



THE INSTITUTION OF FIRE ENGINEERS
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MHCLG 'Request for Evidence' consultation on a Technical Review of Approved Document B of the Building Regulations

On 5th February 2019, the IFE held a workshop for its members hosted by the Building Research Establishment (BRE), at which the various matters raised by the consultation were discussed and debated. An observer from the Ministry of Housing, Communities and Local Government (MHCLG) was present at the event.

The results of the workshops with comments and recommendations arising are contained in the pages below documents which align with the format for the response requested by MHCLG along with indicating the spread of opinion on the various issues across the IFE's professional membership.

Breakout group session 1 dealt with the specific matters listed in the MHCLG consultation.

Breakout group session 2 dealt with some additional 'general' matters relating to quality and competency of particular concern to the IFE.

These documents were submitted to MHCLG under a covering email from the chair of TSAG with the following completed form as the IFE's response.



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Please state whether you are responding on behalf of yourself or the organisation stated above	On behalf of the IFE

Please indicate whether you are applying to this consultation as:	Select one
Builder / Developer	
Designer / Engineer / Surveyor	
Local Authority	

Building Control Approved Inspector	
Architect	
Manufacturer	
Insurer	
Construction professional	
Fire and Rescue Authority professional	
Property Manager / Housing Association / Landlord	
Landlord representative organisation	
Building Occupier / Resident	
Tenant representative organisation	
Other interested party (please specify) Professional Engineering Institution (PEI) -licensed by the Engineering Council	✓



IFE Workshop Tuesday 5th February 2019 - BREAKOUT GROUP SESSION 1

The attendees at the event were split into 10 break-out groups and tasked with reviewing 23 'particular matters proposals' listed in the MHCLG 'call for evidence' consultation.

The groups were asked to present a democratically-decided Group Position from one of the three following options:

- **Agree** the Group supports the MHCLG 'proposal'
- **No Consensus** there is a significantly split opinion in the Group
- **Disagree** the Group does not support the MHCLG 'proposal'

For each of the 1-23 'proposals' the following table lists the group positions and comments made in three columns from left to right according to 'disagree/no consensus/agree'.

To indicate an IFE position based on the strength of disagreement-agreement, a scoring system is use as follows:

1. Each Group 'agree' position scores +1
2. Each Group 'disagree' position scores -1
3. Each Group 'no-consensus' position scores 0
4. Add scores to give total
5. Total = -10 to -7 IFE position = **Strongly Disagree**
6. Total = -6 to -3 IFE position = **Disagree**
7. Total = -2 to 2 IFE position = **No consensus (i.e. neither agree or disagree)**
8. Total = 3 to 6 IFE position = **Agree**
9. Total = 7 to 10 IFE position = **Strongly Agree**



Area of fire safety	ADB Area	Particular matters referred to in the MHCLG consultation for potential review	Strongly Disagree	Disagree	No consensus	Agree	Strongly Agree	IFE Recommendation
General	Scope of fire safety	1. ADB guidance being extended to cover property protection for non-domestic buildings.		✘				On balance, a proposal to extend ADB guidance to cover property protection was not agreed This was not because it was felt that designing for property protection as not appropriate but, rather, it should be considered separately to the functional building regulations requirements for life safety.
		<p>GP7</p> <ul style="list-style-type: none"> - Too many variables in insurance requirements which change too often - Would impact on functional requirements of B Regs - Issues: useful to have alternative guide produced by insurance company - Agree consensus on risk and tolerance <p>GP10</p> <ul style="list-style-type: none"> - simultaneous evacuation - B Regs – predominantly life safety - Life safety only - Challenge with view that life safety only doesn't reflect "Health" of persons affected post fire with loss of home/belongings/etc <p>GP5</p> <ul style="list-style-type: none"> - ADB Life Safety focus - Consider firefighter safety and building collapse <p>GP6</p> <ul style="list-style-type: none"> - Regulatory business - Extra complexity - Insurers not normally consulted - Environmental <p>GP1</p> <ul style="list-style-type: none"> - Stick with Life risk insurers to write their own policy to cover property <p>GP3</p> <ul style="list-style-type: none"> - Decision for end users rather than developer <p>GP8</p> <ul style="list-style-type: none"> - Make documents too long and generic - Other mechanisms available (LABC/ABI/RICS) - Other legislation 				<p>GP2</p> <ul style="list-style-type: none"> - Yes, for buildings in the public interest - Market forces do not drive property protection in buildings of public interest resulting in society losing buildings - Definition of a building in public interest to be agreed <p>GP4</p> <ul style="list-style-type: none"> - Evidence: local acts and sect 20 statutory legislation worked - Issued to be resolved: Enforcement of Building regulations <p>GP9</p> <ul style="list-style-type: none"> - BUT requires flexible approach - To what extent does it need to be covered. - Resources need to be provided and to ensure compliance and continued compliance 		



Area of fire safety	ADB Area	Particular matters referred to in the MHCLG consultation for potential review	Strongly Disagree	Disagree	No consensus	Agree	Strongly Agree	IFE Recommendation
General	Scope of fire safety	2. ADB guidance being extended to cover property protection for domestic buildings.		✘				GP1, GP8 and GP9 comments all indicate that MHCLG meaning of the term “domestic” needs to be clarified.
		<p>GP7</p> <ul style="list-style-type: none"> - Too many variables in insurance requirements which change too often - Would impact on functional requirements of B Regs - Issues: useful to have alternative guide produced by insurance company - Agree consensus on risk and tolerance <p>GP6</p> <ul style="list-style-type: none"> - Regulation business - Extra complexity - Insurers not normally consulted. Environmental <p>GP5</p> <ul style="list-style-type: none"> - Life safety focus - Fire fighter safety <p>GP1</p> <ul style="list-style-type: none"> - Domestic – No - Residential - yes <p>GP2</p> <ul style="list-style-type: none"> - No, as long as all the measures in ADB and those proposed then this is already met <p>GP3</p> <ul style="list-style-type: none"> - All disagree <p>GP8</p> <ul style="list-style-type: none"> - Not suitable for single dwellings - Life safety measures should be enough 			<p>GP10</p> <ul style="list-style-type: none"> - Building regs life safety only - Building regs should be more resilient 	<p>GP4</p> <ul style="list-style-type: none"> - Evidence: Past acts (Section 20), past legislation worked - Issues to be resolved: enforcement <p>GP9</p> <ul style="list-style-type: none"> - Due to impact of need to rehouse large numbers but what type of domestic property - Multi-storey – yes Single house – no 		



Area of fire safety	ADB Area	Particular matters referred to in the MHCLG consultation for potential review	Strongly Disagree	Disagree	No consensus	Agree	Strongly Agree	IFE Recommendation
General	Purpose Groups	3. ADB adopting a risk profile approach similar to that used in BS9999 to define different building uses.			●			Existing purpose group system requires review but BS9999 system not universally well-regarded and can be open to abuse.
			<p>GP4</p> <ul style="list-style-type: none"> - Evidence: Existing purpose groups working but review required Issues: review of groups within ADB <p>GP5</p> <ul style="list-style-type: none"> - Mixed use. Existing tools sufficient - Simple document - Possible “gaps” from regs and guidance <p>GP10</p> <ul style="list-style-type: none"> - Ambiguity - Primary guidance to stat. req. - Purpose group should be reviewed/updated. <p>GP7</p> <ul style="list-style-type: none"> - Because recommendations and limited would all need to chance to make it worthwhile - Then there would be no point in having both ADB and BS9999 BUT purpose group needs revisiting - Issues: - PG’s based on alternative system (e.g. planning categories) <p>GP8</p> <ul style="list-style-type: none"> - Risk profile too complicated - Purpose groups generally acceptable. <p>GP3</p> <ul style="list-style-type: none"> - Risk profile is too complex for ADB. They are separate documents. No cherry picking 		<p>GP6</p> <ul style="list-style-type: none"> - BUT ADB needs to expand on NOPA <p>GP1</p> <ul style="list-style-type: none"> - Greater flexibility because of complexity of building use and occupancy <p>GP9</p> <ul style="list-style-type: none"> - it will give certainty of what risk profile - Risk profile to be used to inform Fire Protection Standard. <p>GP2</p> <ul style="list-style-type: none"> - ADB current purpose group is no longer fit for purpose and building categories all out of date - Risk based approach similar to BS9999 is more flexible and adaptable and relevant for fire safety - Definition or mark profile to be resolved to include a risk or frequency of fires based on a BS9999 model 			



Area of fire safety	ADB Area	Particular matters referred to in the MHCLG consultation for potential review	Strongly Disagree	Disagree	No consensus	Agree	Strongly Agree	IFE Recommendation
General	Specialised housing and care systems	4. Measures that will enable elderly people to live in their own homes for longer (specialised housing)				✓		Supported and will require specific guidance.
<p>GP8</p> <ul style="list-style-type: none"> - Wrong question. Are houses suitable for the needs of occupiers - Add sub group – residential sleeping <p>GP3</p> <ul style="list-style-type: none"> - Statement is unspecific there are adequate measures in place 			<p>GP4</p> <ul style="list-style-type: none"> - Loop holes within ADB and significant gaps in ADB it is not suitable or detailed enough - Issues – overhaul of guidance for this specific purpose group <p>GP6</p> <ul style="list-style-type: none"> - Agree. <p>GP5</p> <ul style="list-style-type: none"> - inevitable (Age) - Future proofing - Expand beyond elderly and inclusive of other needs <p>GP1</p> <ul style="list-style-type: none"> - Smoke is the biggest killer <p>GP7</p> <ul style="list-style-type: none"> - Specialised housing not part of a purpose group - Greater evidence of people being independent into old age - Better definition of building use - Application of stay put policy <p>GP2</p> <ul style="list-style-type: none"> - Current measures do not reflect the ageing population i.e. Guidance presumes self-evacuation but is not always achievable - Statistics on aging society - Elderly moving into city centre high rise blocks - Issues: definition of a proportional response as a function of size and expected demographic <p>GP9</p> <ul style="list-style-type: none"> - Agree - Proposals 1 to 3 will assist <p>GP10</p> <ul style="list-style-type: none"> - Agree in principle but guidance required - Group felt it should have its own guidance document 					



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General	Trigger heights and thresholds	5. Trigger heights (e.g. 5m, 7.5m, 10m, 18m and 30m) and other thresholds (e.g. compartment size) need to be reviewed.					✓	A review is strongly supported.
						<p>GP5</p> <ul style="list-style-type: none"> - Change in FF procedures and techniques. Change in building methods <p>GP10</p> <ul style="list-style-type: none"> - Change in building layout/footprint/façade/place etc - Changing firefighting dynamics /approach - Issues -ADB only <p>GP2</p> <ul style="list-style-type: none"> - Current trigger heights are outdated – doesn't reflect modern firefighting or operations Doesn't cover really high rise buildings. - There should be a maximum height - Clarification required whether height remains a measure of risk for each threshold. <p>GP6</p> <ul style="list-style-type: none"> - Especially 18 m! 11m ladders <p>GP3</p> <ul style="list-style-type: none"> - Agree but separate triggers for each fire safety aspect. <p>GP9</p> <ul style="list-style-type: none"> - All thresholds should be based on research <p>GP1</p> <ul style="list-style-type: none"> - Review trigger heights are not based on modern technologies <p>GP4</p> <ul style="list-style-type: none"> - Not looked at holistically. Evidence: financial constraints of the fire and rescue services. Abuse of trigger heights - Issues: ADB needs to provide more specific guidance for building types/purpose groups and more scientific approach needed <p>GP7</p> <ul style="list-style-type: none"> - Issues: harmonies with purpose-built guidance document - Clarity on why heights chosen - Out of date with technology & FF capabilities - Relevance to current design practise. <p>GP8</p> <ul style="list-style-type: none"> - Trigger heights generally ok but components' sizes require review. 2 different aspects. 		



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General	Age distribution	6. ADB guidance needs to be reviewed to reflect a changing age profile in society.				✓		Agreed but there is a consistent view that this should consider other vulnerabilities rather than just age.
		<p>GP5</p> <ul style="list-style-type: none"> - Other more relevant available ADB & M references in place - More about ability than age <p>GP6</p> <ul style="list-style-type: none"> - Age is not a criterion 			<p>GP10</p> <ul style="list-style-type: none"> - Age discrimination - Should be ability related not age 	<p>GP7</p> <ul style="list-style-type: none"> - Specialised housing not part of a purpose group - Greater evidence of people being independent into old age - Better definition of building use - Application of stay put policy <p>GP9</p> <ul style="list-style-type: none"> - Risk profile. Should take this in use. <p>GP4</p> <ul style="list-style-type: none"> - Evidence: needs to cover persons with other specialised needs - Less persons supervising on site - Issues: more specific guidance for a wide range of specialised needs <p>GP8</p> <ul style="list-style-type: none"> - Should be for general capability rather than age <p>GP1</p> <ul style="list-style-type: none"> - But should reflect vulnerability not just age. <p>GP3</p> <ul style="list-style-type: none"> - Life safety should be for all regardless of demographics part M covers it <p>GP2</p> <ul style="list-style-type: none"> - Agree. - Points as for Qu.4 		



Area of fire safety	ADB Area	Particular matters referred to in the MHCLG consultation for potential review	Strongly Disagree	Disagree	No consensus	Agree	Strongly Agree	IFE Recommendation
General	Smoke and Toxicity	7. Controls on the release in fire of toxic species from construction materials to be considered.			●			What is clear is that IFE members are divided on whether this is a good idea but are in general agreement that this will be a very complex issue to address and more work will be required to establish whether it is a sensible thing to do.
		<p>GP5</p> <ul style="list-style-type: none"> - Would be overly complex - No 'good' fires Toxicity is N/A - Idea to avoid fire in first instance <p>GP6</p> <ul style="list-style-type: none"> - All smoke is toxic and very complex <p>GP8</p> <ul style="list-style-type: none"> - ADB protects MoE - Linings and materials already considered to address. 			<p>GP7</p> <ul style="list-style-type: none"> - No consensus. <p>GP2</p> <ul style="list-style-type: none"> - Duty of care to ensure buildings are safe - The location and installation of such materials could be considered i.e. Cavity walls. - Would need evidence <p>GP3</p> <ul style="list-style-type: none"> - Will affect fire retardants - More contents rather than construction 	<p>GP10</p> <ul style="list-style-type: none"> - Premature death following fire? MMC will drive change - Complex issues to address! <p>GP4</p> <ul style="list-style-type: none"> - Evidence: review of ADB and third party accreditation on a more regular basis based on changes in products/systems - Issues: Clear and unambiguous guidance and industry guidance with independent test data - Removal of desk top studies (evidence-based test data) <p>GP9</p> <ul style="list-style-type: none"> - But what constitutes construction materials needs good definition <p>GP1</p> <ul style="list-style-type: none"> - Smoke is the biggest killer 		



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General	Construction Technologies and Designs	8. ADB needs to be reviewed to keep up to date with current construction materials and methodologies.					✓	Strongly supported.
						<p>GP1</p> <ul style="list-style-type: none"> - Tests need to be adapted to avoid manufacturer 'get arounds' <p>GP5</p> <ul style="list-style-type: none"> - Timber framing - External construct and flammability - Review to avoid in future <p>GP6</p> <ul style="list-style-type: none"> - Agree <p>GP9</p> <ul style="list-style-type: none"> - Need to be able to rapidly update the approved documents but change will need an effective ? <p>GP10</p> <ul style="list-style-type: none"> - Needs complete update and then regular (5 yearly?) review - Changing budget/construction approach - Challenging construction techniques - Modular units – fire behaviour <p>GP4</p> <ul style="list-style-type: none"> - With a regular review phase <p>GP8</p> <ul style="list-style-type: none"> - Document incomplete and out of date. - Requires parallel interpretation pathway <p>GP3</p> <ul style="list-style-type: none"> - Has to be reviewed by different people <p>GP7</p> <ul style="list-style-type: none"> - Because designs are used to get around limits or limits cannot be applied - Issues: ADB will need updating more often - Must not stifle innovation <p>GP2</p> <ul style="list-style-type: none"> - Needs to be updated as new materials have varying combustibility because ADB is predicated to non-combustibility - These materials are in use and have contributed to fire spread. Gaming ADB to use materials not covered in ADB - Guidance specific to use of combustible material construction to be produced. 		



Area of fire safety	ADB Area	Particular matters referred to in the MHCLG consultation for potential review	Strongly Disagree	Disagree	No consensus	Agree	Strongly Agree	IFE Recommendation
General	Construction details	9. ADB should refer to sources of industry guidance on good practice.				✓		General support but care should be taken to mitigate commercial bias/pressure.
			GP7 - Refer to industry good practise should be good practice - not mandated by evidence - Too broad			GP6 - Hackett said so! GP9 - Logical to release good practice GP5 - Caveat to say alternatives are available GP8 - Already refers to this in existing scope and intentions - Enhance section for how to use GP10 - BS9999 – Bias towards products - Industry commercial pressure/advantage - Bias per industry group GP4 - With government led guidance with a verification process GP3 - All agree this is an important part of the process GP2 - There are good examples of best practice which should be utilised		



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General	Cables	10. ADB should refer to the classification of the fire resistance of cables to BS7671.	<p>GP6</p> <ul style="list-style-type: none"> - Specified elsewhere 		<p>GP5</p> <ul style="list-style-type: none"> - Limited knowledge <p>GP1</p> <ul style="list-style-type: none"> - No consensus <p>GP4</p> <ul style="list-style-type: none"> - Not sure - Is the testing process suitable and sufficient? - Do they replace real world conditions? 	<p>GP10</p> <ul style="list-style-type: none"> - Not sure if purely BS7671 or other standards too - Any other standards? - Link to PTP? <p>GP8</p> <ul style="list-style-type: none"> - Agree <p>GP2</p> <ul style="list-style-type: none"> - BS7671 should be included in ADB - Electrical fire statistical data - Shirley Towers fire <p>GP9</p> <ul style="list-style-type: none"> - Classification to 7671 <p>GP7</p> <ul style="list-style-type: none"> - Why not? <p>GP3</p> <ul style="list-style-type: none"> - Simple guidance will be helpful - Contents more than construction 	<p style="text-align: center;">✓</p>	There is support for this 'proposal'.



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Requirement B1: Means of warning and escape	Means of escape from blocks of flats	11. The 'stay put' strategy is still appropriate.					✓	<p>The strength of opinion rests with the view that a 'stay put' fire strategy is still appropriate for blocks of flats.</p> <p>Discussion in the plenary session after the breakout group session showed that there was a high level of discomfort about the wording "stay put" and that a more appropriate form of words could be more helpful so that residents do not feel that they are 'ordered' to stay in their dwelling.</p>
			<p>GP4</p> <ul style="list-style-type: none"> - Stay put is not still appropriate - Historical reasons for stay put, back to basics policy – still relevant? - Lost the principles of the original evacuation strategy from previous legacy guidance 		<p>GP6</p> <ul style="list-style-type: none"> - No consensus 	<p>GP1</p> <ul style="list-style-type: none"> - Escalation process needed <ol style="list-style-type: none"> 1. To decide when to stop 2. how to communicate to occupants <p>GP7</p> <ul style="list-style-type: none"> - Statistics still show this is low risk - Issues: information to occupants - Maintenance of fabrics and systems - Control of change including internal to flats - Ability to assist FB with abandonment of stay put <p>GP5</p> <ul style="list-style-type: none"> - Existing buildings?!? - Principle works - Consideration of development and alternatives <p>GP3</p> <ul style="list-style-type: none"> - It is appropriate - building management and landlord property agent needs proper education for people involved. <p>GP2</p> <ul style="list-style-type: none"> - Evidence = is body of buildings where it works - Issue = Clarification of definition i.e. 'Stay safe' vs 'stay put' <p>GP10</p> <ul style="list-style-type: none"> - Increasing number of engineered solutions / issues of building construction – MMC, quality etc. Will building allow stay put? - No of means of escape - FRA needs! – not robustly addressed - Q/A fire risk - Ability to understand/respond. <p>GP9</p> <ul style="list-style-type: none"> - But fire compartmentation needs to be reviewed and sprinklers need to be adopted - However, post Grenfell will persons stay put <p>GP8</p> <ul style="list-style-type: none"> - Dependent on suitability of building and occupants 		



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Requirement B1: Means of warning and escape	Means of escape from blocks of flats	12. Fire alarm systems should be extended beyond just smoke alarms in dwellings.				✓		<p>It was clear in the plenary session that it was felt that the question should have been made clearer in respect of whether it was intended to refer to a proposal to adopt simultaneous evacuation strategies for blocks of flats.</p> <p>It was felt that it would perhaps have been better to ask the question “should blocks of flats adopt a simultaneous evacuation strategy?”.</p> <p>The answer to that question would be ‘no’.</p> <p>So any extension to fire alarm systems should be considered in respect to assisting the fire service/building management in moving to a full evacuation of the building when required.</p>
			<p>GP10</p> <ul style="list-style-type: none"> - Contradicts stay put approach? <p>GP4</p> <ul style="list-style-type: none"> - As a life safety measure, it is NOT required - Needs to be reviewed - Can cause an issue with unwanted alarms if with common parts 		<p>GP6</p> <ul style="list-style-type: none"> - Silly question! <p>GP3</p> <ul style="list-style-type: none"> - Section meets major review 	<p>GP1</p> <p>But with review of manual automatic operation</p> <p>GP8</p> <p>To aid firefighters and locating fire</p> <p>GP7</p> <ul style="list-style-type: none"> - Ability to extend evacuation to whole floor/building and Fire Brigade override switch - Would have helped with recent disasters - Issues: Must not compromise evacuation capabilities of building or confuse action to be taken - Elimination of false alarm <p>GP9</p> <ul style="list-style-type: none"> - But needs to be compatible with stay put manual control by FRA <p>GP2</p> <ul style="list-style-type: none"> - Needed for Fire Brigade if evacuation is required. Manual with key - Should be an alarm system only not AFD. - Cause vs effect needs to be clarified. <p>GP5</p> <ul style="list-style-type: none"> - Risk-based approach - With technology that can be adaptable on site to suit - Only certain circumstances - Possible manual only? - Many caveats required 		



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Requirement B1: Means of warning and escape	Means of escape from blocks of flats	13. Two protected means of escape should be provided				✓		Agreement is marginal and there was concern that a 'requirement' for two means of escape needs to be proportional to the building risk so that for certain risk levels a single escape stair may still be appropriate. Needs some work.
			GP10 (Subject to...) - "Sterile escape routes" are the challenge! - They don't happen! - Practise demonstrates weaknesses with single means of evacuation - Ambiguity with ADB GP2 - Issues to be resolved: - All other ADB measures must be in place and stair must be sized adequately for escape and fire fighting	GP7 - Strong opinions but no evidence supporting either way - Issues – survey on compartmentation needed to support concept of protection for single stair GP3 - Wording has to change	GP1 - But qualified by: <ul style="list-style-type: none"> ○ Building height ○ Other fire safety provisions GP9 - Agree GP8 - Yes, for new build properties GP4 - Single means of escape not recommended GP6 - Above a certain height GP5 - Trigger points and facility triggers to requirement			



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Requirement B1: Means of warning and escape	Means of escape from blocks of flats	14. Guidance on smoke control should be reviewed.					✓	Strongly supported.
					<p>GP2</p> <ul style="list-style-type: none"> - Very little guidance on smoke ventilation - Now have many premises where vents are not provided or have been removed - Clarification required on staircase requirement. AOV provision etc. <p>GP4</p> <ul style="list-style-type: none"> - Agreed <p>GP1</p> <ul style="list-style-type: none"> - Agreed <p>GP6</p> <ul style="list-style-type: none"> - Agreed <p>GP3</p> <ul style="list-style-type: none"> - Agreed <p>GP9</p> <ul style="list-style-type: none"> - Agreed <p>GP10</p> <ul style="list-style-type: none"> - Needs to be scientific review - Absence of the requirements for pressurisation <p>GP7</p> <ul style="list-style-type: none"> - ADB needs better clarity on what is required. - Issues: consensus between authorities <p>GP5</p> <ul style="list-style-type: none"> - Application of current is confusing and inconsistent results <p>GP8</p> <ul style="list-style-type: none"> - No additional comments 			



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Requirement B1: Means of warning and escape	Means of escape for disabled people	15. Allow use of evacuation lifts as an alternative to refuges in non-residential buildings.			●			<p>Significant split of opinion. From the plenary session it is clear that this needs a fundamental review of the manner in which refuges are currently used with or without evacuation aids and the expectations and views of the vulnerable persons that these facilities are intended for should be sought and listened to.</p> <p>There also needs to be a close look at the current 'fire service cannot be relied upon to help with evacuation' position.</p>
			GP10 - Should NOT be used as "alternative" can be part of wider strategy - Not instead of! GP4 - Both should be required – evac lifts and refuges GP1 - Refuge is needed regardless GP9 - Evac lift requires an associated refuge GP5 - Refuges still needed with evac lifts GP7 - Refuge still needed while lift is in use - Possibly seen as replacement for management			GP6 - Please refer to NFPA 101 - Disabled refuges work poorly - UK guidance GP8 - No additional comment GP3 - Agree GP2 - Refuges are small - People cannot self-evacuate from high rise without lifts - Need to define building threshold (height, occupancy, numbers) when required		



Area of fire safety	ADB Area	Particular matters referred to in the MHCLG consultation for potential review	Strongly Disagree	Disagree	No consensus	Agree	Strongly Agree	IFE Recommendation
Requirement B1: Means of warning and escape	Means of escape for disabled people	16. Add more explanatory guidance appropriate to the issue in residential buildings with 'stay put' strategies.					✓	Strongly supported.
						GP1 - Agree GP7 - Designers (not fire engineers) do not understand concept - To give confidence in this as a system following Grenfell GP8 - No additional comment GP2 - The intention of stay put needs to be clarified - Should be stay safe GP4 - <u>NEED</u> to understand the principles of evacuation strategy GP5 - Good Luck! - Lots of discussion required - Needs to be considered at build GP10 - Improve understanding and embed key principles GP6 - Agreed GP3 - Agree GP9 - Agree		



Area of fire safety	ADB Area	Particular matters referred to in the MHCLG consultation for potential review	Strongly Disagree	Disagree	No consensus	Agree	Strongly Agree	IFE Recommendation
Requirement B3: Internal fire spread (structure)	Compartmentation	17. Amend guidance on maximum compartment sizes.				✓		This is supported with the caveat that is requires proper and full consideration.
			GP5 - Further research required GP3 - Need review and not amend based on life safety - There has been no major problem with this	GP10 - Possible volumetric approach - Should be reflective of fire load/purpose group GP6 - No consensus	GP2 - Compartment sizes based on post war building structures no longer relevant - Issues to be resolved: Relative life safety issue for compartments in modern buildings GP7 - To account for modern construction technology - Update for fire-fighting capabilities and construction standards - Issues: incorporating compensation measures GP4 - As buildings are more complex especially warehouses GP8 - No additional comments GP9 - Agree GP1 - Agree			



Area of fire safety	ADB Area	Particular matters referred to in the MHCLG consultation for potential review	Strongly Disagree	Disagree	No consensus	Agree	Strongly Agree	IFE Recommendation
Requirement B3: Internal fire spread (structure)	Sprinklers and other Fire suppression systems	18. Change the threshold height of 30m currently used for blocks of flats.					✓	Support for this is caveated on the basis of full and proper review.
			GP6 - Any limit is arbitrary. NFPA= 23 metres	GP10 - Needs consideration/review to see if change is required!	GP1 - Agree GP3 - Agree GP4 - Agree GP2 - Cost benefit shows this is justified for all flats - With an ageing population this will strengthen GP9 - Should align with risk profile GP5 - Other than cost – why not? GP8 - For single escape stairs, reduce to maximum of 18 metres - Dependent on occupant capability GP7 - Fire brigade resources reduced for lower heights - Also relates to question 5 revising threshold heights			



Area of fire safety	ADB Area	Particular matters referred to in the MHCLG consultation for potential review	Strongly Disagree	Disagree	No consensus	Agree	Strongly Agree	IFE Recommendation
Requirement B3: Internal fire spread (structure)	Sprinklers and other Fire suppression systems	19. Extend automatic fire suppression to other types of building.			●			This needs further careful and considered review before decision to extend is taken.
			GP5 - Insurance driven property protection GP8 - ADB only covers 'simple' buildings GP3 - Question is not clear. Would like to see this in residential buildings	GP10 - Needs consideration /review to see if change is required (as per 18) GP7 - Response? Question not fully understood - Review needed for other residential building types	GP1 - To include other building types and possibly property protecting e.g. emergency supply components GP2 - Cost benefit analysis shows benefit for large warehouses and factories - Also, no reason hotels and student accommodation to be excluded. See discussion about purpose groups GP9 - Should align with risk profile GP6 - Agree GP4 - Holistic approach			



Area of fire safety	ADB Area	Particular matters referred to in the MHCLG consultation for potential review	Strongly Disagree	Disagree	No consensus	Agree	Strongly Agree	IFE Recommendation
Requirement B4: External fire spread	Space separation	20. Modern methods of construction result in higher compartment fire temperatures and there is a need to reduce permissible unprotected external area.			●			Split opinion between those that consider there is no evidence that the current guidance is deficient and those that consider that some research is justified to look at whether the current guidance needs amending. There is no agreement that the current permissible unprotected areas need to be reduced until this research is done.
			GP8 - No known additional radiated fire spread GP5 - Robust as it is GP3 - No need for it. Not aware of any evidence so far GP7 - No evidence to suggest boundary distance cause of major fire spread GP6 - Disagree	GP10 - Needs a review to determine if tables in ADB still relevant!	GP1 - BR187 Assumptions need to be reviewed to account for thermal output and products of combustion drift etc. GP2 - BRE Research - Issue: definition of compartment characteristics that result in higher compartment temperatures GP4 - Not just space separation as impacts on other issues - Review of testing methods to replicate real world conditions GP9 - Agree but requiring research to establish the appropriate level			



Area of fire safety	ADB Area	Particular matters referred to in the MHCLG consultation for potential review	Strongly Disagree	Disagree	No consensus	Agree	Strongly Agree	IFE Recommendation
<p>Requirement B5: Access and facilities for the fire service</p>	<p>Fire service vehicle access</p>	<p>21. Current guidance is impracticable and needs to be reviewed.</p>					<p>✓</p>	<p>Strongly agreed.</p>
						<p>GP1 - Need to review access roads as well as space around the building</p> <p>GP6 - See CIBSE Guide E</p> <p>GP5 - Dated and research required on review - Techniques, equipment has changed</p> <p>GP4 - Needs to be reviewed - Guidance does not work in practise - Further guidance required on roadways leading to sites</p> <p>GP10 - It should be reviewed! - Any fitted with fire mains that doesn't meet certain criteria – then sprinklers should be provided! - Open water issue!</p> <p>GP7 - Review of reversing distance etc. - More guidance needed on what constitutes perimeter access for pump appliance</p> <p>GP3 - Needs reviewing</p> <p>GP9 - Needs to reflect modern fire appliances and firefighting practice along with levels of car ownership etc.</p> <p>GP8 - No additional comments</p> <p>GP2 - Review vehicle access - Uncontrolled parking - Limited access to dry riser mains - Hydrants covered - Enforcement of hatched (no parking) areas - "Review Whole"</p>		



Area of fire safety	ADB Area	Particular matters referred to in the MHCLG consultation for potential review	Strongly Disagree	Disagree	No consensus	Agree	Strongly Agree	IFE Recommendation
<p>Requirement B5: Access and facilities for the fire service</p>	<p>Internal facilities</p>	<p>22. Recommendations for internal measures e.g. fire-fighting shafts and risers needs to be reviewed.</p>					<p>✓</p>	<p>Strongly agreed.</p>
			<p>GP8 - Disagree</p>			<p>GP1 - Single stair access causes problems if barrier is breached - Location of rising main can cause break down of barriers</p> <p>GP5 - Recent developments in other guidance renders ADB dated</p> <p>GP9 - Appropriate for the risk profile</p> <p>GP10 - Fire Fighting shaft – should go to 11 metres! - Ladder access approach has changed! - Pressurised Fire Fighting shafts!</p> <p>GP6 - Fire Hose/door - See NFPA</p> <p>GP4 - In line with Fire Fighting operating procedure and current BS guidance</p> <p>GP7 - Operational/anecdotal example of problems with firefighting lifts - Revise for modern vehicle capabilities</p> <p>GP3 - Practical fire fighting</p> <p>GP2 - “Fire Fighting Procedures” review - Review of firefighting installations - Charging of dry riser results in breaching of fire doors resulting in fire spread - Location of mains - Better smoke control of corridor and firefighting shafts</p>		



Area of fire safety	ADB Area	Particular matters referred to in the MHCLG consultation for potential review	Strongly Disagree	Disagree	No consensus	Agree	Strongly Agree	IFE Recommendation
Requirement B5: Access and facilities for the fire service	Basements	23. A holistic approach for basements rather than focussing on smoke ventilation provisions may be better.					✓	Strongly agreed.
			GP5 - Current system is thorough - Outside of consent guidance engineered approach			GP10 - NOT at the expense of smoke ventilation! - Overall review GP7 - Clearer guidance for access to basements without Fire fighting shafts - Vary recommendations according to use of basement GP9 - But difference between basement and lower ground floor needs to take into account current operational tactics GP8 - Review definition of a basement - consider from B5 perspective GP1 - Operational procedures need incorporating. - Basement use has changed and needs updating GP4 - Basements should be reviewed to check current guidance and firefighting operations GP6 - Agree GP3 - Agree GP2 - Approach for basements assumes all basements and risks are the same - Issues: Holistic approach measures should match purpose groups or risk profiles		

IFE Workshop Tuesday 5th February 2019 - BREAKOUT GROUP SESSION 2



THE INSTITUTION OF FIRE ENGINEERS
FOUNDED 1918 • INCORPORATED 1924

The attendees at the event were split into 10 break-out groups and tasked with reviewing 5 'suggestions to MHCLG for review'.

The groups were asked to present a democratically-decided Group Position from one of the three following options:

- **Agree** the Group supports the 'suggestion to MHCLG for review'
- **No Consensus** there is a significantly split opinion in the Group
- **Disagree** the Group does not support the 'suggestion to MHCLG for review'

For each of the 1-5 'suggestions to MHCLG for review' the following table lists the group positions and comments made in three columns from left to right according to 'disagree/no consensus/agree'.

To indicate an IFE position based on the strength of disagreement-agreement, a scoring system is use as follows:

1. Each Group 'agree' position scores +1
2. Each Group 'disagree' position scores -1
3. Each Group 'no-consensus' position scores 0
4. Add scores to give total
5. Total = -10 to -7 IFE position = **Strongly Disagree**
6. Total = -6 to -3 IFE position = **Disagree**
7. Total = -2 to 2 IFE position = **No consensus (i.e. neither agree or disagree)**
8. Total = 3 to 6 IFE position = **Agree**
9. Total = 7 to 10 IFE position = **Strongly Agree**



Area of fire safety	ADB Area	Suggestions to MHCLG for review	Strongly Disagree	Disagree	No consensus	Agree	Strongly Agree	IFE Recommendations
Building Information	Regulation 38	1. Provide clearer guidance about expectations for the quality of information handed over to the occupier on building completion. (Reg 38)					✓	The IFE strongly recommends to MHCLG that there should be clearer guidance about expectations for the quality of information handed over to the occupier on building completion. (Reg 38)
					GP5 <ul style="list-style-type: none"> - No "enforcement" - Interpretation - Prominence of info in ADB - Acceptance of poor intervention by Building Control - Current info adequate 	GP4 <ul style="list-style-type: none"> - Difficult to obtain/Where is it? - Can be signed off without seeing it - Needs enforcement and better control GP2 <ul style="list-style-type: none"> - Existing information on content is adequate (<i>just</i>) but additional guidance should be provided on people involved, location of storage and maintenance of information - (National Database) - also needs enforcing GP10 <ul style="list-style-type: none"> - Lack of consistency and actually... does it exist? - Is it accurate? - Evidence: that it is feasible (see motor industry) - Central database is key and essential GP7 <ul style="list-style-type: none"> - Typically, handover of information not being done - Good to have guidance on what is expected - Survey needed for evidence GP8 <ul style="list-style-type: none"> - No guidance (realistic) in place currently GP6 <ul style="list-style-type: none"> - Our experience shows information is not useful (pants!) - Structured strategy - Schedule of info to be supplied GP9 <ul style="list-style-type: none"> - Needs to be in simple form easy to understand - A standard schedule of required information - More rigorous enforcement - Building Control should obtain confirmation owner has received it GP3 <ul style="list-style-type: none"> - Enforcement responsibility - Whose responsibility? - Records need updating? - Fire engineer - where do they go? GP1 <ul style="list-style-type: none"> - Product compliance - Selection - Apply to passive and active 		



Area of fire safety	ADB Area	Suggestions to MHCLG for review	Strongly Disagree	Disagree	No consensus	Agree	Strongly Agree	IFE Recommendations
Inspectability	N/A (not in ADB yet)	2. Provide guidance on designing, constructing/installing and labelling fire precautions to facilitate inspections by Competent Person (e.g. Fire Risk Assessors)					✓	The IFE strongly recommends to MHCLG that there should be clearer guidance on designing, constructing/installing and labelling fire precautions to facilitate inspections by Competent Person (e.g. Fire Risk Assessors)
						<p>GP4</p> <ul style="list-style-type: none"> - Inspectability - 3rd party products? - Issues of counterfeiting - Difficult to identify fire precautions, a competent person is required - Clearer labelling/identification needed - Use of QR codes? <p>GP1</p> <ul style="list-style-type: none"> - Consistent approach required - Documented - Colour Coding <p>GP10</p> <ul style="list-style-type: none"> - ADB is not a design guide, but should reference standards - Reference back to Q1 (Reg 38) - Any active systems should have cause and effect (as per Q1) <p>GP8</p> <ul style="list-style-type: none"> - Agreed <p>GP5</p> <ul style="list-style-type: none"> - managing and applying <p>GP9</p> <ul style="list-style-type: none"> - All work should be certified and/or labelled <p>GP6</p> <ul style="list-style-type: none"> - Certification - Clerk of work - Video/photo evidence <p>GP3</p> <ul style="list-style-type: none"> - Competent to produce labels - Better education - When do people come on board? <p>GP7</p> <ul style="list-style-type: none"> - Many FRAs carried out with insufficient clarity on features on site <p>GP2</p> <ul style="list-style-type: none"> - Evidence: maintenance and inspection <i>is</i> problematic and does not happen - Issue: Buildings should be well documented on handover and guidance should facilitate effective handover for Fire Safety Order and ongoing maintenance 		



Area of fire safety	ADB Area	Suggestions to MHCLG for review	Strongly Disagree	Disagree	No consensus	Agree	Strongly Agree	IFE Recommendations
Fire Safety design and specification	General	3. Refer to RIBA Fire Plan of Works (under development and subject to input from the CIC Working Group 3 Fire Engineers) as a reference for good practise				✓		The IFE recommends to MHCLG that MHCLG supports the RIBA Fire Plan of Work subject to recommendations for a row being added to clearly identify the role of a Fire Engineer through the project phases (see CIC WG3 recommendations).
			GP4 - General fire safety design and specification - Should not sit with ADB - Should sit in the procedural guidance notice of irregularities - Should dovetail with a robust enforcement system GP10 - Not a guidance document - Not relevant to a completed building GP7 - RIBA Plan of Work only engages Fire Engineers at Stages 2-4 – does not go far enough - RIBA not the only Plan of Work - ADB should not narrow field and allow other systems - Issues: Although not refer to RIBA Plan of Work should give guidance on when and for what Fire Engineering is needed.			GP5 - Get specialist knowledge involved at early stage GP1 - BUT not road tested yet - It's not deep enough yet and needs to be embedded GP2 - On promise that RIBA incorporate recommended changes by CIC WG3 GP9 - Suitable for a reference document but needs further development GP6 - FEI? Why - Golden thread GP3 - RIBA - Continuity of Fire Engineer - Fire engineering 2-6 - Fire Risk Assessment for stage 7 - time restraints - Scotland – approval/certification before starting GP8 - What is it they are expecting the Fire Engineer to offer at this stage?		



Area of fire safety	ADB Area	Suggestions to MHCLG for review	Strongly Disagree	Disagree	No consensus	Agree	Strongly Agree	IFE Recommendations
Fire Engineering	Definitions	<p>4. Add definition of “Fire Engineering” as follows:</p> <p><i>“Fire Engineering is the competent application of scientific and understanding engineering principles, rules [codes], and expert judgment, based on an understanding of the phenomena and effects of fire and of the reaction and behaviour of people to fire, to protect people, property and the environment from the destructive and harmful effects of fire.”</i></p>				✓		The IFE recommends to MHCLG that MHCLG adds a definition of ‘Fire Engineering’ to ADB covering purpose and competency.
			<p>GP3</p> <ul style="list-style-type: none"> - Definition Fire Engineering is the demonstration of functional requirements of BR outside of code compliance <p>GP1</p> <ul style="list-style-type: none"> - At the moment we don’t know if “Fire Engineering” is going to be an important term in ADB 			<p>GP10</p> <ul style="list-style-type: none"> - BUT does this suggested wording align with 7974 definition? - Consistency across whole ‘Fire Engineering’ industry – needs a single definition - Current ADB wording points to potential to “Engineer Out”! <p>GP8</p> <ul style="list-style-type: none"> - Agreed <p>GP4</p> <ul style="list-style-type: none"> - Definitions - agree - BUT levels of competency to be understood <p>GP5</p> <ul style="list-style-type: none"> - No comment on definition <p>GP7</p> <ul style="list-style-type: none"> - BUT needs to use simpler language to make clear purpose of fire engineering to non-technical users of ADB <p>GP9</p> <ul style="list-style-type: none"> - Appears to cover what fire engineering is <p>GP6</p> <ul style="list-style-type: none"> - Poorly written - Revert to original <p>GP2</p> <ul style="list-style-type: none"> - Evidence: Hackitt and all the bad “fire engineering” 		



Area of fire safety	ADB Area	Suggestions to MHCLG for review	Strongly Disagree	Disagree	No consensus	Agree	Strongly Agree	IFE Recommendations
Competency of fire safety designers and specifiers (Fire Engineers)	Reference to certification (as is already the case in ADB for products and installers)	5. ADB should make reference to an expectation that a Fire Engineer will have membership of a professional body with a Code of Professional Conduct (COPC), with a Whistleblowing Policy and associated support for its members and have a robust and effective disciplinary procedure for sanctioning members who breach the body's COPC.				✓		The IFE recommends to MHCLG that MHCLG adds to ADB that persons carrying out fire engineering work should have membership of an appropriate professional body.
			GP3 - What is the benefit? - Not for ADB GP4 - Within own institution e.g. IPE/IMechE/IChem			GP2 - Evidence: Hackitt report and non-experts doing fire engineering GP6 - Whistleblowing? GP9 - Membership of an appropriate professional body and have appropriate knowledge, training and experience GP10 - Level of competency to be relevant to complexity of building - Accountability is key! GP8 - Essential and relevant CPD – reviewed and evidenced, manager or peer counter signed - Where fire engineering is presented as a solution it should be justified by a Fire Engineer – relevant professional body GP5 - Has to be inclusive of all fire safety professionals GP7 - BUT should not limit to membership of one specific body GP1 - Agree in principle - Should be applied to all professional bodies in construction		