MODULE 6 OPENING ON BEHALF OF BINDMANS, HICKMAN & ROSE AND HODGE JONES & ALLEN

1.<u>Preface.</u> The Grenfell disaster is a predictable, yet unintended consequence of a combination of the laudable desire to reduce carbon emissions coupled with an unbridled passion for deregulation[1], in particular a desire to deregulate and boost the housing construction industry which resulted in overdependence on the construction industry and proved lethal. Government's desire to foster industry, followed by dependency on it, led to industry becoming powerful and freely exploiting the regulations. Government began to realise the extent of the problem, and reacted by concealment instead of candour. The result is a prolonged period of concealment by Government which should properly be regarded as one of the greatest scandals of our time. The architect of the *Green Economy* had intended that there be fetters on industry: *"I believe passionately in the free enterprise system as a creator of wealth, but markets know no morality. It is our responsibility…. to bring a balance to the books of life[2]"*. In the event however, the overriding deregulatory imperative meant there were no fetters and safety considerations were not balanced against either the environmental imperative or industry freedoms. On the contrary, the particular brand of deregulation and dependence on *"Big Society"* involvement instead of adequate regulation, enabled industry to write its own rules.

2.<u>Overview.</u>

2.1 Prior to June 2001, the Department with responsibility for fire until January 2016 was the Home Office. From then until January 2016[3] responsibility lay variously DETR/ODPM/DCLG/CLG, hereafter **"the Department"**. The root problem which led to Grenfell can be traced back to the 1952 Model byelaws for use by Local Authorities **"LAs"** which made a distinction between the external wall and cladding, allowing the latter to be Class 0 albeit the definition of Class 0 was then different. The 1965 Building Regulations **"BR"** (the first BRs to apply nationally) permitted Class 0 cladding unless the building was less than 3 feet from another. At this time a Class 0 material could be a combustible material

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[1] Cameron as PM had *"...committed Government to being the first to reduce rather than increase the stock of regulations during its lifetime"* **{CLG00019171/4}**

[2] Michael Heseltine *Blueprint for a Green Economy Submission to the Shadow Cabinet* Sept 2007 **{FBU00000045/16}**

[3] HO Position Statement **{HOM00034148/1-2}**

with a non-combustible surface[4]. The definition of Class 0 became increasingly less robust[5] during the further deregulatory processes which began in earnest with the Building Act 1984 and ADB 1985 which provided for functional requirements but without the prescription previously contained in the 1965 BR and instead merely the non-mandatory guidance in ADB. Problems began when modern cladding materials began to be used. Although there had as yet been no testing of ACM, even in the 1960s, there was awareness in the scientific community (and some civil servants, including Brian Martin were later aware of this research) of the dangers of aluminium cladding[6]. As BRE acknowledged in July 2016[7] the impact on fire safety of external cladding systems had been *"a real concern since their first appearance …30 years ago"*. The fact that deregulatory measures were posing fire safety risks should have been apparent by the early 1990s. Government's knowing neglect of safety can be traced back to the failure to take evasive action following the Knowsley Heights fire in 1991.It seems civil servants were aware of the significance of this fire although Ministers may, initially at least, have been unaware of the full extent of the implications for the Government's [DoE] *Estates Action Programme* **"EAP"**, by which DoE shared its budget for EAP with LAs to re-clad 1960s blocks using combustible cladding. The pilot for this scheme, Knowsley Heights, suffered a terrible fire shortly after re-cladding but as explained below, there appears to have been a cover-up, and a total failure to examine the degree to which the combustible class 0 cladding (if it was class 0) had contributed to the fire. The Inquiry will need to explore this issue with Government and BRE witnesses.

2.2 **First missed opportunity to abandon Class 0.** Following the Knowsley fire in 1991, there was a missed opportunity to require, in the 1992 edition of ADB which for the first time precluded the use of combustible insulation in the external wall, that cladding panels in addition to the insulation, should be of limited combustibility **"MOLC"** and remove the Class 0 classification. Furthermore, the requirement of B4 was diluted by the 1992 BR amendment requiring only that the external wall should *adequately* resist fire spread, which requirement remains to this day. This is consistent with Government trying to legitimise the flammability of the cladding rather than solve the safety problem it posed. Whether or not

[4] E7(B)(2) and (3) (a) and (b). Class 0 could be non-combustible but at its weakest was a combustible material with a 3.175mm surface of non-combustible material Lane Module 2 presentation **{BLARP20000022/119}**
[5] Lane Module 2 presentation **{BLARP20000022/121}**

[6] *External walls of buildings – Part I The protection of openings against spread of fire from storey to storey* – Ashton & Malhotra **{CLG00034717}**
[7] BRE 26.7.16 report for itself authorised by S Colwell **{BRE00021415}**

Ministers were aware of the Knowsley cover up, they were certainly aware of the findings of the DETR Select Committee in 2000, which followed the 1999 Garnock Court fire. The investigation of that fire also seems to have been the subject of a cover up as explained below. Although the fire had been serious and involved a self-propagating cladding fire, DETR did not question why BRE's report failed to detail whether the GRP cladding was Class 0 or not, and therefore whether it complied with BR, and tends to suggest they did not want to know. This is the more extraordinary given the Garnock fire occurred in June 1999 and evidence was taken by the Select Committee on 30.7.99 during which the problems caused by the notorious Class 0, were aired. It is a term which has repeatedly been confused with limited combustibility due to the fact that it is defined in terms of MOLC being Class 0, but it is forgotten that Class 0 materials are not invariably MOLC and the term, being predominantly[8] a measure of the surface spread of flame, also applies to composite products containing plastic/foam cores. Class 0 therefore does not in fact convey any significant fire safety as the foam core may ignite and this fact was raised by the Fire Safety Development Group's evidence[9] to the Select Committee. Despite the Select Committee's recommendation that, in effect, Class 0 be substituted with fire test 9[10], Class 0 was cynically retained, despite the Select Committee's recommendation and the evidence given to it by BRE that *"...the current guidance... is far from being totally adequate...[11]"*. The explanation for Government's refusal to withdraw Class 0 may be the RADAR research which identified that adoption of the more realistic European tests such as SBI would *"discriminate against"* foil faced insulation products[12]. Despite that same research indicating to Government that European tests for fire resistance (as opposed to rtf) were 10-15% more stringent than the National tests, it also recorded; *"However it is proposed to retain the existing classification system to mitigate confusion and market distortion"*. Such are the problems arising from jointly procured industry and Government research, which RADAR was. It appears the RADAR research was commissioned to give voice to building industry manufacturers concern *"to ensure that no significant change to the regulatory status quo will occur due to the introduction of the new [rtf] test methods[13]"*. Kingspan was not shy in broadcasting

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[8] As it is a test for lining materials in which the cut edge of the specimen is not heated Lane Module 2 presentation **{BLARP20000022/94} {/101}**
[9] **{CLG00019484/9}**
[10] **{HOM00034348}**
[11] **{CLG00019484/19}**
[12] RADAR 2 *Project Correlation of UK reaction to fire classes ...with Euroclasses* **{CLG00000951/9}**
[13] **{CLG00000950/3}**

industry's hold over Government, proclaiming that *"...Government has stated that it will not implement the new Euroclass system until the industry is ready to adopt it"*[14].

2.3 **Second missed opportunity to abandon Class 0.** Following the Select Committee, the Dept entered a contract with BRE[15] in two stages for the revision of BR135 (by large scale testing) and development of further guidance for ADB testing **"The BR 135 revision Contract**[16]**"**. The results of these testing programmes as early as 2001 reveal the precise dangers of PE ACM (even in conjunction with mineral wool) and the unsuitability of Class 0 as a metric of flame spread[17]. Prof Bisby expresses disbelief that Class 0 was not withdrawn after the September 2002 report of these 2001 tests[18].This, taken together with other data Government was receiving at the time, make it unbelievable that the National Classes were not withdrawn. One of the BRE reports made clear that *"Certain combustible claddings can support unlimited vertical flame spread"* but noted that less combustible ones do not[19]. Again, the answer may lie in interference from industry, which, as expressed by CWCT, was unhappy[20] that the use of the test used/proposed in the BR135 revision Contract would result in rainscreen cladding ceasing to be a permissible method of construction, given all rainscreen cladding systems had been shown to fail in the testing programme under the BR 135 revision Contract. This, CWCT claimed, could lead to *"...economic consequences for the building industry and the UK as a whole"*. This may explain Government's failure to abolish Class 0 as the Select Committee had effectively proposed. If the Class 0 criterion in diagram 40 prevailed and the BS8414 test was simply an alternative, then industry could avoid the test altogether and carry on with unsuitable Class 0 cladding panels. Allied to this was Government's failure to extend the requirement for MOLC to cladding panels, as well as insulation. Thereafter there are countless missed opportunities to have withdrawn Class 0, the principal ones being addressed below.

2.4 **Knowledge of ineffectiveness of Cavity Barriers and Class 0 combustibility.** The requirement for cavity barriers within the external cavity was introduced as a result of the Knowsley fire. The Government/BRE however understood from 1994 that cavity barriers

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[14] KS Technical Bulletin 2003 **{KIN00000060/5}**
[15] Revised bid -rev 2 dated 23.12.99 **{BRE00041836}**
[16] DTLR Survey summary and options report **{BRE00041887/11}** This involved testing using EU rtf tests and ISO 9705 tests
[17] BRE Report *Analysis of ISO9705 European and British Fire Test data for BR135 Project Conclusions* par 2**{BRE00001436/24}**
[18] Bisby Phase 2 Report *Regulatory testing and the path to Grenfell* paras 835, -7 and 850-857 **{LBYP20000001/154}**
[19] **{BRE00002376}**
[20] Letter CWCT – S Colwell 15.8.02 **{BRE00042031}**

were ineffective in rainscreen cladding and (though it knew already) that Class 0 permitted extensive flame spread. Important research in 1994 by Connolly[21] established that on 10 full scale tests the cladding allowed unlimited capacity for vertical flame spread. Critically, *"It is clear from the experimental work undertaken at Cardington that a cladding material achieving a Class O [sic] rating may suffer extensive burning[22]"* and cavity barriers were not effective in any of the tests. Connelly noted the failure of metals and that cavity barriers work better in some systems than others. The only ones found to be adequate were those *"substantially fixed to the masonry substrate and fitted independently of aluminum sheet rails"*. Further, a test in 1999 which led to a catastrophic cavity fire within the test facility should, according to BRE, "*…have led to a new test to assess the performance of [CBs] where the fire has already broken into the cavity space[23]"*As it was, Government and NHBC did understand by 2010 that cavity barrier testing was not reflective of the end use condition in rainscreen cladding where the outer cladding panel was combustible[24].

2.5 **Concealment in fire investigations.**

A series of fires from Knowsley Heights, Garnock Court, the Edge and latterly Lakanal were investigated in a way which defies belief in that the full circumstances were not made public as they should have been in order to protect public safety as explained below. The missed opportunities were knowingly missed and as such those who missed them are culpable.

2.6 **Prolonged wilful blindness.** This failure to identify and address the problem of fire safety in facades has, in one sense, transcended party politics, stretching as it does across Conservative, Labour, Conservative/Lib Dem Coalition and finally again Conservative Governments. That said, certain political ideals, principally deregulatory policies, bear primary responsibility for events, namely an astonishing period of wilful blindness, reflected in a failure to revise ADB properly from 1992 and a failure to review it at all from 2006 to the time of the Grenfell fire and beyond. There was a Review in 2013 but it comprised purely deregulatory and stylistic changes. This period of wilful blindness to the problems requiring a complete suspension of disbelief by Civil Service and Ministers alike, was undoubtedly facilitated by the Department with control over FRS and ADB (variously ODPM, DCLG/CLG) priding itself on being a deregulatory department, coupled with a single senior civil servant, Brian Martin, having responsibility for ADB for a prolonged period of nearly 20 years by the time of the

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[21] **{RCO00000001}**
[22] **{RCO00000001/46}**
[23] T Lennon email to BM 10.8.09 **{CLG10003967}**
[24] BRE for NHBC Foundation *Fire Performance of highly insulated residential Buildings* **{NHB00000448/42}**

Grenfell fire. He had been initially involved with ADB from 1999 when seconded to the Department from BRE. He came to refer to it as *"..almost like my third child*[25]*"*. Not only was he too close to ADB to have any objectivity about its shortcomings, but clearly from a certain point he lacked any desire to change it *"getting a bit stale"*[26]. Even had he held the desire to change it, the deregulatory imperatives (see S4 below) would have made meaningful change impossible; perhaps a further demotivating factor for him. His perceived superior knowledge of ADB and fire safety rendered him untouchable, and his behaviour and that of his department with him, became puerile and callous, particularly in his dealings with the APPG which was understandably agitating for review of BR/ADB.

Civil servants knew they were endlessly procrastinating, producing discussion documents rather than actually revising ADB, dressing up deregulatory measures as safety improvements and sitting on critical research reports. Ministers may have been unwitting pawns, but if so, were foolish/naïve. The Coalition Government's radical housing policy requiring rapid building of a vastly increased number of homes, coupled with its deregulatory policies meaning it could not impose burdens on industry, led it to allow industry to write its own rules, under the guise of *"empowering the citizen"*. That *"Big Society"* imperative, however well intended at the outset, did not lead to citizen empowerment but instead to industry getting its own way. NHBC/BCA was leant on by industry to write rules circumventing ADB, notably TGN 18 which legitimised desktops and latterly its *"Acceptability of Common Wall Constructions"* which was itself in effect a desktop, which legitimised the use of ACM together with combustible insulation: the very combination which proved lethal at Grenfell. This occurred with Government's tacit approval because it depended on industry to both build the houses as quickly and easily for them as possible and to write the rules, Government now having prevented itself from imposing burdens by regulating. The system of Building Control **"BC"** could only be as good as the flawed guidance on which it was based, but the creation of private BCs **"AIs"** led to competition between Local Authority BCs and AIs which resulted in contractors becoming valued clients to be cherished rather than policed, resulting in a *"race to the bottom*[27]*"* as Government was aware. It was an open secret that workmanship was terrible, and that BC had become *"in many cases morally corrupt and a mere commodity to be bought and cast aside as industry chooses*[28]*"*. NHBC in its capacity as AI, despite internally

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[25] **{CLG00018930/1}**
[26] **{CLG00018930/1}**
[27] **{CLG10007057/2}**
[28] Email Manchester BC- LABC 3.7.18 **{LABC0010151}**

recognising the need to not allow commercial pressures to override *life safety issues* and noting "*Our reputation would be shredded if we knowingly let something go we knew was life threatening and there was an accident*[29]*"* nevertheless did precisely that. It approved Kingspan K15 for some 8 years from 2005, without appreciating the obvious fact that the BBA certificate applied only to the specific system tested under BS8414. NHBC continued to approve K15 even once alerted to the dangers in late 2013 by an independent façade engineer[30]. NHBC's continued approval was on the spurious grounds of compliance with BCA TGN 18 which was merely a circumvention NHBC/BCA had devised (apparently in conjunction with Kingspan) to circumvent the BR/ADB. This circumvention was necessary in order to protect NHBC which, as Approved Inspector had approved so many developments using K15. Even now, NHBC is disingenuous in its defence of itself, pretending that it was only alerted to the fact that K15 was not a MOLC and/or had only been tested in one specific build up, by a change in the BBA certificate, whereas in fact NHBC was already aware of these facts, not least because it was explicitly told so by the independent façade engineer in November 2013 and the BBA certificate had not even been revised by then[31]. LABC reveals itself as a spineless members' organisation, which (despite providing system approvals for products such as K15 and later RS5000 on which it knew BCOs and others would rely) did not investigate the accuracy of these approvals even when alerted back in 2011 to *"sharp practice"* by both KS and Celotex[32].

2.7 **Government's wider failures.**

2.7.1 Government's failures are not confined to failure to have in place adequate guidance governing flame spread on the external wall, but also a wider failure to ensure that the fire safety regime, RRO, was adequately supported by guidance, particularly on FRA in relation to both the ambit of it (extension to leaseholder doors and external wall) and the need to provide PEEPs in general needs housing blocks. Whilst the guidance was, in Dr Lane's view capable of being properly interpreted, as it should all have been read together by a competent person[33], the Government should not have deferred to industry for sector led guidance which principally derived from Todd and should instead have ensured clear cohesive guidance was provided.

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[29] NHBC Davis/Jefferson thread 20.4.16 **{NHB00001243}**

[30] John Lewis' summary of NHBC/Wintech meeting on 15.11.13 **{NHB00000597/4-5}**

[31] BBA certificate was revised on 17.12.13 **{KIN00000454}.** Also note that Amended Issue 1 of the certificate dated 6.04.10 stated on the front page that "*the product has been tested to BS 8414-1:2002 for one specific construction on masonry walls (see section 7)"* and section 7.5 described the tested build up **{KIN00000493}.**

[32] Emails in April 2011 between Jim Mansfield consultancy and Turner **{LABC0019671} {LABC0019673}**

[33] Lane, Module 3 Report, Chapter 9, 2.2.70 **{BLARP20000028/20}** and 5.4.9 **{BLARP20000028/65}**.

2.7.2 Deregulatory policy also affected the field of fire risk assessors under the RRO. Government, not wishing to impose burdens on business, did not expressly require that risk assessment be carried out by a competent person, still less a competent fire risk assessor and failed to ensure an accreditation system of appropriately qualified assessors, instead depending on FSF to define the competence criteria and finance it. Whilst we adopt Dr Lane's view that every FRA must be competently executed, nevertheless it was unfortunate that Government did not expressly legislate for this, as it gave the unscrupulous an opportunity for poor practice. Industry comprises multiple disparate influences and interests and therefore does not speak with a single harmonised voice. To this day there remains no single nationally accredited register of fire risk assessors.

2.7 **Test houses and certifiers complicity.** The organisations supporting the testing regime are part of the problem: BRE is a wholly flawed organisation which has effectively sponsored Kingspan's activities for over a decade without raising the alarm, and has presided over a series of inadequate and dangerously misleading fire investigations beginning with Knowsley/Garnock but which continued through Lakanal (failure to investigate downward spread or establish what the cladding panel actually was). As Bisby points out, there may still to this day be a building with the exact same cladding as Knowsley, and as designed by the same architect, the same lack of CBs as Knowsley[34].

3. <u>Root causes of the failures in fire safety.</u>

3.1The cladding problem: modern combustible materials and an outdated set of rules.

3.1.1. The guidance in ADB, such as it is, has not kept pace with modern technology: ADB is based on Post War Studies No 20 published in 1946 as the Department knew from July 2000[35]. It was subsequently made clear to the Department that the Post War Studies document was based on assumed fire loads which would now be unrealistically low due to the additional load imposed by modern materials[36]. The Department did not fully understand the basis of ADB as evidenced by Brian Martin's comment in his evidence to the Lakanal Inquest seeking to explain why the cladding was only required to be Class 0 and did not need to be fire resistant *"...the enclosing rectangle method is an attempt to simplify a hellishly complicated bit of physics which I can't explain[37]"*.

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[34] Bisby Phase 2 Report *Regulatory Testing and the Path to Grenfell* paras 531-536 **{LBYP20000001/103}**
[35] Burd attended meeting with S Hunt re relationship between firefighting and ADB **{CLG00000974}** minutes emailed to Burd **{CLG00000973}**
[36] **{CLG00006277/7-8}**
[37] **{INQ00014610/69}**

3.1.2 **Lack of coherence in aims underlying BR/ADB routes to compliance.**

Since 2002 there have been three broad legitimate routes to compliance for the façade, albeit based on radically different approaches to compliance: (1) satisfying the linear route of ADB (reliance on National or European tests) but note these are not strictly *"deemed to satisfy"* solutions; (2) large scale testing;(3) following an engineering solution route (i.e. compliance with BR functional requirements). Routes (1) and (2) are based on fundamentally different approaches to testing: the National/European tests are based on tests within a room and seek to estimate the time to flashover *within* a compartment, whereas route (2) (BS8414) is based on assessing the impingement of the smoke plume from an already developed external fire on the external cladding. Prof Bisby elides routes (1) and (2), his second route is fire engineering, and his third is to address the functional requirements of the BR, but combine it with the linear route/large scale test[38]. It should be noted that Prof Bisby's third route does generally involve dishonesty by the manufacturer /test house supporting it (Kingspan and Arconic being the archetype proponents) and so is *"utterly indefensible"*[39] and cannot be regarded as a legitimate route. Whilst theoretically, Bisby's *third way* could be adopted in good faith, as he suggests, experience suggests it is often not so, and currently many within the fire engineering sector lack the competence to do this. It is undoubtedly the case, that this hotchpotch of differing approaches to compliance adopted by the BR/ADB positively encourages manipulation[40].

3.2 **Class 0 Conundrum.**

3.2.1 Class 0 is derived from the application tests under of BS 476 parts 6 and 7. ADB Cl 12.6 at the time of Grenfell required that the *"external surfaces of walls should meet the provisions in Diagram 40*[41]*"*. Diagram 40 in turn stipulated that below 18m, a material with an index of not more than 20, calculated in accordance with BS476 part 6 should be used. As early as April 2002, the members of the BRAC Part B working Party accepted they no longer knew how the index of not more than 20 under BS476 Part 6 had been derived[42]. This in itself ought to have been a trigger for reconsideration of reliance in diagram 40 on indices derived from tests whose indices were no longer fully understood. Furthermore, had the BRAC working party troubled to understand the tests as Dr Lane now explains them, they would have appreciated that the tests are inapt for composite materials as they expose only

[38] Bisby's *"third way"* paras 972-1016 **{LBYP20000001/177}**
[39] Bisby para 996 **{LBYP20000001/180}**
[40] Bisby para 1016 **{LBYP20000001/183}**
[41] **{CLG00000224/95}**
[42] PTBWP(02)M1 Par 6.7 **{CLG00001435/3}**

the external surface to heat for only a short period of time, and the output temperatures are measured only at the chimney of the furnace chamber[43]. A further problem with the use of Class 0 was that Diagram 40 gave the impression of equating Class 0 to Euroclass B[44] and the minimal footnote 1 did little to correct this general impression.

3.2.2The other major problem with Class 0 is that its definition meant it applied both to a material and *"the surface of a composite material*[45]*"*(and in any event only the surface was tested[46]) such that it did not impose any requirement for the core. This issue gave rise to the question whether the core could properly be deemed *Filler* such that a MOLC core was required (see below). The lack of requirement as to core imposed on Class 0 products made Class 0 a completely unsuitable metric for modern composite materials such as ACM. Furthermore, the definition potentially led to confusion that Class 0 equated to a MOLC even though not all Class 0 materials were MOLC. ADB also referred to *Composite products defined as [MOLC]*[47] but these were likely to have been products such as plasterboard which is a composite and some (but not all) of which are MOLC. Government was aware of that confusion as explained below.

3.2.3 That Class 0 was a completely unsuitable metric should have been absolutely obvious from as early as 1991, given the Department's knowledge of a fire's ability to spread from floor to floor using cladding as a medium and bridging compartmentation (as at Knowsley, Garnock, the Edge and Lakanal). As from 2006, ADB implicitly assumed vertical fire spread, since it incorporated by refence BR 135, by then in its second edition (2003), and containing Brian Martin's graphic diagram showing the mechanism by which fire could spread using the cladding as a medium[48]. BR 135 assumed that compartmentation had already been breached by the time of the FRS arrival[49]. Class 0 was clearly inadequate to resist vertical flame spread. Furthermore, Brian Martin was on notice from September 2002 that in tests recently carried out that 4 out of 11 products marketed as Class 0 were not in fact Class 0[50]. There is no evidence he sought to investigate, still less cure this problem of mis-selling.

3.3 **The *filler* debate.** Government's failure to abolish the National Classes and in particular Class 0 was compounded by its failure to expressly require in the *linear route* that the

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[43] Lane Module 2 presentation **{BLARP20000022/51-73}**
[44] **{CLG00000224/97}**
[45] ADB App A par 13 **{CLG00000224/122}**
[46] Lane Module 2 Presentation **{BLARP20000022/101}**
[47] ADB App A par 14 **{CLG00000224/122}**
[48] **{CLG00019023/9}**
[49] BCA TGN 18 Dec 2014 draft **{BCA00000019/2}** and summary of S Colwell's explanation to NHBC of assumptions underlying BR135**{NHB00000829/2-3}**
[50] **{BRE00001436/24}** par 1

cladding panel be MOLC. Since the Grenfell fire, Government has claimed that clause 12.7 did apply to the panel as well as insulation. It is suggested[51] that following the fire at *The Edge* in 2005 the word *filler* was introduced into cl 12.7 ADB by the 2006 edition. Given however that the heading of 12.7 *"Insulation/Products"* was also introduced in that edition, it should not have been wasted on the draftsmen that, on one view, whatever *filler* meant, it was confined to insulation. If the amendment was made in response to the Edge then the material they were describing as *filler* was in fact the core of a sandwich panel, which was a form of insulation, even though it was not being used primarily for that function, but rather as a *stiffener*[52]. In any event, if the amendments were made as a response to the Edge fire, it was remiss of the draftsmen not to list the changes to 12.7 in the *"main changes"* section so as to advertise the problems and risks. Whilst as we have previously submitted, a competent person using ADB, which is designed primarily to protect life, should err on the side of caution if confronted with ambiguity, that does not excuse the Government's failure to amend 12.7 to clarify that it applied also to the core of the cladding panel. Even on the Government's case that cl 12.7 did require the core of a cladding panel to be MOLC, this requirement dated only from ADB 2006 when the word *filler* was introduced. There was therefore an inexcusable period of delay from 1992 to 2006 during which there can be no claim that cladding panels were required to have a MOLC core. Thereafter, it ought to have been clear that 12.7 was ambiguous as explained above, but this was anyway expressly brought to Government's attention in November 2013[53] and again in July 2014. It was made clear that there was ambiguity in 12.7 ADB as, despite being *"intended to prohibit the use of [PE] cored ACM in buildings over 18m as they are not classed as [MOLC]. This is not clear from the current clause …it was suggested clarification could be achieved by means of a FAQ[54]"*. Brian Martin claims that Dr Sarah Colwell did not in fact get in touch about this as the meeting notes indicated she would, but that is nothing to the point: Brian Martin attended this meeting but left at some point. It is reasonable to assume that he received the minutes, as the Department did, and if so he (and the Department) were on notice of this most serious problem. He also ignored later warnings made directly to him that the clause was dangerously ambiguous. When informed that the ambiguity of term "*filler*" had resulted in a situation of "*grave concern"* in which "*no existing buildings in the UK over 18m"* using ACM meet

[51] Burd [31] **{CLG00019461/13}** and BM [110] **{CLG00019469}**BM email to Baker 25.11.13 **{BRE00047585}**
[52] **{BRE00035368/2}**
[53] Baker's email to BM 25.11.13 **{BRE00047585}**
[54] CWCT Meeting 2.7.14 **{CLG00019336/4}**

ADB, Martin's response was defensive and dismissive: *"I'm not sure the text is really all that ambiguous... "*. He disregarded claims of ambiguity as being raised by people "*when they are trying to justify something that is clearly wrong"* and seemingly ignored altogether the serious claims concerning non-compliant buildings.[55]

3.4 **Class 0 Conundrum causing confusion as to the insulation requirements**

Despite cl 12.7 making pellucid that insulation must be a MOLC, due to the confusion that Class 0 equated to MOLC, some architects/designers (with encouragement from the manufacturers as we saw in Module 2) were using foam insulation which was by definition not MOLC, in order to comply with the thermal requirements imposed by Part L. This was made clear to Government at the 2.7.14 meeting: *"There is a degree of ignorance with some people confusing class 0 with limited combustibility[56]"*. The Department clearly took this on board, as Brian Martin shared *a friendly warning* with NHBC on the same day as the 2.7.14 meeting. As he said, *"I've been talking to a few folk"* who had indicated that K15 was being mis-sold by virtue of the BBA certificate and he escalated this to senior officials (Ledsome and Harral (see 8.1 below)). Despite this and subsequent realisation that NHBC was allowing potential breaches of BR the Minister went to visit the NHBC in September 2015 (par 4.13 below) and there is no hint of criticism/concern in the brief.

3.5 **The dangers of desktops.**

3.5.1Despite considerable noise to the contrary, particularly from NHBC (largely responsible for the increase in desktops by its drafting, with BCA of TGN 18), desktop assessments of large-scale tests were never a route to compliance under ADB. The argument to the contrary derives from the wording of cl 12.5 ADB, which states external walls should either (1) meet the guidance in 12.6-12.9 or meet the performance criteria in BR135 *"using full scale data from... [BS8414 tests]"* (emphasis added). ADB however prescribes the circumstances in which *"products or structures"* can be assessed as meeting BR135 *"...from test evidence against appropriate standards, or by using relevant design guides.."*[57] . The requirement to use appropriate standards or guides is a reference to using standards which allow extended application of a certified result. The principles on which extended application **"EXAP"** rules are based are set out in our Module 2 opening par 3.2.3 and as Dr Lane said[58], they are given in CEN/TS15117:2005[59]. Previous guidance such as PEPF *Guide to undertaking Assessments*

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[55] Emails of Nick Jenkins (Booth Muirie) to Brian Martin in February 2016 **{BLM00000847/3}.**
[56] **{CLG00019336/3}**
[57] ADB App A **{CLG00000224/119}**
[58] Module 2 Presentation **{BLARP20000022/196}**
[59] **{BSI00001736}**

in lieu of fire tests[60] had also made clear that assessments on systems such as fire doorsets (different to cladding systems in that the entire doorset can be tested) would be regarded as *"Complex Assessments"* and would require both primary and secondary data (witnessing).

3.5.2 Essentially, desktops are inapplicable to system tests in which only a part only of a system/structure is tested (cladding) and there was at no material time until after Grenfell a BS/other guide which purported to provide guidance on extrapolation of results from a system test. In practice therefore there was no means of *"using data"* from large scale tests to extrapolate from BS8414 tests, rather the only data which could properly be used was that from the test of the product itself. Following Grenfell the Government banned desktops[61], resulting in Kingspan and others on the relevant BSI committees developing BS 9414[62] which came into force in 2019[63], it is a controversial document[64], and the first standard attempting to derive meaningful conclusions from a BS8414 test.

3.5.3 **Desktops on BS8414 tests were not considered appropriate before BCA's TGN18 introduced them as a concept by its *"Option 3"*.**

(1) Whilst it appears BRE was carrying out some form of desktops on BS8414 prior to 2014 it generally deprecated them, refused to carry one out when requested to do so by BBA and claimed to carry them out only if available data permitted and applying the Fire Test Study Group **"FTSG"** rules[65]. Internal BRE correspondence indicates BRE was aware that desktops were not valid extended application assessments and their policy was in general *not* to produce them.[66] Desktops were still a relatively rare thing in the context of BS8414 tests (for the good reason that not permissible) until the production of TGN 18 which triggered an avalanche of desktops, which in turn was apparently the reason for the 2015 amendment to TGN 18 permitting desktops to be carried out by a "*suitably qualified fire specialist"* as opposed to a "*suitable independent UKAS accredited testing body (BRE, Chiltern Fire or Warrington Fire)".*[67]

(2) **Introduction of BCA's TGN 18.**

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[60] June 2000 ed **{BCA00000070}**
[61] MHCLG Circular 10.9.18
[62] *Fire performance of External Cladding systems – The application of results from BS8414 -1 and BS8414-2 tests.* Draft 30.11.18 **{KIN00008439}{KIN00008565}**
[63] https://www.thenbs.com/PublicationIndex/documents/details?Pub=BSI&DocID=327548
[64] See comments of Arup and ors **{KIN00008563}**
[65] Howard email to BBA 2.4.14 **{BRE00005773/838-9}** *FTSG Pocket Guide for Fire test Reports and Assessments* [Not on Relativity]
[66] Tony Baker email to Andy Russell on 24.7.13: "*... in general the answer would be no unless the system to be assessed was very similar to that tested."* **{BRE00003397}**; See also **{BRE00047433}.**
[67] As was decided during BCA Technical Liaison Group meeting on 16.4.15 **{NHB00002469}** and as explained by Evans at [200] **{NHB00003020/77}**

It is now clear (albeit denied by NHBC) that TGN 18 was introduced by NHBC/BCA very much to suit their own purposes, albeit with encouragement[68] (which NHBC denies) from Kingspan. NHBC introduced TGN 18 as a means of extricating itself from the difficult situation that it had been approving K15 for some 8 years between 2005 and 2013 in the erroneous belief that it was MOLC and compliant. TGN 18 was a convenient circumvention of ADB in making desktops a seemingly legitimate means of compliance. This was music to the ears of Kingspan Celotex and other manufacturers selling otherwise non-compliant products.

(3) Government and other organisations were contemporaneously aware of the fact that the notion of "desktops" was being misused and indeed Brian Martin initially refused to speak at an NHBC event because he did not wish to be seen as approving the use of desktops, considering they and engineered solutions are *"not as robust as they should be"*[69]. He was in the event persuaded to speak on the unsatisfactory and non-committal ground that it was for BC to decide[70]. This is a line which, disappointingly, Government has persisted in adopting even post Grenfell[71] .

3.6 Deliberate Ambiguity in BR/ADB?

3.6.1The Government's continued failure to revise ADB to correct the Class 0 conundrum and ambiguity as to the core of composite cladding panel products from 1992 when it had sufficient knowledge for the opportunity to arise, can only be justified by a desire to preserve the ambiguous status quo, in order to give the construction industry the latitude it desired. It appears that the National system had been retained simply to placate industry which realised its products would not pass the test introduced as an alternative means of compliance in the wake of the Select Committee. Government's nonchalance in the face of the clear warnings from 2013/14 that ADB cl 12.7 was insufficiently clear to require the core of cladding panels were MOLC, and that even insulation which was not MOLC was being used despite the clear prohibition is telling as to Government's intentions. It clearly intended that Class 0 cladding should continue to be used. After all, as CWCT had made clear, if not, then rainscreen cladding would no longer be a viable building technique, with consequences for both industry and the UK economy. Government's response to the Knowsley fire in 1991 was to require an amendment to the 1992 Building Regulations to dilute the absolute *"shall resist flame*

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[68] Email Meredith to P Clark and S.Howard/D Smith *"we are slowly educating the NHBC and worked with them and the BCA to produce BCA [TGN18].."* **{BRE00004073}**

[69] **{NHB00001325}**

[70] **{NHB00001325/3}**

[71] 16.4.19 Email to A Heath **{KIN00008565/1}**

spread" to *"shall adequately resist flame spread"* (emphasis added) although this was not picked up in the 1992 ADB, it was picked up in the 2000 edition[72]. This was a Government accepting that it was not realistic to assume no flame spread on the external wall, rather than seeking to prevent it and it is therefore not surprising that Class 0 Conundrum and ambiguity over whether the core of cladding panels was to be MOLC was left ambiguous.

3.6.2 As is clear, Government was both aware of, and deprecated the use of desktops, and yet does not appear to have questioned the justification for their use, nor regarded Government as being obliged to actively discourage or prevent the use of desktops. It never appears to have considered clarifying ADB 12.5 to remove any scope for ambiguity. On the contrary, Brian Martin was aware of TGN 18 and his belief that industry should write its own rules facilitated the production of it (see above). The ambiguity which allowed the production of TGN18 and the deluge of desktops which followed cannot be said to be accidental/inadvertent as Govt had the opportunity to prevent it when TGN 18 was first produced (June 2014).

4. Motivations for the prolonged neglect of safety

4.1 The Radical Housing Agenda, Deregulation Agenda and aspiration to be the *"Greenest Government ever".*

4.1.1The government's commitment to the housing construction sector began immediately in the October 2010 spending review in which it planned over the next 4-5 years to reduce the regulatory burden on the house building sector whilst also incentivising LAs and local communities to be supportive of housing growth, delivering up to 150,000 affordable homes by 2014/5[73] .The housing agenda was compounded by the *One in One Out* rule which began in Autumn 2010, requiring a deregulatory measure to be found of equivalent net cost for any new regulation introduced[74]. Hard on the heels of that policy came the Budget Moratorium in March 2011[75] which meant a waiver had to be obtained in order to make any changes to BR. Changes in BR due to the green deal had to be compensated for by cuts in regulation in the housebuilding industry[76]. Even changes to support the Government's claim to be the *Greenest Government ever* were hard fought[77]. The Government's Housing strategy declared itself *"radical and unashamedly ambitious[78]"* and involved *Help to buy* mortgage schemes

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[72] **{INQ00014107/86}**
[73] **{INQ00014585/49}**
[74] **{INQ00014583/3}**
[75] **{CLG00013912}**
[76] **{CLG10005145}**
[77] **{CLG00014067/5} {CLG10005144}**
[78] *Laying the foundations: A housing strategy for England* **{CLG00019155/6}**

then known as *Firstbuy* for first time buyers and releasing land for 100,00 new homes, coupled with planning reforms to facilitate the *Community right to build* imperative[79]. On top of this came the Red Tape Challenge in Construction Theme which flowed from the Star Chamber in May 2012. BR were not exempt.

4.1.2 **The Housing Standards Review in 2012 "HSR"** was, as Ledsome says, *"An example of regulation to deregulate[80]"*. The ostensible intention was to remove contradictory/over-lapping standards both locally and nationally[81]. Theoretically it was not supposed to adversely impact fire standards, but it potentially could do so. See for example the optional requirements for access and *"...meeting the current and future housing needs of a wide range of people including older and disabled people[82]"*. The HSR delivered more than £100m in de-regulatory savings for the home building industry. The deregulatory effect was compounded by the *One in Two Out* rule which was introduced in November 2013, only to be compounded again in March 2016 by the *One in Three Out* rule.

There was, in June 2015, a proposal to revisit the HSR to target further cost reductions for homebuilders, even including by imposing a 3% cap on accessible (wheelchair) housing provision in private tenures[83]. This should have been unthinkable, not least because it conflicted with the Government's espoused inclusivity agenda, and its awareness of an increasingly ageing population. Furthermore, in the more general sense the HSR was a significant distraction from doing anything meaningful in terms of amending the BR.

4.1.3 **The 2015 Productivity Review: *"Fixing the foundations: creating a more prosperous nation[84]"***. This was an impetus to compensate for the fallout of the financial crisis and boost productivity, including boosting the *Northern Powerhouse* by committing £13 bn to transport networks in the North[85], relaxing planning laws and building more affordable homes, together with support for first time buyers[86]. This became known, in the Autumn statement 2016 as *Accelerated Construction*, with Government committing £2 bn to speed up housebuilding on surplus public sector land and a commitment to *"...encourage new developers and different models of construction in house-building[87]"*. All these measures

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[79] **{CLG00019155/18}**
[80] Ledsome [39] **{CLG00019465/12}**
[81] HSR Consultation **{INQ00014676/3}**
[82] **{INQ00014590/10}**
[83] **{CLG10007059} {CLG10007060}**
[84] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/443898/Productivity_Plan_web.pdf
[85] *Executive Summary* Par 15
[86] S9 *Planning freedoms and more houses to buy*
[87] Core Brief Topical factsheets 23.11.16 **{CLG10008731/5}**

meant Government was utterly dependent on the success of its radical housing strategy and in turn increased Government's dependency on volume housebuilders and those who facilitated the housebuilders' activities such as NHBC, meaning that Government did not adopt a challenging position towards such institutions either [88].The combination of this radical housing agenda coupled with the inflexiblity of the green agenda resulted in the unintended consequences of combustible insulation being used in HRBs. Government however had been warned. Brandon Lewis, as Housing Minister was warned as early as 2012 of the root of the problem, namely the fact of the green agenda driving increased the use of insulation with the inevitable impact on fire safety: *"Energy Company Obligation …and The Green Deal will spark the biggest change to the fabric of British Building since WW2, let's not do this at the expense of fire safety[89]"*.Lewis would later make Barwell, aware of the fact that BR/ADB had not kept pace with technology changes introducing combustible materials[90]. Barwell and Lewis should both have been in no doubt of the combustibility of modern materials from their awareness in 2014 of the Kennett Drive fire and subsequent debate (see par 5.12 below).

4.2 **Industry captures Government and with it, regulation.** A succession of deregulatory policies had the effect of freezing Government's ability to substantively revise BR/ADB in any way which imposed burdens, leaving industry with the whip hand, able to exploit the BR/ADB and testing regime as it saw fit. The only new regulations were de-regulatory ones such as the extension of the Competent Persons Schemes which involved sectors of industry writing their own guidance. The Department was aware of the risks posed by excessive de-regulation at the time of introducing its moratorium (2011). It seems the Department gave consideration to the interplay between the Art 2 ECHR right to life (enshrined in HRA) which imposed on Government an obligation to have in place appropriate systems to safeguard life, and deregulation, namely whether, if it ceased enforcing RRO that would put it in breach of Art 2[91]. Government's recognition that its self-inflicted paralysis risked breaching the right to life, and yet continued inaction in relation to BR/ADB, is chilling. As Randall would comment on the day of the Grenfell fire: *"Some of the stuff about disproportionate burdens feels uncomfortable today[92]"*.

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[88] **{CLG10007447/5}** *"**Discussion on new build market** [LTT] – Housing supply is a priority for the Department. I know you work closely with officials to monitor performance- interested in your views on current trends and issues for the industry"*. Removed in the final version: **{CLG10007445/5}**

[89] Rockwool email **{HOM00047100}** and briefing note **{HOM00047101}**

[90] Letter Brandon Lewis to Barwell **{CLG10008740}**

[91] **{CLG00014415}**

[92] **{CLG00002037}**

5. Government knowledge of inherent flaws in the BR/ADB and non-compliance

5.1Goverment knowledge of poor workmanship/wilful non-compliance: An *Open Secret*

Poor workmanship and lax BC flowing from the fundamental ambiguity in the BR/ADB were described by MacNamara after the fire as "*...One of the open secrets in the building industry*[93]". Government was aware, as from its 2007 Report: *"The Future of Building Control"* that *"There is a sense that the regulations are too complex and can sometimes be conflicting...compliance with some parts of the regulations is low for a variety of reasons but principally a lack of understanding about what is required and a lack of resources within [BC] profession to inspect everything all the time*[94]". LABC was also aware, as from 2008 that the principles in ADB were not effective unless policed *"what does not get inspected does not get done"*[95].

5.1.1 Again in 2009 there was a drive to tackle non-compliance but this took the form of LA's making risk assessments *"subjective judgments about the ability of builders*[96]" which BRAC considered problematic, recognising that *"unknown and unreliable builders were a problem"*. Earlier in 2009 BRAC had recognised there was a lack of testing, non-compliance and *"illegal construction*[97]" and yet, no-one seemed to consider that greater regulation of the construction industry was required.

5.1.2 **Government becomes aware of wilful non-compliance: a widespread absence of cavity barriers.** Government became aware from at latest December 2014 onwards that cavity barriers were often not being installed when new homes were built. This should have acted as an indicator that the radical and rapid new homes policies and lack of focus on compliance with ADB were a dangerous combination. Government (Brandon Lewis was Housing minister at the time and Williams his successor) became aware in December 2014 of a catastrophic fire at Kennett Drive in June 2014 which had caused the total destruction of four timber framed brick houses all built by the same developer on a large estate and it was clear the firestopping (cavity barriers) had not been put in place at the time of construction[98].This should have been of the utmost concern to the Housing Minister, knowing the centrality to Government of the rapid housebuilding agenda.

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[93] MacNamara email 20.6.2017 at 17.33 **{CAB00004662}**
[94] **{CLG00018577/8}**
[95] Email thread 29.9.08 Paul Everall and NHBC and ors **{LABC0002262}**
[96] BRAC 8.10.09 meeting item 4 **{CLG00019144/2}**
[97] **{CLG00019113/3}**
[98] Extract from Hansard **{CLG10006647/3}** expressly brought to Lewis' attention by the speaker as it was to be the topic of debate **{CLG10006589}**

The same problem arose in another catastrophic fire the Old Tannery fire in July 2015, in which 45 properties were damaged or destroyed [99]. The minimal press report of the discussion between Brazier and Wharton about this incident refers to the *"Government's ambitious housebuilding programme"*, notes the lack of obligation on the BCB to inspect that cavity barriers are installed and noted we *"had a lucky escape with the Tannery fire last year*[100]*"*.

5.2 **Failure to investigate Fires prior to Lakanal adequately.**

5.2.1The Government's own *Investigation of Real Fires* contract let to BRE required the research expressly to *"provide timely feedback to [CLG] on the effectiveness or otherwise of the guidance in [BR ADB]…in achieving fire safety…*[101]*"*. Accordingly, complete candour in reporting was demonstrably required.

5.2.2The Government's tendency instead was to regard fires as something to be covered up or trivialised, such that the public might be *"reassured"* and so that the underling regulations would not be criticised, thereby continuing to allow industry the latitude it wanted. Had this happened only once or twice, it might be regarded as happenchance, but the consistent pattern of inadequate investigation threading from Knowsley and Garnock, through the Edge and Lakanal, goes beyond mere accident, and strongly implies Government collusion. The Inquiry will need to probe the nature of the relationship between BRE and Government. There are clear indications that BRE regarded clients as its handler to some degree: see for example in the investigation into Garnock for N Ayrshire, BRE asked itself: *"Can we say that we think they were sold a pup?*[102]*"*. This is obviously an inappropriate question for a scientist to be asking himself: if the purpose of investigation is to prevent recurrence then the truthful and scientifically correct advice must always be given. N Ayrshire had been sold a pup, in that the GRP cladding was most unlikely to have ever been Class 0[103]. It is not clear whether BRE felt constrained by Central or Local Government, or perhaps both (especially given Central Government paid for the N Ayrshire report[104]), to supress the fact that the cladding was non-compliant with BR/ADB. The report sent to the Department was entirely neutered and did not even mention Class 0[105]. It is profoundly odd that BRE would have

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[99] https://www.kentonline.co.uk/canterbury/news/fire-ravaged-homes-rebuild-controversy-40225/
[100] **{CLG00030835}**
[101] **{BRE00000936/3}**
[102] **{BRE00035380/18}**
[103] **{BRE00035381/9}**
[104] **{BRE00035379/18}** and therefore may have had control over the report **{BRE00035378/28}**
[105] **{BRE00035375}**

prepared such a report, especially given the more fulsome version given to N. Ayrshire, but equally odd that the Department did not question the nature/properties of the GRP cladding material given that the impact of the smoke plume on the GRP was said to have *"generated a self- propagating fire*[106]*"*.

5.2.3 **Knowsley and Garnock.** These fires had many similarities, primarily they were part of the HMEAs *Estates Action Programme* **"EAP"**. *"We have received via HMEA a request from [Markham] Street press office to play down the issue of the fire…*[107]*"*. The likely reason was the need to avoid the bad press then circulating *"Danger that flats could explode like a tinderbox*[108]*"*and avoid the cladding scandal which was then estimated at a likely cost of £500m[109] but has reached biblical proportions today. Both fires including the use of GRP panels (which was not Class 0 at Garnock and may not have been at Knowsley) both involved uPVC window reveals which softened and created a fire path. Even BRE appears to have conflated Class 0 with MOLC in its report on Knowsley[110], which defies belief. The report in relation to the Knowsley fire was stated to be *"Limited Circulation"*[111] and yet contained vitally important information in recording that: *"There are implications for the protection of window reveals especially where refurbishment has involved the use of cellulosic [e.g. uPVC] and polymeric materials [e.g. GRP] in close proximity"*. uPVC reveals had featured in both Knowsley and Garnock. At another EAP project, Lavendon there had been a fatal fire in 1997 involving a uPVC soffit and fascia at the eaves, the report stating that *"…if the soffit and fascia…is a thermoplastic such as PVCu, fire can penetrate the new over roof …and significant…risk to life can occur"*[112]. Why, therefore, was the Knowsley report not more widely circulated? Especially given the Select Committee's criticism of the Department's decision not to revise the guidance to prohibit uPVC usage in areas where they could melt or be destroyed by fire (e.g. window reveals)[113].

5.2.4 **The Edge.** As explained above this fire involved sandwich panels and was apparently the trigger for the introduction of the word *"filler"* into ADB 2006. One of the salient

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[106] **{BRE00035375/7}**
[107] **{INQ00014755}**
[108] **{BRE00035378/32}**
[109] **{BRE00035378/31}**
[110] **{BRE00035385/3}** *"Under DOE/BRE guidance at the time [CBs] could be omitted where the cladding system was non-combustible"* despite recording that the cladding was *"a Class 0 GRP rainscreen"*
[111] **{BRE00035385/1}**
[112] **{BRE00000971/42-44}**
[113] Paras 5.1 & 5.2 **{CLG00019484/10-11}**

features of the fire was that it involved downward flame spread. This made it particularly important to understand whether or not the cladding panels achieved Class 0 or not, and yet Prof Bisby is unable to find any reference to Class 0 in the reporting on this fire[114]. Although the Greater Manchester FRS requested and obtained a copy of BRE's Report regarding the Edge, again this was a fire which merited a widespread understanding of it, not least if, as one of the joint investigators of the fire would later remark to Brian Martin, the Edge Fire "*signalled the End of 'rainscreen cladding'*[115]". It did not; but should have ended the use of highly combustible cladding. Whether Government admitted it or not, these fires would have informed Brian Martin, given his background at BRE of the fact of widespread (and dangerous) non-compliance with ADB.

6. Government's response to Lakanal.

6.1**Not a priority for Government.** It is clear that Government did not prioritise the response to Lakanal, and in fact responding to it conflicted with the true priority of the Coalition Government which was its radical house building agenda. Government communicated this prioritisation to Ministers in part by virtue of responsibility for fire not resting with the more important department, namely the Home Office, until January 2016, relevant ministers being Liberal Democrats, the junior partner in the Coalition and by directly giving Ministers the impression housing was the dominant agenda[116]. Worse still, Government's own investigation into the fire was a complete whitewash: see below.

6.2**Whitewashing.** Sir Ken Knight's (Chief Fire and Rescue Adviser) public report to the Secretary of State which was intended to reveal lessons learned did not achieve that outcome. The published report made clear what the scope of his remit had included namely the way in which BR applied to Lakanal in addition to RRO, advice given to residents and firefighting operations[117]. The full-length report remained restricted due to a disclosure agreement with the police to avoid prejudicing their investigation[118] .The full-length version of this report differs materially in content in relation to the façade's performance, initially suggesting the

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[114] Bisby Phase 2 Report The path to Grenfell para 898 **{LBYP20000001/164}**
[115] Sam Greenwood to BM/Burd 5.12.12 **{CLG00019192}**
[116]Barwell received a call from the PM on the day Barwell became Minister of State for Housing giving him a *"clear steer"* that the *"key priority was addressing the housing supply crisis"* [1/13] **{CLG00030960/4}** & [2/18]**{CLG00034283/7}**
[117] Par 3 Report 30.7.09 **{CLG10003963/7}**
[118] See Knight's letter to Coroner 15.2.10 **{HOM00000741}** but attaching full report in addition to publicly available one **{HOM00001091}**

method of external fire spread was not unusual[119] but conceding development and spread was unusual[120]. The final report is much shortened but confines itself to stating fire spread was unusual[121]. LFB subsequently[122] informed Government of the product's poor performance, as LFB gave a clear warning to Sir Ken Knight that BRE initial testing suggested some external wall panels at Lakanal did not possess the necessary rtf properties. Knight had commented in his 23.7.09 *"restricted"* report he was to meet with LFB to receive the findings from their review and would be kept appraised of *"any significant issues identified during the investigations ...for communicating lessons learned as soon as possible[123]"*. That report had been sent to all Ministers[124].What had next transpired is an extraordinary suppression of information, in that the Department shut down the inquiry prematurely on 28.7.09 without explanation, leaving it to LFPA and the police to carry out such further investigations as they wished. A grotesque abdication of responsibility[125]. It also raises the spectre of a deliberate cover up, given that Knight never sought to correct his misleading report given the information which followed namely that BRE had by 30.11.09 carried out BS476 part 7 testing to establish whether the spandrel panels were Class 0 for LFB[126] and had established that they were Class 3. Testing under part 6 was not possible by reason of the volatility of the material, and concerns that *"the ferocity with which the material burns could lead to damage of the BS476-6 apparatus[127]"*. Furthermore, the specification for the materials indicated they should have a *"[BR] compliant insulation core faced with powder coated aluminum on both sides"* which would have achieved Class 0[128]. This should have informed BRE of the problem of incorrect products being used (and Knight, if made aware, as he had asked to be appraised of what the panels were supposed to be to comply with BR and whether they had been correctly specified or whether a failure by the installer[129]). Despite LFEPA's desire to make the findings public for safety reasons, on the police expressing concerns about disclosure, Knight decided to raise the issue with *"FRD, Housing and BR CLG*

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[119] Bisby *Path to Grenfell* Report disagrees considering it noteworthy that spread from floor to floor occurred within 4m 30 sec **{LBYP20000001/191}** par 1061-2
[120] Paras 2.4. and 3 **{HOM0001092/25}**
[121] Par 5.3.1 **{CLG10003963}**
[122] Email thread 15.12.09 Martin/Burd/Knight and ors **{CLG10004193/3}**and Dobson letter 14.12.09 **{HOM00000628}**
[123] SKK Restricted report 23.7.09**{HOM00003417/2}** par 7
[124] Maude email to PS to all Ministers **{CLG00002707}**
[125] Martin to Crowder email 28.7.09 **{BRE00043742}**
[126] BS476 part 7 report **{HOM00000629}** sent to Knight under cover of LFB letter 14.21.09 **{HOM00000628}**
[127] **{BRE00043724}and {BRE00043272}**
[128] **{BRE00043727/2}**
[129] 15.12.09 thread **{CLG10004193/4}**

colleagues[130]*"*. It appears Martin was anyway made aware of the composition of the panels directly by BRE[131]. The upshot of Knight's internal discussions with CLG discussions was that the information would not be made public[132]. This on the spurious ground that the investigation had not yet determined whether or not the panels were specified by the LA. The Department's closing down the inquiry by standing down BRE and then making it worse by trying to reassure "*we will need to be careful to avoid giving impression that we believe all buildings of this construction is inherently unsafe*[133]*"*is a complete abdication of responsibility for public safety and reflects a desire to mislead. The Department appears to have been well aware of what it was doing, *"Do we need CLG legal advice (or at least for lawyers to be aware) particularly with regard to the Department's liabilities in relation to any disclosures made or not made?*[134]*"*.

As with previous fires, BRE's investigation in its fires of special interest report was deficient and does not reflect the investigations BRE carried out and Prof Bisby is rightly critical of the failure, despite identifying downward flame spread, to offer any analysis of how/why that had occurred, nor, critically to examine the nature of the cladding panels themselves, nor whether they complied with ADB[135]. Again, BRE appears complicit in a Government cover-up.

6.3 **Brian Martin's evidence to the Lakanal Coroner.**

Martin would later[136] make much of the confusion of the experts who gave *"confusing"* evidence as to the meaning of the ADB provisions governing the external wall, using this as an excuse to downplay to Ministers the significance of the fire. Martin's own evidence was an exercise in disingenuity, especially so given his knowledge of the performance of the HPL panels at Lakanal (see immediately above). Whilst it was technically correct that the cladding as opposed to substrate was not required to be fire resistant and was only required to be Class 0, his evidence was disingenuous because it suggested (incorrectly) that Class 0 was unlikely to spread fire[137]. At no point did he suggest that Class 0 was an inadequate metric and ought to be changed; instead suggesting that, had the cladding at Lakanal been Class 0 it would not

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[130] 15.12.09 thread **{CLG10004193/3}**
[131] Email 18.11.09 *"Lakanal House"* from Crowder asking to speak *"as soon as is convenient"* **{BRE0004376}**
[132] SKK letter to Dobson 22.12.09 **{CLG10004228}**
[133] S Dunn sub to Malik and Denham cc PS to all Ministers **{CLG00000122/2}** *"social housing issues"*
[134] Longman to Burd, Knight BM and ors 16.12.09 **{CLG10004194/2}**
[135] Bisby *Path to Grenfell* report par 1038-54 **{LBYP20000001/188}**
[136] Submission to Don Foster paras 9&10 **{CLG00000461/2}** suggest confused evidence re fire resistance periods, which was true, but BM's par 9 overlooks Class 0 Conundrum etc described above.
[137] **{INQ00014610}** *"...if [the panels] caught fire they probably weren't Class 0*" **{/51}** "…it will burn just not very much" **{/72}** Suggested non-combustible only *"slightly more stringent"* than Class 0 **{/57}**

have spread flame as it did. Given he *knew* the cladding at Lakanal was Class 3 this was in itself him being less than straightforward. Martin refused to accept that ADB required fundamental change and whilst accepting that *"ordinary building folk"* were users insisted that it was clear enough for those users[138]. That however does not appear to have been his real opinion, given he variously notes the needs for *"an idiots guide/things to look for/avoid type thing[139]"*. He now suggests[140] that ADB should remain in the realm of professionals as per Pickles' response to the coroner[141]. There is a compelling argument that building design should remain in the hands of competent professionals[142], but nevertheless the guidance available to them should be clear, and Martin's views on this at the time were contradictory, acknowledging to Ministers (contrary to his evidence to the coroner) that ADB can be difficult *"for inexperienced people to apply[143]"* and in truth he knew that ADB (consistently with Government rapid housebuilding policy[144]) was being used by inexperienced people, hence his suggestion of an *"idiots guide"*.

6.4 **Window-dressing: Government ignores the Lakanal Coroner.**

6.4.1Nothing meaningful whatsoever was done in response to the Coroner's R43 letter to the Department[145]. The R43 letter recommended: (a) the Department provide clear guidance on the definition of common parts under the RRO and the scope of the inspection required for an FRA;(b) the Department encourage providers in HRBs to consider retro-fitting sprinklers and (c) the Department review ADB to ensure it gave clear guidance on B4.

6.4.2 **Clear guidance on "*common parts*"/RRO.**

Pickles' response[146] simply brushed off the Coroner's recommendation to give guidance on what the Coroner had characterised as *"common parts"* under the RRO and FRAs, praying in aid the LGA Guide as valid Art 50 guidance on FRAs, albeit promising to review it with LGA.

(1) **LGA Guide.** There was no review of the LGA Guide. Upton had informed Ministers 13.5.13 *"we are content ..[LGA Guide] provides sound advice on FRA process"* but noted

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[138] **{INQ00014610/77-80}**
[139] **{CLG00000522}**
[140] [26] **{CLG00019469/10}**
[141] **{CLG00000522}**
[142] Bisby *Path to Grenfell* report paras 1173-1175 **{LBYP20000001/206}**
[143]**{CLG00000461/1}** par 4(a)
[144] May 2015 Dept recognised need for simplified guidance for *"... small builders (particularly SME homebuilders)"* **{CLG00019290/1}**
[145] **{HOM0004585}**
[146] **{CLG00000599}**

BSR00000096_0024

"The LGA plan to undertake a quick review, with the housing sector to ensure this guidance adequately addresses the issues the coroner has raised" It is unclear how Upton could properly advise that LGA gave sound advice in advance of any review. The 2013 review comprised only an email to LGA key stakeholders in May 2013[147]. This yielded in Upton's words *"very little response"* but, perhaps unsurprisingly, *"a very robust endorsement from the authors[148]"*. On any footing this was a wholly inadequate review and there is no suggestion that Upton or anyone else in the Department applied their minds to the adequacy of the Guidance on FRAs. On the contrary, Upton informed Sir Ken Knight that *"LGA confirmed the responses received from stakeholders indicate the sector are satisfied that guidance remains appropriate[149]"*.

(2) ***"Common parts"*** **under the RRO.**

The reason the Coroner recommended guidance on *common parts* was needed was in order to define the extent of the fire risk assessor's duty to investigate flat entrance doors etc and in response to the suggestion in the Inquest that the LGA guide was insufficiently clear[150]. The RRO does not contain a definition of *common parts*. Instead, it states the places to which it applies, but excludes domestic premises, defined as those not used in common with other occupants[151]. Accordingly, the issue only arises in construing the exclusion, rather than defining the scope of the FRA under the RRO. Despite regarding itself as having made a *"commitment to review the definition of common parts ....*[152]", no one in the Department appears to have applied their mind to the question of the scope of the obligations imposed by the RRO, and why the Department had been asked to give guidance. The correct way to approach the problem would have been to consider the objectives of the RRO, namely that a *suitable and sufficient*, (accurate and reasonably comprehensive) FRA of the risks posed by the building to its residents/visitors be produced. Instead, the Department and its lawyers, abdicating responsibility, considered the question would be for the Courts to decide, and refused to address the underlying policy question, other than to repeat what they thought the original policy intent had been. As one of the Department's lawyers rightly noted, the real question was what the RRO actually said and whether it reflected current policy[153]. By leaving the question for the Courts, the Department was overlooking its duty to address the

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147 **{CST00005484}**
148 **{HOM000467074/3}**
149 **{HOM00046074/2}** par 4
150 Day 36 p 15 line 16 to p 18 line 8 **{INQ00015066/15}**
151 Art 6 **{INQ00011327/7}** and Art 2**{/3}**
152 Upton to B Lea **{CLG00000543/2}**
153 M Stubbs (Deputy Director legal) **{HOM00048192/4-5}**

issue in circumstances where the Department was being told, by the Coroner, the FRS (Ron Dobson)[154] and RBKC[155] that the RRO was materially unclear and the Art 50 guidance with it. Instead, the Department approached the task in a literal way, insisting that the RRO was not intended to apply to the structure of a block of flats as that would require artificial delineation of a domestic premises so as to exclude the external walls[156]. This was particularly inexcusable, and unfathomable, given that in the immediate wake of the Lakanal fire, Terrie Alafat (Housing) had written to LAs concerning Lakanal and attaching Guidance on FRAs produced by LFB, which made clear the risk assessor should consider the structure between flats and common parts[157].Whilst Upton sought Ministerial consent to reply to Ron Dobson[158] and took legal advice on the letter knowing it would be shown to the Coroner[159], she does not appear to have sought Ministerial consent to the question whether or not to amend RRO, albeit she did ask within the Department whether there was a case to be made, in the context of enforcing the RRO in relation to leaseholder doors, for asking Ministers to clarify the legislation. In the context of whether to amend the RRO to exclude domestic premises altogether (as per Scotland) she noted *"Whilst I accept Ministers could be asked whether they wished to amend the FSO… this would neither be straightforward nor quick[160]"*. In fact, Ministers may have been under the impression that guidance on FRAs had been given as the LFB guidance which Alafat had attached was referred to and attached to a submission to Rose Winterton in August 2009[161]. One explanation for the lack of proper consideration of the RRO and what its objectives were, was that the Department was considering a review of it alongside ADB in 2015[162] and given the moratorium which was in place (see s4 above) there would be no ability to amend RRO so as to impose burdens in any event. Government has now, belatedly, amended RRO to include the structure of domestic flats[163]. In the Department's post Grenfell fire internal communications, the only steps recorded against the common parts against definition of common parts/scope of FRA inspection was Pickles' response to the Coroner[164]. Nothing was done.

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[154] Dobson letter 11.12.12 **{HOM00044730}**
[155] RBKC letter re leaseholder doors 4.6.13**{HOM00001442}** Upton's reply 3.7.13 **{CLG00002849}**
[156] Upton reply 6.2.13 to Dobson **{HOM00050051}** his letter at **{HOM00044730}**
[157] **{CLG00001758}** Attached guidance at **{CLG00001759}**
[158] **{CLG00000277}**
[159] **{CLG00000277}** par 7
[160] **{HOM00048192/2}**
[161] **{CLG00001754/2}** and **{CLG00001751}**
[162] Larking draft sub to B Neill **{HOM00023152}** GTI date 18.7.12
[163] Fire Safety Act 2021
[164] J Taylor email to M Dawes 15.6.17 **{CLG00008124}**

6.4.3 **Sprinklers.** The Department had no intention of pressing the retro-fitting of sprinklers, on grounds of cost as explained below, and had they been clear in encouraging industry/housing sector to provide sprinklers, the obvious question would have been asked; namely, why not legislate for it? The Department's reply to the Coroner simply attached the letter sent to LAs/private registered housing providers following Shirley Towers[165].Note that limp-wristed letter (which simply urged recipients to note the Shirley Towers recommendation to consider retro-fitting sprinklers in HRB over 30m, particularly complex designs) had itself been sent to create the impression of proactivity: *"In light of the recent verdicts on the other fatal fire at Lakanal there is considerable press and media interest, and we would want to be able to say that DCLG is taking action ...[166]"* . In fact, the Department was resolute in its intention not to encourage retro-fitting sprinklers *"we will need to have a very robust public case on not retro-fitting sprinklers"*. Brian Martin adding *"We probably do need a defensive line, if pressed"*[167]. It seems they briefly considered retro-fitting sprinklers to all social housing (which they assumed to comprise 5,000 to 10,000 HRBs) and came up *with "an order of magnitude[168]"* figure for what it might cost. Whatever the figure was, it was clearly off-putting, hence the need for the defensive line.

6.4.4 **Failure to carry out BR/ADB Review by March 2017 or at all.**

(1) Pickles made a commitment that BR/ADB would be reviewed, at latest by March 2017[169], he also recorded that research to inform that review had been commissioned. That research was a project known as *"Compartment sizes, Resistance to Fire and Fire Safety Project"* **"the BRE 7 workstreams[170]".** In fact, it seems they were not commissioned until 2013[171] albeit BRE submitted its proposal in Summer 2012[172].Although BRE reported back to Brian Martin formally at latest in February 2015, these had been reporting to him informally earlier it seems[173]not least because there was a stakeholder group for each workstream who had to be kept informed. There appears to have been an extreme lack of urgency in releasing these reports to Ministers. Publication of the reports was not even requested until December

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[165] **{CLG00000750}** it attached Shirley Towers R43 **{CLG00000662}**
[166] **{CLG00000451}**
[167] PS to Mark Prisk to B Lea **{CLG00000557/2}**
[168] Email thread Martin/Larking 1.9.09**{CLG10003986}**
[169] Dawes [3/10]**{CLG00030839/4}**interprets 2016/2017 as meaning end of financial year: 31.3.2017 latest
[170] Specification for the Project version 1 dated June 2010 **{CLG00013136}**
[171] This would be consistent with BRAC being informed (17.10.14) they had been commissioned **{CLG00019324}.** Harral [65] **{CLG00019487/19}** says commissioned in 2013. Ledsome [55] **{CLG00019465/18}** says Summer 2012 but is likely referring to the BRE July 2012 proposal (below)
[172] BRE 4.7.12 Proposal for BRE 7 workstreams **{BRE00027567}**
[173] See e.g. workstream 5 **{LABC0001614}**

2015[174]. Even then, Civil servants pressing for release in 2016 caveated it with *"I fully appreciate that this clearance process is far from being a priority"* [175]. In the end, BRE asked to publish them themselves in November 2016[176]. These reports, critically important as they are to an understanding of the flaws in ADB, were not disclosed to the public until 1.2.19 during a Government consultation on ADB. Given their content it can only be inferred that Martin did not want their contents revealed as they demonstrate the fallacies underlying various provisions of ADB.

(2) The review of BR/ADB had not been done by the time of the Grenfell fire (see 10 below). Pickles also volunteered a review of the Competent Persons scheme for Window installers, even though this had not been requested and was not causative at Lakanal. This was not in response to the Coroner at all, but rather a deregulatory measure[177] giving scheme providers the ability/obligation to write their own rules which already formed part of the *"legacy measures in the pipeline review[178]"*. In any event, as Brian Martin admits, he did not in fact follow through on requiring scheme providers to draw up a guide for use by all the schemes[179].

7. Failing those with disabilities

7.1 Inadequacy of RRO guidance as to disability and need for PEEPS

As rehearsed in Module 3, clearly the LGA Guide[180] was "outlier" guidance within the Art 50 guidance in suggesting PEEPs were not required in general needs blocks. The Department was aware of this issue shortly after the Guide was drafted as it was informed by LGA of a letter received from a consultancy (Triple A) pointing out that the LGA Guide was contrary to law in relation to PEEPs[181]. With the Department's approval (Upton/Martin[182]), Todd's office drafted a tendentious and incorrect response to the letter, suggesting that the vulnerable/disabled should simply remain within their flats and await rescue by FRS[183]. The final response sent by LGG[184] disingenuously relied on the purported benefits of stay put,

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[174] **{CLG1000140}**
[175] **{CLG00019364}**
[176] **{CLG10008702}**
[177] **{CLG00014599/1}**
[178] **{CLG00013580/2}**
[179] Martin [35] **{CLG00019469/113}**
[180] Clauses 79.9-79.11 **{HOM00045964/119}**
[181] Triple A Consult (Elspeth Grant) to Sir Merrick Cockell (Chair LGA) **{HOM00019844}**
[182] Who gave input into the draft **{CLG10004907}**
[183] **{CLG10004905}** **{CLG10004906}**
[184] **{CLG10004932}**

rather than explain the true rationale for the LGA Guide's position on PEEPs was the desire to avoid imposing disproportionate burdens on landlords[185] which was the Department's position at the time.[186] When Triple A responded[187], having now spoken to the Equality & Human Rights Commission, requesting the results of the Government's Equality Analysis **"EA"**, required to meet the PSED, LGA (Bosdet, but with Upton and Martin ultimately copied on the thread and agreeing) brushed off the request pointing out that they had *"received comments on the subject matter"* and reminding that this was *"sector led guidance not statutory and…is not a radical departure from previous guidance"*. When Triple A pointed out that it was EHRC who had suggested requesting the EA, Bosdet's response was that the Equality Act no longer required an EA, which was to overlook that best practice (which Government should always follow) was to require an EA. Triple A ended the thread observing that *" Government statistics show that 77% of all fatal fires involve disabled people, quite probably as a result of outdated 'current practice' which does not meet the requirements of Equality or Fire Safety Law British Standards or any other Government Guidance on the subject"*. This was simply dismissed by Todd saying, with Upton's agreement, that he did not propose to correspond as he did not think it would ever satisfy Triple A. Government was too dependent on and unwilling to challenge Todd, who, like Martin, had become synonymous in their minds with fire expertise and with whom Government had an unhealthily close relationship, Todd expressing himself willing to act as the Government's mouthpiece on the day of the Grenfell fire Todd's office told Upton Todd *"..just wanted to know if the [HO] needed any message sending out"*. This over-dependency on Todd and Martin appears to have resulted in Government concluding that there was no need to take advice on the legality of the PEEPs guidance in the LGA Guide even though they had, in effect, been warned by EHRC it was not lawful. Martin had a vested interest in not pointing out the inadequacy of the guidance as that would in turn highlight the inadequacy of ADB MOE for disabled guidance. Government's confidence in these two men resulted in complacency and inaction. In the context of evacuation of the vulnerable in specialised housing when drafting the CFOA guide, a fire safety expert warned by email thread (in which Martin and Upton were copied) of near misses with residents being haphazardly evacuated. The expert noted that whilst most fires occur in individual dwellings with little risk to others there was a risk to the wider occupancy with *"..the potential for a*

[185] Todd, T/168/123:13-20 and T/168/139:23-25
[186] Todd, T/168/123:25-126:16
[187] **{HOM00020571/4}**

significant loss of life and major subsequent fallout including criticism of the regulators and those that are best placed to provide guidance[188]*"* . Todd dismissed this by saying they don't happen frequently but the consequences were so serious they needed to be addressed. *"It is a simple truism that, rightly or wrongly, the public will tolerate quite significant numbers of deaths, provided each incident results in only one or two deaths. There is no tolerance for large numbers of deaths in just one single incident*[189]*"*. Government did not react to such warnings, but instead seemed to think it could hide behind *"sector-led"* guidance as a way of distancing itself, if that guidance proved wrong. Given, however, that Pickles would later proclaim the LGA guide fulfilled his Art 50 duties[190], the Government must bear the full weight of the criticism of this woeful guidance on PEEPs.

7.2 Inadequacy of guidance for MOE for disabled in ADB

7.2.1The Department was aware (Burd and Brian Martin) from July 2004 that the guidance on MOE for those with disabilities was clearly *"inadequate"*. That was Martin's view in an article he published[191] and flowed from the *Forward Look* report in the context of the ADB review[192] . This recorded that as a result of consultations *"It was clear from the comments made that guidance on this issue was inadequate and is an issue that should be addressed"*. Despite being informed at a round table meeting with CFOA and Disability Rights Commission in July 2004 that further guidance was needed as ADB *"tends to focus on non-disabled people*[193]*"*and despite suggestions that conventional lifts might be used as evacuation lifts[194], and despite a further clear warning from Andy Jack in 2005 that MOE for those with disabilities was inadequate[195], ADB was not revised in 2006 to improve the guidance.

7.2.2The Department (Martin) was well aware in 2012 that it had received *"a run of letters complaining that ADB doesn't provides(sic) for adequate [MOE] for disabled people. In particular that final exists have steps instead of ramps*[196]*"*. Martin relied on the broad ambit of 5.31 ADB which simply said final exits should allow rapid dispersal and did not require ramps[197]. Yet again, Martin defaulted to his standard position that it was for industry

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[188] **{CLG00018931/3}**
[189] **{CLG00018931/2}**
[190] Response to the Coroner **{CLG00000599}**
[191] **{CLG0001306/2}**
[192] **{CLG00007360/3}**
[193] **{CLG00018844/2}**
[194] **{CLG00007349}** discussed at BRAC **{CLG00001539}{CLG00001541}**
[195] **{CLG00018845}**
[196] Martin to May 4.1.12 *"Concerns about disabled egress"* **{CLG10005101/2}**
[197] ADB 2006 with 2007 amendments **{CEL00001243/60}**

professional bodies, not the Department, to draft guidance/explain ADB to its members. Martin ended with: *"The trick, I think, is to focus just on this simple paragraph [5.31 ADB] and not get drawn into the bigger question of MoE for disabled people*[198]*"*. Martin clearly knew that *the bigger question* was one on which ADB did not bear scrutiny. Despite a campaign on the need for express provision for ramps directed to Stunell[199], there was still no requirement for a ramp at final exit at the time of the Grenfell fire. Minor changes were made in 2013 to ensure that egress as well as access for the disabled was considered (*"assistance down (or up) stairways or the use of suitable lifts will be necessary*[200]*"*) but this is minimal guidance.

7.2.3The finally produced Work stream 7 report in February 2015 also makes clear, unsurprisingly, given the length of time the inadequate guidance had subsisted, that the majority responses were vehemently critical of the guidance for MOE for those with disabilities: *"Much more needs to be done to educate designers about the wide range of needs that arise… The world needs much more practical guidance on managing evacuation of disabled people*[201]*"*. This clear criticism sits ill with the conclusion that *"ADB is considered to be sufficient to provide minimum guidance*[202]*"*.

7.2.4 Despite these concerns being referenced in Martin's April 2015 *War Book* (brief for new minister) *"…concerns around the means of escape for disabled people and whether the requirements are sufficient/complied with*[203]*"* no further guidance or amendment to ADB was made by the time of the Grenfell fire.

8.Knowledge of flaws /ambiguity in, and abuse of BR/ADB and the Testing regime

8.1 Government officials had known for some time that BR/ADB had not kept pace with technology (see 3 above). As from July 2014, senior Government officials (Ledsome/Harral and Martin) were aware K15 had been used on "*possibly a lot"* of buildings due to an error in the BBA certificate[204]. It is not known whether they raised this fact with Ministers, but clearly, they should have done, given the widespread ramifications potentially flowing from this and its implications for the radical housing strategy. It should have alerted to them to potential a lack of clarity in the regulations, and the evidence suggests that the Department

198 **{CLG10005101/2}**
199 **{CLG10005101/1}**
200 **{CLG00000224/17}**
201 **{CLG00006270/14}**
202 **{CLG00006270/33}**
203 **{CLG00019269}**
204 **{CLG00000686}**

well knew the tendency of industry and the bodies such as NHBC to seek to exploit any potential ambiguity in regulations.[205] This is clear from Martin's email exchange with Jenkins concerning the filler debate (par 3.3 above).

8.2 **Game changer: 2015 BRE 7 Work stream reports**. As from 2015 onwards the Department has no excuse for its failure to immediately recognise and respond to the urgent need to revise BR/ADB given the range of inadequacies identified by the reports, particularly the fact of significantly increased fire loads imposed by modern materials meaning the fire resistance periods for external walls[206] (not cladding) should be at least double what they were. The implications of this are obvious. Similarly, Workstream 7 exposed the flaws in the MOE for the disabled, although those had long been apparent see S7 above. The extraordinary delay in publishing those reports to Ministers, and in not releasing them until February 2019[207] mid consultation on ADB gives rise to the obvious inference which the Inquiry is invited to draw, namely that the Department was, by 2015 at latest, well aware that the guidance for the external walls in ADB was a disaster waiting to happen.

9. Attitude towards Sprinklers

9.1The Department had been aware from November 2001 that sprinklers constituted *"the most effective and accessible control method"* for external fires in that they reduced *"..the gas temperature to levels that are not threatening to the non-fire resisting façade"*[208].Similarly by report to Burd in March 2002 *"The optimum response ...is sprinkler protection , to limit the probability of a large fire and to limit its spread[209]"*, i.e. its spread to the façade. This knowledge makes it inexplicable that sprinklers were not introduced above 30m in newbuilds until ADB 2006 which came into force 1.4.07. Martin also must have been aware of this given his role at BRE from 1999 onwards, and yet, even in the wake of the Lakanal fire, the Department vehemently opposed Lord Harrison's Bill seeking to introduce sprinklers[210]. Most recently, BRE's report for NHBC in 2010 report had attributed the reduced number of fires to sprinklers[211]. There could be no doubt as to the effectiveness of

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[205] Thread 16.7.15 Guy Bampton BM and ors. **{CLG10007267}** commenting on NHBC Standards Com *Key projects in the pipeline* **{CLG10007268}**

[206] Workstream 1 Report *Periods of fire resistance* **{CLG00006277/9}**

[207] https://www.gov.uk/government/publications/compartment-size-resistance-to-fire-and-fire-safety-research

[208] Nov 2001 BRE *External Fire Spread via Windows* **{BRE000429092/22}**4th bullet

[209] March 2002 BRE *External Fire Spread via Windows* **{BRE00002376/41}**

[210] **{CLG00000297}**

[211] *Fire Performance of highly insulated residential buildings and modern methods of construction a literature review* **{NHB00000448}**

sprinklers as Brandon Lewis said in February 2013: *"Let me go on record again: sprinklers work – and we know it*[212]*"*.

9.2 **Ignoring the growing body of evidence**

9.2.1Even though in 2012 Government had received the Callow Mount Project Retrofit project (itself triggered by the Lakanal fire[213]) which indicated average costs to retrofit in social housing of just £1,148.63 per flat[214] this would not be taken seriously until a few days after the Grenfell fire[215] . Martin's position was that even if retrofit was a more viable option than previously thought, it was still simply a matter for the RP to address[216]. The Callow Mount project was firmly reinforced by BRE's report for CFOA in March 2012, the expressed purpose of which was to update the 2004 BRE Cost Benefit Analysis[217] which had concluded sprinklers were not generally cost efficient. The 2012 report for CFOA concluded sprinklers were cost effective for most PBBF and traditional HMOs including at least 6 bedsits[218]. Martin does not appear to have sought to investigate this proposition at the time until his belated email of 13.3.15 asking for support to review the question of sprinklers[219]. This was immediately followed by Martin's *"Worry list"* April 2015, which raised the issue of sprinklers[220]: '*what happens if we don't act?'*. The risk was described as '*increasingly difficult to defend current position without better evidence*'. The evidence should have been sought long ago. Furthermore, by 23.12.14, Martin already knew the opinion of BRE's Workstream report 5 (restricted to stakeholders) which concluded *"Blocks of flats"* would *"be expected to experience a net cost benefit from the installation of sprinklers for much less than 10 storeys (30m) in height*[221]*"*. In the final version of this report included a caveat *"The uncertainties in sprinkler effectiveness for the reduction in death and injuries were generally very large. However, the sensitivity analysis showed the [CBA] results were not greatly influenced by the effectiveness in reducing deaths and injuries. Most of the benefit from sprinkler protection arose from property protection*[222]*"*. The Inquiry will wish to explore how those words came to be included.

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[212] **{CLG00018700}** speech or sprinkler week **{CLG00018701/3}**
[213] Email 1.3.12 **{CLG00000155}**
[214] *The Callow Mount Sprinkler retrofit project* **{CAB00001169/29}**
[215] Thread 17.6.17 Elliott Cohen/Ledsome/O'connor and ors. **{CLG00005239}**
[216] Email 1.3.12 **{CLG00000155}**
[217] *Cost Benefit Analysis of residential sprinklers final report* 1.3.12 **{HOM00000005/3}**
[218] *Cost Benefit Analysis of residential sprinklers final report* 1.3.12 **{HOM00000005/60}**
[219] **{CLG00000753/1}**
[220] *Worry list* at **{CLG00019271}**
[221] **{LABC0001614/14}**
[222] **{CLG00006275/4}**

9.2.2 The April 2015 war book produced for new ministers (see 10.4.2 below) recorded: *"previous administrations have decided the costs and benefits associated with life safety measures …should determine what is required- hence sprinklers are limited to tall blocks of flats and large warehouses*[223]*"* thereby suggesting knowledge that sprinklers were undoubtedly beneficial. The war book went on to describe the issue as *"contentious"* due to sprinklers being not cost-effective, but this was already out of date information given developments since 2012 and the December 2014 BRE workstream 5 report referred to above.

10. <u>Failure to review BR/ADB from 2006 to 2017.</u>

10.1 Albeit there had been a review in 2006 which introduced the requirement for sprinklers in new build HRBs over 30m and introduced the word *"filler"* into ADB cl 12.7 (which did nothing to resolve the Class 0 Conundrum see 3.2 above) there were no other material amendments to ADB from 2006 to the time of the Grenfell fire. The deregulatory agenda was led by the Department which prided itself on being *"a deregulating department"* which resulted in BR being regarded as a field to be harvested for deregulatory gain. Consultations on BR in 2008, 2010 and 2012 were simply aimed at *"identifying opportunities to deregulate*[224]*"*. The language was that of unbridled de-regulatory ambition: *"What else could we scrap or amend?"*. In its May 2012 briefing pack for the Star Chamber the Department noted under the heading *"What have we done to deregulate so far…..we have just consulted on a largely deregulatory package : including the potential to scrap or simplify Part P -Reducing the burdens of Part B (Fire safety)*[225]*"*.

10.2 **A semblance of change: 2010-2013 Review.**

As Ledsome says[226], the purpose of this review was to identify *"quick wins for deregulation, and system improvement"* such as, for example the extension of the Competent Persons scheme. In any event, any review in this period was hamstrung by the moratorium imposed by the March 2011 Budget[227] until 1.4.13. This despite BRAC noting that *"current definitions in relation to class 0 were very difficult to understand and suggested additional information should be provided*[228]*"*.

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[223] **{CLG00019269}**
[224] **{HOM00002080/3}**
[225] **{HOM00002080/4}**
[226] [34] **{CLG00019465/10}**
[227] **{INQ00014625/6}**
[228] **{CLG10005408/1}**

10.3 **July 2014** "***Optional Building Regulations: a radical approach".***

As part of the Big Society impetus, to involve self-builders, communities and neighbourhoods to become more involved in supporting and undertaking new housing development in their areas a proposal was made for a 50 page document which would replace the ADs and be a safe harbour[229]. This appeared to have been motivated by a meeting between the Ministers Williams, Boles and Letwin (one of the architects of the deregulatory ambition) with encouragement from Number 10, and following Williams' speech to LABC in March 2014 for which Ledsome had suggested: *"the story- for relevant media-is around "optional [BR]" "a radical approach to [BR]"*. This was Government signalling to industry a brave new world in which BR were optional. It did not in fact transpire; but was clearly Government's aspiration, and had been the subject of preparation by Government over a period. In March 2013, Government had introduced through the Deregulation Bill, amendments to the Building Act 1984 to enable BR to set *"optional requirements"* which would be set at a level above the basic minima in BR 2010 and be applied by a planning authority as a planning condition[230].

10.4 **Brian Martin's *"Worry list"* and the proposal for a *Discussion Document.***

10.4.1 It is likely no coincidence that in April 2015, just after the BRE 7 Workstream reports had become available to the Department in February 2015, Martin was asked by Richard Harral to produce a *"worry list"*. Harral had already been becoming concerned in September 2014, that: *"ramping up work on the review of parts B and E is becoming pressing[231]"*. Strangely, Martin's worry list only features sprinklers and timber framed buildings /materials of modern construction[232], whereas cladding does not feature expressly in the list. Martin claims that he thought this had been covered by TGN 18[233]. It seems unlikely Martin could have taken great comfort from this note, given his concerns as to desktops (see above) which were introduced by TGN 18 in addition to the option 1 of using both MOLC insulation and cladding panels.

10.4.2 ***Discussion Document Doomed.*** The genesis of the Discussion Document was a brief to new ministers described by Martin[234] as a *"war book[235]"*which would have been necessary due to the pending election. The war book recorded that the Lakanal Coroner had only

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[229] **{CLG10006430}**
[230] **{INQ00014590/5}**
[231] **{CLG10006472}**
[232] **{CLG00019270}** list at **{CLG00019271}**
[233] Martin [132] **{CLG00019469/47}**
[234] [47] **{CLG00019469/16}**
[235] **{CLG00019465/21}**

recommended the guidance be *"simplified"* and mentioned *"There is ongoing (albeit unfocused) concern about the impacts of* ***modern construction methods and materials***[236]". This was of course a colossal understatement of the parlous state of ADB guidance on external walls. That guidance did not change despite a meeting in May between senior civil servants- Harral, Peter Scholfield and Sally Randall, a note of which was shared with Martin[237] at which it was noted that *"[ADs] need review- some guidance good, other guidance impenetrable…the regulations are complex and difficult to interpret"*. The reasons the simplifying deregulatory agenda would eventually win the day are clear from this note. Government regarded itself as at the mercy of industry (on whom Government depended for their housebuilding agenda) *"…despite high level concerns about regulations when push comes to shove on the ground there appears to be little appetite for change and transitional costs may be high.."* and *"…The risk is industry push back if they feel they have not been fully involved*[238]*"*. Ledsome's submission to Wharton at the end of May 2015 provided an unambitious *Forward Look* between June and October, which did at least include: "*Publication of discussion document on technical changes to fire safety provisions in [BR] (particularly changes needed to follow up previous Government commitments to the Coroner after…Lakanal...)*[239]*"*. The Discussion Document could never be meaningful unless it had been informed by the BRE 7 Workstreams (recently made available to the Department) which had of course been commissioned in the wake of Lakanal in order support review of ADB.

10.5 **The art of the possible: Part B review is converted to a *Productivity Review*.**

Despite the focus in late June having been the review of part B with a discussion document being prepared prior to formal public consultation[240], Ledsome then asked Harral to instead incorporate part B review into the wider context of a general BR review[241]. It seems that following the Government's Productivity Review in July 2015 (see s4 above) of which obviously officials had prior knowledge, all that was possible *"given the Government's over-arching deregulatory agenda*[242]*"* was simplification or *"more radical change"* comprising *"moving away from [use of ADs] entirely and rely instead on the functional requirements,*

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[236] **{CLG00019269}**
[237] **{CLG00019290}** and Martin [48] **{CLG00019469/16}**
[238] **{CLG00019290/4}**
[239] Sub at **{CLG00019275}** *Forward Look* at **{CLG00019276}**
[240] Martin sub 30.6.15 {CLG00019283}
[241] **{CLG00019284} {CLG00019285}**
[242] Harral's email 3.6.15 re the ADs **{CLG10007043}**

leaving it to industry and [BCBs] to agree what is reasonable?[243]*"*. This proposal came despite Ledsome being aware of the Department's notes for the Star Chamber back in 2012 which indicated there was no appetite for greater reliance on insurance (rather than regulation) which was unlikely to deliver the required performance outcomes[244].

10.6 **Despite acknowledging urgent need for change, deregulatory agenda takes precedence**

By mid September 2015, Harral's submission to Wharton[245] was superficial, despite noting *"...whilst the scope and requirements of the [ADs] may be broadly correct, the documents themselves are in urgent need of comprehensive review to address problems created by many decades [of] iterative change*[246]*"*. The submission proposed only simplification, reduction and consistency. The outcomes of the review were depressingly and predictably narrow: *"reduced cost of regulation to industry -...aligned with most effective industry practice – increased productivity in the construction industry*[247]*"*. The definition of the *technical review process*[248] was also predominantly deregulatory, namely what could be removed/clarified: *"Are the requirements working well in practice – are they causing any problems for industry?"*. The single technical requirement was *"Are the existing technical requirements for fit for purpose in meeting the functional requirements?"*. That had already been answered in the negative by the introduction quoted above recording the need for *urgent comprehensive review to address problems created by many decades [of] iterative change*. The submission also proposed options for changes to the BC system[249], which system could only ever be as effective as the underlying BR/ADB (used as a benchmark for compliance). All this was to be encapsulated into the Discussion Document[250]. The timetable, which revealed the true (and superficial) colours of what was being proposed, should have triggered alarm bells with those reading it: *"**Phase 1 Simplification- October 2015 to October 2017**... **Phase 2 Larger Scale deregulation- October 2015 to October 2019** Part B – technical review...*[251]*"*. This meant the Part B review would not be finished until over a decade after the Lakanal fire which had triggered it.

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[243] Harral's Paper attached to the above re ADs **{CLG10007044}**
[244] **{HOM00002080/8}**
[245] Harral submission 15.9.15 **{CLG00019302}**
[246] Annex B **{CLG00019304/1}**
[247] Annex B **{CLG00019304/4}**
[248] Annex B **{CLG00019304/5}**
[249] Annex A **{CLG00019303}**
[250] Harral submission 15.9.15 **{CLG00019302/1}** par 3
[251] Annex B **{CLG00019304/7}**

10.7 **October 2016**: **Civil servants resort to subterfuge to progress ADB review.**

The Inquiry will wish to examine carefully with relevant witnesses the circumstances in which the Deputy Director with responsibility for BR agreed with the Director of FRD and agreed that in order to progress the ADB review, one Minister, Brandon Lewis should write to another, Barwell[252], mentioning the Discussion Document, which at this time had yet to materialise. The letter in reply[253] was not, as normally would have been the case, drafted by Brian Martin, and it may therefore be that someone was trying to circumvent him, for reasons which are obvious, since he was clearly an unwilling party to reviewing the BR admitting to being *"stale"* (see par 2.6 above).

10.8 **Pointless exercises**

10.8.1 **The purely Deregulatory Discussion Paper**

As the March 2017 draft recorded in its introductory paragraphs: *"it does not include any firm proposals[254]"*. The Part B proposals were exclusively deregulatory, and insofar as positive change in relation to specialised housing was considered, the suggestion was it could be informed by other industry guidance being produced.

10.8.2 **The Useability Study.**

Published in February 2017, having been commissioned in August 2015 with findings received in April 2016[255], this had been a slow process with precious little value given the self-evident conclusions it reached: *"The AD's are highly valued but need to change... There is a debate about prescriptive and non-prescriptive guidance .... The purpose of the ADs is to provide guidance for compliance with the [BR] so that buildings are safe..."[256]"*. The document went on to recommend: *"more prescriptive guidance ...that minimises the need for interpretation[257]"*. Rather than consulting users about the ADs in general terms, it would have been of infinitely greater value to have published the 2015 BRE 7 workstreams and sought the then informed views of users on the technical aspects called into question by the workstreams.

10.9 **Deflecting the APPFSRG.**

10.9.1 This group had been pressing the Department for a review of ADB since 2010 and had received the same lack of positive response from three successive ministers[258]. Following

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[252] **{CLG00019831}**
[253] **{CLG10008739}**
[254] **{CLG00019391/5}** par 3
[255] Harral [110]
[256] **{CLG00019422/11}**
[257] **{CLG00019422/12}**
[258] Referred to in letter Sir David Amess to Barwell 18.4.17 **{CLG000119436/2}**

Lakanal, the group questioned by letter 1.5.14 the wisdom of deferring the revision of BR until 2016/17, bearing in mind the outcome of the Lakanal Inquest and Martin's evidence that the composite spandrel panels were not required to have any fire resistance[259] .They would continue to agitate for the revision of BR/ADB right up until mid April 2017[260]. The group also expressed surprise that BRAC had not been made aware of the BRE 7 workstream reports in March 2015[261], but was brushed off by tendentious letter which avoids the question of why the reports had not been given to BRAC. The letter appears to have been drafted by Martin[262].

10.9.2 As late as March 2016, Martin was emailing his superiors Harral and Ledsome, making light of the group's prolonged frustration: *"Essentially they want to see a review of AD B and aren't very happy about how long they are having to wait. We had a similar run of increasingly tetchy correspondence from Sir David with Stephen Williams[263]"*. Martin went on to explain the *"line"* he had used to APPG namely to fob them off by saying the Department was not yet in a position to say when the BR would be reviewed, and it was best to review them in the round. Neither the fact of this prolonged correspondence nor Martin's inappropriate tone prompted a reaction from Harral or Ledsome. Ridley after the fire characterised the Department's correspondence with APPG as *"appalling delayed, partial - and looks chaotic[264]"*.

11.Wider Industry collusion in BR ambiguity.

11.1 NHBC was aware of the unsuitability of K15 and RS5000 but out of a desire to protect itself, having accepted K15 over a prolonged period, sought to find a way of justifying their continued use which had the dual-purpose of retrospectively validating NHBC's historic acceptance of the product and ensuring their customers did not "*take business away*" in favour of competing BCBs and warranty providers.[265] Similar motivations applied in respect of RS5000 (which entered the market *after* K15's unsuitability came to NHBC's attention) in

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[259] David Amess to Williams **{CLG00019248/1}**
[260] Letter Amess to Barwell 18.4.17 **{CLG00019436}**
[261] Amess to Williams 5.3.15 **{CLG00000753}**
[262] Williams reply 12.3.15 **{CLG00000755}** Martin [174 m] **{CLG00019469/60}** & **{65}**
[263] Email Martin to Harral/Ledsome 16.3.16 **{CLG10008060}**
[264] **{CLG00030840/7}**
[265] See Evans' July 2015 presentation which identified that "*Reputational damage is the **main risk**"* (emphasis added) to NHBC which it defined as "*Some builders will see us as unreasonable and take business away"* **{NHB00001167/16}**. Indeed, one of the primary drivers for NHBC strategy of getting BCA to adopt its guidance was that by changing its stance on K15, NHBC was concerned about being "*seen as awkward/obstructive if another BCB is willing to accept it"* and *"other BCBs are not applying the* [correct] *criteria"* **{NHB00000597/6}.**

that, whilst NHBC did not have a problem with historic acceptance of RS5000, they would struggle to justify legitimising the use of K15 whilst simultaneously preventing the use of RS5000 in light of their similarity and the growing popularity of RS5000 as an alternative to K15; in the end therefore RS5000 was accepted on equal terms.[266]. NHBC, despite becoming concerned about the use of K15 in late 2013 when it became aware of the misleading BBA certificate for K15 which suggested K15 was a MOLC, nevertheless went on, possibly encouraged by KS[267] to produce BCA TGN 18 which provided 3 routes to compliance the last being *"desktops*[268]*"*. This was simply a circumvention of BR/ADB. NHBC was advised in terms by Arup in October/November 2014 that in Arup's view ADB was *not sufficiently robust* and Arup was "*deeply concerned about the use of combustible components within external wall constructions of [HRB]*[269]*"* and that the "*use of highly combustible materials in residential buildings is now simply an accident waiting to happen*[270]*"*. Nevertheless, in May/June 2015 BCA TGN was revised to include yet another circumvention of BR/ADB, namely the fire engineering solution. This route had also been included in ADB but was aimed at complex buildings not residential buildings[271]. NHBC asserts it held higher standards than other BC providers and had an elaborate system of checking compliance (2015 Project Review), but in fact this was predominantly a way of transferring potential liability from itself to others, initially KS and latterly fire engineers. In any event, in the course of the Review it became apparent to NHBC that no testing had been done on sheet aluminium still less ACP and it characterised aluminium sheet, ACP, HPL and *"any finish achieving a B or C rating when tested to BS EN 13501"* as *"high risk cladding build ups"*[272]. Diagram 40 ADB permitted use of a B rating on buildings over 18m. Nevertheless, and despite its knowledge (as from Nov 2014) that the regulations were insufficiently robust, it did not raise these concerns forcefully with Govt or contractors, instead pursuing its best commercial interest. Particularly shocking then, is Evans' public sanction in January 2016 of the use of ACM PE above 18 m as complying with ADB[273], seemingly without questioning the risks

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[266] Dissimilarly to K15, the NHBC had initially taken a strict approach to demonstrating compliance with RS5000 e.g. **{NHB00000828}**, such that the 2016 Note was complete volte-face.
[267] Email I. Meredith to P. Clark and S. Howard/D.Smith *"we are slowly educating the NHBC and worked with them and the BCA to produce BCA [TGN18].."* **{BRE00004073}**, albeit this may relate to the 2015 revision of the document which KS certainly influenced: Item 3 of **{NHB00000977}**
[268] **{NHB00000760}**
[269] Note of meeting 25.11.14 **{NHB00000829}**
[270] Dr Lane email to Steve Evans dated 30.10.14 **{NHB00000811/3}**
[271] ADB 2, General Introduction para 0.30 **{CLG1003130/14}**
[272] **{NHB00003026/5}**
[273] His answer transcribed from video by Epiq **{INQ00014949/13}**; also transcribed in Bisby *Path to Grenfell* report par 1469 **{LBYP20000001/241}**

that its use would pose. He later resiled from this position when pressed on it over email, explicitly accepting that Class B is not MOLC and as such "*it isn't possible to accept the installation of any ACM product on the basis of the recommendations of AD B*".[274] He also accepted that whilst in theory the BS8414/BR135 route offered an alternate means of compliance, the NHBC was not aware of any BS8414 tests using an ACM panel; this led him to the conclusion that the way to establish compliance of an ACM panel was compliance with BCA TGN 18, by which he presumably meant either a desktop study or a fire engineered approach – however this should not have been possible in the absence of *any* test data on ACM systems.

***"Acceptability of Common Wall Constructions"* July 2016 ("2016 Note")**.[275] This represents the nadir of NHBC's capitulation to/collaboration with industry: the inexplicable sanctioning of the use of ACM PE together with PIR/PUR foam insulations without the need to provide a desktop study under Option 3 of BCA TGN 18, which had been NHBC's policy since February 2015, was again part of the NHBC drive to legitimise its past failures and retain business. The 2016 Note approved the use of *any* ACM panel in the pre-approved build up provided it was a minimum of Class B (even ACM PE, provided it had a Class B certification)[276]. The alleged basis of this acceptance was said to be "*the significant…range of BS8414 tests and subsequent desktop assessments of different combinations of combustible insulation and claddings…* "[277] presented to the NHBC. However, there is no evidence that anyone at NHBC (or externally) actually conducted any form of detailed assessment or analysis of the desktop studies it had received in order to draw the conclusion that this pre-approved build-up was safe. Indeed, it is only in response to Rule 9 requests from the Inquiry that NHBC has even produced a *list* of the desktop studies it had received at this time.[278] As such the substantive basis for this note, if there is one, is highly spurious, particularly in light of NHBC's knowledge of the dangers of ACM and its acknowledgement that it had seen literally *no* BS8414 test evidence for any kind of ACM.

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[274] Evan's email to Jenkins dated 29.1.16 **{BLM00000211/2-3}**

[275] **{NHB00002744}**

[276] Under "*Restrictions on use*" in Appendix 3 of the 2016 Note: "*The use of polythene or polythene/mineral cored aluminium composite panels which do not achieve a minimum Class B combustibility classification fall outside the scope of this guidance note. Such products are unsuitable for use in high rise situations*" **{NHB00002744/4}**; this implies that a Class B ACM PE panel *would* be acceptable. As such, the Reynobond PE 55 used on GT which whilst not actually Class B, did have a BBA certificate stating that it was, would have been permissible under the 2016 Note.

[277] **{NHB00002744/1}**

[278] Evans' Witness Statement at [262] **{NHB00003020}**

Worse still, NHBC had reason to suspect that Kingspan had carried out and *failed* a BS8414 test using ACM yet this did nothing to dissuade it.[279]

11.2 BRE. BRE witnesses seek to portray the organisation as merely a "*testing and approval body*" and as such, suggest that when asked for advice on the interpretation of Building Regulations concerning the suitability of materials above 18m the BRE "*would have explained that interpretation could only be provided by MHCLG and Building Control*".[280] This is not only factually inaccurate, since there are innumerable examples of BRE providing advice on BR/ADB interpretation, but is contrary to the perception of the BRE in the industry as a fire authority and a bastion of fire safety in the UK; a perception built on the back of its close historic ties to government and authorship of certain key authoritative documents such as BR 135. Far from distancing itself from this public perception, the BRE jealously guarded it for commercial gain. Debbie Smith regarded CWCT moves to establish a working group on fire and facades as "*very dangerous*" and called for a strategy "*to ensure that we don't end up handing the fire safety mantle to CWCT (a competitor)*" as "*we don't want everyone going to CWCT with their fire issues in the future*".[281] Since BRE willingly adopted the "*fire safety mantel*", it had a responsibility to guide the industry and vocally challenge fire safety issues. In reality, the BRE was weak and overly driven by its own commercial interests[282] and those of its clients;[283] it repeatedly failed to take action when it could and should have. An early example is Colwell's knowledge that the BBA were to approve a PE cored ACM (Reynobond 55) over 18m on the basis that it was Class 0 alone; she did nothing to correct this misunderstanding.[284] Perhaps one of its most significant failures however was its inaction over the "*filler*" debate; the BRE was aware for some time of the competing interpretations of ADB and received warning in 2008 of "*serious concerns about the fire safety surrounding*

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[279] KS had promised to test ACM but had never shared any test results with NHBC {**NHB00001033/2**} along with his suspicion that KS had not disclosed failed tests to NHBC? (See [201] and {**NHB00000810**}) - was the obvious conclusion not that KS had carried out ACM test(s), and failed them?

[280] Paragraph [728] of S.Colwell W/S {**BRE00047571/107**}

[281] {**BRE00047459**}

[282] Internal emails noting that Kingspan testing in 2006/07 amounted to around £200,000 and £16,000 per month which "*makes all the difference*" {**BRE00004863**}.

[283] BRE overly concerned to protect "confidentiality" of clients resulting in failures to correct misrepresentations by those same clients e.g. Arup requested Classification Report for K15 2005 test (which did not exist) and BRE response was "*You would need to speak directly with Kingspan regarding the classification document. We can't really comment on what we have supplied to a client as part of a contract*" which wrongly implied that such a document did exist {**BRE00003490**}; see also {**BRE00047409**} where client confidentiality was used to avoid a question about an absence of BS 8414 tests on ACM, when BRE could simply have said there had been no successful BS 8414 tests using ACM to its knowledge.

[284] {**BRE00047592**}

certain types of composite panels" and the fact that "*current standards and regulations need to be reviewed to ensure people's lives are not put at risk unnecessarily"* due to "*loopholes"*.[285] It wasn't until November 2013 that BRE recommended to BRE that the term *"filler"* be defined and Brian Martin's response revealed his lack of understanding, suggesting that a "*homogenous Class B board would be fine"*; whilst BRE did suggest to Martin that save for non-substantial surface coatings the system should be MOLC, this did nothing to clarify the filler debate.[286] BRE involvement in CWCT meetings in 2014 informed them that there was still "*great confusion"* and a need for clarity,[287] and whilst the BRE ostensibly continued to carry the fire safety mantel by agreeing to develop an "FAQ" document with DCLG, this never materialised and it appears that the BRE were placated by DCLG who informed them that the issue would be considered in the next review of ADB.[288] BRE was aware in 2016 that the debate continued and mass confusion remained, it having been a controversial topic at a conference which it hosted in January 2016, however by this stage it seems that BRE had given up. When Jenkins' post-conference query on the topic was referred to Colwell, she simply referred him on to Brian Martin, prompting Euroclad to describe the BRE as a "*buck passing load of incompetents"*.[289] If BRE had not already realised, Martin's responses to Jenkins made it absolutely clear that Martin had not taken its advice seriously and did not intend to clarify the regulations since he was "*not sure the text is all that ambiguous"*,[290] yet it seems the BRE did nothing to push back. Clearly, the BRE's reputation as a bastion of fire safety in the industry, if it still exists, it is one that it entirely failed to live up to and does not deserve.

11.3 LABC

Although LABC Type Approval certification later named "*Registered Details*" **("RD")**[291], appears to have emerged from an early system of optional co-operation between local authorities[292] by 2009 it was a self-proclaimed *"customer-orientated service"*[293] marketed to the construction industry as *"a fast track route through the Building Regulations process."*[294]

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[285] Political Intelligence email to PFPF 14.2.08 forwarded to BRE **{BRE00004940/3}.**
[286] See email chain ending 3.12.13 **{BRE00047587}.**
[287] See **{BLM00000820/4}** and **{BRE00016100/2-3}**
[288] S.Colwell W/S at [134] and [564] **{BRE00047571}**
[289] Phil Cook email dated 16.2.16 and preceding emails **{BLM00000153}**
[290] **{BLM00000847/3}**
[291] Barry Turner w/s par 45 **{LABC0011202/14}**.
[292] Barry Turner w/s par 24-26 **{LABC0011202/14}**.
[293] LABC Type Approval Manual **{LABC0018748/17}**.
[294] Li email to Roodurmun 14.7.15 **{LABC0003024/1}**.

LABC's original certification of K15 as part of a generic but undefined *"system"* was a critical element of Kingspan's strategy to mislead in respect of the use of K15 over 18m, later copied by Celotex[295], which LABC willingly provided despite recognising it as patently inapposite for what was in reality a singular product.[296] Far from approaching the certification process with the independence and integrity one might hope would be forthcoming from a collective of BCBs, LABC instead shows itself to have been a willing pawn in the industry's manipulation of the BR, hopelessly in thrall to Kingspan and latterly Celotex.

11.3.1 **Failure to correct erroneous claim that K15 was MOLC.** LABC's System Type Approval certificate for K15 of 1.5.09[297] stated that K15 had been assessed in accordance with Part B[298] and confirmed generically that it *"has been found to be capable of complying with the current Building Regulations."*[299] The corresponding analysis document[300] on which the certificate was based erroneously referred to K15 as an MOLC[301] which was seized upon and repeated by Kingspan in its marketing literature.[302] When this clear error was brought to LABC's attention twice in the following months[303] it simply did not engage and replied only when threatened with a formal complaint.[304] LABC's eventual response was opaque[305] and inexplicably obstructive *"I must for the record state that my earlier message neither accepted nor denied the statements publicised by Kingspan"*[306] Such an approach to an issue that had been identified as one of *"serious concern"*[307] and *"extremely important with respect to both life safety and property protection"*[308] is inexcusable. Yet further, LABC took no steps to withdraw or clarify the LABC System Approval certificate, which remained in force until the end of its three year period of validity on 30.4.12.[309] LABC now emphasises that when the K15 certificate was next issued on 28.8.13[310] the statement on MOLC did not appear as part of the

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[295] LABC internal email thread 22.11.13 **{LABC0005302}**.
[296] Jones email to Harrison 14.1.09 **{LABC0002281/1}**; Jones email to Pack 26.1.09 **{KIN00024989}**; LABC peer review email thread 3.3.09 *"I have no particular issue with this other than why is an insulation board a system?"* **{LABC0008171/2}**.
[297] LABC System Approval Certificate No 452-7-7194 for K15 1.5.09 **{LABC0004651}**.
[298] Section 3 **{LABC0004651}**.
[299] Section 4 **{LABC0004651}**.
[300] **{LABC0001806}**.
[301] **{LABC0001806/2}** and **{LABC0001806/3}**.
[302] **{KIN00008748/2}**.
[303] Rockwool letters to Barry Turner of September 2009 **{LABC0000924}** and October 2009 **{LABC0000853}**.
[304] Rockwool email to LABC of 1.2.10**{LABC0010318/2}**.
[305] Barry Turner email to Rockwool of 23.2.10 *"... the Local Authority that carried out the assessment for compliance with the Building Regulations were satisfied that it met the relevant criteria"* **{LABC0019620/1}**.
[306] Barry Turner email to Rockwool of 5.3.10 **{LABC0019626/1}**.
[307] Rockwool letter to Barry Turner of September 2009 **{LABC0000924/1}**.
[308] Rockwool letter to Barry Turner of October 2009 **{LABC0000853}**.
[309] Exhibit BST1 to w/s of Barry Turner of LABC **{LABC0019607/2}**.
[310] RD certificate for K15 28.8.13 **{LABC0001000}** and Drawing and Document List **{LABC0001001}**.

issued documentation.[311] However, even if correct, this cannot excuse its inactivity in the interim period and overlooks that the K15 certificate subsequently issued on 24.10.14[312] and published on LABC's website[313] once again described K15 as MOLC[314] This was never subject to formal retraction and only tacitly corrected by virtue of the K15 RD certificate of 30.3.15 stating *"Thermosetting insulants (rigid polyurethane foam boards) do not meet the limited combustibility requirements of AD B2 Table A7…".*[315]

11.3.2 **RD certification for K15 and RS5000.** LABC's RD certification documentation for K15 dated 28.8.13[316] and Celotex dated 29.8.14[317] despite based in each case on a single BR135 classification report misleadingly implied global approval for use above 18m. This problem was not picked up by the peer review process which was so woefully light touch that in the case of Celotex approved the issue of the certificate before the relevant BR135 report had even been received by LABC[318] still less scrutinised by it.

Upon being notified of concerns about the expansive terms of the K15 RD in December 2013[319], LABC again failed to act and instead upon the imminent expiry of the K15 RD on 21.8.14 indulged Kingspan with an extension of the certificate until 31.10.14.[320] When the certificate finally lapsed after a further extension (albeit with modified wording) to 30.11.14[321], Kingspan brazenly threatened to withdraw the significant further business it had promised LABC: *"He mentioned that getting the £31K quote signed off by his boss is going to be difficult if this doesn't get sorted now."*[322] Remarkably, Kingspan's plainly improper overtures do not appear to have prompted any form of rebuke from LABC.

In light of the concerns that had been expressed to LABC, the RS5000 RD documentation of 29.8.14[323] should never have been issued with the generic statement on use above 18m, which LABC now admits was incorrect but again prays in aid of the supposed temporal limitations

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[311] LABC M2 closing submissions par 21 **{LABC0019740/6}**.
[312] **{NHB00000798}** and table at Ewing w/s par 27 **{LABC0020139/23}**.
[313] See NHBC email exchange of 24.10.14 *"…I've just found this certificate on the LABC Registered details website, no doubt worth a careful read."* **{NHB00000797}**.
[314] "*Regulations*" section **{NHB00000798/3}**.
[315] *"Regulations"* section **{LABC0012013/3}**.
[316] RD certificate for K15 28.8.13 **{LABC0001000}** and Drawing and Document List **{LABC0001001}**.
[317] RD certificate for Celotex 29.8.14 **{LABC0000358}** and Drawing and Document List **{LABC0000359}**.
[318] Brennan email to Ewing 8.8.14 *"Bollocks. I'd read Tim's email saying that the BRE letter states "that they have tested for compliance with BS8414 and it satisfies the requirement." It got the 4 votes on peer review too…"* **{LABC0005602/1}**.
[319] Ewing email to Kingspan 18.12.14 **{LABC0000996}**.
[320] Brennan email to Ball 21.8.14 *"This should allow us all enough time to get the renewal and reassessment sorted…"* **{LABC0001841}**; LABC RD certificate dated 21.8.14 **{LABC0001843}** and Drawing & Document List **{LABC0001842}**.
[321] RD certificate for K15 with amended validity expiry date of 30.11.14 **{NHB00000798}**.
[322] Brennan email to Ewing 11.12.14 **{LABC0002819}**.
[323] RD certificate for Celotex 29.8.14 **{LABC0000358}** and Drawing and Document List **{LABC0000359}**.

of its error.[324] LABC revised the RS5000 RD on 3.11.14[325] but does not claim to have taken any action in respect of Celotex' misleading press release of 5.8.14 suggesting compliance of RS5000 for use above 18m on the basis of the RD, of which LABC was aware as Celotex had in fact audaciously announced its LABC approval prior to receiving confirmation from LABC[326] prompting internal alarm at LABC *"we haven't anything that proves it works, the BRE letter just says they are preparing the report not that it was found to comply."*[327]

Following the publication of BCA TGN 18[328] (with LABC's involvement through representation on BCA Technical Liaison Group[329]) the K15 and RS5000 RDs were revised on 30.3.15[330] and 3.11.14[331] respectively to clarify that LABC approval for use above 18m was limited to the precise specifications tested and identified in the certificates. However these details were buried in the small print of the "*conditions of certificate*" section and a new standalone single page "*Registered Details FACT SHEET*"[332] was introduced, which made the critical claim to permissible use above 18m yet simply noted *"Due to space limitations, the Registered Detail certificate should be consulted for the full scope of this registration."* The detail of the specifications which were the subject of the RD were later divorced entirely from the certificate in the K15 reissue of 20.4.16[333] and hived off to a *"K15 Product Specification & Classification Report Index"*[334] located on Kingspan's website.[335] There can be no real doubt that this was part and parcel of Kingspan's strategy to intentionally mislead and prolong the erroneous implication of global approval of use of K15 above 18m. Critically, LABC was not duped by Kingspan – it was well aware of Kingspan's tactics. Although professing concern that *"I can't help but think that this will be used by Kingspan marketing and will encourage people to read no further"*[336] LABC took no action to counteract Kingspan's unethical strategy and merits the firmest condemnation for its passive complicity.

11.3.3 ***"Winning work by interpretation"*** LABC meeting minutes show that LABC viewed Kingspan's dissatisfaction with NHBC's stance on K15 as a *"business opportunity"* which it

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[324] Ewing w/s par 84.1 **{LABC0020139/52}** and par 86.1 **{LABC0021039/53}**.
[325] **{LABC0000310}** **{LABC0000312}**.
[326] Ewing/Brennan email exchange 8.8.14 **{LABC0005601}**.
[327] Ewing/Brennan email exchange 8.8.14 **{LABC0005602/2}**.
[328] **{LABC0000095}**.
[329] Basen w/s par 8.1 **{LABC0020141/6}**.
[330] RD certificate for K15 30.3.15 **{LABC0012013}**.
[331] RD certificate for RS5000 **{LABC0000312}** emailed to Celotex on 3.11.14 **{LABC0000310}**.
[332] RD Fact Sheet for K15 **{LABC0012012}** and RD Fact Sheet for RS5000 **{LABC0000311}**.
[333] RD certificate for K15 24.3.16 **{LABC0000971}**.
[334] **{LABC0000972}**.
[335] Ewing email to Kingspan 8.4.16 **{LABC0003241/2}**.
[336] Turner email to Ewing 18.12.14 **{LABC0000863}**.

intended to exploit.[337] LABC recognised the potential for criticism that it was *"wining work by interpretation"*[338]yet was concerned only with the optics rather than the substance of its behaviour *"...we can't* ***be seen*** *to be winning work on the basis of technical interpretation..."*[339] (emphasis added). Yet this is precisely what LABC was attempting to do, as exemplified by its July/August meetings with Kingspan and Berkeley Homes *"to establish the combined LABC and LABC Warranty position in respect of the use of K15 over 18m."*[340] It is a matter of most fundamental concern that LABC allowed the certification process for which it was responsible to be distorted by commercial concerns thus comprising the integrity of a system relied upon by those tasked with ensuring the safety of end users. As articulated by an LABC member in the aftermath of the Grenfell fire *"Compliance without compromise"*[341] ought to have been LABC's mantra yet the reality was - as it acknowledged internally - LABC was *"pushing the entire Kingspan range through RD!"*[342]

12. Government presided over failures of systems.

12.1**Failed Construction [BR] and Building Control system.**

As is apparent from the above, the interrelationship between Government and the housebuilding industry, with Government being in effect the junior partner, given its dependency on the housebuilding sector to provide rapid home-building to ensure Government's credibility, resulted in a failed system of BR, which had been left fallow for a period in excess of over a decade by the time of Grenfell. In fact, it was worse than being left fallow, as BR was seen as a vehicle for harvesting de-regulatory wins. Building Control used BR/ADB as a benchmark and therefore could only ever be as effective as ADB was. Furthermore, the introduction of private AI's left LA BCO's fighting for work, and so they ceased being policemen and instead became collaborators, although clearly, significant incompetence also played a part, if Grenfell is an exemplar. After the fire, Government was finally forced to be candid (internally at least): *"we are basically going to be asked if we are acknowledging that [BR] or control have failed. Don't we have to say yes to that? From a common sense perspective that was obvious after the fire and we now know that the wrong cladding is on lots of different buildings[343]"*. Similarly, Dawes considered there were

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[337] LACB and LABC Warranty Registered Details JMC meeting on 24.6.15 **{LABC0000874/1}**.
[338] Taylor email to Snell 18.8.15 **{LABC0006037/1};** Taylor email to Barnbrook 3.7.15 **{LABC0005971/1}**.
[339] Taylor email to Barnbrook 3.7.15 **{LABC0005971/1}**.
[340] Taylor w/s table at par 28.1 **{LABC0020153/27}**.
[341] Wayne Timperley email thread 3.7.18 **{LABC0010151/2}**.
[342] Ewing email to Turner 5.6.15 **{LABC0005943/1}**.
[343] McNamara email to Bramley and ors. 24.6.17 at 16.23 **{CLG00003905/2}**

"...systemic issues to be addressed across the whole system of fire and building safety regulations..[344]*"*

12.2 **Failure to ensure clarity in the fire safety system.** The RRO replaced a series of statutes governing fire safety and is now the sole system governing fire safety in commercial and public buildings including shared accommodation. Government compounded its failure to ensure ADB was effective protection against fire by failing to ensure the RRO itself was sufficiently clear in relation to its scope and/or that the various guidance which it was required to approve under Art 50 was consistent with each other and adequate (see S7 above). As a result, there was a perception in some quarters that RRO did not require PEEPs as established in Module 3 and a confusion as to whether the scope of the FRA extended to flat entrance doors and the external walls of buildings. Government was contemporaneously well aware of this issue. Government was well aware of the problem that the scope of FRAs required by RRO was unclear and indeed was made aware by RBKC of the issue regarding whether the flat front doors were within the scope of the FRA.

The Government's failure to ensure clarity in RRO is an abdication of responsibility in which it did not confront the policy question as to the policy objectives which the RRO *should* be achieving.

12.3 **Abdication of responsibility for producing Competency Criteria for Fire Risk Assessors: leaving it to the fire safety sector.**

The Government had chosen not to legislate that a person defined as a risk assessor must carry out FRAs. That was unwise as explained above. Lakanal was a trigger for improving the competency of risk assessors (despite the fact no FRAs had been done there), recognising the complexity of the issues of breached compartmentation with which they had to deal. During the process of Government shuffling off responsibility for drafting competency criteria onto the FSF, Government was made well aware that a nationally accredited register of UKAS accredited risk assessors was required if competency was not to default to the lowest level[345]. Yet in the end, Government left it to the FSF to resolve. FSF discussed setting up a self-financing scheme[346] but did not come to fruition, because industry lacks cohesion and resolve, which falls to Government.

13. Awareness of underfunding of social housing and problems with ALMOs/TMO's.

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[344] Dawes to Jeremy Heywood 25.6.17 **{CLG00003996}**
[345] **{CLG10004360/5}**
[346] **{HOM00043195/1}** par 5

In the Conservative 2010 Emergency Budget Councils spending was to be cut at a rate of 7.1% over a four year period. LA spending remained constrained. Following the fire, MacNamara commented "*We know housing benefit doesn't pay for housing costs in large parts of the country. We…knowingly devolved responsibilities to councils and cut funding so can't argue that we expected the regulatory function to continue"*. She further questioned Government's responsibility on Grenfell, given that RBKC's choice of a contractor who had underquoted by orders of magnitude compared to other bidders: *"How much did we incentivise that?*[347]*"*. MacNamara also posed the question: *"Did the regulator know the TMO was failing?"*. The answer is that it did/should have done as Government was aware: Barwell was made aware, by virtue of an appeal to him as Secretary of state (by a TMO whose employment had been terminated) of problems with MMAs and TMO impacting the safety of gas supply and the issues of inadequate funding[348].

14. Relationship between Civil Service and Ministers: a failure of systems.

14.1If the Civil Service is known for its poor institutional memory[349], Ministers have little hope. They are often, if not invariably, not in any way expert in the sector into which they are parachuted, often there only briefly, and there does not appear to be any handover between Ministers to alert incomers of problematic issues. This no doubt may occur sporadically, but the lack of system is unhelpful to good governance. Ministers at times (and with laudable exceptions) appear insufficiently aware that their role encompasses protection of the Nation's safety. Grenfell is a lens through which to see how we are governed. As the potential for danger to arise underlies all fields of human endeavour, it is vital that we be governed in such a way that safety considerations are somehow ringfenced and not abandoned to the political whims of the day. Ministers did receive some warnings (explained above) of the problems caused by the use of combustible materials and so the responsibility for failure to react does not lie with officials alone. In particular the political subterfuge in 2015/16 should have warned Ministers that urgent action was needed. That was well before Ledsome received his warning from Harral in May 2017 that *'We/Ministers are increasingly vulnerable to some or all of these risks becoming material and [Govt] being held to account for being inactive*[350]*"*

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[347] Macnamara *Wider Thoughts* email 21.6.17 **{CAB00004662}**
[348] **{CLG10008749/18}**
[349] https://www.instituteforgovernment.org.uk/sites/default/files/publications/Policy making in the real world.pdf See *"Knowledge Management"* p11
[350] **{CLG10009051}**

15. Need for accountability.

Select Committees are the only respected internal scrutiny method, but even then, their recommendation to in effect abolish Class 0 was not heeded. Pickles notes there were 219 APPG's (and this number has mushroomed to some 700 odd). This is too many for them to be effective. Furthermore, there is the perennial risk that they are reduced to mere lobbying groups, which may explain the ease with which Brian Martin and others were able to brush off the APPFSRG's concerns. On an individual level, Martin appears to have escaped unscathed, indeed being promoted to Head of Technical Policy, despite presiding over what is likely to be regarded as one of the major scandals of our time.

16. After Grenfell: Government and Industry. We should not discuss these issues as if they are historical: there is every reason to believe that little or nothing has changed despite the Grenfell fire: Government is still saying it is for designers to determine what is acceptable, despite the lack of adequate guidance.

Desktops, banned following the fire, have been legitimised by BS9414, Todd's position that PEEPs should not be required in general needs housing was legitimised (despite the Inquiry's Phase I recommendations requiring PEEPs in all housing) in a new version of PAS 79. That was only withdrawn following a proposed application for judicial review of the decision to publish. Three and a half years after the fire, although the RRO has been amended to clarify that its scope extends to flat entrance doors and external walls, it has not been amended to expressly require that the person carrying out the risk assessment be competent or that the risk assessment should be carried out by a risk assessor. Despite the post Lakanal drive to ensure that a national risk register of accredited risk assessors was created (a task delegated to FSF) this remains outstanding. These failures are by both Government and industry as the former shrugs off responsibility onto industry and industry defaults to what suits it best. One would have thought that the horror of Grenfell, in which a disproportionately high number of those who died were disabled or vulnerable, would have been sufficient to dissuade those who sought to publish the revised version of PAS79, not least in the middle of a Government consultation on the subject. Similarly, had the will existed in industry, the FSF could have created a self-funding entity which would take carriage of the National register.

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