Dear Sir / Madam

The IET’s response to the call for evidence by the Housing, Communities and Local Government Committee with regards to the ‘Pre-Legislative Scrutiny of the Building Safety Bill’

The Institution of Engineering and Technology (‘IET’) is Europe’s largest professional and technology organisation with 168,000 members drawn from industry, academia and the public sector. The members represent a wide range of expertise, from technical experts to business leaders, encompassing a wealth of professional experience and knowledge. Our primary aims are:

a) to provide a global knowledge network, promoting the exchange of ideas between business, academia, governments and professional bodies, and enhancing the positive role of science, engineering and technology;

b) to address engineering and technology challenges that society faces in the future.

At the IET, we welcome the Government’s commitment to safety, demonstrated by the Fire Safety and Building Safety Bills. Many of our members work in and with the built environment and safety sectors. We have been keen to draw on their impartial, independent advice with a view to supporting measures that enhance safety and standards for the benefit of residents and the wider construction industry. With that in mind, we have submitted responses to previous consultations, and we are currently participating in the work of the Competence Steering Group for Building a Safer Future (CSG).

We have provided a summary response below, together with our full response to your eight questions. We would be happy to discuss our comments in more detail and to provide examples and evidence from our extensive networks of engineers. Please feel free to contact us at SEP@theiet.org or on 07860-403464 if you would like to arrange this.

Summary

Our key points from each question are given below:

1. The IET welcomes the Bill as it supports residents’ safety and greater empowerment in Higher Risk Buildings (HRBs). The Bill aims to create a culture of quality in the built environment industry, with accountability and competence playing key roles. However, the IET is concerned that the lack of mandatory contextual competence and professional registration may lead to inconsistent rigour in delivery and cost-cutting, that increase safety risks.

2. Positive features in the Bill include the Building Safety Regulator (BSR) role, the competence National Standards, the 3 Dutyholders, key accountability remits, the Gateway system, and the new Homes Ombudsman. Funding for these roles and complexity around ownership models need resolving. In due course, the IET believes the regulatory system should encompass all communal buildings to ensure consistent safety standards. The scoping of HRBs (18 m height with residents in occupation) is narrow, and fails to take into account other high-risk properties / factors.

3. The existence of Accountable Persons throughout a building lifecycle will improve the ownership and effectiveness of safety actions. A user-friendly digital stakeholder map and safety golden
thread, available to all key parties at early development stages, is essential in supporting understanding and timely delivery.

4. A Residents’ Panel with direct links to the BSR will help to voice key safety concerns. Pragmatically, the management of highly technical issues and the effectiveness of channels between a high-level panel and local resident committees remain unclear.

5. The principle of a new building safety charge is fair. However, the definition of ‘reasonable’ charges, for both leaseholders and landlords, is unclear. If charges are too low, landlords may cut costs by reducing the quality of work, with detrimental safety impacts for leaseholders.

6. Product testing should include mandatory testing of relevant products together to ensure conformity to standards as a unit. Real world tests should be enforced, rather than reliance on desktop studies. Robust supplier chain assurance and greater use of product Declarations of Performance are key to ensuring confidence in compliance.

7. It’s appropriate that the BSR comes under the HSE. We suggest the BSR is funded through the Government – at least until an appropriate ‘fee for intervention’ type scheme has been robustly tested to ensure fitness for purpose.

8. The Bill should be flexible enough to encompass wider policy obligations (especially ‘net zero’), future industry developments, process adaptations, and an expansion of the scope of buildings covered. We believe that regulating via safety case reports is appropriate, as is the requirement for sprinkler systems.

**Full Responses to the Questions**

1. **How well does the Bill, as drafted, meet the Government’s own policy intentions?**

   1.1. The Government’s overriding aim is to ensure that residents in all buildings are safe and feel safe. As framed, the Bill focuses on residents in Higher Risk Buildings (HRBs), especially in the occupation phase. However, there can obviously be risks (fire, flooding, gas explosions, electric shocks etc) in other buildings and smaller blocks.

   1.2. The Bill is welcome as it provides a comprehensive framework in law that supports residents’ safety, that enhances their confidence and trust in the system. It also gives residents a more effective means of communicating issues and getting action done. The Bill gives greater transparency of the process to residents, empowering them with access to safety information and a more direct means of resolving issues via the new Homes Ombudsman.

   1.3. There’s a welcome focus on changing the culture of the wider built environment industry in the Bill. It highlights the need for oversight with contextualised competence at all levels (through design, construction and occupation stages), with accountability and clear ownership. This follows the Hackitt recommendations and subsequent reports / consultations. However, there needs to be continual enforcement of the new requirements to ensure adherence. Otherwise there is a risk that the desired governance and assurance regime will not be effective.

   1.4. The IET is concerned that whilst the Bill ‘creates powers to prescribe’ (Explanatory Note (EN) 35 Industry Competence), it doesn’t oblige individuals and organisations to comply with independent mandatory training and (re)assessment, to raise and maintain standards via professional registration (Clause 39). It’s not compulsory that construction organisations and individuals at all levels must fully demonstrate contextualised competence – skills, knowledge, experience and behaviours (SKEB) - or carry out Continuing Professional Development (CPD) after registration / competence assessment to keep SKEB up to date. Advisory compliance is obviously not as effective as enforced compliance that identifies and enforces competence. This lack of mandatory compliance threatens to undermine the good work of the CSG and is at odds with the BSI’s commission (from MHCLG itself) to develop
related National Standards. There are already several “competing” competence proposals from different organisations for different industries. The lack of obligation will enhance confusion and make the harmonisation and adoption of the overarching competence framework and the accompanying Publicly Available Specification (PAS) more difficult.

1.5. As the Bill stands, competent individuals could be constrained by a lack of organisational competence and vice versa. EN 33 states the Dutyholder role can be fulfilled by either an individual or an organisation. The concern is that if an organisation has the Dutyholder role, it may use staff of varying competence to carry out the work. Diverse levels of competence of different operators/trades on a project could affect the quality and standardisation of outputs produced.

1.6. The Bill allows the Architects Registration Board to monitor the competence of architects throughout their registration, and to assess their training and CPD (Clause 111). The IET suggests that it would be appropriate for the same registration, monitoring and disciplinary provisions to be enforced for other building services professionals, including those involved in the management of buildings.

1.7. There are several electrical trade associations and competent person bodies, that can monitor and assess the training/competence of electrical operatives. However, there is no equivalent requirement for designers’ competence. The Bill proposes powers (but there’s no enforcement) to ensure competence (of the Principal Designer and Contractor), but it’s not clear that this extends to electrical and other building services designers. EN 362 states:

“Anyone who participates in or manages the work must have the appropriate skills, knowledge, experience and behaviours, and if they are an organisation, the organisational capability to carry out work in a way that is compliant with building regulations. If a person does not have the appropriate skills, knowledge, experience and behaviours, they must be in the process of obtaining it, and must be appropriately supervised.”

EN 369 only indicates that:

“The new provisions will impose general duties in relation to competence of persons carrying out any work on all buildings to ensure compliance with building regulations”.

However, not all necessary work (including modifications, repairs etc) is covered by the Building Regulations.

1.8. Costs and timelines are necessarily key factors in the procurement process. The absence of mandated competence levels raises the concern that organisations that embrace the ethos of the draft Bill with its drive for quality and resident safety, may be undercut by others who focus more specifically on driving down costs. If contract decisions are weighted too heavily towards cost savings (incentivised in times of economic constraint), the fundamental sector reforms may be undermined. Principles of prevention in CDM 2015 Appendix 1 provide a hierarchy of controls that guide designers to eliminate and remove risks during the design phase. The concern is that these may not be applied consistently due to cost cutting in design. This raises a risk that the new Bill will be less effective, the desired culture change not embedded, the safety risk increased, and resident confidence and trust reduced.

1.9. The IET believes that independent building control oversight should be enforced (Clauses 36 & 44). The Gateways provide a perfect opportunity to reinforce this role – as long as carried out by technical staff who are members of a competent person scheme. If not done, there’s a risk that oversight by the builder alone may undermine the rigour of the process.
2. Does the draft Bill establish an appropriate scope for the new regulatory system?

2.1. The Bill contains many positive features including: the independent oversight by the Health and Safety Executive (HSE) via the Building Safety Regulator (BSR), the creation of related BSI National Standards, the role of the 3 Dutyholders (Principal Designer, Principal Contractor, Building Safety Manager), key accountability remits throughout the building lifecycle, the new Gateway system to ensure conformity to specifications at key points, and the creation of a Homes Ombudsman to replace the ‘democratic filter’. However, there is no provision as to how these bodies are to be funded, either initially or in the long term (as alluded to in Q7).

2.2. The scope of HRBs of 18m height with residents in occupation is clear, though perhaps oversimple. Height should not be the sole criterion for defining a high-risk building (see 1.1). Consideration is needed of the number of apartments in residence, and hence the amount of people who could be trying to escape at any one time. There’s a risk of stampeding if large numbers avoid ‘Stay Put’ due to fear of the unknown or lack of information (notwithstanding the provisions in response to Q4).

2.3. The draft Bill does not currently include other large communally-used buildings, though it may be extended to include types such as specialised housing (eg for assisted living), which rely on a ‘stay put’ policy. The current scoping is pragmatic with regards to built environment resourcing capacity. However, the IET believes that in due course the scope of the regulatory system will have to become more all-embracing to ensure a consistent regime across all relevant building types.

2.4. There’s a case for a Lead Engineer role to ensure integrated engineering knowledge is available to owners and Building Safety Managers across the supply chain throughout the building lifecycle. The role would ensure a joined-up approach between the different sectors in the process. This would help guarantee that checks and balances were in place at commissioning, delivery, handover and occupation stages. The Lead Engineer role would ensure that minor maintenance / modification matters below the Construction (Design & Management) Regulations (CDM) threshold did not collectively result in material safety risks. The complexity, breadth of expertise and building longevity required may mean that the role sits with (an) organisation(s), rather than individuals.

2.5. A key issue is that the sector suffers from mixed models of enforcement and ownership. The new regulatory system recognises the range of resident / ownership models, both in existence and in future builds, and the difficulties that a ‘one-size fits all’ approach can bring. Such mixed ownership models include resident management companies and managing agent models, leasehold and commonhold. Fire and Rescue Services currently enforce the common areas of HRBs, though this will change with the obligations of the new Accountable Persons (Clause 61). All these add to the complexity and need considering, to ensure the Bill is futureproofed.

2.6. It’s recognised that definitions in the Bill are quite general to ensure that it retains flexibility. However, transition timelines will need recording in associated documentation to ensure a well-defined scope before the Bill becomes law. The IET also believes that the scope of trades needs to be flexible to allow for future technological advances, materials usage / changes, updated industry practices and skills developments (see 8.4).

3. Will the Bill provide for a robust – and realistic – system of accountability for those responsible for building safety? Are the sanctions on those who do not meet their responsibilities strong enough?

3.1. The principle of Accountable Persons at all stages through a building’s lifecycle (including occupation) is clearly a positive step. It does need to take account of all levels within and between building trades, with named parties from the client, corporate and resident side...
4. Will the Bill provide strong mechanisms to ensure residents are listened to when they have concerns about their building’s safety?

4.1. The proposal for a high-level residents’ panel (Clause 11) to ensure matters of key concern can be voiced directly with the BSR is welcome. However, it’s unclear how effective this group can be, given the technical nature of some of the issues that will need to be discussed and agreed.

4.2. It’s also not clear how this high-level group will link with local resident committees in HRBs or with the Homes Ombudsman. The links between an Accountable Person and the relevant ‘Residents Engagement Strategy’ (Clause 82) will facilitate the process. However,

(Clause 61 et al). There’s a case for extending the Accountable Person role to all rented / leasehold properties.

3.2. The imposed requirement of dutyholders for mandatory occurrence reporting is welcome and will improve transparency, and the effectiveness and timeliness of preventative action / resolution (Clause 78).

3.3. The difficulty is ensuring clarity in practice over the accountability of different parties at different stages in the process. There is likely to be complex, changing accountability throughout the building lifecycle. Clarity over accountability is particularly important at the occupation stage, where there is the greatest risk of fatality in the event of a fire or similar life safety issue. Not only are there more people in occupation, building maintenance also needs to be properly carried out and resident DIY can present new risks. There is a need for a digital stakeholder map linked to a digital safety golden thread to make sense of the complexity, to ensure transparency to all key parties at all times, and to spot gaps. A digital twin model may be helpful in pulling together the various aspects of the golden thread.

3.4. The IET agrees that the stakeholder map – safety golden thread is initiated at new build design and planning stage, and maintained throughout the building lifecycle (Clause 52 (56B); EN 16). However, as currently drafted, the golden thread is handed over to the Accountable Person at the Gateway 3 phase (EN 48 & 49). We advise that access is granted to key parties from the outset of the construction process to ensure proactive due diligence, a clear audit trail and the ability to prevent / resolve issues at the earliest stage. A retrospective approach at Gateway 3 could lead to ‘fait accompli’ circumstances, where people are accountable for situations that are not of their making or that could lead to time-consuming and expensive remedial work.

3.5. For new builds, resident access to the golden thread would clearly only be available once in occupation, though with staged occupation, this could be before full completion of construction. For maintenance, the golden thread should be available from the outset of work planning (this links with Q5).

3.6. Models around accountability, stakeholder mapping and the safety digital thread should be as standardised, streamlined, yet as comprehensive as possible. This will simplify their construction, understandability and scrutiny for the layperson, and transparency in multi-occupancy buildings. In turn, this will aid the provision of timely, clear information between all parties, including fire and safety rescue, so as to support effective decision-making and responses. Without such features, the safety risk may increase and resident confidence and trust decline.

3.7. The IET is focusing its answers on those aspects of the Bill that relate closely to our engineering remit. As such, we are not commenting in detail on the appropriateness of sanctions. However, if the expectation is that key persons are professionally qualified, a robust sanction would be for disciplinary action to strike persons from the Professional Bodies Membership and/or remove them from the Regulator’s Professional Registration Register, in cases of not adherence to mandated governance that led to negligence.
there will need to be streamlined and integrated processes and channels between the various parties to ensure good access, the ability to aggregate and raise key systemic issues across HRBs, and timely resolution. Some bodies already have schemes in place. For smaller companies it may be a challenge to ensure no-one is excluded. Perhaps there should also be a mechanism for residents’ groups to propose or appoint a specialist or person to represent them on technical issues. The BSR and Residents’ Panel should review the effectiveness of processes on a regular basis and amend them accordingly to ensure they remain fit for purpose.

4.3. The importance of access to user-friendly, digital safety golden threads of HRBs has been raised in response to Q3. This is key to ensuring that residents can analyse information and raise safety concerns both locally and at Residents’ Panel level. Information must clearly be presented with appropriate formats / level of detail to enable scrutiny (without compromising building security).

4.4. The removal of the ‘democratic filter’ and its replacement with a dedicated, specialist Homes Ombudsman is welcome (Clauses 106-109). It’s hoped that this will lead to quicker, more transparent, pragmatic resolution of issues. However, sufficient resourcing needs to be allocated for this role to be effective (as per Q7).

5. Is the Government right to propose a new Building Safety Charge? Does the bill introduce sufficient protections to ensure that leaseholders do not face excessive charges and that their funds are properly managed?

5.1. In principle, the proposal for a new building safety charge (Clause 89 (17G)) is fair. The IET agrees that statutory limits on management fees are put in place to ensure leaseholders don’t face excessive charges, and that accounts are available to residents on request. However, the details around the charge are currently imprecise. There are unresolved value engineering questions about what constitutes ‘reasonableness’ (Clause 89 (17J)), how and by whom charges are determined, what happens about historic / unaffordable repairs (within / outside defect periods) and what recourse there would be to challenge charges – both from leaseholders and landlords. It’s important that charges correlate to work done to the right safety standards by contextually competent individuals. As the Bill stands, the mechanisms / protections are not sufficiently clear to ensure fair charging for either party. The IET suggests that greater clarity is needed on this point, with the resolution of outstanding issues being handled via the Homes Ombudsman.

5.2. Landlords / managing agents will rightly need to carry out work on occasions to comply with safety legislation and will compile business models accordingly. If there is a cap (to be determined) on the rate of charges that can be levied on leaseholders, one option would be for landlords to absorb remaining costs. An alternative would be to cut building costs. This may impinge on the standards / levels of competence / safety / quality or the timeliness of the work undertaken. All these alternatives could have long-term, detrimental impacts (cost and safety) for leaseholders.

5.3. The Bill does not detail how landlords / managing agents should manage funds, how funds are requested, at what stages, and any related sanctions for non-compliance. The Bill would be clearer and excessive charges less likely if measures were included to ensure a level playing field between managing agents. We suggest that the maintenance of sinking funds (as per the recommendation of the ‘Scottish Parliamentary Working Group on Tenements’, 2018) should be mandatory in England and Wales. This would ensure that business could not be won unfairly by undercutting rivals on price through the removal of reserve fees, with leaseholders potentially facing excessive charges at a later stage.
6. **Does the Bill improve the product testing regime in a way that will command the full confidence of the sector?**

6.1. We believe the Bill needs strengthening in this area. The Bill mentions testing and sampling (Clause 37 (1G)), and products and raw materials do need to comply with relevant British / international standards. We suggest that it also becomes mandatory for relevant products to be tested together to ensure they meet the required standard as a unit. This would be where there are safety implications or where the products are new to the market and have not been used elsewhere. Records of test results need to be made available to key stakeholders to demonstrate that installed products are safe, and for review if maintenance / modifications are required.

6.2. The Bill makes no mention of supplier chain assurance, which can create significant risk. Secure, validated and interoperable, structured product data is vital in bringing the construction industry into a safer future. Key aspects include:

6.2.1. performance data – information on standards, environmental performance (including certification), hazardous materials, and also data on compatibility and usage for appropriate purposes;

6.2.2. maintenance data – how often the product needs to be maintained, how it is maintained, when it was last maintained and information about replacement parts;

6.2.3. compliance with safety standards (e.g. the BS476 series which set out the fire tests on building materials and structures to comply with Building Regs Approved Document B).

6.3. Choosing the wrong product can lead to fire and loss of life. A permanent connection between the product and evidence of its performance, with a reliable governance system for product users, can prevent this. It would ensure that accurate details pass smoothly between manufacture, design and operation stages, and reduce the risk of inappropriate product selection / substitution, counterfeit, incompatible and unsafe goods entering the supply chain. The IET notes that this aspect should already be covered by CDM and Building Regulations, and competent designers and installers – we are keen that assurance is maintained in this area.

6.4. We suggest the more widespread requirement of a product Declaration of Performance (DoP) or, where applicable, a Declaration of Conformity (DoC). A DoP is key to confidence in compliance as it is a process of conformity assessment, continuous monitoring and a schedule of routine testing. Evidence of compliance throughout product life would be achieved through the creation and communication of digital object identifiers on the product itself - interlinked, single-source, structured, secure, verifiable and interoperable data, available to key stakeholders.

6.5. At Grenfell there was a reliance on desktop studies rather than real world conditions. We suggest that desktop and CFD models should only be used to give an indication. Reliance on such models without real world tests should not be permitted.

7. **Is it right that the new Building Safety Regulator be established under the Health and Safety Executive, and how should it be funded?**

7.1. The IET thinks it is appropriate that the HSE takes on this responsibility. The HSE is a respected, independent, expert body that already deals with aspects of building standards and has relevant procedures in place. This will enable the BSR role to establish itself for the long-term (Part 2).

7.2. The Bill does not sketch out a funding model for the BSR role. It’s important that the BSR is financially independent of appointing parties that are involved in construction, so as to avoid any undue influence or trade lobbying.

7.3. The HSE has a ‘fee for intervention’ (FFI) scheme where organisations pay for some activities (linked to turnover) such as inspections, especially where failings have been
detected. This is intended to act as an incentive for companies to conform to regulations. It moves the HSE from an advice role to one of enforcement/ regulation. It is not obvious that this funding regime would be effective in the HRB context. Initially, as all parties would be learning, it may be counterproductive to charge for 'failings' and may discourage an open and cooperative learning process. As such, before any move to an FFI model were considered, as a minimum the model should be tested robustly to ensure it would be fit for purpose. Until such time, we suggest that the BSR role is funded through the Government.

7.4. We also suggest that any such information gained by the BSR should be publicly available – not to embarrass or punish designers or installers, but as a useful learning resource for professional development and training.

8. Does the Bill present an opportunity to address other building safety issues, such as requirements for sprinkler systems?

8.1. It’s important that the Bill is encompassing in its reach, but also general in its application. The Bill should allow for secondary legislation to cover building safety issues in all relevant trades and building types. It should take account of industry developments, process adaptations, and the broadening of the scope of buildings included.

8.2. Regulating via safety case reports and notification to the regulator (Clauses 74 & 75) is potentially appropriate. However, there are a few caveats to consider:

8.2.1. Safety cases are unfamiliar in the sector and work needs to be done via industry associations to grow understanding and familiarity. They need to be digital in format to enable remote access and assessment. It’s recommended that the safety case approach embraces a safety management system (SMS) as a core element;

8.2.2. Safety cases should keep in step with significant changes to the building state, occupancy, usage, and equipment. Given the nature of HRBs, regular updates are to be expected. A golden thread of information (see Q3) is fundamental to demonstrating that a building is operating according to the original/refurbished design intent. Linking a digital safety case/report to a BIM (Building Information Model) and seeking to automate updates to the safety case seems crucial to making this process work;

8.2.3. The HSE would need to be funded (see Q7) to undertake an urgent and substantive element of work to ensure that a suitable regime, acceptable to key stakeholders, can be put in place by the time the Bill is enacted, and the Regulator is operating formally.

8.3. The IET considers that the requirement for sprinkler systems should be included in the Bill. Scotland has already incorporated the requirement. In Wales there’s a requirement to fit automatic fire suppression systems (AFSS) in all new and converted dwellings used for residential purposes.

8.4. The Bill makes no reference to the Government’s policy obligations towards ‘net zero’. Whilst out of scope, the Bill should ensure it is flexible enough to encompass ‘net zero’ requirements, including retrofit technologies, heat pumps and electric vehicle charging. This is so that industry takes into account changes to electricity and other supplies and installations, when considering processes, materials, and related safety matters in both new builds and refurbishments.