



**DORSET & WILTSHIRE
FIRE AND RESCUE
AUTHORITY**

Item 19/58

MEETING	Dorset & Wiltshire Fire and Rescue Authority
DATE OF MEETING	18 December 2019
SUBJECT OF THE REPORT	Grenfell Tower Public Inquiry update
STATUS OF REPORT	For open publication
PURPOSE OF REPORT	For information
EXECUTIVE SUMMARY	<p>On 14 June 2017, a fire broke out in the kitchen of Flat 16 Grenfell Tower, a high-rise residential building in West London. The fire claimed the lives of 71 people present in the building, including the life of a child who was stillborn after his mother had escaped. A total of 277 people escaped from the tower.</p> <p>The morning after the fire, the then Prime Minister announced that there would be a public inquiry into the circumstances surrounding the fire. On 28 June 2017, The Rt Hon Sir Martin Moore-Bick was appointed to act as chairman. The Inquiry was separated into two phases. Upon the conclusion of Phase 1, the Grenfell Tower Inquiry: Phase 1 report was published on 30 October 2019.</p> <p>This report both updates Members on the progress of Phase 1 and broadly outlines the conclusions and recommendations that have been determined.</p>
RISK ASSESSMENT	<p>Failure to strategically reflect upon and learn from this incident and make an appropriate response to the conclusions and findings of the Phase 1 report may lead to the loss of a key opportunity to further strengthen the response arrangements of the Service and may adversely affect the high standing of the Authority.</p>

COMMUNITY IMPACT ASSESSMENT	None for the purposes of this report.
BUDGET IMPLICATIONS	None for the purposes of this report, however the strategic implications of this Inquiry are being considered as part of the Service's Strategic Assessment of Risk and medium-term financial planning arrangements.
RECOMMENDATION	Members are asked to: 1. Note the content of the report.
BACKGROUND PAPERS	Grenfell Tower Inquiry: Phase 1 Report – Report of the Public Inquiry into the Fire at Grenfell Tower on 14 June 2017. Sir Martin Moore-Bick (October 2019) https://www.grenfelltowerinquiry.org.uk/phase-1-report NB: A dedicated website has been established for the Grenfell Tower Inquiry, where the report and a large amount of other information can be viewed or downloaded: https://www.grenfelltowerinquiry.org.uk/
APPENDICES	None
REPORT ORIGINATOR AND CONTACT	Name: CFO Ben Ansell Email: ben.ansell@dwfire.org.uk Tel no: 01722 691076

1. Introduction

- 1.1 On 14 June 2017, a fire broke out in the kitchen of Flat 16 Grenfell Tower, a high-rise residential building in West London. The fire, which should have been contained within the flat, escaped into the external envelope of the building. The building was constructed of reinforced concrete, to which a cladding system had been added. The cladding system comprised insulation boards attached to the outside of the concrete structure and protected from the weather by aluminium composite material (ACM) rainscreen panels. The rainscreen panels contained a polyethylene core. Polyethylene is a highly combustible substance. Most of the insulation panels were made from polyisocyanurate foam, which is also combustible.
- 1.2 The first 999 call was made at 00.54 and the first firefighters arrived at Grenfell Tower at 00.59. By that time the fire had already escaped into the cladding. The fire spread rapidly up the outside of the building. Within a few hours it had engulfed almost the whole of the building.
- 1.3 The fire claimed the lives of 71 people present in the building. This includes the life of a child who was stillborn after his mother had escaped. A further resident who escaped died seven months later (although she had been seriously affected by smoke inhalation, her death was not directly caused by the fire). A total of 277 people (residents and visitors) escaped from the tower.
- 1.4 The morning after the fire, the Prime Minister announced that there would be a public inquiry into the circumstances surrounding the fire. On 28 June 2017, The Rt Hon Sir Martin Moore-Bick was appointed to act as chairman. The Inquiry was formally set up on 15 August 2017 and opened on 14 September 2017. The first evidence was heard on 21 May 2018.
- 1.5 The Inquiry was separated into two phases:
 - Phase 1 – *‘to identify exactly how the fire started, how it escaped from the flat of origin and how fire and smoke was able to spread throughout the building in a manner and at a speed that prevented many people from escaping, despite the prompt attendance of the emergency services. Also, (to) examine the response of the emergency services so far as it bore on the decisions made and actions taken on the night of the fire’.*
 - Phase 2 – *‘to ascertain the underlying causes of the disaster, including the decisions made in relation to critical aspects of the design and construction of the cladding system, the adequacy of the regulatory regime and the response of central and local government’.*
- 1.6 Upon the conclusion of Phase 1, the ‘Grenfell Tower Inquiry: Phase 1 report’ was published on 30 October 2019.

2. Grenfell Tower Inquiry: Phase 1 Report

2.1 The full report consists of 838 pages and is arranged in four volumes:

- Volume 1 – Part I: Background matters
- Volume 2 – Part II: The events of 14 June 2017
- Volume 3 – Part II: The events of 14 June 2017 (continued)
- Volume 4 – Part III: Conclusions

Part IV: Remembering those who died

Part V: Recommendations

Part VI: Looking ahead to Phase 2

2.2 A dedicated website was established for the Grenfell Tower Inquiry, where the report can be viewed or downloaded: <https://www.grenfelltowerinquiry.org.uk/>

2.3 For the purposes of this update, Members' attention will be drawn to the Conclusions and Recommendations of the Inquiry.

2.4 Conclusions

2.4.1 Below is a summary of the conclusions reached within the report.

2.4.2 The cause and origin of the fire and its escape from Flat 16.

a. The fire is most likely to have entered the cladding as a result of hot smoke impinging on the uPVC window jamb, causing it to deform and collapse and thereby provide an opening into the cavity between the insulation and the ACM cladding panels through which flames and hot gases could pass. It is, however, possible (but less likely) that flames from the fire in the fridge-freezer passed through the open kitchen window and impinged on the ACM cladding panels above.

b. The fire had entered the cladding before firefighters opened the kitchen door in Flat 16 for the first time at 01.14.

c. A kitchen fire of that relatively modest size was perfectly foreseeable.

2.4.3 The subsequent development of the fire.

a. The principal reason why the flames spread so rapidly up, down and around the building was the presence of the aluminum composite material (ACM) rainscreen panels with polyethylene cores, which acted as a source of fuel. The principal mechanism for the spread of the fire horizontally and downwards

was the melting and dripping of burning polyethylene from the crown and from the spandrel and column panels, which ignited fires lower down the building. Those fires then travelled back up the building, thereby allowing the flame front to progress diagonally across each face of the tower.

- b. The presence of polyisocyanurate (PIR) and phenolic foam insulation boards behind the ACM panels, and perhaps components of the window surrounds, contributed to the rate and extent of vertical flame spread.*
- c. The crown was primarily responsible for the spread of the fire horizontally, and the columns were a principal route of downwards fire spread.*

2.4.4 The loss of compartmentation and the spread of fire throughout the tower.

- a. The intensity of the heat was such that the glass in the windows inevitably failed, allowing the fire to penetrate flats.*
- b. Extractor fan units in the kitchens had a propensity to deform and become dislodged, providing a point of entry.*
- c. A number of key fire protection measures inside the tower failed. Although some fire doors held back the smoke, others did not. Some were left open and failed to close because they lacked effective self-closing devices; others were broken down by firefighters or wedged open with firefighting equipment.*

2.4.5 Compliance with the Building Regulations.

There was compelling evidence that the external walls of the building failed to comply with Requirement B4(1) of Schedule 1 to the Building Regulations 2010, in that they did not adequately resist the spread of fire having regard to the height, use and position of the building. On the contrary, they actively promoted it.

2.4.6 The London Fire Brigade (LFB): planning and preparation.

- a. The otherwise experienced incident commanders and senior officers attending the fire had received no training in the particular dangers associated with combustible cladding, even though some senior officers were aware of similar fires that had occurred in other countries, and of the fact that construction materials and methods of construction were being used in high-rise building facades with a limited understanding of their behaviour and performance in a fire.*
- b. LFB incident commanders had received no training in how to recognise the need for an evacuation or how to organise one.*
- c. There was no contingency plan for the evacuation of Grenfell Tower.*

- d. *Although the LFB purports to maintain an operational risk database (ORD) for buildings in London and has a risk assessment policy (PN800) accessible by all operational firefighters at an incident, the entry on the ORD for Grenfell Tower contained almost no information of any use to an incident commander called to a fire. Such information as was contained in the ORD was many years out of date and did not reflect the changes made by the refurbishment.*
- e. *In some cases, basic information relating to the tower held by the LFB was wrong and in others it was missing altogether.*

2.4.7 The LFB: at the incident ground.

- a. *None of them seem to have been able to conceive of the possibility of a general failure of compartmentation or of a need for mass evacuation; they neither truly seized control of the situation nor were able to change strategy.*
- b. *Once it was clear that the fire was out of control and that compartmentation had failed, a decision should have been taken to organise the evacuation of the tower while that remained possible. That decision could and should have been made between 01.30 and 01.50 and would be likely to have resulted in fewer fatalities. The best part of an hour was lost before Assistant Commissioner Roe revoked the “stay put” advice.*
- c. *The LFB continued to rely on the “stay put” strategy in place for Grenfell Tower which was not questioned, notwithstanding all the early indications that the building had suffered a total failure of compartmentation.*
- d. *No systematic arrangements were made for information about the number and source of fire survival guidance (FSG) calls to be communicated to the incident commanders. Similarly, information about the internal spread of the fire and the results of rescue operations was not effectively shared with incident commanders; pictures from the police helicopter were not available to them.*
- e. *There were serious deficiencies in command and control. Although additional resources arrived swiftly, some senior officers failed to give sufficient practical support or inform themselves quickly enough of conditions and operations within the building.*
- f. *Many of the physical or electronic communication systems did not work properly, such as the command support system (CSS) on the command units.*

2.4.8 The LFB: in the control room.

- a. *LFB policy on handling FSG calls requires control room operators (CROs) to stay on the line with callers until they are rescued or can otherwise leave the building, but the number of FSG calls received during the fire far exceeded the number of CROs available, putting them in an invidious position.*

- b. Neither the application of the “stay put” policy nor the specific requirements that have to be followed if an FSG caller is to escape from a burning building are properly set out in the LFB policy documents.*
- c. CROs did not always obtain necessary information from callers, such as flat numbers, the number of people present, or whether people were disabled; nor did they always assess conditions at the callers’ locations and hence the possibility of their escape.*
- d. CROs had not been trained to handle numerous simultaneous FSG calls, on the implications of a decision to evacuate, or on the circumstances in which a caller should be advised to leave the building or stay put. They were not aware of the danger of assuming that crews would always reach callers, which was one of the important lessons that should have been learnt from the Lakanal House fire. As a result, they gave assurances which were not well founded.*
- e. When the “stay put” advice was revoked and occupants were to be told to leave the building, the CROs did not all understand that they had to give that advice in unequivocal terms so that the caller would know that they had no choice but to leave the building.*
- f. Channels of communication between the control room and the incident ground were improvised, uncertain and prone to error. CROs did not therefore know enough about conditions in the tower or the progress of responses to individual FSG calls, so they lacked a sound basis for telling callers whether help was on its way.*
- g. Those on the incident ground did not have access to valuable information from the control room. The very fact that CROs had to terminate FSG calls in order to answer new calls ought to have alerted more senior control room officers to the fact that it had become impractical to give proper FSG advice.*
- h. There was no organised means of sharing information obtained from callers among the CROs, and little access to information from other sources. As a result, CROs had no overall picture of the speed or pattern of fire spread. Early on in the incident CROs told occupants that the fire was still confined to floor 4 when in fact it had reached the top of the tower.*
- i. Although the LFB has arrangements in place for handling a large number of 999 calls, routing them to other fire and rescue services, they do not provide for sharing information about conditions at the incident itself. Differing advice was given at important moments.*
- j. There were weaknesses in the supervision of control room staff. Supervisors were under the most enormous pressure, but the LFB had not provided its senior control room staff with appropriate training on how to manage a large-scale incident with a large number of FSG calls.*

k. Mistakes made in responding to the Lakanal House fire were repeated.

2.4.9 The response of the other emergency services, Royal Borough of Kensington and Chelsea (RBKC) and the Tenant Management Organisation (TMO).

a. The Metropolitan Police Service (MPS) declared a Major Incident at 01.26 without telling the LFB or the London Ambulance Service (LAS). The LFB declared a Major Incident at 02.06 without telling the MPS or the LAS; and the LAS declared a Major Incident at 02.26 without telling the LFB or the MPS. RBKC was not told about any of these declarations until 02.42. This lack of communication was a serious failure to comply with the joint working arrangements and protocols designed for major emergencies in London.

b. The consequence of failing to share the declarations of a Major Incident meant that the need for a properly co-ordinated joint response between the emergency services was not appreciated early enough. That in turn led to a lack of shared understanding of the nature and effect of the fire. The conversations that should have taken place between the supervisors of the different control rooms did not happen.

c. Communication between the emergency services on the night of the fire, both remotely and on the incident ground itself, did not meet the standards required by the protocols. A single point of contact in each control room and direct communication between control room supervisors should have been established.

d. The heli-tele downlink (the communication link with the police helicopter overhead) failed to function, which adversely affected LFB operations.

2.4.10 Shutting off the gas supply to the tower. This was achieved effectively by a local engineer who arrived, unprompted and remained on scene for 24 hours.

2.5 Recommendations.

2.5.1 Phase 1 recommendations are detailed in Chapter 33 of the report. There are 46 recommendations, which, in Sir Martin's view, need to be read in full, in the context of Chapter 33. However, in summary, they relate to the following matters:

a. The information made available to fire and rescue services about the materials and methods of construction used in the external walls of high-rise residential buildings.

b. The arrangements made by the LFB to discharge its duties under section 7(2)(d) of the Fire and Rescue Services Act 2004.

c. The availability of plans of high-rise residential buildings to local fire and rescue services and the provision of premises information boxes in high-rise residential buildings.

- d. The regular inspection and testing of lifts designed for use by firefighters.*
- e. Communication between the LFB control room and the incident commander.*
- f. The way in which fire and rescue services handle emergency calls.*
- g. The LFB's command and control procedures and use of resources, in particular the capture of information from crews returning from deployments and the sharing of information between the LFB control room, the incident commander and the bridgehead.*
- h. The communication equipment available to the LFB for use by crews deployed in firefighting and rescue operations in high-rise buildings.*
- i. The evacuation of high-rise residential buildings, including the provision of equipment enabling firefighters to send an evacuation signal to the whole or a selected part of the building.*
- j. The provision of fire safety information to residents of high-rise residential buildings and the marking of floor levels in lobbies and staircase landings.*
- k. The inspection of fire doors and self-closing devices.*
- l. Aspects of co-operation between the emergency services.*

3. Dorset & Wiltshire Fire and Rescue Service response

- 3.1 Dorset and Wiltshire Fire and Rescue Service had been closely monitoring the Public Inquiry process and were working within the National Fire Chiefs Council (NFCC) prior to the release of the Phase 1 report. The Chief Fire Officer has been appointed by the then Minister of State for Housing and now Minister of State for Crime, Policing and the Fire Service, Kit Malthouse MP, to sit on both the national Building Regulations Advisory Committee and the Fire Safety Working Group; advising the Secretary of State on strengthening building regulations and standards in England. He has also actively worked with Baroness Scott of Bybrook to support her role on the influential Grenfell Recovery Task Force.
- 3.2 The Service has also been contributing to, and focussing on, other relevant developments including:
 - Building a Safety Future. Independent Review of Building Regulations and Fire Safety – Interim Report. Dame Judith Hackitt (December 2017)
 - Building a Safety Future. Independent Review of Building Regulations and Fire Safety – Final Report. Dame Judith Hackitt (May 2018)

- Building a Safer Future – An Implementation Plan. HM Government (December 2018)
 - Raising the Bar – interim report. Improving competence, building a safer future. The industry response group steering group on competence for building a safer future (August 2019)
 - Building Regulations 2010 – Approved Document B (fire safety), Volume 1, Dwellings. HM Government (September 2019)
 - Building Regulations 2010 – Approved Document B (fire safety), Volume 2, Buildings other than Dwellings. HM Government (September 2019).
- 3.3 Upon receipt of the Phase 1 report, all recommendations have been considered and assessed against our current operational procedures and practices. They have also been considered in the context of local and regional arrangements and within the auspices of the NFCC.
- 3.4 On 4 November 2019, following the publication of the Phase 1 report, the Home Secretary and Secretary of State for Housing, Communities and Local Government wrote jointly to all Chairs of Fire & Rescue Authorities and Chief Fire Officers. They stressed the importance of responding to the findings and recommendations of both Sir Martin Moore-Bick and Dame Judith Hackitt's reports to date. Whilst noting that many of the recommendations from Sir Martin are focused on LFB, they also stressed the importance of all fire and rescue services taking action, both individually, and as part of wider NFCC collaboration.
- 3.5 Officers are undertaking this work both locally, with our neighbouring fire and rescue services and at a national level. This involves NFCC work both operationally and in a fire safety context. It also includes the Chief Fire Officer's role as a member of the Building Regulations Advisory Committee.
- 3.6 In their letter, the Home Secretary and Secretary of State announced a Grenfell Phase 1 round table, to which the Chair and Chief Fire Officer will be invited.

4. Summary and Key Points

- 4.1 The Grenfell Tower Inquiry Phase 1 report has now been published. Officers have comprehensively considered the conclusion and recommendations of this important report. Undoubtedly this and subsequent reports will have long-term resourcing implications for the Authority, and this is currently being considered within the Strategic Assessment of Risk and medium-term financial planning arrangements that will be presented to Members in the seminar that follows this meeting and at the February Authority meeting.

December 2019