



Safest People, Safest Places

Combined Fire Authority

21 October 2024

Grenfell Tower Inquiry Phase 2 Report

Report of the Deputy Chief Fire Officer

Purpose of Report

1. The purpose of the report is to provide Members with a summary of the Grenfell Tower Inquiry Phase Two report, published on 4 September 2024.

Background

2. The Inquiry was established to examine the circumstances leading up to and surrounding the fire at Grenfell Tower on the night of 14 June 2017. Phase 1 focused on the factual narrative of the events on the night of 14 June 2017. The Grenfell Tower Inquiry's final hearings took place in November 2022.
3. Phase 2 examines the causes of the fire, including how Grenfell Tower came to be in a condition which allowed the fire to spread in the way identified by Phase 1.

Key Findings of the Report

4. The key findings summarised by organisation are below.

Government

5. The report finds that Government had missed multiple opportunities to identify and take action to address the risks of combustible cladding and insulation. As late as 2016, Government was aware of the risks but failed to address them.

6. In 2001, a large-scale test of a system incorporating aluminium composite material (ACM) panels was undertaken. Government failed to publish the results or warn the construction industry of the risks posed by these materials.
7. The statutory guidance for the Building Regulations 2010 concerning fire safety, Approved Document B (ADB), is described as “vague and ill-considered”, perpetuated “erroneous assumption[s]”, and the official responsible for the regulations was not given “adequate oversight.” Many in the industry misunderstood the content and purpose of ADB, and the inquiry found that it was not uncommon for construction professionals to conflate compliance with ADB with compliance with the Building Regulations.
8. The report found that the Department for Communities and Local Government (DCLG, now MHCLG) did not treat the coroner's recommendations following Lakanal House “with a sense of urgency” and that civil servants “did not explain clearly to the Secretary of State (SoS) what steps were required to comply with them”. The report found that “the department displayed a complacent and at times defensive attitude to matters affecting fire safety” and “disregarded” fire safety in favour of a deregulatory agenda.
9. It was also during this post-Lakanal deregulatory period that “Government determinedly resisted calls from across the fire sector to regulate fire risk assessors and to amend the Fire Safety Order (FSO) to make it clear that it applied to the exterior walls of buildings containing more than one set of domestic premises”.
10. Government officials unacceptably influenced the outcome of Sir Ken Knight’s report on issues arising from the Lakanal House fire in 2009 regarding changes to the FSO and competence. This was due to the presumption that Government’s deregulation agenda meant such changes would not be approved, and resources were insufficient to support more legislation. As a result, no proposals for reform were put forward to Ministers.
11. At a 2009 Chief Fire Officers Association (CFOA, now NFCC) enforcement working group meeting, it was noted that “although the department recognised that many would welcome a nationally recognised accreditation scheme for fire risk assessors, it was not something that Government intended to develop”.
12. In response to a consultation on the Fire Safety in Purpose-Built Blocks of Flats guide, CFOA stated “that not to include advice on the evacuation of disabled people was a fundamental error”. Despite this view, the drafting group did not commission research or examine ways of helping those unable to escape unaided. The CFOA response was “either considered and rejected or simply ignored”.

Building Research Establishment (BRE)

13. The report found that the privatisation of BRE limited the scope of advice on fire safety matters. On occasions, it deliberately curtailed investigations before any proper conclusion had been reached.

14. BRE recognised as early as 1991 following the Knowsley Heights fire “that small-scale testing”, which provided the basis for the national standard, “did not enable a proper assessment” for how an external wall system would react to fire. However, BRE did not draw this fact to Government’s attention. The report also found that BRE failed to draw attention to the way ACM panels with unmodified polyethylene cores “behaved and the dangers they presented” following its large-scale test in 2001.
15. The Inquiry found BRE’s reports into three major fires (Knowsley Heights [1991], Garnock Court [1999] and the Edge [2005]), were “far from comprehensive” and that every report “failed to identify or assess important contributory factors”. This resulted in giving DCLG the false impression that “the regulations and guidance were working effectively”.
16. Weakness in the way BRE carried out tests and in its record keeping allowed it to be manipulated by “unscrupulous product manufacturers”. It found that senior BRE staff gave advice to customers, such as Kingspan and Celotex, on “the best way to satisfy the criteria for a system to be considered safe”. The accommodation (in some cases) of existing customers was at the “expense of maintaining the rigour of its processes and considerations of public safety”.

Product Manufacturers

17. The report is clear that safety in the built environment depends on knowing how products and materials will react to fire. A significant reason for Grenfell Tower being clad in combustible materials was due to “systematic dishonesty” by those who made and sold rain-screen cladding and insulation products with “deliberate and sustained strategies to manipulate the testing processes, misrepresent test data and mislead the market”.
18. These strategies were successful because certification bodies “failed to ensure that the statements in their product certificates were accurate and based on test evidence”. The body with oversight of the certification bodies also failed to “apply proper standards of monitoring and supervision”.

Arconic:

19. From 2005 until after the Grenfell Tower fire, “Arconic deliberately concealed from the market the true extent of the danger” of its Reynobond 55 PE rainscreen product in cassette form “particularly on high-rise buildings”. This was “not an oversight” but a “deliberate strategy” to continue selling the product in the UK “based on a statement about its fire performance that it knew to be false”.
20. From early 2005, Arconic had been in possession of test data showing the cassette product “reacted to fire in a very dangerous way” and could not be classified in accordance with European Standards.
21. Despite knowledge of the danger of the product in cassette form and concerns in the construction industry around ACM, Arconic “was determined to exploit

what it saw as weak regulatory regimes” to sell the product. After cladding fires in Dubai in 2012 and 2013, they did not withdraw the product in favour of a new fire-resistant version.

Celotex:

22. In an attempt to break into the market of insulation suitable for high-rise buildings, Celotex embarked on a “dishonest scheme to mislead its customers and the wider market.” Celotex deliberately tested its RS5000 insulation product in 2014 “with the complicity of the BRE” in a manner to ensure it passed. It then obtained a BRE test result that omitted the use of magnesium oxide boards in the testing, rendering the report “materially incomplete and misleading”.
23. Celotex marketed the product, referring to the successful test, as acceptable for use in buildings above 18 metres. They also put (in small print) that the system test used does not test or classify individual products. From 2011, it was sold and marketed as having Class 0 fire performance though this was “false and misleading”.

Kingspan:

24. From 2005 until after the inquiry began, Kingspan “knowingly created a false market in insulation for use on buildings over 18 metres”. Kingspan knew its K15 product could not be sold as suitable for use in external walls of buildings over 18 metres in height.
25. Kingspan relied upon results of a single 2005 test on a system whose components were not representative of a typical external wall. It continued to rely on the test despite changing the composition of the product in 2006. Kingspan held its own concerns on the new composition’s fire performance, which tested disastrously, but did not withdraw the product.
26. Kingspan concealed from the British Board of Agrément (BBA) that the product they were selling differed from the 2005 test product. The BBA certificate contained three fire performance statements which were untrue and used a form of words suggested by Kingspan and drawn from the company's marketing literature. The re-issued 2013 certificate contained a false implication that the product was of limited combustibility.
27. Kingspan also obtained a Local Authority Building Control (LABC) certificate in 2009 containing false statements. It used the LABC certificate to “mask or distract from” the absence of supporting test evidence.
28. When Kingspan returned to testing on systems containing K15, they did not use the product which was currently on the market yet used those results to support the sale for use on buildings over 18 metres until October 2020.

Regulatory Bodies and Compliance

29. The report is clear that all of the “certification bodies that provided assurance to the market of the quality and characteristics of the products [used on and in Grenfell Tower] failed to ensure that the statements in the certificates they issued were accurate and based on appropriate and relevant test evidence.” A recurring theme throughout the report is the fundamental incompatibility and inability of Government to reconcile rigorous independent examination in the best interests of the public with the delivery of a commercial service.

British Board of Agrément

30. The BBA, responsible for product compliance with legislation, awarded certificates of compliance to insulation products used in Grenfell Tower, and the report finds that it was neither “independent nor rigorous”. This is attributed to an “ingrained willingness to accommodate customers instead of insisting on high standards”, along with “inadequate levels of competence” among its staff.
31. The BBA’s certificates of compliance were found to contain false information and were allowed to be dictated by the manufacturers themselves. In some cases, the BBA did not even assess or test products before issuing certificates.

Local Authority Building Control

32. LABC is responsible for verifying the compliance of construction products with the Building Regulations. The Inquiry found that it failed “to take basic steps” to ensure its compliance certificates were accurate, that it failed to properly scrutinise products, that its staff were not competent to undertake their roles, and that it was “vulnerable to manipulation”.

National House Building Council (NHBC)

33. NHBC provided building control services to a large proportion of the construction industry. Evidence found that NHBC was “nervous” about the use of Celotex insulation in high-rise buildings, and even consulted FRSs on the issue. The report describes NHBC as “unwilling to upset its own customers”, however, and that building control bodies “preferred to co-operate with applicants...rather than enforce the Building Regulations rigorously.”

United Kingdom Accreditation Service (UKAS)

34. UKAS is appointed by the Government to assess and accredit organisations that provide services including certification, testing, and inspection. UKAS “relied too much on the candour and co-operation of the organisations being assessed and too much was left to trust.”

The Royal Borough of Kensington and Chelsea (RBKC) Council and the Tenant Management Organisation (TMO)

35. The Inquiry found that RBKC and the TMO, jointly responsible for Grenfell Tower's fire safety management, showed "persistent indifference" to safety requirements. Residents of the tower repeatedly raised dissatisfaction with their treatment by the TMO, argued the refurbishment of Grenfell Tower (which fitted the building with combustible cladding) was mismanaged by the TMO, and that by the time of the fire relationships between the organisation and Grenfell Tower's residents "had deteriorated to the point at which they could be described as hostile."
36. The TMO's Chief Executive "consistently failed" to draw attention to the London Fire Brigade's (LFB) concerns about the tower's failure to comply with the FSO, either to the TMO board or RBKC.
37. Despite a 2009 recommendation from an independent fire safety consultant, no fire strategy had been approved by the TMO or RBKC at the time of the fire. The TMO's only fire assessor was not subject to "any formal selection or recruitment process." The report notes that LFB raised concerns about the assessor's competence, which were subsequently ignored.
38. Fire risks identified in the tower were not remedied suitably or efficiently. The "TMO had developed a huge backlog of remedial work", information about vulnerable occupants was not collected, and senior management even reduced the importance attached to certain fire safety works. The TMO did not value fire safety and the demands of managing it were seen "as an inconvenience".
39. Grenfell Tower's fire protection systems did not work effectively and were in some instances not present at all. The TMO "failed to specify the correct fire safety standard" when ordering fire protection measures despite a 2015 Enforcement Notice from LFB on the same failure in another property in the TMO's portfolio.
40. In 2010, a fire had broken out in the lobby of Grenfell Tower but was quickly extinguished by LFB. The TMO's post-fire report, provided to the TMO board on 17 June 2010, is described by the Inquiry to have "grossly understated the extent to which smoke had spread within the tower and was seriously misleading." The spread of smoke in this fire led LFB to issue a 2014 deficiency notice to the TMO for its failure to maintain the smoke ventilation system. The system was only replaced in 2016.
41. RBKC did not have an effective emergency plan for the displacement of a large number of people, of which fire is only one hazard which might necessitate the evacuation. This is "a serious criticism of a local authority responsible for resilience".

London Fire Brigade

42. The report is critical of LFB's senior leadership, noting that the "Lakanal House fire in July 2009 should have alerted the LFB to the shortcomings in its ability to fight fires in high-rise buildings... Those shortcomings could have been made good if LFB had been more effectively managed and led."
43. The Inquiry pointed to complacency and overconfidence in bodies set up to review and report on necessary changes, but monitoring did not occur to ensure changes had been fully implemented. This resulted in growing knowledge about the dangers presented by the increasing use of combustible materials not being reflected in operational policies and procedures.
44. It finds that LFB did not provide sufficient guidance or training for control room operators dealing with many concurrent calls, fire survival guidance refresher training, nor training for firefighters in dealing with uncontrolled external wall fires.
45. LFB's policies for firefighting in high-rise buildings were found not to reflect national guidance at the time, and a "well known problem" with communication equipment, which did not adequately function inside the tower, was not addressed.
46. The report also notes several instances of LFB advice that went ignored by the TMO, which "failed to give sufficient weight to the advice of the LFB". One example shows that, in 2014, LFB requested for a premises information box to be installed, which was denied by the TMO's fire assessor, and another relates to the deficiency notice given by LFB in 2016 as relating to the lack of self-closing doors.

Conclusions

47. The Inquiry found that multiple opportunities were missed by Government to highlight the risks of combustible cladding to the wider industry. Testing information was not shared and recommendations from the Lakanal House coroner were not implemented. Government's deregulation agenda combined with the culture within DCLG made addressing concerns and achieving positive change extremely difficult. To remedy this, the Inquiry has called on Government to combine and streamline its various workstreams to have one department reporting to one SoS responsible for fire safety.
48. Understanding of ADB and how to meet the Building Regulations is poor across the industry, and revisions are required to make it fit for purpose and to clarify that complying with ADB does not necessarily guarantee compliance with the Building Regulations.
49. LFB comes under criticism for not responding effectively to learning from the Lakanal House fire and other incidents and for the inadequacy of training for control rooms and incident commanders. The Inquiry recommends that

HMICFRS inspect LFB to assess whether the improvements made since the Phase 1 report was published have been implemented satisfactorily.

50. Recommendations for improvement for FRSs mainly revolve around communications and the use of radios, however, the Inquiry also calls on Government to expedite the establishment of a College of Fire and Rescue. The Inquiry's envisaged role for the College goes beyond that outlined in the White Paper, recommending access to physical premises with a role for providing training as well as monitoring standards and research.
51. Much greater importance has been placed on the importance of fire engineering as a discipline. Several recommendations call for new steps of the building safety regime to be carried out by fire engineers and call on Government and the wider industry to formalise and increase the number of people entering the profession and improve knowledge across the sector, particularly for senior FRS staff, through new CPD courses.
52. Almost all of those involved in the design, build and sign-off of the Grenfell Tower refurbishment come under heavy criticism for immoral business practices and the "merry-go-round of buck-passing" famously stated by Richard Millett KC during the Inquiry. To address this, the Inquiry calls on Government to establish a new Construction Regulator and Chief Construction Adviser to oversee the industry, new licensing and accreditation schemes for professionals in the design and build process, and a fundamental review of the Building Control model including the role of commercial incentives. It does, however, note that a single regulator may not "solve the problem because the system will still depend on the effectiveness of the conformity assessment bodies and the limited oversight of UKAS."
53. The Inquiry criticises the support provided to Grenfell Tower survivors and other local community members affected by the fire and calls on the Government to reform the Civil Contingencies Act and on local authorities and other Category 1 responders to improve preparedness, response and recovery activities, including improvements to training, guidance and procedures.

Next Steps

54. There are 58 recommendations in the final report shown in Appendix A.
55. Although there are no high-rise residential buildings in the Service area, all recommendations are being reviewed to identify opportunities for improvement. An action plan will be produced including engagement with NFCC and it be monitored through the Operational Assurance Group.
56. Appendix A lists the 58 Grenfell Tower Inquiry Phase 2 recommendations as they appear in the final report.

Recommendations

57. Members are requested to:
 - a. **Note** the contents of the report.

Keith Carruthers, Deputy Chief Fire Officer 0191 375 5564

Appendix A – Recommendations

This appendix lists the 58 Grenfell Tower Inquiry Phase 2 recommendations as they appear in the final report.

Regulation

We recommend that the government draw together under a single regulator all the functions relating to the construction industry to which we have referred.

We recommend that the definition of a higher-risk building for the purposes of the Building Safety Act be reviewed urgently.

Government

We recommend that the government bring responsibility for the functions relating to fire safety currently exercised by MHCLG, the Home Office and the Department for Business and Trade into one department under a single Secretary of State.

Chief Construction Adviser

We recommend that the Secretary of State appoint a Chief Construction Adviser with a sufficient budget and staff to provide advice on all matters affecting the construction industry, including:

- monitoring all aspects of the department's work relating to the Building Regulations and statutory guidance;
- providing advice to the Secretary of State on request; and
- bringing to the attention of the Secretary of State any matters affecting the Building Regulations and statutory guidance or matters affecting the construction industry more generally of which the government should be aware.

Legislation and Guidance

Approved Document B must then be kept under continuous review, together with the other Approved Documents, and amended annually or promptly whenever developments in materials or building methods make that desirable. It should be drafted conservatively to ensure, as far as possible, that compliance with it will provide a high degree of confidence that on completion of the work the building will comply with the Building Regulations. **We therefore recommend** that the statutory guidance generally, and Approved Document B in particular, be reviewed accordingly and a revised version published as soon as possible.

It is understandable that those who turn to the guidance for advice about how to comply with the Building Regulations should be tempted to treat it as if it were definitive, but that is a danger that the Secretary of State needs to recognise and guard against. **We therefore recommend** that a revised version of the guidance contain a clear warning in each section that the legal requirements are contained in the Building Regulations and that compliance with the guidance will not necessarily result in compliance with them.

ADB proceeds on the assumption that effective compartmentation renders a stay put strategy an appropriate response to a fire in a flat in a high-rise residential building. New materials and methods of construction and the practice of overcladding existing buildings make the existence of effective compartmentation a questionable assumption and **we recommend** that it be reconsidered when Approved Document B is revised.

A stay put strategy in response to a compartment fire will be acceptable only if there is negligible risk of fire escaping into and spreading through the external wall. Calculating the likely rate of fire spread and the time required for evacuation, including the evacuation of those with physical or mental impairments, are matters for a qualified fire engineer. We do not think that it would be helpful to attempt to include in Approved Document B an indication of what would be acceptable because each building is different, but **we recommend** that the guidance draw attention to the need to make a calculation of that kind.

We recommend that, as far as possible, membership of bodies advising on changes to the statutory guidance should include representatives of the academic community as well as those with practical experience of the industry (including fire engineers) chosen for their experience and skill and should extend beyond those who have served on similar bodies in the past.

Fire Safety Strategy

We recommend that it be made a statutory requirement that a fire safety strategy produced by a registered fire engineer (see below) to be submitted with building control applications (at Gateway 2) for the construction or refurbishment of any higher-risk building and for it to be reviewed and re-submitted at the stage of completion (Gateway 3). Such a strategy must take into account the needs of vulnerable people, including the additional time they may require to leave the building or reach a place of safety within it and any additional facilities necessary to ensure their safety.

Fire Performance Tests

As is apparent from the experiments conducted by Professor Bisby and Professor Torero for Phase 2 of our investigations, the factors that affect the way in which fire spreads over ventilated rainscreen external wall systems are complex and understanding them is an evolving science. Intuitive judgements are often wrong because a small change in the system can have a significant effect on the outcome. It follows that assessing whether an external wall system can support a particular evacuation strategy is difficult because the necessary information is not always available. **We therefore recommend** that steps be taken in conjunction with the professional and academic community to develop new test methods that will provide the information needed for such assessments to be carried out reliably.

In the light of Professor Torero's evidence we think that BS 9414 will encourage people who are not trained fire engineers to think that they can safely assess the performance of a proposed external wall system by extrapolation from information obtained from tests on one or more different systems. For the reasons given by

Professor Torero we think that BS 9414 should be approached with caution and **we recommend** that the government make it clear that it should not be used as a substitute for an assessment by a suitably qualified fire engineer.

Certification of Products and Certification of Test Data

We recommend that the construction regulator should be responsible for assessing the conformity of construction products with the requirements of legislation, statutory guidance and industry standards and issuing certificates as appropriate.

In our view clarity is required to avoid those who rely on certificates of conformity being misled. **We therefore recommend:**

- that copies of all test results supporting any certificate issued by the construction regulator be included in the certificate;
- that manufacturers be required to provide the construction regulator with the full testing history of the product or material to which the certificate relates and inform the regulator of any material circumstances that may affect its performance; and
- manufacturers be required by law to provide on request copies of all test results that support claims about fire performance made for their products.

Fire Engineers

We recommend that the profession of fire engineer be recognised and protected by law and that an independent body be established to regulate the profession, define the standards required for membership, maintain a register of members and regulate their conduct.

In order to speed up the creation of a body of professional fire engineers **we also recommend** that the government take urgent steps to increase the number of places on high-quality masters level courses in fire engineering accredited by the professional regulator.

We recommend that the government convene a group of practitioner and academic fire engineers and such other professionals as it thinks fit to produce an authoritative statement of the knowledge and skills to be expected of a competent fire engineer.

We also recommend that the government, working in collaboration with industry and professional bodies, encourage the development of courses in the principles of fire engineering for construction professionals and members of the fire and rescue services as part of their continuing professional development.

Architects

We recognise that both the Architects Registration Board and the Royal Institute of British Architects have taken steps since the Grenfell Tower fire to improve the education and training of architects. **We recommend** that they should review the changes already made to ensure they are sufficient in the light of our findings.

We also recommend that it be made a statutory requirement that an application for building control approval in relation to the construction or refurbishment of a higher-risk building (Gateway 2) be supported by a statement from a senior manager of the principal designer under the Building Safety Act 2022 that all reasonable steps have been taken to ensure that on completion the building as designed will be as safe as is required by the Building Regulations.

Contractors

We recommend that a licensing scheme operated by the construction regulator be introduced for principal contractors wishing to undertake the construction or refurbishment of higher-risk buildings and that it be a legal requirement that any application for building control approval for the construction or refurbishment of a higher-risk building (Gateway 2) be supported by a personal undertaking from a director or senior manager of the principal contractor to take all reasonable care to ensure that on completion and handover the building is as safe as is required by the Building Regulations.

Building Control

We recommend that the government appoint an independent panel to consider whether it is in the public interest for building control functions to be performed by those who have a commercial interest in the process.

We recommend that the same panel consider whether all building control functions should be performed by a national authority.

A Construction Library

Those who design buildings, particularly higher-risk and complex buildings, would benefit from having access to a body of information, such as data from tests on products and materials, reports on serious fires and academic papers. In Chapter 112 we have referred to the Cladding Materials Library set up by the University of Queensland, which could form the basis of a valuable source of information for designers of buildings in general. **We recommend** that the construction regulator sponsor the development of a similar library, perhaps as part of a joint project with the University of Queensland, to provide a continuing resource for designers.

Response to Recommendations

We recommend that it be made a legal requirement for the government to maintain a publicly accessible record of recommendations made by select committees, coroners and public inquiries together with a description of the steps taken in response. If the government decides not to accept a recommendation, it should record its reasons for doing so. Scrutiny of its actions should be a matter for Parliament, to which it should be required to report annually.

Fire Risk Assessors

We recommend that the government establish a system of mandatory accreditation to certify the competence of fire risk assessors by setting standards for qualification and continuing professional development and such other measures as may be considered necessary or desirable. We think it necessary for an accreditation system to be mandatory in order to ensure the competence of all those who offer their services as fire risk assessors.

Fire Control Switches in Lifts

We are not in a position to determine whether greater standardisation of fire control switches and keys is required. **We therefore recommend** that the government seeks urgent advice from the Building Safety Regulator and the National Fire Chiefs Council on the nature and scale of the problem and the appropriate response to it.

Pipeline Isolation Valves

Pipeline isolation valves are a critical part of the gas distribution network because they are intended to enable the supply of gas to be shut off quickly in an emergency. At the time of the fire at Grenfell Tower the valves could not be operated because they had been covered over in the course of hard landscaping. There was evidence that it was a common problem in the industry for pipeline isolation valves to be lost in that way. In our view that poses an unacceptable risk to health and safety and could have significant consequences. **We therefore recommend** that every gas transporter be required by law to check the accessibility of each such valve on its system at least once every three years and to report the results of that inspection to the Health and Safety Executive as part of its gas safety case review.

A College of Fire and Rescue

We welcome the government's ambition to create an independent College of Fire and Rescue expressed in the white paper *Reforming our Fire and Rescue Service* and **we therefore recommend** that the government establish such a college immediately with sufficient resources to provide the following services nationally:

- practical training at all levels supplementary to that provided by individual fire and rescue services;
- education in the form of lectures and seminars on different aspects of the work of the fire and rescue services in order to share experience and promote good practice;
- research into matters that may affect the work of the fire and rescue services, including major fires;
- the development of equipment, policies and procedures suitable for ensuring the effectiveness of fire and rescue services nationally and the safety of firefighters and the public;
- setting and maintaining national standards of managerial competence for senior managers, including control room managers, and providing management training for, and regular assessment of, senior ranks by reference to such standards.

Although it is for the government to decide how the college should be constituted, **we recommend** that it should have a permanent staff of sufficient size to manage its operations and develop its functions in response to the demands of fire and rescue services nationally and the requirements of the board. The college will need access to permanent facilities, including facilities for practical training and education.

The Control Room

We recommend that His Majesty's Inspectorate of Constabulary and Fire and Rescue Services ("the Inspectorate") inspect the LFB as soon as reasonably possible to assess and report on:

- the extent to which the control room is now integrated into the organisation;
- the effectiveness of the arrangements for identifying the training needs of control room staff, delivering effective training and recording its outcomes;
- the effectiveness of the control room generally;
- the ability of the control room to handle a large number of concurrent requests for advice and assistance from people directly affected by fires or other emergencies; and
- the quality and effectiveness of the arrangements for communication between the control room and the incident commander.

Incident Commanders

We recommend that as soon as reasonably possible the Inspectorate inspect the LFB to examine and report on the arrangements it has in place for assessing the training of incident commanders at all levels and their continuing competence, whether by a process of revalidation or otherwise.

Operational Planning

We recommend that as soon as reasonably practicable the Inspectorate inspect the LFB to examine and report on its arrangements for collecting, storing and distributing information in accordance with section 7(2)(d) of the Fire and Rescue Services Act 2004, and in particular its arrangements for identifying high-risk residential buildings and collecting, storing and distributing information relating to them.

Implementing Change

We recommend that the LFB establish effective standing arrangements for collecting, considering and effectively implementing lessons learned from previous incidents, inquests and investigations. Those arrangements should be as simple as possible, flexible and of a kind that will ensure that any appropriate changes in practice or procedure are implemented speedily.

Communications

We recommend that fire and rescue services that continue to use low power intrinsically safe radios as part of breathing apparatus consider reserving them only

for situations in which there is a real risk of igniting flammable gases and generally using radios of higher power, particularly in high-rise buildings.

There is strong evidence that in general digital radios are more effective than analogue radios. **We therefore recommend** that all fire and rescue services give consideration to providing all firefighters with digital radios.

We recommend that firefighters be trained to respond appropriately to the loss of communications and to understand how to restore them.

Water

On the night of the Grenfell Tower fire firefighters were unable to distinguish between different types of hydrant. That is a clear indication of a need for better training and **we therefore recommend** that basic training on the structure and operation of the water supply system, including the different types of hydrants in use and their functions, be given to all firefighters. Training should also be given on effective measures to increase water flow and pressure when necessary.

We recommend that all fire and rescue services establish and periodically review an agreed protocol with the statutory water undertakers in their areas to enable effective communication between them in relation to the supply of water for firefighting purposes.

We recommend that the British Standards Institution amend BS 750 to include a description of the circumstances under which the flow coefficient to which it refers in paragraph 10.2 is to be measured.

Deployment of Firefighters

We recommend that National Fire Chiefs Council consider whether, and if so in what circumstances, firefighters should be discouraged from departing from their instructions on their own initiative and provide appropriate training in how to respond to a situation of that kind.

The Civil Contingencies Act 2004

The government's powers in sections 5 and 7 of the Act to intervene in response to an emergency are far-reaching but they do not enable it to intervene promptly or decisively when a Category 1 responder is failing to rise to the challenge. **We therefore recommend** that the Act be reviewed and consideration be given to granting a designated Secretary of State the power to carry out the functions of a Category 1 responder in its place for a limited period of time.

The response of local voluntary organisations to the disaster demonstrated their capacity to act as valuable partners in responding to an emergency. Regulation 23 of the Civil Contingencies Act 2004 (Contingency Planning) Regulations 2005 requires a Category 1 responder to have regard when making its plans to the activities of relevant voluntary organisations. **We therefore recommend** that the regulation be amended to require Category 1 responders to establish and maintain partnerships

with the voluntary, community and faith organisations in the areas in which they are responsible for preparing for and responding to emergencies.

Guidance

The current guidance on preparing for emergencies is contained in several documents, all of which are unduly long and in some respects out of date. **We recommend** that the guidance be revised, reduced in length and consolidated in one document which lays greater emphasis on the need for those leading the response to consider the requirements for recovery, the need to identify vulnerable people, the importance of identifying and ensuring co-operation with voluntary, community and faith groups and is consistent with the Equality Act 2010.

We also recommend that regard for humanitarian considerations be expressly recognised by making it the ninth principle of effective response and recovery.

London Local Authority Gold Arrangements

Events demonstrated that there is a need for a clearer understanding of the nature of the London Gold arrangements, in particular in situations in which a single borough is affected. **We therefore recommend** that the guidance on the operation of those arrangements be revised and that existing and newly appointed chief executives be given regular training to ensure they are familiar with its principles.

Local Resilience Forums

We recommend that local resilience forums adopt national standards to ensure effective training, preparation and planning for emergencies and adopt independent auditing schemes to identify deficiencies and secure compliance.

We also recommend that a mechanism be introduced for independently verifying the frequency and quality of training provided by local authorities and other Category 1 responders.

Local Authorities

We recommend that local authorities train all their employees, including chief executives, to regard resilience as an integral part of their responsibilities.

RBKC had no effective means of collecting and recording information about those who had been displaced from the tower and surrounding buildings, including those who were missing. Compiling reliable information of that kind is difficult and the challenges likely to be faced by local authority Category 1 responders will vary according to the nature of the emergency. **We recommend** that all local authorities devise methods of obtaining and recording information of that kind, if possible in electronic form, and practise putting them into operation under a variety of different circumstances.

Any local authority is likely to have difficulty finding temporary accommodation for a very large number of displaced persons but the need to do so should be recognised and contingency plans drawn up. **We recommend** that all local authorities make

such arrangements as are reasonably practicable for enabling them to place people in temporary accommodation at short notice and in ways that meet their personal, religious and cultural requirements. Such arrangements should, as far as possible, involve local providers of social housing.

We recommend that all local authorities include in their contingency plans arrangements for providing immediate financial assistance to people affected by an emergency.

We also recommend that as part of their planning for emergencies local authorities give detailed consideration to the availability of key workers and the role they are expected to play so that suitable contingency arrangements can be made to ensure, as far as possible, continuity of support.

We recommend that as part of their emergency planning local authorities make effective arrangements for continuing communication with those who need assistance using the most suitable technology and a range of languages appropriate to the area.

We recommend that all local authorities include in their plans for responding to emergencies arrangements for providing information to the public by whatever combination of modern methods of communication are likely to be most effective for the areas for which they are responsible.

In future, to avoid confusion, wasted effort and frustration **we also recommend** that what in the past has been called by the police a “casualty bureau” be described in a way that makes it clear that it does not provide information to the public about people affected by the emergency.

Vulnerable People

We recommend that further consideration be given to the recommendations made in the Phase 1 report in the light of our findings in this report.

We also recommend that the advice contained in paragraph 79.11 of the LGA (*Fire Safety in Purpose-Built Blocks of Flats*) Guide be reconsidered.