic spacers

Plastic fir trees

Cable ties

Plastic recliner handles / controls

Electric cables

Current match and cigarette tests costs (before discounts are applied) break down as:

£43 Match

£43 Cigarette

£10.20/water soak.

Water soak remains part of the proposed modified match test.

Assume modified match test will therefore be $£43 + £10.20 = £53.20$ (this does not take into account any changes on filling material costs for test).

Assume currently unregulated component match test = £15 (Estimation likely to be more)

Therefore costs for each testing cycle

- Cost saving:
347 cigarette tests @ £43 per test = £14,921
- Additional cost:
342 cover + lining composite new match test @ £53.20 per test = £18,194

Approx. 20 component new match test @ £15 per test = £300

Overall cost impact = increase of £3,573 per test cycle.

Test cycle at least four times a year (many customers are now requesting this amount frequent testing) equates to annual testing cost increase of at least £14,292

Even if the number of components within 40mm of top cover can be reduced, the additional cost due to testing lining and cover composites will always outweigh the saving achieved on reduction in cigarette tests. If a further lining is introduced that would of course increase costs further still. Even if new materials could be used for linings in the longer term that are inherently FR, the testing requirement would, we presume, still remain.

The cover and lining composite will also require a greater number of samples to be prepared and despatched to a test house, again increasing costs. All Parker Knoll top covers and linings are delivered into a cut and sew facility in Lithuania. Samples have to be despatched from Lithuania to Parker Knoll and then forwarded to a test house.

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

Parker knoll currently have over 70 suppliers and I have personally spent more time than the estimated 2 hours already on this change with each supplier, therefore I would envisage large costs to be met by our company relating to these changes.

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

There are many other costs associated with the new match test but primarily these will be as follows:

- ☐ Increased due diligence in addition to the basic familiarisation costs (as Q1)
- ☐ New alternative product development costs (substantial)
- ☐ Potential increases in materials costs of new alternatives to current non-regulated items that would fail.
- ☐ Costs to the retailers of re-assessing supply chain capabilities, test evidence and product mixes.

It is difficult to place an estimate on this until such time as the proposal becomes final as the proposals are evolving after every meeting.

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?

The transition period suggested currently by BIS is 18 months. However, a more realistic transition period would be in excess of 24 months which would allow industry to respond to the changes.

Initially the fabric suppliers and back coaters would have to work on their materials to ensure that these are compliant to the new test requirements.

Once the new materials are available, the manufacturers and retailers will be able to re-design their products to use the alternative compliant materials in their product construction but in our opinion this will increase the cost of furniture to the end user.

As the critical path in retail is 12–18 months, this would mean that compliant production would be achievable into the UK within a 24 month period. This would also allow a reasonable time for companies to manage stock out of the business that would not meet the new requirements.

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?

Answer: As question 1 Impact assessment.

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

None, costs would increase, also the complexity would also increase as stated in question 1 Impact assessment.

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

No

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?

We are unable to comment effectively, Based on our matching products we estimate an average suite to be 30metres end user (35metres before cutting depending on pattern repeat) (this is based on one sofa and two chairs per household).

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

As above, based on our matching products we estimate an average suite to be 30metres end user (this is based on one sofa and two chairs per household).

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

All unquantified costs have been highlighted elsewhere in our response, mainly question 1 Impact assessment.

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

We cannot comment effectively.

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.

As above

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

Our business does not expect to see savings from these proposals.

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 ☒ Yes

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?

☒ Yes

☐ No