



Grenfell

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1. EXECUTIVE SUMMARY

This Incident Review is one of a series of occasional papers by Process Safety Forum, intended to capture the lessons from major incidents that occur in one sector, for the benefit of highlighting shared learning across other sectors.

While such incidents may at first sight appear unique to one industry or process, the experience of PSF is that there are valuable cross-sector learnings to be had from examining their root causes and background factors – indeed, this sharing of lessons across sectors is one of the fundamental aims of PSF. Previous examples of incident disasters that PSF has focused on include the 2005 Buncefield fires and explosions (final report 2008); the 2006 Royal Air Force Nimrod air crash (final report 2009); and the 2011 Fukushima Daiichi nuclear disaster (final report 2012 on Implications for the UK Nuclear Industry).

The scope of this review of Grenfell, which occurred on 14th June 2017, is to identify the incident learnings and the recommended actions from the circumstances that led to the fire, as reported in the Final Report by Dame Judith Hackitt published in May 2018 – ‘Building a Safer Future: Independent Review of Building Regulations and Fire Safety’. These recommendations may be relevant to any of the diverse sectors represented on PSF. While PSF recognises that the circumstances pertaining to the residential fire and the tragic loss of life may not seem an obvious read-across to safety in major hazard industries, PSF’s experience referred to above is that there are nevertheless key opportunities to reiterate the importance to any organisation of a strong focus on major accident prevention and control.

Several relevant aspects have been identified by PSF’s review of the Grenfell Report and its recommendations:

- PSF members should raise awareness in their businesses of the need to ensure that roles and responsibilities are clearly defined when engaging with third party contractors;
- PSF members should raise awareness of the importance of ensuring effective Management of Change procedures are in place for product selection;
- PSF believes the importance of reviewing incidents and learnings within a business cannot be over-stated. Such reviews should identify common causal factors, for example related to plant & equipment design and control; management of change; accountabilities and management of contractors; and whether the culture of the organisation focuses on safety as the priority driver in decision-making. PSF has also recently published a Learning Brief on these aspects.

PSF will continue to follow the developments from Grenfell, review the strength and adequacy of these prevention and mitigation factors in our industries, and promote a healthy focus on leadership and shared learning in major incident prevention.

2. ABOUT PSF

The Process Safety Forum (PSF) was established to provide a platform whereby initiatives, best practice, lessons from incidents and process safety strategy can be distilled and shared across sectors; to influence our stakeholders (including the Regulator); and to drive the process safety management performance agenda.

The PSF directly addresses the recommendation set out in the Buncefield Major Incident Investigation Board (MIIB) recommendation 21:

*'The sector should put in place arrangements to ensure that good practice in these areas, incorporating experience from other high hazard sectors, is shared openly between organisations.'*¹

It also provides one of the mechanisms by which good safety leadership within an organisation can be achieved, by:

'Sharing best practice across industry sectors and learning and implementing lessons from relevant incidents in other organisations, are important to maintain the currency of corporate knowledge and competence'.²

¹ Process Safety Leadership Group Final Report Safety and environmental standards for fuel storage sites, paragraph 257

² Process Safety Leadership Group Principles of Process Safety Leadership

3. INCIDENT DESCRIPTION

The fire which destroyed Grenfell Tower in June 2017 was one of the UK's worst modern disasters.

Just before 01:00 on 14 June, fire broke out in the kitchen of a fourth floor flat at the 23-storey tower block in North Kensington, West London. Within minutes, the fire had raced up the exterior of the building and then spread to all four sides.

Seventy-two people died, and more than seventy were injured.

Dame Judith Hackitt was appointed to carry out a review of the incident, producing an interim report which was published in December 2017. The final report *Building a Safer Future Independent Review of Building Regulations and Fire Safety: Final Report* was published in May 2018. This report identified several recommendations across the following key areas:

- Parameters and principles of a new regulatory framework
- Design, construction and refurbishment
- Occupation and maintenance
- Residents voice
- Competence
- Guidance and monitoring to support building safety
- Products
- Golden thread of building information
- Procurement and supply
- International examples

One of the roles of the PSF is to review lessons from incidents and to determine if any learnings are relevant within the various process sectors that the PSF represents. This document analyses each of the Grenfell report recommendations to determine if, for the PSF represented sectors, it:

- is relevant
- is relevant and has been addressed
- is relevant and requires further action to be taken

The final report is available from gov.uk [here](#).

4. INCIDENT LEARNINGS

3.1. Parameters and principles of a new regulatory framework

Recommendation 1.1	Relevance to PSF Sectors	Justification/Reference	Further Action
The new regulatory framework should apply to residential properties which are 10 or more storeys high in the first instance. New HRRBs should be identified by the Local Planning Authority and notified to the regulator. Existing buildings in scope should be identified through other means, learning from the MHCLG Building Safety Programme experience	Not relevant	Recommendation applies to the residential sector. However, the process sector has established regulatory frameworks in place, for example COMAH	None required

Recommendation 1.2	Relevance to PSF Sectors	Justification/Reference	Further Action
The government should set up a 'Joint Competent Authority'. This should comprise Local Authority Building Standards, fire and rescue authorities and the Health and Safety Executive, working together to maximise the focus on building safety within HRRBs across their entire life cycle. The optimum model for ensuring effective joint working should be discussed with all relevant parties but should draw on the model set out above. The JCA should design and operate a full cost recovery mode.	Relevant but addressed	Refer to recommendation 1.1. For example, Competent Authorities have been established for the process industries (between the HSE, ONR and Environmental Agencies).	None required

Recommendation 1.3	Relevance to PSF Sectors	Justification/Reference	Further Action
The regulatory framework should treat the building as a single entity (a system encompassing sub-systems) and a new over-arching Approved Document should be published describing the system and the holistic analyses that must be completed when undertaking building work. This should define the requirement to understand the interactions of the system and its comprising subsystems in both normal operation and outside normal conditions.	Relevant but addressed	Refer to recommendation 1.1. Some regulatory regimes, for example COMAH, requires the dutyholder to produce a comprehensive safety report identifying the potential risks surrounding abnormal operations.	None required

Recommendation 1.3	Relevance to PSF Sectors	Justification/Reference	Further Action
		Nuclear safety cases describe interactions of building systems and subsystems. However, it would be useful to track this theme over a time period to determine how often this theme occurs in connection with incidents.	

Recommendation 1.4	Relevance to PSF Sectors	Justification/Reference	Further Action
<p>a) A system of mandatory occurrence reporting to the JCA similar to that employed by the Civil Aviation Authority should be set up for HRRBs. The requirement to report should be for key identified dutyholders on a no-blame basis. The outputs of these reports (and statistical analysis of this data) should be publicly available. Non-reporting should be regarded as non-compliance and sanctions applied appropriately.</p> <p>b) It would be appropriate for the JCA to be a prescribed person under PIDA.</p> <p>c) For all other buildings the current CROSS scheme should be extended and strengthened to cover all engineering safety concerns and should be subject to formal review and reporting at least annually</p>	Relevant addressed but	<p>The regulatory regimes described in recommendation 1.1 require mandatory reporting under various reporting mechanisms. For example:</p> <p>RIDDOR</p> <p>Dangerous Occurrences.</p>	None required

3.2. Design, construction and refurbishment

Recommendation 2.1	Relevance to PSF Sectors	Justification/Reference	Further Action
Government should specify the key roles that will ensure that the procurement, design and construction process results in HRRBs that are safe. These should be, as a minimum, those identified in Table 1 – Key roles under the CDM Regulations. The definition of these roles should reflect those in the CDM Regulations to avoid unnecessary confusion.	Relevant	<p>When engaging with third parties, dutyholders must ensure that roles and responsibilities are clearly described.</p> <p>Recent CDOIF guidance <i>'The role of external contractors in the management of ageing plant'</i> is one example of good practice developed by industry and regulators.</p>	<p>PSF members should raise awareness of the need to ensure that roles and responsibilities are clearly defined when engaging with third parties. This may take the form of a Learning Brief referencing the Grenfell final report.</p> <p>Reference should also be made to the lessons learned following the Charles Haddon-Cave report into the Nimrod XV 230 crash.</p> <p>Perhaps useful to do some post-Grenfell theme analysis, including this theme on clarity of key roles.</p>

Recommendation 2.2	Relevance to PSF Sectors	Justification/Reference	Further Action
Government should allocate broad responsibilities to Clients, Principal Designers and Principal Contractors responsible for HRRBs as set out in Table 2 – Key responsibilities of dutyholders.	Relevant	Refer to recommendation 2.1	Refer to recommendation 2.1

Recommendation 2.3	Relevance to PSF Sectors	Justification/Reference	Further Action
Government should make the creation, maintenance and handover of relevant information an integral part of the legal responsibilities on Clients, Principal Designers and Principal Contractors undertaking building work on HRRBs. The four information products (the digital record, the Fire and Emergency File, Full Plans and Construction Control Plan) represent a minimum requirement.	Relevant	There is a need for dutyholders to ensure that design information relevant to plant or process is requested and received from third parties. This should be stipulated in contractual agreements.	<p>PSF members should raise awareness of the need to ensure that design information relevant to ensuring the correct ongoing operations and maintenance of plant and process is ensured. This can be incorporated in the Learning Brief developed for recommendation 2.1.</p> <p>Much learning to do from this perspective. Handover of key design information can be challenged by project over-run and over-spend, which can</p>

Recommendation 2.3	Relevance to PSF Sectors	Justification/Reference	Further Action
			mean that the care and attention required at handover is reduced.

Recommendation 2.4	Relevance to PSF Sectors	Justification/Reference	Further Action
Government should consider applying the key roles and responsibilities and information product recommendations to other multi-occupancy residential buildings and to institutional residential buildings whilst bearing in mind necessary adjustments to keep the requirements proportionate.	Relevant	The role of the PSF is to share relevant knowledge and learning with its membership who represent different stakeholder groups to which ensuring process safety is important.	The PSF will ensure any relevant information (for example a Learning Brief on design information and roles & responsibilities) is developed and shared.

Recommendation 2.5	Relevance to PSF Sectors	Justification/Reference	Further Action
The LPA should be required in law to undertake a consultation with the JCA where it identifies that a building is a HRRB. This process should also apply where planning permission for another building in the near vicinity is sought (where such a building might impact on fire service access to a HRRB). This is the first Gateway Point.	Not relevant	Applies to HRRB only	None required

Recommendation 2.6	Relevance to PSF Sectors	Justification/Reference	Further Action
Government should ensure that there is thorough assessment by the JCA of detailed design plans for HRRBs and sufficient assurance that dutyholders are in place and relevant responsibilities are being met in order to give permission for building work to legally commence. This should be in line with paragraphs 2.29-2.32. This 'Full Plans Approval' is the second Gateway Point.	Relevant but addressed	Existing regulatory regimes exist to ensure that responsibilities are being met (under those regimes). Refer also to	None required

Recommendation 2.7	Relevance to PSF Sectors	Justification/Reference	Further Action
<p>Government should ensure that:</p> <p>a) the JCA undertakes a thorough test of the dutyholders' as-built construction of HRRBs, supported by clear documentary evidence from the Principal Contractor that the design intent has been delivered as proposed (and any changes are documented and justifiable) and that handover of key golden thread information has occurred. This should be as set out in paragraphs 2.33-2.35; and</p> <p>b) the building owner must have completed a pre-occupation Fire Risk Assessment and resident engagement strategy. All of this must be signed off by the JCA (and a safety case review cycle established) to enable occupation to commence.</p> <p>This 'Completion Certificate' process is the third Gateway Point.</p>	Relevant addressed but	<p>Existing regulatory regimes exist to make suitable demonstrations to the regulator.</p> <p>For example, COMAH requires notification of new build sites, and production of supporting safety report.</p> <p>Relevant Nuclear Site Licence Conditions (Construction & Installation of New Plant; Safety Documentation; Site Plans, Designs and Specifications; Modification to Design of Plant Under Construction / Experiment / Existing Plant)</p>	None required

Recommendation 2.8	Relevance to PSF Sectors	Justification/Reference	Further Action
<p>Government should consider also applying Gateway Points 2 and 3 to other multi-occupancy residential buildings and to institutional residential buildings.</p>	Not relevant	Applies to residential buildings only	None required

Recommendation 2.9	Relevance to PSF Sectors	Justification/Reference	Further Action
<p>a) there should be a clearer, statutory change control process that places requirements on the relevant dutyholder to notify the regulators of significant changes post-Full Plans sign-off. Within that context, two types of changes should be defined – 'major' and 'minor'.</p> <p>'Major' changes would be a limited list of significant changes for example (a) changes in use, changes in number of storeys, changes in number of units or (b) changes which could impact on previously signed-off building safety plans. Major changes would require an update from the dutyholder to the JCA (for reconsideration) before such work is commenced.</p>	Relevant addressed but	<p>Existing regulatory regimes exist to make suitable demonstrations to the regulator.</p> <p>For example, COMAH requires notification of significant changes (of inventory), and revision of supporting safety report.</p> <p>Further, Management of Change Procedures are in place to assess the impact of modifications.</p>	<p>None required</p> <p>Analysis of process safety incidents where change control is a causal factor would be useful – see previous comments. Particularly failure to recognise change to design intent. This would provide useful data to drive a Learning Brief etc.</p>

Recommendation 2.9	Relevance to PSF Sectors	Justification/Reference	Further Action
<p>'Minor' changes (i.e. all other changes) would need to be recorded and identifiable at the completion of the work for dutyholders to demonstrate that Building Regulations are still satisfied. b.</p> <p>b) Government should consider also applying this change control process to other multi-occupancy residential buildings and to institutional residential buildings.</p>			

Recommendation 2.10	Relevance to PSF Sectors	Justification/Reference	Further Action
<p>In HRRBs, building work that is carried out by 'persons in a competent person's scheme' should be subject to full oversight by the JCA to enable it to fully discharge its duties in line with paragraph 2.38-2.39.</p>	<p>Relevant addressed but</p>	<p>Existing regulatory regimes exist to ensure oversight by the relevant Competent Authorities.</p> <p>For example, COMAH Intervention against operational delivery guides (including competency)</p>	<p>None required</p>

Recommendation 2.11	Relevance to PSF Sectors	Justification/Reference	Further Action
<p>a) It should not be possible for a client to choose their own regulator or for a regulator to be unable to apply sanctions against a dutyholder where such action is warranted.</p> <p>b) As part of the JCA oversight of HRRBs there should be a single, streamlined, regulatory route for the provision of building control as set out in paragraphs 2.43-2.45 with oversight solely provided through Local Authority Building Control.</p> <p>c) The Approved Inspector regime should be utilised such that it can:</p> <p>provide accredited verification and consultancy services to dutyholders; and also</p> <p>expand LABCs' expertise/capacity (whilst always operating under LABCs rules and standards)</p>	<p>Relevant addressed but</p>	<p>Existing regulatory regimes exist to ensure oversight by the relevant Competent Authorities.</p> <p>Accredited schemes are in place where relevant to ensure work is carried out to approved standards, for example Tank Inspection</p>	<p>None required</p>

Recommendation 2.11	Relevance to PSF Sectors	Justification/Reference	Further Action
<p>d) But no AI can be used to provide both functions in respect of the same building work (i.e. where regulatory oversight is provided the AI must be completely independent of dutyholders).</p> <p>e) This avoidance of conflict of interest should apply to all actors in the regulatory system – so no fire and rescue authority should be able to support the JCA in its oversight of a particular building if it (i.e. the individual or the company) has provided professional design services in respect of that building through its commercial arm.</p> <p>f) Recommendations a.,b. and c. should also apply to all other multi-occupancy residential buildings and to institutional residential buildings. Recommendation d. and e. should apply to all building work.</p> <p>g) Local Authority Building Control should be renamed the Local Authority Building Standards given their new role.</p>			

Recommendation 2.12	Relevance to PSF Sectors	Justification/Reference	Further Action
<p>a) As part of the establishment of the JCA, the fire and rescue authorities need to be engaged in a more consistent manner with a robust dispute resolution mechanism established for use by the organisations within it (as per paragraph 2.46).</p> <p>b) Comparable processes should also be adopted for other multi-occupancy residential buildings and to institutional residential buildings where Local Authority Building Standards and fire and rescue authority will also need to interact to ensure Building Regulation requirements are met.</p>	<p>Relevant but addressed</p>	<p>Existing regulatory regimes exist which include development of relevant emergency plans with first responders.</p>	<p>None required</p>

Recommendation 2.13	Relevance to PSF Sectors	Justification/Reference	Further Action
<p>The sanctions and enforcement regime should be reinforced so that penalties are an effective deterrent against noncompliance. These stronger enforcement tools should generally look to replicate and align with the approach in the Health and Safety at Work Act. More specifically:</p> <p>a) the JCA/Local Authority Building Standards should have additional powers to issue formal Improvement and Prohibition (or 'Stop') Notices to dutyholders where there is a sufficient concern about, for example, the degree of oversight of the work; accurate record-keeping; or the likelihood of meeting Building Regulations requirements;</p> <p>b) the JCA/Local Authority Building Standards should have the clear power to require changes to work that fail to meet the Building Regulations requirements alongside any broader penalties sought;</p> <p>c) time limits for bringing prosecutions against dutyholders should be increased to five or six years for 'major' deficiencies in building requirements identified at a later date;</p> <p>d) the JCA cost recovery model should be weighed appropriately to create a fund for enforcement action to be taken where needed; and</p> <p>e) the new powers should be available, wherever appropriate, to support either the JCA or Local Authority Building Standards in respect of all non-compliant building work.</p>	<p>Relevant but addressed</p>	<p>Existing regulatory regimes exist.</p> <p>For example, COMAH have a range of enforcement actions available including Action Legal, Improvement Notice and Prohibition Notice.</p>	<p>None required</p>

Recommendation 2.14	Relevance to PSF Sectors	Justification/Reference	Further Action
<p>Where a HRRB has not yet had its first safety case review and seeks to carry out refurbishment work then this should trigger a full safety case review as set out in paragraphs 2.58-2.59. Once the safety case review cycle is established then further major refurbishments may also bring forward the next safety case review.</p>	<p>Not relevant</p>	<p>Existing regulatory regimes exist to make suitable demonstrations to the regulator.</p> <p>For example, COMAH requires notification of new build sites, and production of supporting safety report.</p>	<p>None required</p>

3.3. Operation and maintenance

Recommendation 3.1	Relevance to PSF Sectors	Justification/Reference	Further Action
<p>a) Government should specify that responsibility for the safety of all parts of a HRRB must be held by a clear, senior dutyholder which should be the building owner or superior landlord.</p> <p>b) The JCA and residents must be kept notified of the name and UK-based contact information of the dutyholder (whether that is an entity or a named person).</p> <p>c) The dutyholder must nominate a named 'building safety manager' with relevant skills, knowledge and expertise to be responsible for the day-to-day management of the building and act as a point of contact for residents. The building safety manager's name and contact information must be notified to the JCA and to residents and should be displayed in the building.</p>	Not relevant	Existing regulatory regimes exist which stipulate different models with regards to dutyholders and site responsibility.	None required

Recommendation 3.2	Relevance to PSF Sectors	Justification/Reference	Further Action
<p>Government should allocate clear responsibilities to dutyholders of HRRBs to:</p> <p>a) take such safety precautions as may reasonably be required to ensure building safety risk is reduced so far as is reasonably practicable;</p> <p>b) ensure that information management systems are in place in order to maintain relevant documentation and compile and maintain a safety case file (see paragraph 3.34);</p> <p>c) ensure that there is a resident engagement strategy and that residents receive information on fire safety in an accessible manner; and</p> <p>d) handover all of the relevant information to a new dutyholder when a building changes hands.</p>	Relevant but addressed	<p>Existing regulatory regimes exist which require the production of a safety case (or equivalent document). This includes ensuring all necessary records are kept and maintained.</p> <p>See previous comments on handover</p>	Refer to recommendations 2.1 – 2.4

Recommendation 3.3	Relevance to PSF Sectors	Justification/Reference	Further Action
The dutyholder for a HRRB should proactively demonstrate to the JCA through a safety case at regular intervals (as determined by level of risk) that they are discharging their responsibilities. The safety case must identify the hazards and risks, describe how risks are controlled, and describe the safety management system in place.	Relevant addressed but	Existing regulatory regimes exist which require periodic demonstration to the Competent Authority. For example, the COMAH Safety Report lifecycle is currently set at 5 years.	None required

Recommendation 3.4	Relevance to PSF Sectors	Justification/Reference	Further Action
<p>a) The dutyholder for a HRRB should demonstrate that the fire risk assessment for the whole building has been undertaken by someone with relevant skills, knowledge and experience and reviewed regularly (dependent on risk and as agreed with the regulator) so as to keep it up to date and particularly if:</p> <p>there is a reason to suspect it is no longer valid;</p> <p>they have received a notice from a regulator; or</p> <p>there has been a significant change to the premises.</p> <p>b. The dutyholder should ensure that any recommendations/requirements outlined in the fire risk assessment are undertaken and completed in a timely manner. Fire risk assessments should be reviewed at least annually until a first safety case review has been completed, where this applies.</p> <p>c. The government should consider applying this requirement to other multi-occupancy residential buildings.</p>	Relevant addressed but	Existing regulatory regimes exist which require on and off site emergency plans to be exercised and reviewed on a periodic basis	None required

Recommendation 3.5	Relevance to PSF Sectors	Justification/Reference	Further Action
a) For HRRBs, residents should have clearer obligations in relation to maintaining safety of flats and should cooperate with the dutyholder (or building safety manager) to the extent necessary	Not relevant	Applies to residential buildings only.	None required

Recommendation 3.5	Relevance to PSF Sectors	Justification/Reference	Further Action
<p>to enable them to fulfil their duty to keep the building safe for all those living there.</p> <p>b) The dutyholder should educate, influence and inspect to ensure residents meet these obligations and the JCA should be able to intervene where there is any immediate risks to persons.</p> <p>c) The government should consider applying this good practice on rights and responsibilities to other multi-occupancy residential buildings.</p>			

Recommendation 3.6	Relevance to PSF Sectors	Justification/Reference	Further Action
<p>The JCA should be empowered to regulate across all parts of a HRRB, be clearly identifiable to dutyholders and residents, and should have the following roles in the occupation and maintenance phase:</p> <p>a) hold a register of dutyholders;</p> <p>b) ensure that dutyholders meet their responsibilities through effective inspection, assessment and enforcement; and</p> <p>c) deal with immediate risk – the JCA should have powers of access to inspect the whole building and take action where necessary</p>	Relevant but addressed	<p>Existing regulatory regimes exist.</p> <p>For example, COMAH requires regular intervention visits. A register of COMAH sites is maintained and risk ranked by the COMAH Competent Authority.</p>	None required

Recommendation 3.7	Relevance to PSF Sectors	Justification/Reference	Further Action
<p>a) For HRRBs, Environmental Health Officers should raise any fire and structural safety concerns to the JCA.</p> <p>b) For other multi-occupancy residential buildings, local authorities and fire and rescue authorities should work more closely to ensure that the fire safety of the whole building is assessed and regulated effectively.</p>	Not relevant	Applies to residential buildings only.	None required

Recommendation 3.8	Relevance to PSF Sectors	Justification/Reference	Further Action
<p>For HRRBs there should be robust sanctions and strong incentives in place to drive compliance by dutyholders during occupation. The JCA should use a staged approach comprising education, statutory notices, fines and ultimately criminal sanctions.</p>	<p>Relevant but addressed</p>	<p>Existing regulatory regimes exist to make suitable demonstrations to the regulator. For example, COMAH requires notification of new build sites, and production of supporting safety report.</p>	<p>None required</p>

3.4. Residents voice

Recommendation 4.1	Relevance to PSF Sectors	Justification/Reference	Further Action
<p>a) The dutyholder for a HRRB should have a statutory duty to proactively provide residents with a set of information that supports residents to understand the layers of protection in place to keep their building safe.</p> <p>b) The government should consider applying this requirement to other multi-occupancy residential buildings.</p>	Not relevant	Applies to residential buildings only	None required

Recommendation 4.2	Relevance to PSF Sectors	Justification/Reference	Further Action
<p>a) Residents of HRRBs should have the right to access fire risk assessments, safety case documentation and information on maintenance and asset management that relates to the safety of their homes.</p> <p>b) The government should consider applying this requirement to other multi-occupancy residential buildings.</p>	Not relevant	<p>Applies to residential building only.</p> <p>Note – under COMAH regulations 2015, limited public information is now provided regarding COMAH establishments.</p>	None required

Recommendation 4.3	Relevance to PSF Sectors	Justification/Reference	Further Action
<p>a) The dutyholder for a HRRB should have a resident engagement strategy in place to support the principles of transparency of information and partnership with residents. The strategy should outline how the dutyholder will share information with residents, how they inform them of their rights and responsibilities, and how they involve residents in decisionmaking on changes to the building that could impact on safety.</p> <p>b) The government should consider applying this requirement to other multi-occupancy residential buildings.</p>	Not relevant	<p>Applies to residential building only.</p> <p>Note – under COMAH regulations 2015, limited public information is now provided regarding COMAH establishments.</p>	None required

Recommendation 4.4	Relevance to PSF Sectors	Justification/Reference	Further Action
<p>a) Government should provide funding for organisations working at both local and national level to provide advice, guidance and support to residents, landlords and building owners on effective resident involvement and engagement in order to develop a national culture of engagement for residents of all tenures.</p> <p>b) This recommendation should not be limited to the residents of HRRBs – culture change for the residents of these buildings will only happen as part of a wider process of change across the sector.</p>	Not relevant	Applies to residential building only.	None required

Recommendation 4.5	Relevance to PSF Sectors	Justification/Reference	Further Action
<p>a) After internal processes have been exhausted, if residents still have safety concerns about their homes, there should be a clear and quick escalation and redress route available for residents of all tenures to an independent body with access to appropriate knowledge, resources and enforcement powers.</p> <p>b) This route of redress should be open to all residents of all tenures, and not limited to those living in HRRBs.</p>	Not relevant	Applies to residential building only.	None required

Recommendation 4.6	Relevance to PSF Sectors	Justification/Reference	Further Action
<p>a) The dutyholder for a HRRB should provide residents with clear information about their obligations in relation to building and fire safety, and residents should meet their obligations to ensure their own safety and that of their neighbours.</p> <p>b) The government should consider applying this requirement to other multi-occupancy residential buildings.</p>	Not relevant	Applies to residential building only.	None required

3.5. Competence

Recommendation 5.1	Relevance to PSF Sectors	Justification/Reference	Further Action
<p>The construction sector and fire safety sector should:</p> <p>a) demonstrate more effective leadership in relation to developing a responsible approach to delivering building safety and integrity;</p> <p>b) work with other sectors to learn and translate good practice and implement it within the sector; and</p> <p>c) develop continuous improvement approaches to competence levels.</p>	Relevant addressed but	<p>Other sectors?</p> <p>Within the COMAH sector:</p> <p>a) leadership is now an inspection topic</p> <p>b) Knowledge exchange is facilitated through trade association membership and through the PSF</p> <p>c) competency demonstrations are required under COMAH regulations. This will include continuous improvement where relevant and appropriate.</p>	None required

Recommendation 5.2	Relevance to PSF Sectors	Justification/Reference	Further Action
<p>a) The professional and accreditation bodies working within the construction and fire safety sectors should continue the work started in response to the interim report and present a coherent proposal to government within one year. As a minimum, this proposal should cover the role and remit of an overarching body to provide oversight of competence requirements and support the delivery of competent people working on HRRBs, including:</p> <p>the professional bodies, professions and disciplines in scope;</p> <p>its membership and governance;</p> <p>its role in receiving, agreeing and monitoring the individual competence frameworks for those bodies, professions and disciplines in scope for individuals within their membership or on their register, and/or whether a single competence framework for professional bodies in scope should be established;</p> <p>its role in agreeing and monitoring accreditation and reaccreditation, and the period within which the competence of</p>	Relevant addressed but	<p>Existing regulatory regimes exist to ensure competency.</p> <p>Accredited schemes are in place where relevant to ensure work is carried out to approved standards, for example Tank Inspection</p>	None required

Recommendation 5.2	Relevance to PSF Sectors	Justification/Reference	Further Action
<p>individuals should be reassessed and recredited;</p> <p>its role in establishing a method for demonstrating or proving competence;</p> <p>Its role in establishing a method for demonstrating or proving competence;</p> <p>how the correct balance between construction sector skills and fire safety skills should be balanced; and</p> <p>whether the competence requirements for those working on HRRBs should also be extended to cover other multi-occupancy residential buildings and to institutional residential buildings.</p> <p>b) Progress should be monitored by government, with the professional and accreditation bodies providing government with quarterly progress reports.</p> <p>c) If government does not consider that the proposed approach provides the necessary assurance to the JCA, or there is evidence that the fragmented approach to the oversight of competence will continue, then government should mandate a body to establish the competence levels required and oversee its implementation.</p>			

Recommendation 5.3	Relevance to PSF Sectors	Justification/Reference	Further Action
<p>Relevant parties, along with the relevant professional bodies, should:</p> <p>a) Continue to work together to develop a new common approach and competence framework which meets the requirements of the new regulatory framework and the new skills required of Building Standards Inspectors when working on HRRBs, and those offering consultancy and verification services to dutyholders.</p> <p>b) This framework should apply to all Building Standards Inspectors whether they are LABS Inspectors and part of the JCA or Als offering their services to Building Standards or to dutyholders.</p> <p>c) Consider whether these competence requirements for Building Standards Inspectors working on HRRBs, and Als, should also be extended to cover those working on other multi-occupancy residential buildings and institutional residential buildings.</p>	Relevant but addressed	<p>Existing regulatory regimes exist to ensure competency.</p> <p>For COMAH, the COMAH Strategic Forum works closely with industry regulators, unions and skills bodies to identify any areas of potential improvement.</p>	None required

Recommendation 5.4	Relevance to PSF Sectors	Justification/Reference	Further Action
<p>Relevant parties should work together, along with the relevant professional bodies, to develop and define a robust, comprehensive and coherent system for:</p> <p>a) the competence requirements for the role of building safety manager of HRRBs; and</p> <p>b) the remit of this role in introducing and overseeing the process by which residents in HRRBs would be able to access fire safety awareness training.</p>	Not relevant	Competency Management and clear roles and responsibilities are required under the COMAH regime.	None required

3.6. Guidance and monitoring to support building safety

Recommendation 6.1	Relevance to PSF Sectors	Justification/Reference	Further Action
<p>a) Government should work towards a long term aim that guidance on how to meet the building regulations is to be owned by industry, while government sets out regulatory requirements and provides oversight of the regulatory system.</p> <p>b) Government should reserve the right to create guidance if industry has not proven that it is able or is deemed unable to produce suitable guidance.</p>	Not relevant	Applies to residential buildings only	None required

Recommendation 6.2	Relevance to PSF Sectors	Justification/Reference	Further Action
<p>a) The government should create a new structure to validate and assure guidance, oversee the performance of the built environment sector and provide expert advice.</p> <p>b) There should be a periodic review (at least every five years) of the effectiveness of the overall system of building regulation including accountabilities, responsibilities, guidance, and the effectiveness of the regulator.</p>	Not relevant	Applies to residential buildings only	None required

Recommendation 6.3	Relevance to PSF Sectors	Justification/Reference	Further Action
<p>The Government should take forward the recommendations made by the Expert Group included at Appendix F. To summarise these are:</p> <p>a) clear user friendly language and formatting of the guidance (including Approved Document B);</p> <p>b) multiple points of entry for different users to the document set, to provide clear advice for different types of building work;</p> <p>c) facilitating the prioritisation of fire and structural safety while encouraging a holistic approach that considers all building safety objectives; and</p> <p>d) a building regulation manual to explain the role of the Approved Documents.</p>	<p>Not relevant</p>	<p>Applies to residential buildings only</p>	<p>None required</p>

3.7. Products

Recommendation 7.1	Relevance to PSF Sectors	Justification/Reference	Further Action
<p>a) A clearer, more transparent and more effective specification and testing regime of construction products must be developed. This should include products as they are put together as part of a system.</p> <p>b) Clear statements on what systems products can and cannot be used for should be developed and their use made essential. This should ensure significantly reduced scope for substitution of any products used in a system without further full testing. Until such time, manufacturers should ensure that they adhere to the current limitations set out in classification reports in the current regime.</p> <p>c) The scope of testing, the application of products in systems, and the resulting implications must be more clearly communicated in plain, consistent, non-technical language.</p>	<p>Relevant</p>	<p>This recommendation can equally be applied to any products that are planned to be used in other sectors.</p> <p>Suitable Management of Change procedures should be in place to ensure that new or replacement products do not introduce additional risks and are fit for purpose.</p>	<p>PSF members should raise awareness of the need to ensure that Management of Change procedures are in place for product selection. This may take the form of a Learning Brief referencing the Grenfell final report.</p> <p>Reference should also be made to existing PSF Safety Alerts on this topic, for example <i>Compatibility with Gasoline/5% Ethanol Mix (E5) on Fuel Loading Racks at Terminal</i></p> <p>Whilst it did not become a safety issues, the NASA extruded aluminium case study demonstrates the importance of trusted suppliers, ethics when handling data and the need for the Client to check data: https://www.telegraph.co.uk/news/2019/05/02/nasa-says-manufacturers-fraud-caused-two-rocket-launch-failures/</p> <p>Perhaps worth a Safety Alert, even though the consequences in this case were ultimately financial.</p>

Recommendation 7.2	Relevance to PSF Sectors	Justification/Reference	Further Action
<p>a) Manufacturers must retest products that are critical to the safety of HRRBs at least every three years. Manufacturers should consider the need to test more frequently, focusing especially on the testing of products as they operate in systems rather than individual elements.</p> <p>b) The testing of products that are critical to the safety of HRRBs should be subject to independent third party certification.</p> <p>c) The introduction of the JCA should drive the introduction of reactive testing when particular issues of concern arise regarding products installed that are critical to the safety of HRRBs.</p> <p>d) Additional test houses should be established and certified.</p> <p>e) All test houses should produce an annual report providing summary details of tests carried out and the number of passes and failures reported.</p>	Relevant but addressed	Independent certification is established for safety critical equipment, however the importance of specifying these requirements during the procurement stage should be highlighted.	<p>PSF members should raise awareness of the need to ensure that necessary certification is identified during the procurement stage.</p> <p>This can be highlighted through the response to recommendation 7.1.</p>

Recommendation 7.3	Relevance to PSF Sectors	Justification/Reference	Further Action
A simpler, more streamlined set of standards relating to the testing of products used in HRRBs, and the health and safety of people in and around those buildings, needs to be developed. This should ensure that where new standards are required, these are identified quickly and in the case of conflicting standards, that these are identified and reviewed.	Not relevant	Applies to residential buildings only	None required

Recommendation 7.4	Relevance to PSF Sectors	Justification/Reference	Further Action
Test methods and standards should be maintained under a periodic review process in order to drive continuous improvement and higher performance through the development of new test methods, and encourage innovative product and system design under better quality control.	Not relevant	Applies to residential buildings only	None required

Recommendation 7.5	Relevance to PSF Sectors	Justification/Reference	Further Action
<p>a) The construction products industry should work together to develop and agree a consistent labelling and traceability system, making use of the digital technologies that are already available and learning from other sectors.</p> <p>b) The dutyholder for any given HRRB should ensure that the documentation that supports the performance claims for products and systems incorporated within the HRRB should be maintained throughout the life cycle of a building through the golden thread of building information (see Chapter 8).</p>	Not relevant	Applies to residential buildings only	None required

Recommendation 7.6	Relevance to PSF Sectors	Justification/Reference	Further Action
<p>a) Government should ensure that there is a more effective enforcement, complaint investigation and market surveillance regime with national oversight to cover construction product safety.</p> <p>b) Government should consider whether this could be achieved by extending the remit of the Office for Product Safety and Standards.</p> <p>c) The introduction of national level market surveillance should drive the introduction of risk-based testing of products that are critical to the safety of HRRBs.</p>	Not relevant	Applies to residential buildings only	None required

3.8. Golden thread of building information

Recommendation 8.1	Relevance to PSF Sectors	Justification/Reference	Further Action
<p>a) Government should mandate a digital (by default) standard of record-keeping for the design, construction and during the occupation of new HRRBs. This is to include any subsequent refurbishments within those buildings.</p> <p>b) Digital records are to be in a format which is appropriately open and non-proprietary with proportionate security controls.</p>	Not relevant	Applies to residential buildings only	None required

Recommendation 8.2	Relevance to PSF Sectors	Justification/Reference	Further Action
Government should work with industry to agree what information must be held in the digital record for new HRRBs.	Not relevant	Applies to residential buildings only	None required

Recommendation 8.3	Relevance to PSF Sectors	Justification/Reference	Further Action
<p>a) Government should work with industry to agree the type of information to be collected and maintained digitally (by default) to enable the safe building management of existing HRRBs.</p> <p>b) Dutyholders must identify and record where gaps in the above information exist and the strategy for updating that relevant information.</p>	Not relevant	Applies to residential buildings only	None required

Recommendation 8.4	Relevance to PSF Sectors	Justification/Reference	Further Action
<p>a) Dutyholders must hold, transfer and update information throughout the life cycle of the HRRB.</p> <p>b) Information from this record is to be provided to the JCA in the event that this may be required.</p>	Not relevant	Applies to residential buildings only	None required

3.9. Procurement and supply

Recommendation 9.1	Relevance to PSF Sectors	Justification/Reference	Further Action
<p>a) For higher risk residential buildings (HRRBs), principal contractors and clients should devise contracts that specifically state that safety requirements must not be compromised for cost reduction.</p> <p>b) The government should consider applying this requirement to other multi-occupancy residential buildings and to institutional residential buildings.</p>	Not relevant	Applies to residential buildings only	Refer to the response to recommendation 7.1.

Recommendation 9.2	Relevance to PSF Sectors	Justification/Reference	Further Action
<p>a) For HRRBs, tenders should set out how the solution that is proposed will produce safe building outcomes, approaching the building as a system. Those procuring should use the tender review process to test whether this is the case.</p> <p>b) The government should consider applying this requirement to other multi-occupancy residential buildings and to institutional residential buildings.</p>	Not relevant	Applies to residential buildings only	Refer to the response to recommendation 7.1.

Recommendation 9.3	Relevance to PSF Sectors	Justification/Reference	Further Action
For HRRBs the information in the contracting documentation relating to the safety aspects should be included in the digital record set out in Chapter 8.	Not relevant	Applies to residential buildings only	Refer to the response to recommendation 7.1.

3.10. International examples

Recommendation 10.1	Relevance to PSF Sectors	Justification/Reference	Further Action
The government should re-join the Inter-jurisdictional Regulatory Collaboration Committee (IRCC).	Not relevant	Applies to residential buildings only	None required

5. CONCLUSIONS

The following PSF actions are identified following the review of the Grenfell final report:

Action Reference	Action	Due Date
Grenfell/ACTION 1	<p>PSF members should raise awareness of the need to ensure that roles and responsibilities are clearly defined when engaging with third parties. This should include:</p> <p>Reference to the Grenfell recommendations 2.1 – 2.4</p> <p>Reference to the similar lessons from the Charles Haddon-Cave report into the Nimrod XV230 crash</p> <p>The need for design information relevant to ensuring the correct ongoing operations and maintenance of plant and process is obtained from third parties and maintained</p>	Forward Plan 2020
Grenfell/ACTION 2	<p>PSF members should raise awareness of the need to ensure that Management of Change procedures are in place for product selection. This should include:</p> <p>Reference to the Grenfell recommendation 7.1</p> <p>Reference should also be made to existing PSF Safety Alerts on this topic, for example <i>Compatibility with Gasoline/5% Ethanol Mix (E5) on Fuel Loading Racks at Terminal</i></p> <p>The need to ensure that necessary certification of products is identified during the procurement stage.</p>	Forward Plan 2020
Possible ACTION 3	<p>How to encourage businesses to carry out a deeper review of incidents and learnings from within their business and more widely to identify the weaker signals and potential causal factors. This will be the subject of a Learning Brief.</p>	December 2019