# THE GRENFELL TOWER FIRE: A CRIME CAUSED BY PROFIT AND DEREGULATION





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# FOREWORD BY MATT WRACK, FBU GENERAL SECRETARY

The Fire Brigades Union (FBU) is appalled that more than two years since the Grenfell Tower fire, there is still no justice for the bereaved, survivors and residents. Firefighters share the community's anger that those immediately responsible for putting combustible cladding on the exterior of this high rise residential building – the architects and designers, the tenant management organisation, the councillors and construction firms – have not been held to account. Our union is also concerned that the Grenfell Tower Inquiry, set up by the Westminster government, has so far failed to produce a report and urgent recommendations to ensure such a fire never happens again.

High rise residential buildings across the UK are still clad with flammable materials, but still the fire and rescue service has yet to research and seek to develop an evacuation strategy, let alone implement such a strategy with training and equipment and embed it into firefighting practice.

The FBU believes that the terrible loss of life at Grenfell Tower was ultimately caused by political decisions made at the highest level. For at least 40 years, policies relating to housing, local government, the fire and rescue service, research and other areas have been driven by the agenda of cuts, deregulation and privatisation.

#### DEREGULATION

Deregulation has been the dominant political ideology of most politicians in central government for decades. But it has also been fostered by the direct lobbying of private business interests. Ultimately this agenda has been driven by the profit needs of private businesses. Corporate interests have been prioritised over and above the needs of citizens; in this case, especially the needs of people living in council or other social housing.

This process has seen the replacement of regulations laid down and enforced by the state with systems of self-regulation where business interests have taken priority. This can be seen across all areas of policy relevant to the fire at Grenfell Tower: research and testing of construction materials, risk assessment, inspection, enforcement, the setting of standards and systems of decision making.

Mechanisms (however limited) of political and democratic accountability have been systematically undermined and removed wherever possible. The subsequent decisions of individuals within such a system are inevitably shaped by this broader regime. This includes the decisions of local government, landlords and fire and rescue services, among others.

#### CULTURE OF COMPLACENCY

In this pamphlet, the FBU shows how this political approach has weakened and undermined fire policy and the fire and rescue service. We believe a deep seated culture of complacency has developed with regard to fire policy and fire safety. Ultimately, politicians at ministerial level must bear responsibility for the creation of this complacency and its consequences.

The FBU believes the fire and rescue service has been weakened in its ability to plan and prepare for the range of risks that it might need to address. In particular, there has been a reduction in the importance attached to planning and preparation for emergency incidents. Since 2003-04 the fire and rescue service has become increasingly fragmented. This has weakened the ability to identify, plan for and train for the variety of risks that might be faced at emergency incidents.

In particular, we draw attention to the scrapping of the Central Fire Brigades Advisory Council (CFBAC) and the abolition of most national standards within the fire and rescue service that previously informed strategic decision making in the service. This includes decisions about standards, the inspection and enforcement of fire safety, planning for operational incidents and the training that arises from such planning.

Of course, many of the arguments made in this pamphlet are provisional, pending publication of the Grenfell Tower Inquiry's (GTI) reports. But if the Westminster government and its inquiry are to leave no stone unturned in investigating the Grenfell Tower fire, then it must examine the entire UK-wide fire safety system over the last half century.

### 1. INTRODUCTION

The fire at Grenfell Tower on 14 June 2017 resulted in the deaths of 72 people, injuries to hundreds of others and the devastation of a whole community. This was the worst fire in living memory in the UK and one of the worst high-rise residential building fires ever anywhere in the world. The bereaved, survivors and residents are right to describe these deaths as an atrocity and right to demand justice. The Fire Brigades Union – the professional trade union voice of firefighters across the UK – stands in solidarity with those fighting for justice at Grenfell.

At the height of the incident, at least 250 firefighters and 60 fire appliances were on scene to help rescue as many residents and visitors as possible. Firefighters went into Grenfell Tower at considerable risk to themselves with the sole aim of trying to save lives. Firefighters and emergency control staff rescued people or helped them evacuate from the building. They have all suffered from the physical and mental effects of intervening in the fire: every one regrets the tragic loss of life. All want justice for the bereaved, survivors and residents.

#### THE FIRE

The Grenfell Tower Inquiry (GTI), established by the Westminster government, has already provided a great deal of evidence about what happened on the night of the fire. Witness statements and testimony from the bereaved, survivors and residents, firefighters and fire industry experts have provided a clear picture of what happened on that terrible night.

The fire started on the fourth floor in the kitchen of flat 16, in the area around a tall fridge freezer. The fire spread insidiously from inside the kitchen to the external cladding, through parts of the internal window surround and external cladding system, into the back of the cladding cavity. This subsequently led to sustained burning of the cladding, either within the cavity or on its external surface, or both. Residents first contacted the fire and rescue service at 00:54.

The rapid upward vertical fire spread at Grenfell Tower was primarily due to the presence of a particular kind of cladding: aluminium composite rainscreen cassettes with polyethylene filler material.

- By 01:08 burning material was visible outside flat 16.
- At 01:14 the fire had spread vertically in both directions.
- By 01:26 the fire had reached the top floors of the building.

It took 12 minutes for the fire to spread 19 floors to the roof. An architectural "crown" on the roof of the building made of cladding played an important role in increasing the rate and extent of lateral fire spread to the other sides.<sup>2</sup>

#### **BUILDING FAILURES**

Residents and firefighters present on the night of 14 June faced a severe multistorey, multi-compartment fire in a building with manifold failures of fire protection measures, which meant fire and smoke penetrated the building at several levels. Expert reports identify numerous failures:

- The rainscreen cladding system covering the outside of the building
- The lining materials around the windows
- The fire resistance of flat fire doors
- Flat fire doors that did not self-close
- Lack of provision for people who needed assistance
- A lower standard of stair doors
- · Heating system and gas pipes in the protected stair
- A single stair 1.04 metres wide
- Firefighting lifts not provided
- Dry fire main instead of a wet riser for water supplies [A dry fire main is an
  empty pipe that can be connected to a water source from outside a building
  by firefighters. In a wet riser system pipes are kept full of water for automatic
  or manual firefighting]
- Failure of the lobby smoke control system.<sup>3</sup>

Other matters are expected to be clarified from witness statements and further expert reports, so more failures may be revealed later. Many of the arguments made in this pamphlet are provisional, pending publication of the GTI's reports. However, it is possible to trace some of the connections between these failures and prior decisions by central government and other actors to the causes of the fire at Grenfell Tower.

# 2. GRENFELL TOWER AND THE POST-WAR HIGH-RISE BOOM

Grenfell Tower was a residential block of 25 storeys, including a basement and ground floor, rising to level 23, plus a plant floor at roof level. Part of the Lancaster West Estate in North Kensington, it was designed in 1967 and completed in 1974. The building was extensively refurbished between 2012 and 2016.

Grenfell Tower was built at the end of the sustained post-war mass housing boom, which transformed the housing landscape of many UK cities. Between 1945 and 1975, around 440,000 high-rise flats (defined as flats in blocks of five or more storeys) were built in the UK, housing or rehousing approximately one and a half million people. The vast majority of high-rise residential buildings were in inner city areas.

#### POST WAR HIGH-RISE BUILDING

After the Second World War there was a desperate need for new housing and both Conservative and Labour parties made the level of housing completions a major political priority. Initially, all new housing was built by local authorities and private building was rigorously controlled. In the 1940s almost all council housing was built in large, suburban estates in "cottage" houses. The Tory government drastically relaxed controls on private building in 1954 and the following year announced that the bulk of new housing needs could now be met by the private sector.

In 1956 the Westminster Conservative government replaced the previous site subsidy, that was paid per dwelling, by a much smaller one paid per acre as well as a new storey height subsidy. Flats in blocks of four, five and six storeys qualified for very large increments to the basic house subsidy, wherever they were built. Above six storeys, the subsidy rose by a fixed increment for each additional storey. This encouraged the mass building of high-rise residential buildings, commissioned by local authorities but built mostly by private companies. This lasted until 1967 when, under the Labour government's Housing Subsidies Act, local housing authorities were given permission to accept tenders for housing schemes, providing the cost was not more than 10% above a "yardstick" set by the government. This gradually discouraged high-rise building.<sup>4</sup>

#### POST-WAR FIRE SAFFTY

When Grenfell Tower was built, London had its own building legislation, made up of the London Building Acts 1930 to 1939, as well as the London Building (Constructional) By-laws. Section 34 of the London Building Acts (Amendment) Act 1939 required that the means of escape from fire had to be satisfactory. Section 20 imposed additional fire safety requirements depending on the height of a building, including an 80-foot (24-metre) height limit for fire safety reasons. These regulations were overseen and enforced by specialists of the London County Council, which governed inner London, and from 1965 the Greater London Council (GLC).<sup>5</sup>

At the beginning of the high-rise boom, the Westminster government published important guidance, *Post-War Building Studies*, a collection of technical reports written between 1944 and 1952, intended as a basis for codes or regulations applicable to new buildings more than 100 feet (30 metres) high. Key recommendations in these reports included:

- Limiting the use of combustible material
- Limiting the number of people using a staircase
- Recommending two independent escape routes for every part of a building
- Limiting the height of single-staircase buildings to 42 feet (13 metres)
- Promoting self-closing doors.<sup>6</sup>

However, as housing expert Patrick Dunleavy put it, when the building boom took off in the early 1950s, regulations were widely breached and, by 1957, some provisions were changed. Much of the guidance was ignored.

#### THE POST-WAR FIRE SERVICE

The early post-war fire service had no direct fire safety enforcement role – it was essentially a fire extinction service. Although the Fire Services Act 1947 placed a statutory duty on fire brigades to give advice "on request" on fire prevention matters, inspections of high-rise residential buildings by firefighters were not required. The 1947 Act did create the Central Fire Brigades Advisory Council (CFBAC) as the statutory stakeholder body to provide ministers with expert fire advice.

The CFBAC was chaired by the fire minister and included representatives from the Fire Brigades Union along with the Home Office, Association of Metropolitan Authorities, Association of County Councils, Chief Fire Officers Association (CFOA),

National Fire Officers, the London Fire Brigade, the Institution of Fire Engineers, the Fire Research Station and the Scottish Home and Health Department. Pre-war national standards of fire cover were reviewed in 1958. In 1960 the CFBAC formed a joint fire prevention committee and discussed fire precautions in flats. During the 1960s firefighters began to inspect and enforce fire safety law in factories, offices, shops and railway premises.

#### THE ORIGINS OF THE 'STAY PUT' POLICY

Fire safety in high-rise residential buildings was also strongly influenced by the British Standards Institution (BSI) code of practice CP 3 Chapter IV Part 1: 1962. Its recommendations applied to blocks of flats or maisonettes having any floor more than 80 feet (24 metres) above the ground. The height was selected as a basis for the recommendations because dwellings above that height were beyond the reach of rescue or firefighting from a mobile ladder outside the building. The code laid the basis for the "stay put" policy:

The assumption should no longer be made that buildings must be evacuated if a fire occurs and high residential buildings should, therefore, be designed so that the occupants of floors above a dwelling which is on fire, may, if they choose, remain safely on their own floor.<sup>7</sup>

In 1971 the BSI published a revised code of practice for flats and maisonettes, with specific "stay put" advice to residents. It expounded on the limits of fire service intervention, compartmentation and evacuation:

Owing to the high degree of compartmentation provided in dwellings in modern blocks, the spread of fire and smoke from one dwelling to another and the need to evacuate the occupants of adjoining dwellings are unusual. The occupants should be safe if they remain where they are. Nevertheless, the possibility that individuals may seek to leave the building cannot be overlooked and provision should therefore be made for the occupant of any dwelling to do so by his own unaided efforts, using adequately protected escape routes within the building without outside assistance ...

It is no longer assumed that when a fire occurs in a block it is necessary to evacuate the whole block, whole floors or even dwellings adjacent to the fire. In an emergency, however, the occupants of dwellings would generally first try to escape from a fire by the most obvious route in order to reach

safety before being cut off by smoke and hot gases. Where escape routes are adequately protected, safety may be reached within the building, or in the open air clear of the building, by the occupants' own unaided efforts and without reliance on rescue by the fire service.<sup>8</sup>

#### **CFBAC INVESTIGATIONS**

On 4 February 1975 a man died on the balcony of his 13th floor flat after a fire at Longlents House in the London Borough of Brent. The inquest coroner called for changes in the regulations in high-rise blocks. Labour home secretary Roy Jenkins asked the CFBAC to investigate the incident.

The CFBAC concluded that occupants of flats needed to be more fully aware of the need to keep exit routes free from fire hazards and obstructions, as well as know what to do in the event of fire. The committee recommended strengthening guidance in the code of practice. The CFBAC also suggested reviewing arrangements for the training and equipping of fire brigades to deal with fires in high-rise buildings.<sup>9</sup>

As a result of the CFBAC report, advice to residents was improved by an amendment to the BSI code of practice in August 1978. This advised that, if a fire was evident or reported elsewhere than in a resident's own flat, residents would normally be safe to stay in their flat. They were advised to close doors and windows, but to leave at once, closing doors behind them, if smoke or heat entered the flat before doors and windows could be closed.<sup>10</sup>

By the mid-1970s there was interest in the potential use of helicopters by the fire service. Some of it was prompted by films like the *Towering Inferno*. In 1978 the CFBAC concluded that helicopter rescues were "a last resort for very rare occasions when all the other forms of rescue have been ruled out".<sup>11</sup>

#### HIGH-RISE RISKS

The risks of fire in buildings such as Grenfell Tower, including multiple fire deaths, were known to politicians by the early 1970s. In 1975, a Building Research Establishment (BRE) report warned of "the remote possibility of a catastrophic fire with high loss of life, which would distort the statistical picture, and cause considerable public alarm and disquiet".<sup>12</sup>

In 1979, another BRE paper warned that, "because there is a lack of appreciation by the building profession of the design and construction requirements for dependable fire protection provisions, high life-risk situations must exist in such buildings". <sup>13</sup>

Although the FBU had concerns about the building safety regime at the time – particularly the lack of consultation and liaison with firefighters – there did exist a robust body of legislation in London, an expert apparatus to enforce the law and some solid research about high-rise residential buildings. In particular, the CFBAC played a vital role in providing expert advice to ministers. However, as we show below, opportunities were missed to improve the situation in the late 1960s and early 1970s.

### 3. MISSED OPPORTUNITIES TO ENSURE HIGH-RISE SAFETY

Before Grenfell Tower was built, there were a number of missed opportunities to improve fire safety in high-rise residential buildings. The worst was probably the Fire Precautions Act 1971. After serious discussion about the issues, this new law excluded high-rise residential buildings from the beginning and was never extended far enough to manage the risks in high-rise flats. Important warnings went unheeded, including those from the 1970 Holroyd report into the fire service, the Griffiths inquiry into the Ronan Point tower block fire in east London and the Summerland fire in the Isle of Man. (see below).

#### INTERDEPARTMENTAL COMMITTEE ON FIRE PREVENTION

In 1962 Conservative home secretary Henry Brooke established an interdepartmental committee of officials to assess the adequacy of existing fire prevention legislation. The committee concluded that it was not appropriate nor practicable for the government to compel the owners of dwellings to protect their property against damage by fire. Instead, this was left to voluntary arrangements between owners and insurance companies. However, the committee found that the law relating to fire precautions in certain kinds of residential accommodation and in places of public entertainment was inadequate.

The committee prepared an outline Bill in 1964. It was to apply to any building of more than two storeys which "shall be certified by the fire authority as being provided, in case of fire, with such means of escape from the building in which the premises are situated as may reasonably be required in the circumstances of each case". The Bill said local fire authorities should examine all such premises. The draft Bill formed the starting point for the Fire Precautions Act 1971.

#### THE FIRE PRECAUTIONS ACT

The passage of the Fire Precautions Act is a stark demonstration of missed opportunities to improve fire safety. Had high-rise flats been designated or regulated in some other form by the Fire Precautions Act, this would have improved fire safety at Grenfell Tower from the beginning.

The Fire Precautions Bill was introduced after the Conservative party under Edward Heath won the general election in June 1970. The draft Bill, circulated in July 1970, included the requirement that blocks of flats and maisonettes over two storeys high should have a fire certificate. The government estimated that there were 45,000 blocks of flats owned by local authorities in England and Wales at the time. However, governments failed to implement this measure.

At least two steps backwards were taken in the course of the Bill's passage. First, flats were excluded from the list of premises planned for mandatory fire certification. Instead it was left to the discretion of the fire authority, in consultation with the building authority, to decide whether particular premises should be required to have a fire certificate. Home Office minister Richard Sharples spelt this out at the second reading in November 1970, stating that high-rise blocks of flats, "will not be subject to the designation procedure, but a special procedure". The new law left the question whether a fire certificate is required in a particular case "to the discretion of the fire authority in consultation with the housing authority".

Second, the designation of flats received another blow after environment minister Paul Channon wrote to Sharples on 19 November with "official" concerns. He argued that it would be "important to consider carefully... the rate at which existing local authority flats are to be brought within the fire certificate procedure of the new Bill, and also the standards which are to be imposed under this procedure".

Sharples argued that a rapid rate of application and "the imposition of very high standards" could result in "very considerable expenditure", making sizeable inroads into authorities' housing budgets. He mentioned a new code of practice for fire precautions in new flats that would call for a secondary means of escape in all but a few types of three and four storey and some higher flats. Sharples' reply to Channon included the observation that: "There may well be cases, (although I cannot think they will often arise in council owned property) where the risk of fire is more acceptable than the risk of homelessness".

The Home Office circular on the new Act stressed that a different procedure applied to flats. A turf war between the Home Office and the Ministry of Housing and Local Government (from October 1970 part of the Department of the Environment) stymied the potential for designating high-rise residential buildings for the purposes of certification and enforcement action by fire authorities.

A Home Office note sent to the CFBAC in August 1971 stated that flats and tenements were premises that would be considered under the Act in the future.

In May 1973 the CFBAC discussed research on the relative importance of different types of occupancy with respect to life risk, which made flats and maisonettes the number one priority on the list. But no government brought forward proposals for fire authorities to inspect and certify blocks of flats.<sup>14</sup>

#### RONAN POINT AND THE GRIFFITHS INQUIRY

On 16 May 1968 a gas explosion in a flat in Ronan Point, in the London Borough of Newham, led to the collapse of part of the 23-storey block. Four people were killed and another resident later died in hospital. The Labour government commissioned an inquiry led by Hugh Griffiths QC. One of its recommendations was that the minister of housing and local government must accept responsibility for seeing that the British Standards and Codes of Practice referred to in the regulations were kept up to date.

Griffiths' report said that, right up to the date of the disaster, the ministry of housing and local government had never appreciated the risk of progressive collapse in this type of building, adding: "The view the Ministry took was that if a building complied with the requirements of the Building Regulations and the Codes of Practice it must be safe, and no further thought was required. At no time did they appreciate that they were dealing with a new method of building that required a new Code of Practice." 15

In response to Griffiths' recommendations, the ministry of housing and local government asked local authorities to appraise all their blocks over six storeys in height and built of large pre-cast concrete panels. Yet the wider design and fire risk failings persisted with Ronan Point itself and other buildings like it. <sup>16</sup>

#### THE HOLROYD INOUIRY

In November 1966 home secretary Roy Jenkins announced a committee of inquiry into the fire service, chaired by industrialist Ronald Holroyd. It was published in May 1970. The most relevant recommendations included:

- Common national codes of practice to standardise essential fire prevention requirements, with flexibility for enforcing authorities to apply them
- "Only men with operational firefighting experience and knowledge and experience of fire should be used for enforcing fire prevention legislation in premises when they have been occupied"

- Fire authorities should be responsible for enforcing all fire prevention legislation
- A mandatory duty on the building regulation authority to consult the fire authority before approving plans of new or altered buildings.<sup>17</sup>

Although firefighters were given some extended powers by the Fire Precautions Act 1971, these were restricted to certain types of premises. The amount of work involved was never properly resourced by central government. The split in responsibilities between fire services and building control highlighted by the Holroyd report was never satisfactorily resolved.

#### THE SUMMERLAND FIRE COMMISSION REPORT

On 2 August 1973 the Summerland leisure centre fire on the Isle of Man killed 50 people and injured 80. The Summerland fire commission chaired by judge Joseph Cantley concluded that no-one – neither clients, nor authorities nor architects – ever stood back and looked at the Summerland project as a whole. Summerland's owners were criticised for the absence of an evacuation procedure. The commission found that Oroglas cladding did not play the primary role in the spread of fire in Summerland. However, the void behind the combustible wall "may well have been the biggest single structural contribution to the disaster of the fire". The most relevant recommendations were:

- That a named person should be in charge of designing a building and take the major decisions
- No public building should be occupied until after a satisfactory official inspection of the building had been made and a completion certificate issued.
- Architects and designers should bear in mind the difference in scale between standard fire tests and the conditions of use in full-size buildings.<sup>18</sup>

These examples show that fire safety matters required further improvement by the end of the 1970s. Instead, central government imposed a deregulation agenda that would undermine improvements already made and stymie other efforts.

# 4. HOW THATCHER DEREGULATED THE LAW ON BUILDING SAFETY

The year 1979 was a major turning point in British history. The election of Margaret Thatcher's Conservative government saw the beginning of a drive to deregulate fire safety and building safety across the UK. Thatcher governments imposed an ideology of deregulation and consistently opposed further regulation and, instead, sought to reduce the "burden" of regulation on business.

Deregulation was explicit in reviews of building regulations and fire legislation by Thatcher's Conservative administrations. In 1985 the White Paper *Lifting the Burden* listed 80 sets of regulations it suggested could be scrapped because they were a burden on business.

Deregulation was defined as "First, freeing markets and increasing the opportunities for competition. Second, lifting administrative and legislative burdens which take time, energy and resources from fundamental business activity". <sup>19</sup>

#### THE BUILDING REGULATIONS AND BUILDING CONTROL

In December 1979 environment secretary Michael Heseltine launched a consultation on the National Building Regulations which had been enacted in 1965 and revised in 1976. London retained its own laws. Heseltine argued that any new system of building regulation would have to have "maximum self-regulation, minimum government interference", be totally self-financing, and simple in operation.<sup>20</sup>

Heseltine noted that the National Housing Building Council (NHBC) inspected houses covered by its warranty system. He suggested a system of nationally approved professional "certifiers" as an alternative to local authority building control. He advocated the reduction of the building regulations to "a minimum number of functional requirements and performance standards set out in subordinate legislation along with procedural matters". The formal requirement of "deemed to satisfy" ceased in favour of more informal arrangements involving approved codes of practice and technical requirements.<sup>21</sup>

In 1981, Heseltine presented the white paper *The Future of Building Control in England and Wales* to parliament. It was followed by a Bill that included the part-privatisation of building control to private certifiers. The FBU supported local

authority building control staff, who argued "This Bill Will Kill". The Department of the Environment appointed the Building Design Partnership, a firm of architects and engineers, to revise the building regulations, vastly reducing the legislation, while creating the non-statutory guidance known as Approved Document B (ADB).<sup>22</sup>

#### BUILDING REGULATIONS AND APPROVED DOCUMENT B

The Building Act 1984 laid down primary legislation for building regulations in England and Wales and set the legal status of the "approved" guidance, including Approved Document B, on fire safety. The Act created the role of private "approved inspector" to act in place of local authority building control services.

The Building Regulations 1985 revised previous legislation. The regulations no longer contained full technical details and were cut from more than 300 to 25 pages. The Building (Inner London) Regulations 1985 brought London into the national building regulations for the first time, just before the abolition of the Greater London Council. The government made the NHBC an approved inspector for dwellings at this time.<sup>23</sup>

The "functional requirements" for fire safety were set out in Part B of Schedule 1 to the Building Regulations 1985. The regulations were revised in 1991, 2000 and 2010. The most significant change has been to section B1 Means of Escape. Approved Document B has been successively weakened in ways that affect fire safety in high-rise residential buildings (see table below). Successive changes to ADB opened up the opportunity for aluminium composite material (ACM) cladding panels to be installed on high-rise buildings such as Grenfell Tower.<sup>24</sup>

#### Table 1: FBU concerns with Approved Document B

ADB 1985 permitted cladding products of "*limited combustibility*" to be used on high rise residential buildings in London for the first time, providing they were Class 0.

Class 0 material is not equivalent to a material of limited combustibility. A material of limited combustibility is usually a material that is either totally non-combustible or one that contains a small amount of combustible material. Combustible materials, such as plastics, are not materials of limited combustibility. They can achieve Class 0 performance by adding fire retardants or covering them with metal foil. A combustible material can therefore achieve a Class 0 rating as defined by the regulations, yet still be added to a building while being a fire hazard.<sup>25</sup>

1992	ADB 1992 <i>Section 12: Construction of external walls</i> provided the crucial guidance on external fire spread: It warned: "12.7 <i>The external envelope of a building should not provide a medium for fire spread if it is likely to be a risk to health or safety</i> ".  ADB 1992 applied the " <i>limited combustibility</i> " requirement to insulation (with a concession for masonry cavity walls only). <sup>26</sup>
2000	ADB 2000 reduced the scope of the limited combustibility requirement for insulation, so that it applied to insulation in ventilated cavities only.  The most significant weakening was the introduction of BRE Note 9, allowing for large scale testing for external cladding systems as an alternative path for compliance.  ADB was further amended in 2002, to accommodate European test standards. Class A1 was the highest performance, Class F the lowest. Euro Class B was accepted as an alternative to Class 0 for the external surfaces of walls above 18 metres. <sup>27</sup>
2006	ADB 2006 was split into two volumes; Volume 1 on dwelling houses; Volume 2 on buildings other than dwelling houses. Blocks of flats came under Volume 2. Section 12.5 does not prohibit the use of combustible materials in cladding systems. It offers two alternative routes to compliance.  The first 'linear' route, says all the individual components of the cladding system should meet certain requirements, which are specified in the sections 12.6 to 12.9.  The other 'test' route involves subjecting the whole system to a large-scale test, defined in BS 8414-1 and BS 8414-2. The criteria for a successful test is given in the BRE publication BR 135.  Section 12.6 specifies requirements for the external surfaces of walls. For residential buildings over 18m high, the relevant provisions are given in Diagram 40: the surfaces should have either a national Class 0 rating or a Euro Class B rating.  This section is more ambiguous than previous version of ADB in three respects:  • The restriction of the requirement to insulation material in ventilated cavities only was removed

- A new category of 'filler material' was added
- An undefined et cetera was added after 'filler material'
- The other 'test' route to compliance in ADB 2006 also significantly weakened the fire safety requirements.

First, the change in wording to "full-scale test data" allowed the use of desktop studies, because they use 'test data' despite not being tests themselves.

Second, the role of the large-scale test (BS 8414) was expanded from an alternative to meeting the provisions of Diagram 40 only, to being an alternative to meeting the limited combustibility requirements for insulation also. It became an alternative to the 'linear route' to compliance. <sup>28</sup>

# 5. HOW THATCHER ATTACKED FIRE SAFETY IN THE UK

In parallel to watering down building safety regulation, Conservative governments of the 1980s and 1990s attacked the laws designed to improve fire safety, underfunded the fire service and attacked national standards meant to help firefighters protect the public.

#### HOME OFFICE, REVIEW OF FIRE POLICY

On 26 June 1980 the Westminster government published a *Review of Fire Policy*, along with a green paper for consultation. It argued that fire prevention legislation had placed a "significant financial burden" on the economy. The consultative document proposed "an adequate level of fire protection to be provided as economically as possible". A principal target was the Fire Precautions Act 1971, the main legislation at the time governing fire safety across the UK.

The review recognised that "there can be no doubt that the removal of the controls would ... lead to the recurrence, albeit infrequently, of multiple fatality fires of a type at which the public has voiced sufficient concern to provide adequate justification for the introduction and preservation of the controls".

The review described the Fire Precautions Act 1971 as "an inflexible and extravagant instrument" and claimed it would be "inappropriate" to extend the legislation to other premises further (including potentially to high-rise flats). Scandalously, it suggested there may be "over provision" of fire cover "which may enable judicious reductions to be made which would not result in an unacceptable increase in property loss or casualties". <sup>29</sup> This was the starting pistol for fire cuts.

#### THE JOINT COMMITTEE ON STANDARDS OF FIRE COVER

One consequence of the Home Office review was an attempt to downgrade standards of fire cover that had been established in 1937 and were last revised in 1958. In 1984 the Joint Committee on Standards of Fire Cover (which included the FBU) published a report. It noted the "considerable boom in high-rise building during the 1960s" and concluded that there was no case for lowering existing standards, including those for high-risk premises (renamed "special risks") such as tower blocks that required a pre-determined attendance.<sup>30</sup>

#### ATTACKS ON THE FIRE PRECAUTIONS ACT

In July 1985, the Home Office consulted on the Fire Precautions Act. Home secretary Leon Brittan made it clear that this was not about improving the fire service, but about a "lower unit cost" and no increase in "manpower or expenditure levels by local authorities". The Westminster government recommended replacing the system of fire certification "by one under which all designated premises must be registered and a statutory responsibility placed on responsible persons to achieve and maintain a reasonable standard of fire safety".<sup>31</sup>

In 1988, the enterprise and deregulation unit of the Department of Trade and Industry (DTI) appointed the architects Bickerdike Allen Partners to review the interaction of building and fire legislation. The terms of reference asked whether fire legislation placed "burdens on business". The report was published in February 1990. It disparaged fire prevention officers (FPOs) and boosted building control officers (BCOs). It advocated "leaving the door open" to privatisation of the FPO function and the wider use of private approved inspectors.<sup>32</sup>

The deregulatory drive continued after Thatcher left office. John Major, then chief secretary to the treasury, argued in a lecture to the Adam Smith Institute on 27 June 1989: "Efficiency and value for money must remain an absolute obligation for the public sector ... we must wherever possible open public services to competitive pressures through market oriented policies." 33

In 1993 another Home Office review of the Fire Precautions Act was carried out, designed to reduce "burdens on business". The report speculated about a "totally deregulated environment", but rejected it. It concluded that "the 1971 Fire Precautions Act does not provide the most suitable legislative means of ensuring fire safety in the 1990s and beyond".<sup>34</sup>

#### DEREGULATION IN THE 1990S

In 1993 a Department of Trade and Industry (DTI) construction task force reported on fire safety legislation. Its report was never published officially, but a series of recommendations from it appeared in a government booklet on 17 January 1994. These included dissolving the Fire Precautions Act into a revised set of building regulations, scrapping fire certificates and using firefighters as inspectors working for the Department of the Environment.<sup>35</sup>

The DTI also published *Deregulation – Cutting Red Tape*, which recommended:

New initiatives to encourage more inspectors to come forward in the private sector and so to provide the benefits to be derived from increased competition in the building control service. Steps will also be undertaken to improve the operation and clarity of the regulations on approved inspectors.<sup>36</sup>

On 17 January 1994, Michael Heseltine, secretary of state for trade and industry, announced that a government committee involving the Home Office, Department of the Environment and Health and Safety Executive (HSE) would review the operation and effectiveness of fire safety legislation. The group reported in June 1994. High-rise residential buildings were not included in its list of higher life-risk premises. Key recommendations of the interdepartmental review included:

- Subordinating the Fire Precautions Act into the Health and Safety at Work Act
- A "simpler and less costly" form of certification
- A bigger role for private approved inspectors
- Scrapping fire precautions in local Acts and by-laws.<sup>37</sup>

During the last throes of John Major's administration, environment secretary John Gummer drove through two measures that further damaged fire safety in the UK. First, in 1996, the government permitted more private approved inspectors to take on the functions of building control. According to the accrediting body, the Construction Industry Council Approved Inspectors Register (CICAIR), there are now nearly 100 approved inspectors in England and Wales. This has had a detrimental effect on local authority building control departments. Second, the Building Research Establishment was privatised. This opened a conflict of interest between its role in providing expert advice to ministers with a commercial role in testing materials for construction firms.

# 6. HOW BLAIR CONTINUED THE DEREGULATION AGENDA

Despite some initial hopes of a change of direction, the deregulatory drive continued under Tony Blair's New Labour administrations. In 1998, construction minister Nick Raynsford widened the scope for corporate bodies to become approved inspectors for building control purposes. <sup>40</sup> In 2004, Chancellor Gordon Brown appointed Philip Hampton, an accountant and banker, to propose ways to reduce regulatory "burdens on business". This "Better Regulation" policy consolidated the shift away from enforcement to advice, concentrating formal enforcement resources on high-risk areas and efforts to do more with less. <sup>41</sup>

In 1997 the newly elected Labour government had the opportunity to reverse the deregulatory drive of the previous two decades. Fire minister George Howarth's consultation on proposals to consolidate and rationalise fire safety legislation was explicitly based on the FBU's Fire Safety Bill, which it first proposed in 1992, and earlier work by the Central Fire Brigades Advisory Council.<sup>42</sup>

Sadly, these ideas were not pursued and a deregulatory approach was taken instead. The Fire and Rescue Services Act 2004 (and equivalent legislation in Scotland, Wales and Northern Ireland) replaced the Fire Services Act 1947. The new law abolished national standards of fire cover, allowing local services to set attendance targets (time taken by the fire service to reach a fire) for their own areas. It abolished the Central Fire Brigades Advisory Council, that fire minister Phil Hope had condemned as "cumbersome, complex and unable to deliver meaningful change". 43

#### REVIEW OF THE FIRE AND RESCUE SERVICES BILL

The Office of the Deputy Prime Minister (ODPM) committee of Westminster MPs organised a consultation before the Fire and Rescue Services Bill came into force. The FBU submitted a memorandum, which stated:

Whilst supporting the new risk-based approach the FBU believes that there should be a national risk-based standard and national Fire Service Strategy policy to replace the 1985 Standard... The FBU regrets the Government's intention to disband the CFBAC and replace it with a number of bodies, from most of which staff representatives are to be excluded.<sup>44</sup>

The committee of MPs backed the removal of national standards of fire cover and made no comment on the abolition of the CFBAC.<sup>45</sup>

#### THE REGULATORY REFORM COMMITTEE

In May 2004, the Regulatory Reform (Fire Safety) Order was laid before parliament. It applied to England and Wales. The Regulatory Reform Committee of MPs considered whether fire safety was appropriate for delegated legislation – which is merely laid before Parliament and not debated as is primary legislation. Some MPs were concerned that the proposed order was unsuitable for the regulatory reform procedure and needed the higher level of scrutiny parliament normally gave to primary legislation. The FBU memorandum to the ODPM committee had warned: "simply placing a duty to enforce the Order without providing either a duty to carry out inspections, or to develop an enforcement programme to do so, is not sufficient in our opinion to preserve the current level of public safety or equal the current requirements of the Fire Precautions Act 1971 insofar as it relates to the issue of fire certificates. <sup>46</sup>

#### THE REGULATORY REFORM (FIRE SAFETY) ORDER

The Regulatory Reform (Fire Safety) Order 2005 was a significant legislative failure by the Westminster government. It ignored many warnings from a range of expert stakeholders when it introduced the Order. In particular, it scrapped the fire certification process, which gave fire authorities considerable leverage to bring about improved safety standards across a range of premises. The government introduced a self-compliance regime without providing the necessary safeguards for those carrying out risk assessments, particularly for complex buildings governed by multiple regulations – such as high-rise residential buildings.

The FBU raised these concerns with the ODPM, Department for Communities and Local Government (DCLG) and the Home Office. Before the Fire Safety Order came into force, the union wrote to the fire minister Nick Raynsford on 1 March 2005, criticising the transitional arrangements for handling fire certificates and the advice provided by the Chief Fire Officers Association (CFOA). The FBU repeated warnings about the consequences of scrapping national standards, the CFBAC and the inspectorate, and the hands-off localist approach of central government, as well as the continued central funding cuts. Central government ignored these warnings. 47

#### ANOTHER REVIEW OF THE FIRE SAFETY ORDER

In 2006, the ODPM committee of MPs reviewed the Fire Safety Order before it came into force. The FBU memorandum warned that: "There needs to be clear and strong guidance on the enforcement of the Regulatory Reform (Fire Safety) Order 2005 ... to ensure the enforcement activities of fire and rescue authorities are properly carried out". The union warned of the dangers of running down fire certificates and scrapping of the CFBAC.<sup>48</sup>

Matt Wrack, FBU general secretary, gave oral testimony to the ODPM committee of MPs. He raised concerns about the abolition of national standards and the limits of integrated risk management plans (IRMP), which allowed for different levels of response. Wrack illustrated the point with reference to high-rise residential fires:

Since the introduction of local integrated risk management plans there are no national standards. We are concerned that you could end up, and are increasingly ending up, with effectively a postcode lottery. We do not see why, if you have a fire in a tower block in Birmingham, you should get a different standard of response than if you have a fire in a tower block in London. Unfortunately, because of IRMP, at the present time that is perfectly possible.<sup>49</sup>

Overall, the New Labour government continued with the deregulation agenda begun by Thatcher, weakening the fire safety regime for high-rise residential buildings and other housing. It scrapped the CFBAC, the authoritative statutory stakeholder body and replaced it with the weak and ineffective Practitioners' Forum, which was itself scrapped after the 2010 general election. The government also failed to provide the resources fire authorities needed to enforce fire safety standards effectively. In particular, it made significant cuts to wholetime firefighter jobs, reducing the number of personnel available for fire safety inspections.

The Conservatives in opposition were no better. They supported all the significant changes to fire legislation during 2004-06. Before entering government, they had made plans for drastic deregulation. In 2007, John Gummer and Zac Goldsmith's *Blueprint for a Green Economy* report argued for "abolishing all the current Building Regulations Approved Documents and replacing them with National Building Standards". Under these plans, "there would no longer be any need for local authority building control departments". They would be replaced by "a system of self-certification for major construction companies and house builders". 50 Gummer was secretary of state for the Environment from May 1993 to May 1997.

# 7. HOW CAMERON, MAY AND JOHNSON EXTENDED DEREGULATION AND IMPOSED AUSTERITY

The change of government in 2010 was a watershed for the fire and rescue service across the UK. Soon after the Conservative-Liberal Democrat coalition government was formed, Prime Minister David Cameron announced the "Red Tape Challenge", intended to reduce the number of regulations across a wide range of industries, and "one in, two out" for new regulations. Under this rule, government departments were instructed to find savings worth double the cost of any new regulations on business. <sup>51</sup>

The acceleration of deregulation along with savage austerity cuts to funding had direct implications for the fire service. When fire minister Bob Neill MP addressed the FIRE conference in Harrogate, in June 2010, he said: "We will not be moving back to prescriptive national standards. The Integrated Risk Management Plan process is already established and provides a sound basis to allow for the provision of local services driven by the local agenda and based on local risks and the need of the local community". He added: "Should we be looking to regulate further? 'No' would be my answer. We must move away from the view that the only way to solve problems is to regulate."<sup>52</sup>

Neill told an All-Party Parliamentary Fire Safety and Rescue Group seminar on 9 May 2011 that the Fire Safety Order was effective, "well received by many in the business community" and proportionate.<sup>53</sup>

Neill was due to speak at the Housing Sector National Forum on 16 June 2011, but did not attend. Nevertheless, his speech was published on the DCLG website and read to the gathering. He referred to safety in multi-occupied residential buildings and then stated:

Over the years, regulations – and the inspections and bureaucracy that go with them – have piled up and up. This has hurt business, imposing real burdens and doing real damage to our economy. Reducing the number of rules and regulations is therefore absolutely central to the Coalition Government's vision for Britain, removing barriers to economic growth and increasing individual freedoms. We have given a clear commitment that where regulation cannot be justified, we will remove it.<sup>54</sup>

Neill was succeeded as fire minister by Brandon Lewis, who continued with the same approach. He told the Chief Fire Officers Association (CFOA) conference in September 2012: "I firmly believe that businesses have the right to expect that those enforcing regulatory compliance do so in accordance with the fundamental principles of better regulation. I know that CFOA are keen to address shortcomings in this area and to lead work at the local level to develop fire safety audit and enforcement responsibilities to reflect more closely the aspirations that businesses have. Essentially, this means ... helpful, proportionate and consistent advice on compliance." <sup>55</sup>

In December 2012, communities secretary Eric Pickles announced the repeal of sections of various local building acts, including sections 20 and 21 of the London Building (Amendment) Act 1939. The repeal was opposed by fire safety professionals. <sup>56</sup> At the Local Government Association (LGA) fire conference in March 2013 Lewis said that "there are many good things we can collectively do to prevent fire deaths without the blunt tool of regulation". <sup>57</sup>

#### THE KNIGHT REVIEW

In 2012, fire minister Brandon Lewis asked the retiring chief fire and rescue adviser, Ken Knight, to carry out an "efficiencies review" of the fire and rescue service in England. Knight's review, published in May 2013, was primarily concerned with saving money through a variety of untested suggestions, including substituting retained firefighters for wholetime crews. He supported the use of non-operational "Green Book" staff to conduct regulatory fire safety work such as audits and inspections. <sup>58</sup> The FBU regarded Knight's report as a fig leaf for further cuts to the fire and rescue service. The union noted its failure to carry out national fire risk assessments. <sup>59</sup>

The House of Commons Communities and Local Government committee of MPs conducted a brief investigation of the review. The FBU made a written submission and Matt Wrack gave evidence on 9 September 2013. He explained the impact of cuts on national resilience and the need for a CFBAC-type body.<sup>60</sup>

#### NATIONAL AUDIT OFFICE REPORT

The National Audit Office (NAO), which scrutinises public spending for Parliament, periodically investigates public services. Its reports on the financial sustainability of fire and rescue services in England contained valuable insights. Between 2010-11

and 2015-16, it estimated that central funding to local fire and rescue services went down by an average of 28% in real terms, with reductions between 26% and 39% in different authorities over that period.<sup>61</sup>

Under Section 25 of the Fire and Rescue Services Act, ministers are meant to provide the Westminster parliament with a report every other year on how well fire and rescue authorities are meeting their legal responsibilities. The NAO pointed out the paucity of the Section 25 report, which had withered to scarcely a page of text. The communities secretary Eric Pickles relied heavily on the Knight review, which the NAO report showed was misconceived in places. Oversight of the fire and rescue service had been lacklustre for a number of years before the Grenfell Tower fire.

On top of the cuts detailed by the NAO, further cuts of 15% to 2020 were set out in the Local Government Settlement (the annual statement of central government funding for local authorities that MPs must approve). Despite the Grenfell Tower fire, no additional funding has been found for the fire and rescue service since the disaster. The Westminster government has carried on cutting as if nothing had happened. Since Conservative-led governments came into office in 2010, almost 12,000 frontline firefighter jobs have been cut. This is one in five (20%) of the total firefighting force over this period.

#### **CUTS IN LONDON**

The London Fire Brigade (LFB) has suffered swingeing cuts in recent years, facing a squeeze from central funding cuts and from Boris Johnson, when he was Mayor of London. In January 2013 Johnson proposed closing 12 fire stations, removing 18 fire engines and slashing around 400 firefighter jobs in the fifth London Safety Plan (LSP5). The London Fire and Emergency Planning Authority (LFEPA) opposed the mayor's plans, but was overruled.

The FBU said the proposed cuts would jeopardise the safety of Londoners. The union's submission to the LFB consultation warned that the plans would be particularly damaging for high-rise buildings. The FBU submission stated:

The majority of the 10 stations that are proposed to be closed under this plan have extensive high-rise buildings on their grounds. With indications of major increases over the term of the integrated risk management plan LSP5 of high-rise building construction for residential and commercial, it simply isn't

conceivable that firefighters' health and safety can be put at risk by extending the duration from the 'time of call' until the eventual arrival at the correct address with 13 firefighters before firefighting activities can start at the high-rise building.<sup>64</sup>

On 9 January 2014, 10 fire stations including Knightsbridge and Westminster were closed. Peckham fire station, very close to Lakanal House where six people died in a fire in July 2009, was downgraded to a one-pump station. The FBU made a detailed submission to the most recent London safety plan, drawn up just months before the Grenfell Tower fire. The submission made specific reference to the risks in high-rise dwellings and the need to improve response targets for such incidents. It stated:

The FBU believes that the brigade should introduce a new attendance target for the initial response to a high-rise incident. Four appliances are required to safely and effectively begin operations at a high-rise incident. As ridership levels can vary between four and six on an appliance, we believe that setting an attendance target for the initial four appliances would provide the necessary numbers as quickly as possible to a high-rise incident. The FBU proposes a new target of six minutes for the first and second fire engines and eight minutes for the third and fourth...

The FBU welcomes the proposals to introduce attendance times for FRUs (fire rescue units) and aerials. We want to see a change towards measuring attendance times as a percentile, and for a new high-rise incident attendance target of six, six, eight and eight minutes for the initial four appliances.<sup>65</sup>

#### INNON FIREFIGHTERS AND INSPECTORS

The LFB significantly reduced its firefighting force before the Grenfell Tower fire. Wholetime firefighters were reduced by 22%, control staff by 13% and total staff by 23% over the decade.<sup>66</sup>

Table 2: LFB staff in post employed by headcount and by role, 2008 to 2017

Year	Wholetime	Control	Support	Total Staff
2008	6,047	119	1,068	7,234
2017	4,695	104	785	5,584

Staff engaged in inspection and enforcement have fallen by more than a quarter (26%) over the past decade. The figures indicate a particularly stark fall in operational firefighters carrying out these roles, down by almost a half (48%) over the last decade.<sup>67</sup>

Table 3: LFB staff dedicated to inspecting and auditing fire safety, 2008 to 2017

Year	FTE of inspecting officers	Of which operational staff	Of which FRS staff
2008	204	101	103
2017	152	56	96

These cuts show how fire safety has been jeopardised by central government since 2010. Austerity has reduced resilience. The fire and rescue service now has far fewer professionals to deploy to emergencies of any kind, including fires. The FBU believes this is a national scandal that must be rectified in the aftermath of the Grenfell Tower fire.

# 8. FOUR FIRES AND A CIRCULAR THAT FOREWARNED OF GRENFELL

In addition to the deregulatory pressure on the fire safety regime, the FBU highlights the recommendations from particular investigations into high-rise residential fires, many of which were ignored. These are:

- Building Research Establishment, Cladding on high-rise buildings (1986)
- Knowsley Heights fire (1991)
- Garnock Court fire and the Select Committee inquiry into cladding (1999)
- Harrow Court fire (2005)
- Inquest into the Shirley Towers fire (2010).

#### BRE, CLADDING ON HIGH-RISE BUILDINGS

The fire risks from cladding on high-rise residential buildings began to be spelt out to industry and politicians by fire safety experts from at least the 1980s in the UK. In 1986, the Building Research Establishment published a report on overcladding external walls of large panel system dwellings. The report stated:

The risks depend mainly on combustibility of materials used in insulation or overcladding, and hence spread of fire in the overcladding itself. There is an obvious risk of spread on the outer surface ... but a small risk also exists for fire propagation within any cavity containing combustible insulation, for example with polyisocyanurate foam or polystyrene...<sup>68</sup>

The Westminster government did issue some specific advice on cladding. On 9 December 1986, the Department of the Environment warned:

A risk of increased vertical fire spread has been identified during the laboratory testing of overcladding systems incorporating combustible insulants ... Where the cladding is sheet aluminium, laboratory tests have shown that a fire within the cavity can melt the aluminium and burn through to the surface several storeys above the fire. These emergent flames could re-enter the block via windows.

Fires of such severity are rare. Multi-storey blocks have been clad for 10 years with systems which have a potential for fire spread within cavities but

no fires leading to excessive vertical spread have been reported. However, it is advised that both existing and proposed overcladding systems should be examined to determine if modifications are required as a precaution against fire spread.<sup>69</sup>

#### KNOWSLEY HEIGHTS FIRE

On 5 April 1991, fire destroyed all the cladding on one vertical face of an 11-storey block containing 64 flats at Knowsley Heights, Liverpool. All 130 tenants were evacuated. The block had been refurbished in 1988.

The BRE investigation found that a deliberate rubbish fire gained access to the ventilated cavity of the overcladding system and propagated upwards. Fire penetrated uPVC window frames at each floor on the façade. The cladding panels on all 11 storeys either melted, fell away or were taken down later for safety reasons. The Capex rainscreen cladding system consisted of mineral fibre insulation with aluminium rails supporting panels with a Class 0 surface spread of flame rating. There were no cavity barriers. The BRE summary stated:

There is no reason to suggest a life risk associated with cladding unless there are cavities large enough to allow vertical fire spread. There are implications for protection of window reveals especially where refurbishment has involved the use of cellulosic and polymeric materials in close proximity.<sup>70</sup>

An article in *Private Eye* magazine (21 June 1991) raised concerns about the BRE investigation. It concluded: "*But most firemen [sic] who study these things believe that it is only a matter of time before there is a major national fire disaster in Britain's prematurely ageing tower blocks."* 

#### THE GARNOCK COURT FIRE AND SELECT COMMITTEE INQUIRY

On 11 June 1999, a fire at Garnock Court, a 14-storey block of flats in Irving, North Ayrshire, Scotland, led to the death of a man who used a wheelchair, and injured five others. Cladding was a significant factor in the fire spread.

At Westminster, the select committee on environment, transport and regional affairs conducted an investigation and the FBU's Glyn Evans gave oral testimony to the proceedings. The FBU's memorandum outlining the risks from cladding concluded starkly:

The primary risk therefore of a cladding system is that of providing a vehicle for assisting uncontrolled fire spread up the outer face of the building, with the strong possibility of the fire re-entering the building at higher levels via windows or other unprotected areas in the face of the building. This in turn poses a threat to the life safety of the residents above the fire floor.

A secondary problem of fire spread through external cladding may be caused by the method of fixing the panels to the exterior facade of the building. If lightweight fixings (aluminium or metal alloys, etc) or resin bonded systems are used to attach the panels. There is a risk of the panels becoming detached when exposed to fire and falling from the face of the building posing the associated missile risk to firefighters and members of the public in the vicinity of the building...

If the flame front gets past them then the probability is that it will re-enter the building through window openings or balconies higher up the building and consume the contents of those rooms thus becoming self perpetuating. This fire scenario is known as "roll up" because the fire rolls up the building jumping from floor to floor through window and balcony openings and can occur whether or not cladding is present.

Fires involving external cladding will probably be caused by a fire in the accommodation breaking out through a window or balcony and the flame front affecting or involving the cladding system as it rolls up the building face.

The real problem is that any external cladding above the fire is likely to be exposed to flame front temperatures in excess of 900°C upon failure of the window if that failure causes the fire room to flashover. Window frame failure may also cause disruption of the external cladding if it is tied to it.

The FBU concluded that "All cladding used on multi-storey buildings over 25 metres in height and the fixing systems should be completely non-combustible, or achieve a fire resisting standard equivalent to the external walls". The union also proposed "inspections of all high rise residential premises fitted with external cladding systems to ensure that they conform to the current Building Regulations or Standards" and urgent remedial work as necessary.<sup>71</sup>

The select committee of MPs made its own recommendations in a report.<sup>72</sup> Sadly, the government took heed of the committee's complimentary words about the

industry and continued to water down the Approved Document B guidance that was meant to ensure building safety. They also failed to investigate the extent of cladding or research the risks.

### INVESTIGATIONS INTO THE HARROW COURT FIRE

In the early hours of 2 February 2005, a fire occurred in flat 85 Harrow Court, on the 14th floor of a 17-storey residential block in Stevenage, Hertfordshire. Two firefighters and one resident were killed after abnormally rapid fire development.

An FBU report made recommendations for regular firefighter training on high-rise procedures, arrangements for bespoke equipment, regular inspections of all high-rise buildings and sufficient resources to ensure that the weight and speed of response delivered sufficient firefighters and operational equipment on the initial attendance to high-rise incidents. It also made crucial recommendations to central government, including the revision of Approved Document B and the government guidance contained in "Generic risk assessment 3.2: fighting fires in high-rise buildings" and to standard operating procedure for firefighting in high-rise residential buildings.

The FBU also recommended that Stevenage Borough Council and Hertfordshire Fire and Rescue Service (HFRS):

re-evaluate the council's entire fire safety evacuation strategy for blocks of high-rise apartments and, in particular, the apparent contradiction between the "stay put" and "evacuation" strategies, and provide explicit direction on what to do in the event of a fire in a flat, and what to do if it becomes necessary to evacuate another flat/s, and entire floor or even the whole building. Subsequently, review fire safety procedure notices to ensure that they give clear instructions to all tenants, visitors and staff on what to do in the event of a fire in any part of the building.

The FBU also made recommendations to HFRS for improvements to:

- Firefighters' training in all aspects of high-rise procedures
- Resources for fire safety departments
- Regular inspections of all high-rise buildings
- Revised high-rise incident procedures
- The weight and speed of response on the initial attendance to high-rise incident.<sup>73</sup>

In March 2007, the coroners' inquest into the deaths recorded a narrative verdict. Coroner Edward Thomas sent a Rule 43 letter to DCLG attaching the recommendations from the FBU and HFRS reports (Rule 43 of the Coroner's Rules gives a coroner the power to issue a report to a person or organisation when they believe that action should be taken to prevent future deaths). The coroner emphasised "The need for familiarisation, information and adequate training for those firefighters called to fight high-rise fires".<sup>74</sup>

Although DCLG did publish revised guidance (GRA 3.2) in 2008, it did not adequately monitor the implementation of the guidance or get feedback on any problems, because it lacked the oversight bodies, the research arm and professional input from key stakeholders such as the FBU.

## INVESTIGATIONS INTO THE SHIRLEY TOWERS FIRE

Two firefighters died while tackling a fire in Flat 72, Shirley Towers, Southampton on 6 April 2010. The Health and Safety Executive investigated the incident, but did not impose any notices or pursue any prosecutions. Its only recommendation for national consideration was: "Consider the need for national guidance on the content and frequency of familiarisation", something DCLG was already undertaking.<sup>75</sup>

Coroner Ken Wiseman made nine recommendations in a letter to Ken Knight, the chief fire and rescue adviser for England, including on BA (breathing apparatus) procedures and plastic trunking, cable clips and ties. The most relevant recommendations referred to control staff training and signage in tower blocks:

It is recommended that a review of training given to control staff is undertaken by all FRSs in UK in light of the guidance given in recent GRAs including GRA 3.2 of September 2008. All FRS should further consider the implementation of measures to ensure that control staff are properly supervised when taking calls and are trained to capture and relay relevant information likely to assist operational firefighters.

It is recommended that there should be an obligation to:

a) provide signage to indicate floor levels both in stairwells and lift lobbies in high rise premises, to assist the emergency services;

b) ensure that signage indicating flat numbers and emergency exits in high rise premises are placed at a low level to increase visibility in smoke conditions. This could potentially be achieved by amending Article 38 of the Regulatory Reform (Fire Safety) Order 2005, which relates to maintenance of measures provided for the protection of fire-fighters. Alternatively new legislation may be required.<sup>76</sup>

These fires indicated systemic failures, which required a thorough response from central government. The investigations provided ample warnings from fire experts – but these were ignored by ministers.

# 9. THE LAKANAL HOUSE FIRE: A FINAL WARNING

The Lakanal House fire on 3 July 2009 resulted in the deaths of six people, with 15 residents and a firefighter injured. Firefighters rescued a further 40 residents. More than 90 families had to leave their homes as a result of the fire.<sup>77</sup>

The FBU believes that the Lakanal House fire and subsequent responses are particularly relevant to the Grenfell Tower fire. Both were high-rise residential buildings, both involved a breach in compartmentation and both tragedies took place in London less than a decade apart. Given those similarities, it makes sense to devote serious attention to the events around the Lakanal House fire.

Coroner Frances Kirkham held inquests into the Lakanal House deaths from January to March 2013. Kirkham's Rule 43 letter sent to communities secretary Eric Pickles on 28 March 2013 highlighted concerns for the fire and rescue service as a whole. Six recommendations stand out:

- Publish national guidance on "stay put", including how it is disseminated
- Review Generic Risk Assessment 3.2 on high-rise firefighting for national guidance
- Consider premises information boxes or plates
- Clear guidance on "common parts" of a building and inspection of compartments
- Encourage high-rise housing providers to consider retrofitting sprinklers
- Review Approved Document B.<sup>78</sup>

The FBU believes that Eric Pickles' reply to the Rule 43 letter (20 May 2013) revealed alarming levels of complacency.<sup>79</sup> We provide below a commentary on each of these six recommendations in turn.

The union is also concerned about the lack of national standards for accrediting competent fire risk assessors, training fire inspecting officers and the role of fire authorities as providers of training for third parties.

## 'STAY PUT' GUIDANCE

The coroner recommended that DCLG should "publish consolidated national guidance in relation to the 'stay put' principle and its interaction with the 'get out and

stay out' policy, including how such guidance is disseminated to residents".

Eric Pickles responded to the recommendation by stating that detailed national guidance on this issue was already available in *Fire Safety in Purpose Built Blocks of Flats*, produced by the Local Government Association (LGA). He supported a review of that guidance in light of the coroner's recommendations, asserting that "my officials are engaged with the Local Government Association on this matter".

There is little doubt that the guidance needed to be reviewed, not least because of its comment that "High-rise does not mean high-risk". The guidance went too far in efforts to reassure residents. It did not take into account the very severe risk posed by multiple breaches of compartmentation. The guidance did not give any advice on the circumstances in which it might be appropriate to move from "stay put" to "get out". Instead it restated the "stay put" policy.<sup>80</sup>

These were matters that the coroner wanted the secretary of state, on behalf of central government, to review. Instead, by taking no action, Pickles and the Westminster government squandered this opportunity to provide improved guidance on the critical issue of when and how to move from "stay put" to "evacuate".

The LGA guidance made useful recommendations that central government could have helped to implement. For example, the guidance suggested the dissemination of the evacuation strategy to residents by means of handbooks, a website, posting a fire action notice and joining the fire and rescue service for home fire safety visits. But Pickles' department took no action to ensure this was carried out and, in fact, cut funding to local fire and rescue services and local councils that might have been used for this purpose. This was also a missed opportunity.

These failings by government highlight the absence of any functioning and effective national framework in place even to consider the creation of such an overarching strategy. The difficult questions arising from Lakanal were simply ducked by the Westminster government, the only body capable of resolving them given the size of the task involved. A separate and specialist stakeholder body on fire policy used to exist, in the form of the CFBAC. The Practitioners Forum, which replaced some of the functions of the CFBAC, was scrapped while Pickles was secretary of state with responsibility for the fire and rescue service.

## HIGH-RISE FIREFIGHTING GUIDANCE

The coroner's second recommendation was that "consideration be given to review of Generic Risk Assessment 3.2 on 'High-rise Firefighting' to provide consolidated national guidance". This was the only recommendation made by the coroner that DCLG acted on before the Grenfell Tower fire.

In August 2009, the DCLG published a series of generic risk assessments (GRAs) because, it said: "Owing to the size and nature of the Fire and Rescue Service and the wide range of activities in which it becomes involved, there is the potential for the risk assessment process to become a time consuming activity." The GRAs were published to minimise this and to avoid having "inconsistencies of approach and outcome".

In February 2014, DCLG published a revised version of GRA 3.2 on fighting fires in high-rise buildings. It accurately described high-rise firefighting as "a high risk activity" and "an extremely hazardous environment for firefighters". It rightly stated that "additional time and resources may be required to implement safe systems of work for operations at elevated levels" – but this was only a year after it had backed the Ken Knight review, which advocated further cuts to fire service budgets, impacting on resources available on the fire ground.

The revised guidance did not give advice on the real difficulty posed by fire spread beyond the compartment of origin; the need for multiple rescues; the details of an evacuation plan; nor the policies and training necessary for incident commanders to effect such plans. It did not address when an incident commander should move to partial or full evacuation. It merely stated what contingency plans should cover without providing the "guidance" recommended by the coroner on what those plans should be.

In order to provide that guidance it would have been necessary for the secretary of state to commit resources and expertise to considering the problem, testing possible solutions and providing guidance based on empirical evidence. Done properly, this would have required a serious national effort with a major commitment of central funding. In the absence of such efforts, the guidance in GRA 3.2 fell short of assisting fire and rescue services to devise practical contingency plans for evacuating high-rise residential buildings in the event of a significant breach of compartmentation or other rapid fire spread.

In particular, the advice to incident commanders to "follow the evacuation plan devised as part of the premises fire risk assessment" was vacuous, when the

only plan likely to be operative was "stay put". Instead the GRA 3.2 guidance simply suggested referring to Approved Document B paragraph 4.27 for further information. <sup>81</sup>

But the Approved Document B guidance provides little to assist fire officers in preventing breaches in compartmentation, which would require a very large scale inspection and enforcement programme, nor for preparing firefighters for situations in which they would need to evacuate very large numbers of people from high-rise buildings. Section 4 of ADB's 2006 edition that was referred to, was entitled "Design for vertical escape – buildings other than flats". In the 2000 and 1991 editions of Approved Document B, this section was entitled "Design for vertical escape – buildings other than dwellings". The fact that much of the guidance dated from the early 1990s should be a cause for concern, but no indication of subsequent work on evacuation is provided.

The advice on simultaneous and phased evacuation assumes buildings have been designed for such an eventuality. The document may assist firefighters with planning for high-rise workplaces, which have central alarm and communication systems, regular fire drills, wide stairways and other measures in place, with most hazardous incidents during daytime. However, this section does not address all the specific risks firefighters face when seeking to evacuate high-rise residential buildings, particularly at night, when there is only one stairway, no central warning system nor a central means of communication. Such issues are clearly of heightened importance for any evacuation *during* a fire.

The coroner had wanted DCLG to deal with this issue but the department woefully failed to do so. The lack of central, national guidance was a material cause of the failure of fire and rescue services, (even the UK's largest, the LFB) to develop an alternative evacuation plan in these circumstances and then to provide training and resources for incident commanders and other firefighters to implement on the fire ground.

# PREMISES INFORMATION

The coroner's third recommendation for central government was to "require high-rise residential building owners to provide relevant information on or near the premises, such as premises information boxes or plates". Pickles' response was that "a regulatory requirement is unnecessary and disproportionate". The recommendation was therefore not implemented.

Had the recommendation been implemented, there would have been important consequences for Grenfell Tower. First, greater attention would have been paid by responsible persons and the fire safety department to the information provided in such a premises information box/plate, leading to greater awareness of fire safety measures. Second, on the night, it would have provided direct access to information that was missing and still being sought by emergency services deep into the incident. Third, proper information should also have described the operation of the smoke ventilation system.

### DEFINITION OF COMMON PARTS

The coroner next recommended that central government provide clear guidance on:

- "The definition of 'common parts' of buildings containing multiple domestic premises
- "Inspection of a maisonette or flat which has been modified internally to determine whether compartmentation has been breached
- "Inspection of a sample of flats or maisonettes to identify possible breaches of the compartment."

The "common parts" were not defined by the Regulatory Reform (Fire Safety) Order 2005. As the expert report for the Grenfell Tower Inquiry by fire safety consultant Colin Todd explains: "in a block of flats, the Fire Safety Order applies to lobbies, stairways and other common parts, plant rooms, etc". Many in the sector believe "the external walls of a block of flats fall outside the scope of the Order". 82

The coroner sought clear guidance on this and on who should inspect the common parts for breach of compartmentation. It was for the Westminster government to provide the clarification. However central government did not implement this recommendation. At Grenfell, this issue effectively fell between the two stools of fire safety and building control. The fire risk assessment did not consider the increased fire load created by the rainscreen cladding system.

# RETROFITTING SPRINKLERS

The coroner's fifth recommendation was that central government "encourages providers of housing in high-rise residential buildings containing multiple domestic premises to consider the retro fitting of sprinkler systems". Although ministers made

comments in the media and at Westminster giving general support to sprinklers, this was invariably followed by the caveat about being a matter for owners and avoiding the "burden of red tape". Therefore the FBU believes central government did not implement this recommendation.

## REVISING APPROVED DOCUMENT B

The coroner's final recommendation for central government was to review Approved Document B in light of Lakanal House fire. The letter recommended that the review provide clear guidance "with particular regard to the spread of fire over the external envelope of the building". Pickles' reply promised "a new edition of the Approved Document in 2016/17". This was not implemented before the Grenfell Tower fire, despite repeated promises by ministers. In 2015, DCLG minister Stephen Williams told MPs:

Following the Lakanal House fire ... the coroner called on the Government to simplify the guidance in approved document B of the building regulations. My Department's Secretary of State committed to a review, which will deliver a revised document in 2016-17; the intention is to simplify the guidance where possible and update and revise the technical content at the same time.

In October 2016 the minister for housing and planning, Gavin Barwell, said: "We have not set out any formal plans to review the building regulations as a whole, but we have publicly committed ourselves to reviewing part B following the Lakanal House fire." In February 2017, the minister for policing and the fire service, Brandon Lewis wrote that Home Office officials had discussed with DCLG "plans for the future development of the fire safety aspects of building regulations". The DCLG would make a statement "in due course". 83

Only after the Grenfell fire did the Westminster government begin to consult on Approved Document B. On 19 July 2018, the Ministry of Housing, Communities and Local Government (MHCLG) sought submissions on a revised Approved Document B text, which still did not include specific guidance on evacuating high-rise residential buildings.<sup>84</sup>

The Lakanal House fire should have been a wake-up call to central government that the fire safety regime for high-rise residential buildings was flawed. Instead, ministers continued with the deregulation ideology and the smug complacency that they did not need to intervene. The central state has responsibilities towards its citizens. Ministers failed to respond to the risks highlighted by fire experts.

# 10. CONCLUSIONS

The FBU continues to investigate the Grenfell Tower fire and the mistakes that led to it. Further matters are expected to be clarified, so our conclusions are provisional. However, it is possible to trace some of the connections between these failures and decisions taken by central government and other actors to the causes of the fire at Grenfell Tower.

## WERE THE HIGH-RISE RISKS KNOWN AND FORESEFABLE?

The fire risks for residents of high-rise residential buildings have long been known and the specific risks faced by Grenfell Tower residents were well-documented. There is literature on high-rise fires, both internationally and in the UK, with London a particular focus of attention. Post-war building studies outlined the risks from the structure and construction materials, in sleeping accommodation, for vulnerable people, means of escape and self-closing doors before the vast majority of high-rise residential buildings were constructed. Statistical analyses and testing by the Fire Research Station and the Building Research Establishment, including for cladding risks in UK conditions, established the major risks well before Grenfell Tower was refurbished. A number of specific incidents, notably at Knowsley Heights, Garnock Court and Lakanal House, highlighted these risks. Other investigations, such as those into the incidents at Longlents House, Harrow Court and Shirley Towers, drew attention to many of the difficulties faced by firefighters in tackling high-rise fires. At Westminster, the written evidence and expert testimony to the 1999 Environment Committee should have left all actors in no doubt of the risks involved. However, after 1999, and particularly after the scrapping of the CFBAC, there has been no adequate forum within which such matters could be addressed.

### WERE HIGH-RISE RESIDENTIAL BUILDINGS PROPERLY REGULATED FOR FIRE SAFETY?

Fire safety regulations for high-rise residential buildings had flaws throughout the period since tower blocks were built, and particularly during the lifetime of Grenfell Tower. Arguably, London had the most robust post-war regulatory regime, as a result of its specific London Building Acts, London by-laws and its district surveyors. This was dissolved in 1985 with the Building Regulations, Approved Document B and the abolition of the GLC, with Section 20 of the London Building Acts (Amendment) Act 1939 repealed in 2013.

The Fire Precautions Act 1971 missed an historic opportunity to designate high-rise residential buildings and therefore make them subject to fire authority inspection and certification. Ministers failed to extend the Fire Precautions Act 1971 over the next three decades to bring high-rise residential buildings under its jurisdiction. Only relatively recently was some control handed to fire authorities, for the "common parts" of high-rise flats.

Blocks of flats and maisonettes could have been designated as high-risk premises, requiring owners to have a fire certificate. Legislation could have provided comprehensive fire authority oversight of high-rise residential buildings across the UK. Grenfell Tower could have been managed under a more rigorous regulatory regime from the beginning, improving fire safety provision throughout the life of the building. Had such measures been in place, it is highly unlikely that the safety failures identified after the Grenfell Tower fire would have been permitted.

The Building Regulations and Approved Document B do not provide sufficient regulatory clarity for fire safety in high-rise residential buildings. Ministers boasted that they had reduced 300 pages of regulations to 25 pages. Approved Document B is now almost 300 pages, but this is non-statutory guidance. Successive versions of ADB opened the contradiction between the wording of the regulations, which appeared to rule out combustible cladding, and the means of compliance with certain tests and standards, which appeared to permit flammable cladding. The regime allowed the contractor to choose the method of testing and it appears that few, if any, chose the large-scale fire test. Even these tests have subsequently been criticised. The privatisation of the Building Research Establishment (BRE) means that contractors requiring tests are treated as "clients". The compromised nature of this relationship was highlighted by the BRE sponsorship of the cladding industry awards.

The guidance in Approved Document B is not specific enough to provide residents or firefighters with the clarity needed for when stay put, phased evacuation or simultaneous evacuation are required; how to transition from one policy to another; and how to achieve a safe outcome, particularly in circumstances like Grenfell Tower with one, narrow stairway, no central alarm and no central communications system. It is not clear whether the Westminster government will address these issues when it publishes a new revised version of ADB.

The Fire Safety Order only makes fire authorities responsible for the common parts of high-rise residential buildings. This would appear to include carrying out risk assessments of the lifts, stairways, ventilation and lobby doors of buildings like

Grenfell Tower. It appears not to make the fire authority responsible for enforcement on the exterior of the building. This ambiguity needs to be resolved in law.

Central government has never resolved the tension identified by the 1970 Holroyd report between new or altered buildings and ongoing supervision of fire safety. The regulatory overlap between local authority housing departments, building control (public and private), fire authorities and the Health and Safety Executive has never been worked out. The reviews of 1990, 1993 and 1994 limited the scope of fire professionals to take charge of fire safety matters.

The Westminster government's most recent initiatives are to revive the fire inspectorate and ask the National Fire Chiefs Council (NFCC) to examine professional standards. The former is long overdue. Sadly, the latter leaves those who have presided over recent mistakes in charge of rectifying them, while continuing to exclude the FBU. The absence of a central fire stakeholder body involving the FBU and the failure to consult the union at all levels is senseless. It also goes against advice by other experts. For example, Nigel Meadows, the coroner who investigated the Greater Manchester firefighter fatality in 2013, recommended that employers involve the FBU in health and safety committees to ensure improvements are implemented.<sup>85</sup>

#### WHO WAS RESPONSIBLE FOR FIRE SAFETY?

The primary responsibility for fire safety at Grenfell Tower lay with the Royal Borough of Kensington and Chelsea (RBKC) as owner of the building and with Kensington and Chelsea Tenant Management Organisation (KCTMO) as the manager on behalf of the local authority. The Fire Safety Order rightly puts the onus on the owners and managers of high-rise residential buildings to prevent and control fire risks in their buildings.

RBKC building control was responsible for the refurbishment work under the Building Regulations. It is for the Metropolitan Police and the courts to determine who failed to comply with particular regulations and any criminal liability.

The FBU also believes that firms in the construction industry – from those which develop materials, to manufacturers, retailers and those which install or refit high-rise residential buildings – have the legal duty and social responsibility for their products and activities. Making and selling flammable materials without regard to the consequences of their use cannot be acceptable. Disregarding public safety for private profit is unpardonable.

The London Fire Brigade (LFB) bears some responsibility for its risk assessments, familiarisation visits and standard operating procedures with regard to high-rise residential building safety. LFB principal managers did not have a strategy for a situation like Grenfell where compartmentation completely failed and therefore multiple rescues – far beyond simple evacuation – became necessary. The LFB did not fully train or equip firefighters for this eventuality. However, this issue is clearly a national one for the fire and rescue service. There are residential and other buildings across the UK with flammable cladding and (probably) other fire protection failures which existed at Grenfell Tower. The risks these pose in the event of a fire, and how they can be addressed, are therefore national matters. There has been a national failing at government level and in the national structures of the fire and rescue service – such as they are – to address the operational, training and resource issues identified from previous incidents.

#### WERE THERE SUFFICIENT RESOURCES?

The split of building control between local authority and private approved inspectors has been detrimental to public safety. Private providers have found routes to "compliance" that breach the precautionary principle. Running down local authority building control and putting its officers under intense competition from private inspectors has damaged the system of control for high-rise residential buildings.

Fire and rescue services have been decimated by central government funding cuts, sometimes supplemented by local fire authority cuts. One in five frontline firefighter jobs has been cut since 2010. At least a quarter of fire inspectors have also been cut, along with the number of inspections and the time spent on them, contributing to the culture of non-compliance with fire regulation. Weaker enforcement bodies mean some firms and other actors get away with unsafe practices.

#### WHY IS CENTRAL GOVERNMENT IIITIMATELY RESPONSIBLE?

The central state has a fundamental responsibility for the safety of its citizens in a modern democracy. Central government should carry out regular national risk assessments, which would include the risks associated with living in high-rise residential buildings. The legislature ultimately makes the regulations that govern relationships between owners, managers, residents and authorities. Central government has failed to regulate high-rise residential buildings properly for fire safety.

Since the 1980s, the management of risk has squeezed out firefighters, other workers and their trade union representatives who practise fire safety as their profession. This expertise has mostly been substituted with management consultants, industry lobbyists and chief fire officers. These agents have operated within a political climate that has emphasised the need for reducing regulation. This has been driven by central government. The FBU believes this is relevant because, for half a century, central government had an authoritative, statutory fire and rescue advisory stakeholder body that strategically assessed the risks and thereby provided ministers with irreplaceable expertise. The union believes the absence of such a body contributed to the Grenfell Tower fire.

An ideology of deregulation has blighted efforts to improve the living conditions of millions. Central government failed to provide the resources necessary to manage risk. Ministers promoted a fire safety regime that was not fit for purpose and that failed so tragically on 14 June 2017. Central government bears ultimate responsibility for the Grenfell Tower fire. Those who made the pivotal decisions at Westminster need to be held to account and fundamental change is needed in the regimes covering fire safety, fire policy, housing and the fire and rescue service. Nothing less will deliver justice for Grenfell.

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