

### ***Built Environment, Issues & Affairs Work-stream***

## **Summary of FSF and CIC surveys on Building Regulations and Guidance in Approved Document B**

### **Overview**

The Built Environment Issues and Affairs (BEIA) Work-stream, chaired by Celestine Cheong, conducted two surveys; one of the FSF's members from December 2014 – February 2015 and the other of the Construction Industry Council's members from June – September 2015. The studies were implemented in response to the FSF members' growing need to gather a complete industry opinion of the Building Regulations and supporting Approved Document "B" ("ADB"), and to enable the BEIA work-stream to better serve its members if, and where, there is a need for change.

The goals of the surveys were to:

- Garner impressions of understanding, clarity and ease of use of the current guidance
- Establish if the locus of the current system should extend beyond the capacity of "life safety"
- Garner impression of the importance of the Fire and Rescue Service in the decision making process
- Determine, by today's standards, which areas require further investigation and discussion.

The online survey was sent to 63 FSF and 47 CIC members. The FSF response rate was 60% while the CIC's was 94%. In the FSF's questionnaire, there were 15 mandatory and 20 voluntary questions allowing for 35 questions in total. In the CIC's questionnaire, there were 4 mandatory and 13 voluntary questions allowing for 17 in total. The questions were closed and multiple-choice logic was used - where possible – in simple English allowing for controlled data collection by the survey software, Survey Monkey. Those questions unanswered by the FSF were primarily a result of members not having the technical capabilities or feeling that some questions were irrelevant to their member organisation. For the CIC, we can attribute unanswered questions as owing to time pressures.

Of the 39 FSF responses, 31 were Full FSF members with 6 being Associate members and 2 Partner / Sponsors. The responses indicated a breadth of business type with the dominant category listed as "other" (33.3%), followed by Professional / Chartered Association (23%), Consultancy / Alliance (15.4%), Fire and Rescue Service (10.3%), Manufacturer (10.3%) and Trade Union (7.7%). Of the 44 CIC responses, 34 were Full CIC members, 10 Associate Members and 10 skipped the question. Business type was dominated by Architecture (41.5%), followed by "other" (22%), Building

Control (14.6%), Engineering (9.8%), Consultancy (7.3%), Surveying (2.4%) and Research (2.4%).

The snapshot responses address the sentiment towards the overall issues pertaining to the Building Regulations and supporting Approved Document “B”; including clarity and wording, user friendliness, frequency of updates, and certain limitations.

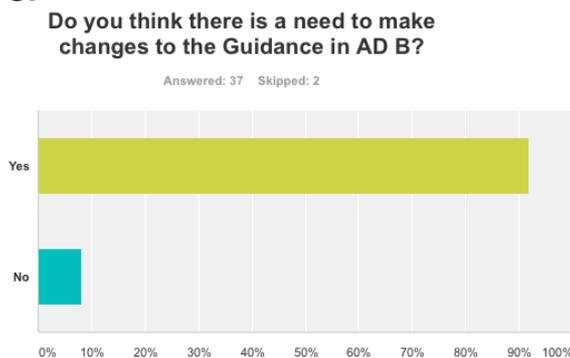
### Scope of Building Regulations and Guidance in Approved Document “B”

This section explores the major issues concerning the Building Regulations and Approved Document “B”: the desire for change and rationale for change.

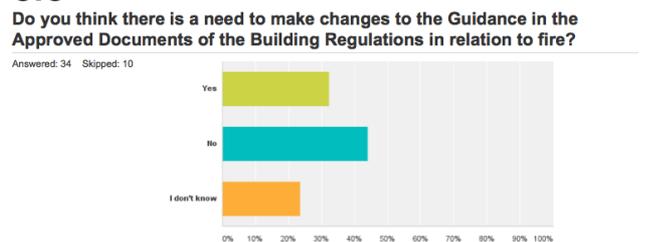
Throughout the FSF’s survey, it was useful to learn that the bulk of the respondents lean greatly towards a unified thinking, with respondents providing very similar answers. There were no borderline answers and a difference in opinion did not sway more than a 67% to a 33% split in terms of a Yes/No answer. This is supported where there was a ranking of sentiment – responses clearly fell into a positive or negative field.

Throughout the CIC’s survey, up to 38% of respondents opted to skip many of the questions. There were borderline answers but this could be attributed to the need for more information and better education on the subject. This is supported where there was a ranking of responses – where “I don’t know” was equally weighted as the Yes/No answers.

**Figure 1:**  
**FSF**



**CIC**



83% of the respondents indicated that the scope of the Approved Document B should be widened to consider environmental, economic or social protection. The environmental factor was the most in favour (74%), followed by economic impacts (71%) and property protection (60%). 92% think there is a need to make changes to the Guidance in ADB, and this is supported by 91% citing there should be new or additional guidance provided using easy to read text. Concurrently, this feedback is consistent with remarks made by HM’s Coroner

in response to the Lakanal House fire in 2009 under rule 43 recommendations, which include that guidance on both the scope of fire risk assessments and on building regulations related to fire safety is made clearer<sup>1</sup>. 69% agreed the research documents underpinning the Guidance in ADB are out of date, and this could allow for further opinion on an agreed frequency of updates.

Only 54% of respondents indicated that life safety is sufficient for the Approved Document B to base its scope on. 13 out of 28 respondents indicated property protection should be considered followed by environmental impacts (10 of 28 respondents) and socio-economic impacts (8 of 28 respondents).

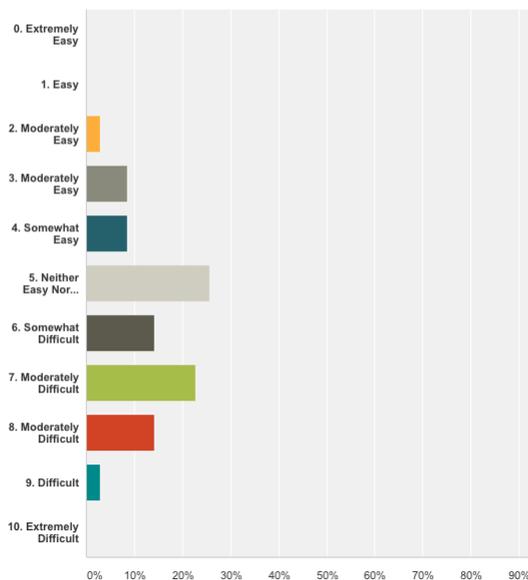
### User Friendliness and Clarity

When assessed for the text’s user friendliness, the data appears to be more consistent in showing that the text in the Guidance is not user friendly, with 79% FSF members and 66% CIC members citing various degrees of difficulty.

**Figure 2:**  
**FSF**

Please indicate on the following scale of 0-10, with 0 being "extremely easy" and 10 being "extremely difficult", your organisation's view in terms of using the Guidance in AD B

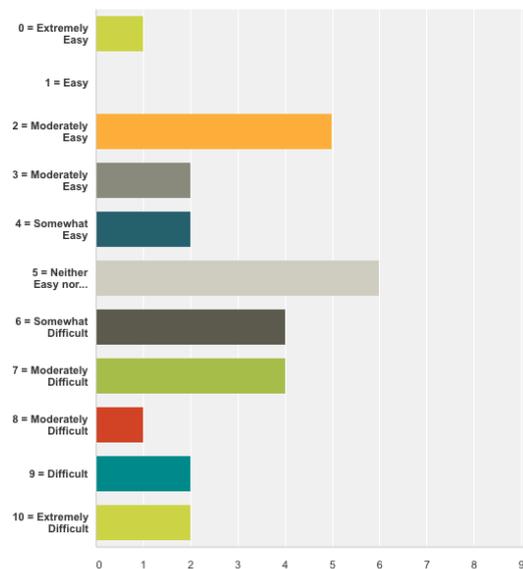
Answered: 35 Skipped: 4



**CIC**

Please indicate on the following scale from 0-10, with 0 being "Extremely Easy" and 10 being "Extremely Difficult", your organisation's view in terms of using the Guidance in Approved Document 'B'

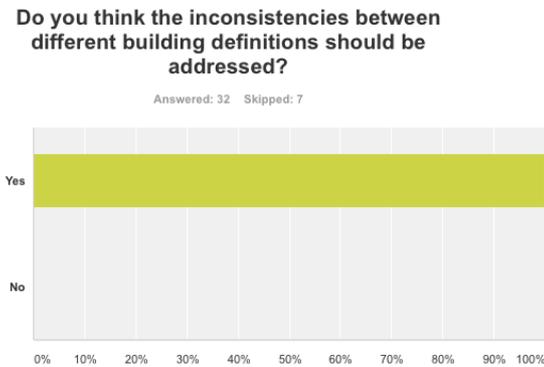
Answered: 29 Skipped: 15



<sup>1</sup> <http://www.lambeth.gov.uk/sites/default/files/ec-letter-to-DCLG-pursuant-to-rule43-28March2013.pdf>

We asked the FSF whether there is a need to provide greater clarity on certain definitions in ADB, for example “competency” in relation to product installation, and the majority 97% agreed it does. We also asked the FSF whether the complexity of building structure and construction was adequately defined in ADB. While 81% indicated that it is not, more understanding is needed within the 19% to gain why it is to various degrees and where. This could allow for further understanding in how to identify and detail necessary definitions (such as building types) and where improvements can be made, as in the 100% indication for the need to address the inconsistencies between different building definitions as depicted below, B4 (external fire spread) being unclear (75%) in its intent in relation to fire spread over external walls of buildings, and the unclear definition of “fire engineering” (81%).

**Figure 3 (FSF):**

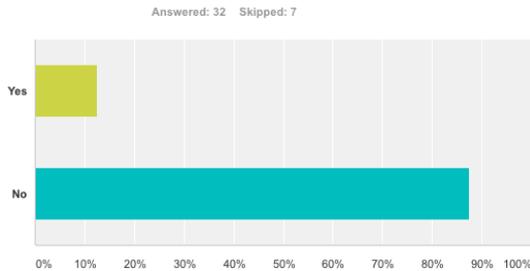


### The Fire and Rescue Service in the decision-making process, and Modernity

The Fire and Rescue Service’s importance in decision-making is highlighted in the majority of FSF members agreeing it should have the final decision (75%) with respect to B5 compliance. This is by contrast with 43% of CIC members citing it should, 35.7%% citing it shouldn’t and 22.3% citing they do not know. Yet where FRS fire fighting intervention practices and current knowledge of current fire and safety design of buildings reflect modernity, the Fire and Rescue Service faired poorly with FSF respondents citing their practices did not reflect the fire safety design and construction of buildings (73%) and were not knowledgeable on current fire and safety design (90%).

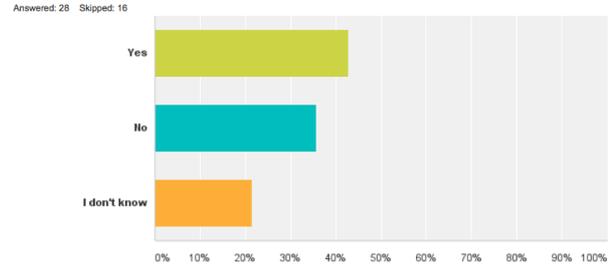
**Figure 4:  
FSF**

Do you think AD B is adapted to suit the trends used in today's construction methods?



**CIC**

Do you think the Guidance in Approved Document 'B' is flexible to suit the trends used in today's construction methods?



Other majority responses relating to the need to upkeep modernity include the majority response to ADB being unable to tailor to the increasing ageing population (84%), the viable use of mattress evacuations (78% said they were not) and ADB not adapting to suit the trends used in today's construction methods (88%), as per Figure 4. This is by contrast to only 36% of CIC members citing it is not flexible and 21.4% of the CIC members not knowing if it is or isn't indicating a need for further education.

Where specific questions were asked of third party accreditation and active fire suppression measures, 90% of FSF respondents said the approach should be mandatory, and over 81% of FSF respondents agreed that once a building is in use it should still be subject to Building Regulations.

One of the challenges is determining whether this understanding should be applied to all provisions of the Building Regulations and is worthy of further investigation.

Where active fire suppression questions were posed to the FSF, the awareness of evidence backing the cause for amends resulted in majority responses in favour for ADB to be aligned with BS9991 and BS9251 in terms of their installation where vulnerable persons are concerned (81%), in terms of extended fire fighter access (71%), and warehouse floor sizing for mandatory installation (71%) – with 71% calling for the sizing to be lowered from 20,000m<sup>2</sup> to at least 4,000m<sup>2</sup>.

Results to the survey can be made available upon request.

**Key observations from the FSF and CIC surveys on Building Regulations and Approved Document “B”:**

- The FSF survey resulted in the respondents providing a majority response to each question, i.e. there were no borderline answers. By contrast the CIC survey indicated further education required owing to weighted “I don’t know” responses
- Over 92% of FSF members indicate a need to make changes to the Building Regulations and Approved Document B
- 100% of members agreed the need to address the inconsistencies in building definitions
- Over 88% of FSF members agree the Approved Document ‘B’ is not adapted to suit the trends used in today’s construction methods, design and usage, in comparison to 42.3% of CIC who do agree it is flexible – the majority (69%) of FSF members agree the research underpinning the Guidance in Approved Document ‘B’ is out of date
- Both FSF and CIC members indicated the need for greater understanding, clarity and ease of use where the text in the Building Regulations and Guidance in Approved Document “B” is concerned
- The FSF survey gave rise to a need to further understand specifics involving clarity of text – for example, how to identify and formulate definitions
- 82% of FSF members indicated the scope of Approved Document ‘B’ should be considered beyond “life safety” where as 54% of CIC members said “life safety” is sufficient
- 90% of FSF members said third party accreditation should be mandatory instead of voluntary
- 43% of CIC members and 75% of FSF members think the Fire and Rescue Service should have the final decision over B5 compliance (access and facilities for Fire and Rescue Services)
- The Building Regulations and Approved Document “B” does not reflect modern building design and usage.