Grenfell Tower Inquiry

Day 294

June 22, 2022

Opus 2 - Official Court Reporters

Phone: 020 4515 2252
Email: transcripts@opus2.com
Website: https://www.opus2.com

Wednesday, 22 June 2022

(10.00 am)

SIR MARTIN MOORE-BICK: Good morning, everyone. Welcome to today's hearing. Today we're going to hear more closing statements in relation to Module 6 from various core participants.

The first statement we're going to hear is going to be made on behalf of the Mayor of London by Ms Studd, who I'm pleased to say is able to be with us in person.

So, Ms Studd, would you like to come up to the lectern and make your statement. Thank you.

Module 6B (Government, Testing and FRA) closing submissions on behalf of the Mayor of London by MS STUDD

MS STUDD: Mr Chairman, the tragedy of Grenfell Tower demonstrates in plain site the catastrophic consequences of the failure to have in place a robust system for the monitoring and amendment of building regulation and guidance in relation to fire safety. It has also revealed a shockingly lacklustre attitude to coroners' recommendations insofar as they required action by government departments. The evidence heard by the Inquiry about the system of testing, accreditation of testing organisations, building control regulations and guidance and the workings of the central government departments has illustrated a succession of missed

opportunities, each one of which could have avoided the terrible tragedy at Grenfell Tower.

The unfortunate comment in the email from Brian Martin that, "we only have a duty to respond to the coroner, not kiss her backside", illustrates what must be a widespread public concern: that lessons are not being learned from coronial inquests in relation to the prevention of future deaths. It is also imperative that the recommendations made by this Inquiry are prioritised, monitored and implemented to provide the bereaved, survivors and residents, as well as the public at large, with the confidence that the safety issues that are highlighted by such inquiries will be acted upon and be enforceable.

In his opening to this second part of Module 6, the Mayor acknowledged that, save in the most exceptional circumstances, the machinery of government works less quickly than we all would like. He appreciates that, very often, there is, of course, a bigger picture to consider. However, what the evidence has revealed in this module is a process that fell significantly short of an acceptable standard.

In his closing submission, the Mayor wants to focus on four issues: first, the lack of rigour from testing and ineffective certification bodies; second, the drive

for deregulation; third, the low priority given to building safety; and, fourth, the failures to address the recommendations made by the coroner as a result of the Lakanal House fire.

I turn first to deal with the rigour of testing and the ineffective certification bodies.

What became clear from the evidence heard by the Inquiry, if it was not already obvious, is that safety testing and certification is of no benefit unless it is conducted in an open, independent and transparent way. As we've seen in this Inquiry, failure to conduct it in this way permits a false sense of security to permeate, with very dangerous consequences.

The evidence heard in the course of this module from the Building Research Establishment, the United Kingdom Accreditation Service and the National House Building Council points to an industry that was aware of the dangers of aluminium composite material panels with a polyethylene core in buildings over 18 metres from at least 2001, reinforced by the fire at The Edge in 2005. In spite of that knowledge, raising as it did the obvious risk of mass casualties in the event of a fire, and the significant risk to public safety, it was never spelled out in terms to government, even though Brian Martin had been previously employed by the BRE.

Although not directly responsible for the cladding at Grenfell Tower, the NHBC relied upon the BBA certificate which certified Kingspan 15 as suitable for buildings over 18 metres. Notwithstanding the obvious conflict with paragraph 12.7 of Approved Document B, it continued acting within the comfort and boundaries of the certificate, because the certificate came from an accredited body that was well recognised.

In answer to questions, Diane Marshall, operations director at the NHBC, defended the position of the NHBC saying that it was "the view within the industry that a BBA certificate could be held in that regard where, as long as you followed the conditions of the certificate, you satisfied the requirements of the Building Regulations". As you so aptly put it, Mr Chairman, this was a "slavish following of a piece of paper".

This misguided approach relied upon an untested assumption that the manufacturer was driven by safety and not by profit. As you pointed out, the NHBC approach was based upon a philosophy that it was safe if Kingspan told you it was safe.

How can the position have arisen where John Lewis from the NHBC, a fire engineer by profession, can tell the Inquiry:

"I did have a lot of concerns about it, yes. But

you're asking a fire engineer whether, you know, they would prefer not to use combustible materials. You know, it's like asking turkeys to vote for Christmas."

What a perverse position had been reached where the very people who should have been giving that transparent and independent advice on fire safety felt that their opinions might be considered so partisan that they did not consider it appropriate to express them.

The BRE, responsible for and contracted to government for the investigation of real fires, was privatised in 1997, and found itself in a post-privatisation position where the government funding had cut them to the bone. Before this Inquiry, Debbie Smith, referred to by another as the "God of fire in the UK", defended the BRE approach and observed that the BRE had always done work for the public good. But, she told you, "you still have to earn money otherwise you are not there, you cease to exist". Its purpose, up until it changed in 2012, was to advise government if the Building Regulations or guidance needed to change. Post-2012, there was an express requirement for the BRE not to make any policy recommendations. This serves to illustrate the low priority being given to fire safety by government.

The evidence from the BRE and government officials

in relation to the 2001 testing of the ACM panels with PE core, where the flames rapidly exceeded the height of the testing rig, was shocking to all who heard and saw it. It's hard to imagine just how difficult that evidence must have been for the bereaved, survivors and residents.

It was clear to the BRE that the ACM with PE core failed spectacularly, and yet the product still satisfied the class 0 classification because of the flawed approach taken to the significance of the internal core. The BRE had first-hand knowledge that ACM with PE filler burnt catastrophically, and yet failed to advise the government that, as a matter of priority, the ADB needed to be amended to highlight the danger revealed by the testing. It was their role to provide such advice.

At the time, Brian Martin was employed by the BRE and had worked on the testing programme. He was also seconded to government two or three days a week to advise on the review of the Building Regulations guidance and on safety contained within the ADB.

In its 2002 report, following on from the tests in 2001, the BRE failed to highlight the important life safety implications of the tests that they had conducted. It was the role of the BRE to present the

data and make recommendations, and for government to act on them, and yet they failed to do more than to alert government to the fact "these issues may require further consideration". Such an approach fell well below the standard that the public should have expected and compromised the safety of the built environment, putting lives at risk.

That those test results remained out of the public domain until this Inquiry obtained them as part of its investigation shows a worrying lack of independence and transparency, which put lives at risk and has to change.

The bereaved, survivors and residents may have some justification to ask themselves the same question asked by Counsel to the Inquiry of Brian Martin, which was:

"Question: Given that the test resulted in ... catastrophic full-scale failure ... [the recommendation] doesn't spell out ... in clear terms to government that if they don't review class 0 ... people might die? And ... what we all want to know, is: why ...?"

They may also question whether a different recommendation could have saved the Grenfell Tower from being clad in the same material and, ultimately, have saved the lives of those who perished in June 2017.

The drive for deregulation.

Whatever the political expedience of deregulation,

it clearly impeded the amendment of ADB to make it fit for purpose and to drive up safety standards. The evidence that the Inquiry has heard shows a preoccupation with one in, one out, and then in 2013, one in, two out, and finally in 2016, one in, three out, which had the effect of civil servants becoming non-reactive. Anthony Burd and Richard Harral both told you graphically about the effect that the deregulation agenda and declining resources had on them personally, but also on the ability of their department, responsible as it was for building policy, to function effectively. Fewer members of staff, more focus on how they should deregulate, as Anthony Burd told you, meant "we couldn't necessarily, with the resources we had, focus on the job in hand". Richard Harral told you that the policy was intended to make it difficult to introduce new regulation.

The system that resulted was that any proposal to regulate required additional work, and any impetus to prioritise life safety regulation was lost. The lack of prioritisation of safety issues is illustrated by the fact that, following his 2016 appointment and subsequent briefing, Gavin Barwell, the new Minister of State for Housing and Planning, remained unaware of the fire at Lakanal House or the coroner's 2013 recommendations. He

accepted that the housing supply agenda took priority during his time in the post. Any suggestion that the deregulation agenda did not apply to the Building Regulations or ADB, as put forward by Lord Pickles, was certainly not as it was understood by those dealing with the issues within the DCLG. His evidence to the Inquiry was unsatisfactory in many respects, and, insofar as it differs from that of his officials, it should be rejected.

The lowering of priority in favour of the housing supply agenda also left fire safety matters in the hands of a single civil servant, Brian Martin, with all the responsibility falling on his shoulders, with disastrous results. Any system which places responsibility for such crucial matters with a single person is clearly broken. This should have been obvious to the DCLG leadership, and the results for building safety were catastrophic.

The effects of deregulation were compounded by the austerity cuts to government departments and the civil service over the same period. These concerns were substantiated by Melanie Dawes in the immediate aftermath of the fire, when she commented in her email to the Cabinet Secretary on 15 June 2017:

"... at some point we may need to reflect on the

impact of cuts to the civil service (DCLG will be less than 50% of its 2010 size by 2020) on some of our deep expert policy functions. The expertise is still there (and it's excellent) but it is sparse and overloaded."

Failure to act on warnings about fire safety.

Certainly through the early years of the 2000s, the concerns being raised about ACM and PE cores were there for all to see. They came from the BRE testing; other fires in the United Kingdom and abroad, where external cladding had contributed; concerns raised by the industry, for example the Centre for Windows And Cladding Technology, Nick Jenkins of Euroclad and the all-party parliamentary group chaired by the late Sir David Amess MP.

The DCLG, which could and should have taken the lead in remedying the misleading, confused and poorly written ADB, which Brian Martin acknowledged was in need of revision, seemed too paralysed to do anything effective.

The amendment of the ADB which did occur in 2006 incorporated the reference to "filler", but in fact led to a significant widespread confusion, rather than clarification. Brian Martin, as the single point of contact, rejected the concerns being raised with him about the misunderstandings in the industry in relation to the term "filler" and about deaths and near deaths in

cladding fires. The emails from others in the industry highlighted in the course of Counsel to the Inquiry's examination of Mr Martin were dismissed as hyperbole, even when Brian Martin himself was aware of the shortcomings of the ADB and had evidence of widespread non-compliance. His failure to act illustrates systemic failures in the DCLG, the lack of political priority being placed on building safety and a corresponding absence of oversight of this vital safety issue from more senior civil servants.

By reason of some or all of the features that have been prevalent in this module -- a lack of resources, ministerial disinterest, a lack of prioritisation on building safety and an erroneous concentration of all building safety and fire matters in the hands of a single individual -- there is a thread of jaded cynicism that runs through the evidence. Rather than trying to implement change and improvement, the DCLG was constricted by a lack of fresh thinking and an unhealthy malaise, where the deep expertise of Brian Martin, which should have been helpful in relation to such a complex area, became conversely a hindrance to any progress.

The failure to learn lessons from the Lakanal House fire is fundamental to the work of this Inquiry. Core participants and the Inquiry itself can urge reform and

make recommendations, but unless compliance is enforced and enforceable, then nothing changes.

11 days after the Lakanal House fire, Brian Martin emailed the BRE his view that the fire did not warrant any changes to ADB. The BRE investigation was closed down so as not to duplicate resources, and the responsibility passed over to the Metropolitan Police Service and the London Fire Brigade. In fact, as it transpired, that initial conclusion was incorrect.

Having heard the detailed evidence in the course of the Lakanal House inquest, including from Brian Martin, the coroner expressed the view that there was clear confusion around the interpretation of ADB and that it needed review. In spite of the Secretary of State, Eric Pickles, confirming that such a review would be undertaken, DCLG was apparently unable to take the recommendations forward. We have heard that they were hampered by frequent elections, the Brexit referendum and deregulation, but perhaps just as significant was the complacency stemming from the initial conclusion that Lakanal House did not require amendment of ADB; the evidence that, overall, deaths occurring in fires were falling; and the fact that there was no historical evidence that such a tragedy like Grenfell Tower would occur in the UK. That placed unwarranted reliance upon

the effective working of the Building Regulations and was, for that reason alone, unsustainable.

However, of even more concern to the Inquiry will be the inability or unwillingness of the DCLG to hear or act upon the concerns of the very many organisations which did see the problem and were aware of the significance of the Lakanal House recommendations from the coroner. The all-party parliamentary group repeatedly urged the government to proceed with a review of ADB, and warned the government of the problems in the built environment which were compromising safety. Individual experts, such as Sam Webb, who had provided evidence in the Lakanal House inquest, reminded Brian Martin of the need to simplify ADB so that it was easily understood. Ron Dobson, the commissioner of the London Fire Brigade, recommended writing to building owners to alert them to the contribution to fire risk made by cladding panels. David Metcalfe from the CWCT raised concerns about the misleading ADB wording.

For each of those concerns, varied and wide-ranging as they were, there was an explanation as to why the re-wording of the ADB should not take priority. Brian Martin accepted it was not getting the requisite attention from ministers that he thought it required. He confirmed in the course of his evidence that the

government position was that committing more resources to fire protection or any other regulation was the opposite of where the government wanted to go.

Louise Upton, who led the fire safety team at DCLG at the time of the Lakanal House fire, thought that a review of the legislation would be unwelcome, and to employ a competent person to carry out a risk assessment would question the whole rationale of the self-compliance regime. It appears that concentration on the deregulation policy obscured focus on what should have been the true priority, which was public safety.

Consequently, the coroner's recommendations were allowed to remain unconsidered until after the Grenfell Tower fire in 2017. The commissioned research, although held by DCLG in 2015, was not published until 2019.

Having failed to act pre-emptively, the government then sought to cover its back when, on 16 June 2017, two days after the fire, Brian Martin emailed Diane Marshall about an article which had run in The Times suggesting that Building Regulation guidance permitted the use of cladding used on the Grenfell Tower. Brian Martin had been asked to rebut this, and he wanted Ms Marshall to help. He attached a script which explained the government's line on why

the existing and unamended ADB guidance in fact banned the use of the material.

As noted at the beginning of this submission, it is essential that recommendations made by coroners are prioritised, reviewed and, where valid, implemented. The Mayor repeats his support for a national oversight mechanism to ensure that recommendations from inquests and inquiries are systemically and independently followed up, as proposed by the charity INQUEST.

In his opening statement for this part of Module 6, the Mayor raised concerns about the fate of important recommendations to be made by this Inquiry, given the government's track record in responding to the coroner's recommendations after the Lakanal House inquest.

Regrettably, the government's tardiness in responding to the Inquiry's Phase 1 recommendations indicates that the Mayor's concerns are justified. The Inquiry's Phase 1 report was published in October 2019. In May 2022, the government published its fourth progress report on the implementation of the 15 recommendations given to government and building owners and managers. The previous progress report was published in September 2021. At the date of this submission, the government has not completed any of its Phase 1 recommendations. The government states that

nine of these recommendations are scheduled to be implemented with the laying of the Fire Safety (England) Regulations on 18 May 2022. However, these regulations will not become law until 8 July 2022, and the new duties will not commence until 23 January 2023.

In contrast, the LFB have completed 26 of its 29 recommendations, and the Mayor, as part of his oversight responsibilities for the LFB, publishes regular progress reports on their implementation, with the 26th progress report published on 31 May 2022. Over three years will have elapsed from the date of the Inquiry's Phase 1 report before any recommendations for government, building owners and managers are fully implemented.

The Mayor is also dismayed at the government's response to the remainder of the six recommendations directed to the government, building owners and managers, some of which have been rejected outright. In particular, the Inquiry recommended that the owner and managers of every high-rise residential building be required by law to prepare personal emergency evacuation plans for all residents whose ability to self-evacuate may be compromised. Further to a consultation which ran in June and July of last year, the government's response, published on 18 May, almost a year later, confirmed that this recommendation would not be

implemented. The government has said that, despite widespread support for the evacuation plans and the proposals outlined, there remain significant issues with the implementation of them with regard to proportionality, practicality and safety. Further time will now be wasted as the government embarks on another consultation on an alternative package of initiatives.

The government's flat rejection of the Inquiry's recommendation on PEEPs is astounding. At Grenfell Tower, 41% of the disabled residents died. The urgency of the Inquiry's recommendation on PEEPs is obvious, and the Mayor is deeply concerned that the government's attitude to implementation of the Phase 1 recommendations means that any Phase 2 recommendations made by the Inquiry to government are unlikely to receive the priority and respect which they clearly deserve.

Half a decade on from the devastating loss of 72 people, the way homes are built and managed should by now be totally transformed. We should today be living in a country where fire safety is prioritised and embedded, rules and regulations are ambitious and rigorous, guidance is clear and comprehensive, and the industry is responsible and highly skilled. While important steps have been taken, most notably with the

Building Safety Act, we are still a long way from achieving this vision, and while we wait for long-lasting changes to be implemented, we have no assurance that the practices that lead to Grenfell are not continuing to this day. There is very little evidence of a culture change within the construction industry. There is real concern that the corner-cutting, buck-passing and rule-dodging continues.

It is notable that, as recently as January of this year, the Secretary of State for the DLUHC had to set out in terms the action he would take against developers in the event that they failed to take steps to make their buildings safe. This is indicative of an industry that is still being dragged to consider safety first. In too many cases, profit still appears to be the overriding priority.

This module has demonstrated a litany of missed opportunities to raise awareness and standards, and to prevent the catastrophe that was the Grenfell Tower fire. The missed opportunities were many and varied. What is clear is that matters of public safety must always be prioritised and the system of testing in this field must be independent and transparent. This will benefit the industry as well as the public. But perhaps most of all, the Inquiry is going to have to achieve

what the Lakanal House coroner was unable to achieve: a mechanism whereby its recommendations are not belittled and filed away to be resurrected on an occasion in the future where another tragedy of whatever kind has resulted in loss of life and livelihood on a scale similar to that of the Grenfell Tower fire.

Thank you.

SIR MARTIN MOORE-BICK: Well, thank you very much, Ms Studd.

The next closing statement is going to be made on behalf of Arconic by Mr Stephen Hockman Queen's Counsel, and Mr Hockman, not being able to be here this morning, is going to make his statement remotely.

So I'm just going to see if Mr Hockman is there.

(Pause)

He is not at the moment, but I think if we wait a moment, he will appear very soon.

MR HOCKMAN: I don't know if you can hear me, sir, but I am here.

SIR MARTIN MOORE-BICK: Good morning, Mr Hockman. Well, we can now see you and we can certainly hear you. I hope you can see and hear us?

MR HOCKMAN: Yes, thank you.

SIR MARTIN MOORE-BICK: Good. Well, if you're ready to make your statement, we shall be pleased to hear it.

So, when you're ready, off you go.

Module 6B (Government, Testing and FRA) closing submissions on behalf of Arconic by MR HOCKMAN

MR HOCKMAN: Thank you very much.

In this module, the Inquiry has examined issues under four main headings, namely firefighting, testing and certification, fire risk assessment, and the role of central government. These oral submissions, like our written submissions already provided, will focus primarily on testing and certification and on the role of central government.

In general terms, it can be said that these two topics both relate to the regulatory regime applicable at material times. This regime will clearly be relevant to the assessment by the Inquiry of the acts and omissions of the various core participants which had or may have had some bearing on the Grenfell Tower fire.

We do, however, wish to stress at the outset that, for two separate reasons, the position of the company which we represent ought to be distinguished from the position of other core participants. The first reason is that the regulatory regime applied in general terms to those carrying out the refurbishment work at the tower and not to the supplier of a particular product, regardless of the extent to which that supplier had any

detailed knowledge of the features of the work involved. The second reason is that, as an overseas supplier, the company could not have had a fully detailed knowledge of the regime in any particular country in which its product might be used. Those involved domestically in carrying out the work would, moreover, be aware of these two matters and of the resulting distinct position of the company in relation to the refurbishment project.

The Inquiry will not, therefore, expect us to provide a comprehensive analysis of the regulatory regime or of its implications for the work which was carried out at Grenfell. The Inquiry will doubtless seek more assistance on these matters from other core participants.

What we seek to do is to assist the Inquiry at this stage by identifying, as we did in our written closing, three key headings, namely the sale and use of ACM PE generally, which will take me just about half of the time available to me; secondly, the supply of ACM PE by AAP, by Arconic, the company that we represent; and, thirdly, the supply and use of ACM PE and other products at Grenfell Tower.

Of course, we appreciate that, since the preparation of our written closing, the Inquiry has heard evidence in Module 7 which may be considered to have some bearing

on the case for this company. It's extremely tempting to embark at this stage upon an analysis of that evidence, but we are confident that to do so now would confuse rather than assist the Inquiry, and that our analysis of that evidence ought to await the opportunity which we will have to address you specifically in connection with Module 7. The only observation I will make at this point is that there is a distinction to be drawn between factors leading to the start of the cladding fire and those leading to the spread of the fire, and the conclusions which one draws may not be identical in respect of those two aspects.

So let me move, please, to my first main heading: the sale and use of ACM PE generally.

With regard to this, it seems to us that the key issue must be the extent to which, over the years prior to the Grenfell fire, it was acceptable, or at least not unusual, for such products to be specified. This may involve thinking about whether it was regarded as acceptable for combustible products generally to be specified. More particularly, it may involve thinking about whether it was regarded as acceptable for ACM PE to be specified. In turn, this may depend partly on whether the product was capable of being used in a manner which was compliant with regulatory regimes, or

at least was perceived as being capable of being used in that way.

It will be recollected that we have, from the outset, emphasised to the Inquiry the importance of evaluating the conduct of core participants by reference to their knowledge and by reference to accepted practice at the relevant time, even if, where appropriate, the Inquiry deems it necessary also to evaluate such practices from today's standpoint.

The argument which we will be advancing is that ACM PE was in widespread use and was treated as being an acceptable form of rainscreen cladding. Moreover, it was potentially compliant, or at the very least perceived as being compliant, with the relevant domestic regulatory regime.

We suggest that the Inquiry can take judicial notice of the fact that the use of combustible materials for the purposes of external wall construction has been commonplace for many centuries. Indeed, for substantial periods of history, timber was probably the only material which could, in practical terms, be used for this purpose. Moreover, the practice of using timber undoubtedly continues to this day and, in the course of his evidence in Module 5, Professor Torero discussed a four-storey building which might be designed using

timber as the structural material. He pointed out that the complexity of a timber building is much higher than the complexity of a steel building when it comes to fire, but that he could design both buildings to an equal level of safety as to probability and consequence, albeit that the designer of a timber building would have to be a top-notch engineer.

It will follows that we should not react with astonishment in to the proposition that buildings can be designed using timber or other combustible materials, and that it was not until after the Grenfell Tower fire that there was any general limitation whereby materials were restricted to those which are either non-combustible or of limited combustibility.

The Inquiry has here been considering in particular an external wall construction involving essentially two layers of combustible material: the inner layer comprising insulation, and the outer layer comprising some form of rainscreen, which, as the name implies, is intended to screen the insulation against the effects of inclement weather. It follows that the key component of such a wall construction was the insulation, the purpose of which was to maximise energy efficiency, the importance of which, in the current energy crisis, is all the more obvious than it has ever been before. But

for the use of the insulation, there would have been no call for any form of rainscreen.

As to the type of insulation, this was discussed by Mr Evans of the NHBC, who explained that, at the material time, there was a focus on thermal insulation. It was, he said, a big drive of the government as part of the carbon agenda, and they wanted ever more thermally efficient wall makeups. Builders were finding that the only way that they could achieve this was with insulation which was not material of limited combustibility.

Similarly, in response to a query from Sweden, Brian Martin stated that requirements for thermal insulation put greater pressure on designers to use polymer insulation materials, which tended to be lighter and to provide greater insulation value than non-combustible alternatives.

As regards the external rainscreen cladding, there is ample evidence that this too was in regular use for many years before the fire. I will consider later in this section of our submissions the extent to which this was facilitated by the then applicable regulatory regime. At this point I merely observe that if ACM PE was in widespread use, it must follow that those charged with the building control function believed that its use

was permissible. It's simply inconceivable that building control officers up and down the country were as weak and as lacking in competence as, with all respect, we saw in the case of the RBKC building control function at Grenfell Tower. Moreover, as we pointed out in our Phase 1 written closing, Professor Bisby himself in his Phase 1 report acknowledged that PE materials were known to be highly combustible, something which in his oral evidence in Phase 1 he also confirmed.

The use of ACM PE was moreover confirmed by Mr Evans of the NHBC, which had a significant involvement in building control. Although Mr Evans claimed to believe that the use of ACM PE was not permitted by the regulatory regime, something that I will address a little later, he did acknowledge that there was a high number of buildings out there with PE core, something that was, in effect, confirmed by Mr Evans' colleague John Lewis, who, in his witness statement, stated that at the end of 2013, he knew anecdotally of projects where NHBC provided warranty or building control where the external wall arrangement specified a combustible material in buildings which were over 18 metres. It is in any event likely that this was the case, given the publication by the NHBC in July 2016 of their guidance which approved the use of ACM panels on façades,

providing that such panels were of minimum class B and which provided a class 0 spread of flame.

It's worth adding, incidentally, that this guidance also stipulated for reliable cavity barriers around window and door openings to reduce the likelihood of fire entering the cavities at these points and, likewise, such reliable cavity barriers at compartment lines to restrict the unseen spread within the wall build-up. It follows that the AAP, Arconic, BBA certificate contained stipulations very similar to those contained in the NHBC guidance.

Similar evidence emerges from the powerful comments by Mr Jenkins of Booth Muirie at the Siderise BRE façade conference in January 2016, who stated that, in many instances, his company was asked to supply standard polyethylene-core ACM material. He added that there were many tall residential buildings recently constructed in the UK where such panels had been installed in combination with various foil-faced rigid foam insulation boards which were not of limited combustibility.

The Inquiry will be aware that we have submitted from an early stage that the market share of the company which we represent, AAP-SAS, was, in the UK, comparatively small, and there's certainly no evidence

to the contrary. For present purposes, however, the point is not that the supply of ACM PE by that company was rare, but that the supply of ACM PE was not.

A number of questions were posed by the Inquiry to witnesses as to the reasons why combustible materials were in such widespread use. Unsurprisingly, perhaps, the answer to this question took, broadly speaking, one of two forms. Some witnesses questioned the degree of use and claimed that they were unaware that the use was so widespread, but, in the light of the evidence which I've already mentioned, this response lacks plausibility. Other witnesses claimed that they did not believe that the use of combustible material was in conformity with the contemporary regulatory regime. Again, for reasons which I will come to, this response lacks plausibility.

It is of course easy to understand why, following the Grenfell fire, witnesses should wish to distance themselves from matters in this way, either to deny that combustible materials were in widespread use, or to claim that their use ought to have been precluded by the contemporary regime. However, it seems from a strategic view of the evidence that the Grenfell Tower fire was not the only reason why witnesses were incentivised to close their eyes to what was in front of them. The true

reason is because, as awareness of the situation developed, even before the Grenfell fire, no one was willing to face up to the legacy issue, namely the problem that all parties were to face in dealing with the legacy of buildings clad with combustible materials if and when it should be decided that that was not longer a safe method of construction to employ.

You may recall that Mr Metcalfe of the CWCT was asked whether it was true that nobody had acknowledged since 2006 that there had been what counsel called a "ten-year legacy of misunderstanding by the UK construction industry", with unknown life safety implications. He gave no satisfactory response.

Now, the same kind of analysis can be applied not only to the question of the use of ACM PE, but as to whether it could have been used in a way which was potentially compliant with the regulatory regime, or at least could have been used in a way which was believed by reasonable people in the marketplace to be usable in that way. But this would seem to be the inevitable conclusion from the examination of witnesses in Module 6. The point was often put on the basis of a lack of clarity, but it seems to us very clear that there was, in fact, simply no requirement in relation to the rainscreen to be of limited combustibility and,

indeed, the approach of your own counsel has been that the regime permitted the choice of a material by reference to its surface alone, rather than its core. If this was an approach which could have been taken in good faith by a UK supplier, then that must have been all the more true in the case of a non-UK supplier.

For the purpose of developing this line of reasoning, it seems to us necessary to begin by observing that the evidence has identified a number of different concepts relevant to the assessment of fire performance. Some but not all of these concepts are actually listed in the Inquiry's own fact sheet for Module 6.

As we know, and as was emphasised by Mr Burd, the regulatory regime did not involve banning products as such, but rather made provision for the control of use, to make sure that products could be used safely to meet the functional requirements.

It should, of course, also be stressed that the ultimate functional requirement was to achieve adequate resistance to fire, and specific requirements, such as the linear route, to which I will be making reference, were intended to represent methods of potential compliance with the ultimate requirement.

So dealing in turn with two or three relevant

concepts, and referring first to class 0, this is, as it happens, identified as follows in the Inquiry's fact sheet. It's described as a notional product performance classification for lining materials defined in Approved Document B, which can be achieved either by a product being comprised throughout of material of limited combustibility, or by meeting certain requirements when tested in accordance with BS 476-6 and BS 476-7.

In our submission, some, at least, of the criticism directed to the use of class 0 as a test has been unfounded, being based upon the assumption that the test was intended to apply or could have been applied in a much broader way than was ever realistic. Thus, being a test which was, at any rate, primarily to ascertain the way in which a flame would spread across the surface of a product, the test manifestly could not be relied upon in order to reveal wider aspects of fire performance, such wider aspects being discussed further below. Moreover being a test of a product and not a system, the test, by definition, could not have enabled a designer to specify a particular product without also considering the system in which it was to be deployed.

We certainly submit that there can be no possible criticism of a product manufacturer in seeking to

obtain, by appropriate means, a class 0 certification. By virtue of the reference to class 0 in paragraph 12.6 of Approved Document B, national class 0 was one component, and only one component, of the linear route to compliance. A product manufacturer supplying a product with a class 0 certification would not be confirming and could not be taken to be confirming that the linear route had be satisfied. Whether the linear route had been satisfied would be a matter for wider consideration in the context of paragraphs 12.5 to 12.9 of Approved Document B, taken as a whole.

We suggest that in most if not all cases, the extent to which a particular façade design would have achieved compliance with the linear route was necessarily a matter for expert advice and input, and the requirement for such advice was obvious simply from a perusal of those paragraphs. No one involved in refurbishment works to which the linear route might apply could properly or legitimately claim to have believed that a class 0 certification enabled a product to be used in any particular cladding system irrespective of the other components in the system or the configuration in which they were to be deployed.

The point has repeatedly been made in the course of submissions and evidence that class 0 was in itself

an inadequate test for the purposes of fully assessing fire performance, a proposition which could perhaps be described as a glimpse of the blindingly obvious. If by reason of the language in Approved Document B or for any other reason contractors or others involved in building work were relying on class 0 for purposes beyond those for which it was properly intended, then that is an approach the fallacy of which simply cannot be laid at the door of an individual product manufacturer, let alone one operating from overseas. Plainly the issue was a matter for those involved in the design and implementation of a refurbishment project, and also for government and other official bodies and individuals involved in the regulatory process. The point can be made and has been made that, in each of these categories, individuals manifestly ought to have been aware of the limitations of class 0 as a method of assessment and of the extent to which class 0 was being relied upon in an inappropriate manner.

The next concept that I'd like to mention is the notion of a test of reaction to fire. The Inquiry fact sheet lists a number of European reaction to fire tests, including the single burning item test, EN 13823, and the single flame source test, EN 11925. It's important to understand that the EN 13823 test does involve the

testing of a product in a particular system. The fact sheet states that a reaction to fire test is:

"... used to determine the extent to which products and materials contribute to the early stages of a fire ... before it reaches flashover."

It's to be noted that Dr Smith accepted and testified that the BRE and government went forward with the retention of class 0 and/or class B knowing that some class 0 products might achieve a European class significantly inferior to class B, but would nevertheless be allowed on a UK building above 18 metres.

It does seem clear that the European reaction to fire tests provide a somewhat sounder basis than class 0 for the assessment of the fire performance of cladding materials, though necessarily with some limitations. In particular, it needs to be stressed once again that an individual product manufacturer cannot carry responsibility for the significance attached by the approved document to the outcome of a reaction to fire test. If and to the extent that reliance upon European class B was insufficient as a method of assessment, or as a component in the linear route, then the responsibility for this must lie at the door of government or at the door of those involved in any

particular project who failed to take sufficient expert advice.

The third concept which deserves consideration in this present context is that of resistance to fire, which relates to a later point in time than the early stages of a fire and concerns the extent to which a particular element in the system, or indeed the system as a whole, will resist the penetration or spread of fire. This is, of course, a highly relevant concept in the context of the functional requirement of the Building Regulations themselves, namely adequate resistance to fire. It seems clear that the preferred method of testing in relation to this issue was full-scale testing pursuant to BS 8414.

The Inquiry will, I'm sure, well recall that, in the company's BBA certificate and in many others, those using its products were expressly informed that the certificate gave no assurance as regards resistance to fire and that this would have to be the subject of separate tests.

The Inquiry may take the view that it may have seemed perfectly reasonable for different approaches to be applied to the insulation on one hand and the rainscreen cladding, whose solitary function was to protect externally the insulation, on the other. There

was an explicit requirement for the insulation itself to be of limited combustibility. If that requirement was complied with, then it would perhaps be understandable if the view were taken that the rainscreen cladding need achieve no higher standard than national class 0. It certainly cannot have been an accident that the two approaches as to insulation in paragraph 12.7 and as to the rainscreen in paragraph 12.6 were different. Mr Martin acknowledged that the suggestion that paragraph 12.7 was intended to include all materials in the external wall would leave diagram 40 and paragraph 12.6 as empty of content.

Many of the witnesses, of course, sought inappropriately to take advantage of what they claimed was their understanding of the requirement in paragraph 12.7 of Approved Document B requiring the insulation to be of limited combustibility. It is submitted nonetheless that all attempts to suggest that paragraph 12.7 applied in any form or in any way to the rainscreen cladding were and are doomed to failure. There was a clear consensus at the CWCT meetings in 2014 and 2016 that the reference to "filler" in paragraph 12.7 could not, certainly not without further exegesis, be taken to include a reference to the combustible core of a composite product. Mr Martin

conceded that his department did not confirm in writing until after the Grenfell fire that the words "filler material" were intended to have that application.

Once again, the point is reinforced that this awareness of the significance of the word "filler" could not possibly have been achieved at any material time by an overseas product manufacturer.

It's worth noting that the question whether the external walls of a building needed to be fire resisting specifically arose for decision at the Lakanal House inquest as a result of an expert witness called David Walker having suggested that this was the case. Brian Martin, you may recall, was accordingly called to give definitive evidence of the official position on this issue, which was accepted by the coroner. In this connection, the transcript of the evidence of Mr Martin at the Lakanal House inquest is worthy of close attention, and we have the full transcript. See in particular the passage on page 35, where Mr Martin confirms that, generally, the main surface of a building could be expected to be class 0. He goes on to state that class 0 is the most restrictive of all the classes, the most stringent, short of non-combustible. He accepts that class 0 was designed to prevent fire on the exterior of a building fire (sic) travelling from floor

to floor in a way that makes it difficult to deal with from a fire authority's point of view. Finally, he states that class 0 material "will burn, just not very much". None of this seemed controversial at the time, certainly not to the various parties at the inquest, some of whom are represented here before you today.

By contrast, the use of combustible insulation was plainly directly contrary to the requirement of ADB, paragraph 12.7. This meant that anyone proposing combustible insulation but wishing actually to comply with the regulatory regime at the time would have needed to recruit a façade expert or to carry out a full-scale test of the proposed façade under BS 8414, and if this step had been taken -- and it's a point we've made before -- the façade would clearly have been designed, and presumably the design implemented, in a completely different way. From a causative point of view, the fact that no one involved in the project insisted on taking expert advice in the face of this manifest breach of the regulatory regime is probably the most significant of all the failures with which the Inquiry will be concerned.

The truth is that, for many years, policymakers and regulators did not see the use of combustible rainscreen panels in general and of ACM PE in particular as

particularly problematic or risky. This is a realisation which was understandably and dramatically enhanced by the Grenfell Tower fire itself. Until then, the concern in terms of fire performance focused principally on the insulation and the need for that component to be of limited combustibility.

One might mention in this context the fact that Professor Bisby, no less, in his report dated 10 November 2021, at paragraphs 1360 and 1443, expressly acknowledges his own failure to highlight, prior to the Grenfell fire, any potential problem with the way in which the regulatory regime handled the supply of the ACM product.

To the extent that policymakers and regulators did consider other and wider factors apart from the insulation, the better view was deemed to be that, alongside the nature of the insulation, it was necessary to take a holistic view of the combination of materials and of the way in which they were configured in the cladding system as a whole.

Dr Raymond Connolly, in his 1994 report "Investigation of the behaviour of external cladding systems in fire - Report 10", after defining the term "fire hazard" stated as follows:

"In assessing the fire hazard it was found that the

design, detailing and construction of the complete cladding system is more important than the reaction to fire properties of the individual materials involved. Consequently it is suggested that the fire hazard be determined by testing the complete cladding system as in practice."

Given Dr Connolly's reputation and standing, it's also worth emphasising that, in 2015, he felt able to provide advice for building control purposes, approving the use of ACM PE in connection with the Apex building in Ealing. Although the proposal was not approved by the NHBC, it was ultimately approved for building control purposes by the London Borough of Ealing. According to the NHBC witness John Lewis, Dr Connolly provided a long and detailed report, concluding that the cladding did not pose a risk.

Moreover, in his statement to the Inquiry, Dr Connolly confirmed his agreement with the House of Commons committee that a full-scale fire test should be required as the sole measure for demonstrating compliance with part B4. But, importantly, he also stated -- and this, as I say, is in his statement to the Inquiry as recently as last December -- that the wholesale prohibition of combustible cladding was not required.

Now, I move, if I may, to make some brief comments under my second heading, before moving to my third and final heading. My second heading, you will recall, concerned the supply of ACM PE by Arconic, AAP–SAS, the company which we represent.

It is, of course, for the purpose of this aspect of the closing, all the more important to stress to the Inquiry that this company should be judged not with hindsight, but on the basis of what they knew or ought to have known at the time. Thus, for example, a topic to which we refer briefly in this closing concerns previous fires, particularly overseas, whether in France or in other jurisdictions such as the Middle East or Australia. The present position is that the Inquiry has seen relatively little fully detailed analysis of the façade build–up or of the actual causes of overseas fires.

The point is now reinforced by the evidence in Module 6 that there was a widespread failure –– possibly in some instances deliberate, or so it's been alleged –– on the part of those in the know, including those in government and, indeed, those having professional expertise, to make known to the public at large, including the construction industry generally, the full facts which their experimentation and expertise were

undoubtedly bringing to light. One might add that not only did this company lack much of the information now disclosed to the Inquiry, but it's also the case that, unlike some of the other suppliers, they made no attempt to bring about pressure on UK regulators or others to encourage an interpretation of the regulatory regime which was favourable to them.

We do recognise that it's been suggested that those in the industry should have been put on notice by recent overseas fires of the issues which arose at Grenfell. However, it is perhaps easy to be misled as to the potential relevance or impact of these overseas fires. In the first place, so far as the evidence goes, their wider impact was to some degree limited, in that the market may have been persuaded that if a severe fire took place at height, this could have been due to a variety of causes, and that one could not simply assume that inapt materials were utilised. Secondly, and in any event, it seems at least as likely that the history of overseas fires was, on balance, reassuring, in that the very limited loss of life was perceived as confirming the adequacy of regulatory regime. A product manufacturer, especially in another jurisdiction, cannot be taken to have known of the domestic stay–put policy, with its attendant implications for life safety.

Of course, we acknowledge that views such as those I've been discussing have now been severely criticised as manifesting undue complacency, but the evidence is nonetheless clear that these were views widely held at the time.

Now I want to go on to my third and final heading: the supply and use of ACM PE and other products at Grenfell Tower.

This is not the place, obviously, to rehearse fully the submissions we made in our Module 2 closings, written and oral, but since Module 6 is concerned with testing and certification, there are some points in relation to testing and certification of the products used at Grenfell Tower to which we wish to refer.

We acknowledge that the Inquiry has scrutinised closely the tests carried out on behalf of this company, AAP, and we emphasise that these tests were undertaken by an authoritative testing body in France, namely the CSTB.

We remind you that the BBA certificate was a product certificate relating to an ACM panel and, in common with other BBA certificates, did not distinguish between the performance which might be achieved once the panel had been fabricated, whether for fixing by rivets or as a cassette.

In my oral submissions to you on 14 September 2021, I made the point that two or more EN, European classification reports, can co–exist in relation to the same product at the same time. Each report shows the classification which the tested product was capable of achieving in the tested system. One such report in 2011 showed a B classification for the product when fabricated as rivet, and that report expressly shows that it remained valid until 2016.

Later on the same day, in the course of his oral closing on behalf of Celotex, their counsel claimed that Arconic had cancelled the class B certifications that it had previously obtained for Reynobond PE and that there was therefore no class B classification in existence at the time that Reynobond was sold for use at Grenfell Tower. In our Module 6 written closing, as I'm sure you've seen, we have responded in detail to this allegation and show that there was in fact a valid class B certificate for the riveted version, granted in 2011, and therefore still valid in 2016.

A further criticism has been the failure of the company to report to the BBA the outcome of the cassette testing in 2005. Without reiterating the full content of our previous submissions on this topic, we would remind the Inquiry of the central point that the

BBA certificate could not and did not claim that the product in question, namely the ACM PE panel, would achieve an EN B result in any and every system and in any and every configuration. We have repeatedly pointed out that Approved Document B itself makes this very point in appendix A in the following terms, in something called note 2:

"Any test evidence used to substantiate the fire resistance rating of a construction should be carefully checked to ensure that it demonstrates compliance that is adequate and applicable to the intended use. Small differences in detail (such as the fixing method, joints, dimensions and the introduction of insulation material etc.) may significantly affect the rating."

That is an explicit requirement of the whole scheme with which we are dealing.

I would just like to add, on a separate matter, reference to the steps taken by the company from early 2014 onwards to make clear to the market the wider testing picture, particularly with regard to cassette. We deal with that in our Module 2 written closing, particularly at paragraphs 144 to 152.

Now, I'm moving towards the conclusion of these submissions, but I have a few further points to make.

There is a further argument, dealt with in greater detail in our written closing, arising from the testing carried out —— or perhaps, rather, not carried out —— in the course of the preparations for the refurbishment of Grenfell Tower.

We repeat that a failure to undertake a holistic fire assessment was of crucial causative significance. There is, however, a narrower but also powerful point relating to the role of Harley, who purchased the ACM PE from the fabricators, CEP, and who were responsible for the way in which it was installed. From their submissions to the Inquiry, it would seem that Harley regard perusal of the class 0 certification on the front page of the BBA certificate as representing a fulfilment of their responsibilities. Nothing could be further, of course, from the truth, not least because of their manifest obligation to consider the BBA certificate in its entirety.

In addition, disclosure by the Inquiry, mainly I think after the end of Module 2, has revealed that Harley knew or ought to have known a great deal about the performance in practice of ACM PE and about the conditions under which it would perform. They, among others, ought clearly to have taken into account this information in deciding on the suitability of ACM PE as

opposed to a fire retardant alternative in the context of Grenfell Tower, or the need, at any rate, to seek holistic fire engineering advice.

I mention in that context the evidence of Mr Sakula on 5 May 2021, who made clear that there was a duty on those involved in construction work to consider the nature of the materials specified, irrespective of any warnings which might or might not be given by suppliers, and indeed, where appropriate, to make specific enquiries of the suppliers if there was any doubt about the suitability of particular materials.

Now I want to deal with an argument strongly advanced on behalf of Kingspan Insulation, who, in this module, but based on the Module 7 evidence, assert that the use of combustible insulation had no causative significance at Grenfell Tower.

For this striking proposition, they rely upon the experiments by Professor Bisby and Professor Torero. This argument is one to which it may of course be necessary to return in the context of submissions about Module 7, but it is appropriate in this presentation to make the point that the argument is wholly flawed for a separate and independent reason.

I have already stressed the fundamental point that the use of combustible insulation at Grenfell Tower

being inconsistent with the linear route to compliance and with the clear regulatory stipulation in ADB, paragraph 12.7, ought to have led those concerned with the refurbishment project to carry out some form of holistic fire engineering assessment or to commission such an assessment from those with suitable expertise. If that had been done, it's clear that the combination of materials used at Grenfell Tower would never have been approved and the tragedy would never have occurred.

However, the argument advanced on behalf of Kingspan overlooks the fact that the conduct of Kingspan and of Celotex as the suppliers of the insulation was a critical element in the failure of all those concerned to carry out that necessary holistic assessment.

As Ms Barwise pointed out in section 6 of her Module 2 written closing, Kingspan and Celotex both made representation to the effect that their product was suitable for use above 18 metres, and thereby, expressly or by implication, gave reassurance that paragraph 12.7 was satisfied, seeking —— successfully, as it transpired —— to give a green light to others as to the appropriate use of such products via the linear route without holistic testing or assessment.

Now I want to make just a few further brief comments arising primarily from steps taken in relation to

testing after the fire and related matters.
Regrettably, as we respectfully submit, following the fire, the focus throughout has been on the ACM PE panels supplied by this company, though the majority of those panels, as we have previously sought to stress, albeit supplied by AAP, were fabricated and utilised in ways that could not possibly have been foreseen by them, for example on the crown and on the columns. Testing was then carried out by the BRE which itself was of unproven reliability and in configurations which bore little resemblance to the tower.
We also contend, with great respect, that perhaps too little emphasis in Phase 2 has been placed so far on the fact that, at least as regards the start of the fire in the cladding system, there were many other causes equally or more potent than the ACM PE panel. Of these, among the most significant, as we submit, were the failure to introduce suitable non-combustible barriers around the windows and, indeed, in the cavity itself, which at the very least would potentially have delayed the onset and spread of the cladding fire, with consequential advantages in terms of the success of the intervention by the London Fire Brigade.
Equally significant at a later stage were the failures of compartmentation, both internal and

external, which led to the fire re-entering and spreading internally to a far greater extent than in any of the overseas or, indeed, domestic examples of previous fires.
What happened at Grenfell was truly a perfect storm, in which the ACM PE panels were but one component of the maelstrom.
We urge the Inquiry to continue to take an objective view of all these matters and not to allow itself, as unfortunately Mr Martin at one point did, to limit its focus to the role of the ACM, suggesting, as he did, that if one were to remediate building defects more widely, the population of the United Kingdom would be living in tents, something that he said in an email that you've seen. Nor, we are confident, will the Inquiry follow the advice of whichever nameless official it was, and again quoted in an email that you've seen, who commented that the loss of a particular company involved in the Grenfell Tower refurbishment would not be severe.
Sir, that concludes my oral presentation, and I'm grateful to you and your colleagues for your patience.
SIR MARTIN MOORE-BICK: Well, thank you very much, Mr Hockman, for delivering those remarks and for delivering them so clearly. I am sorry you weren't able to be here in person, but you haven't lost out in any

way as a result. So thank you very much.
Now, we are due to take our morning break at 11.30. You have finished slightly ahead of time, for which we're grateful. What we will do, therefore, is to break now. We'll resume at 11.40 if the next speaker, who is going to be Mr Green Queen's Counsel on behalf of Kingspan, is available five minutes earlier than scheduled. If he is not available until 11.45, then we will resume then.
Thank you very much.
(11.24 am)
(A short break)
(11.40 am)
SIR MARTIN MOORE-BICK: The next statement we're going to hear will be made by Mr Tim Green Queen's Counsel on behalf of Kingspan. Mr Green is going to make it remotely, and I am very pleased to say that I can see you, Mr Green. Can you see us?
MR GREEN: I can see you, sir. Are you able to hear me, sir?
SIR MARTIN MOORE-BICK: Yes, we are, thank you very much indeed.
So thank you for making yourself available a little earlier than scheduled, that's very helpful, and we are ready to hear your statement, if you would like to carry

on.
Module 6B (Government, Testing and FRA) closing submissions on behalf of Kingspan by MR GREEN
MR GREEN: Thank you very much, sir.
Mr Chairman, Ms Istephan, Mr Akbor, these submissions focus on two aspects of the Inquiry's stated objectives for Module 6, namely examining the functional requirements of the Building Regulations and considering the government's handling of issues raised in relation to fire safety. Kingspan Insulation sincerely hopes that this Inquiry's examination of these important issues will help to bring about real improvements in the regulatory regime going forward. The Grenfell Tower fire was a tragedy that should never have happened, and it is vital that the necessary reforms are now made to the regulatory regime so that there is no possibility of such unsafe cladding systems being constructed in the future.
These submissions divide, then, into six parts: firstly, some initial important points of context; secondly, I will highlight just one of the many failures on the part of the government, namely the failure to act on the information it held about the risks posed by PE-cored ACM; thirdly, the danger still posed today by the regulatory regime in relation to the linear route to

compliance; fourth, the position of Kingspan Insulation in relation to certain assertions advanced during Module 6; fifthly, the importance of reviewing the Module 6 evidence in the light of the expert evidence now provided; and, lastly, a few words by way of conclusion.

Some initial points of context, then, please.

Given that witnesses were questioned in Module 6 about Kingspan Insulation's K15 product, it is right that I start by reiterating certain points.

Kingspan Insulation had no direct involvement in the refurbishment of Grenfell Tower. It played no role in the design or installation of the cladding system. It provided no advice or technical guidance to those responsible for the design of the refurbishment or its installation. It had no contractual relationship with the council or the TMO or any of the designers or any of the contractors engaged on the refurbishment. It did not provide any products directly to those involved in the refurbishment. It was not informed that its K15 phenolic insulation product was being used on the tower at the time of the refurbishment, and it was not aware that K15 had been used on the tower until after the fire. In total, only about 5% of the rainscreen insulation purchased for use on Grenfell Tower was K15.

The second introductory point that I would ask the Inquiry to keep in mind is that it is now clear beyond any doubt that the nature and speed of the spread of the Grenfell Tower fire was caused by the presence of Arconic's Reynobond PE-cored ACM cladding.

Last week the Inquiry heard the evidence of the experts, Professors Bisby and Torero. Their evidence was absolutely clear on this issue. Professor Bisby explained that one of the reasons why PE-cored ACM cladding was, in his words, so dangerous is because of its very volatile behaviour. His conclusion was simple: don't use it. Don't use PE-cored ACM, whether in cassette form or riveted or otherwise. Why not? Again, the answer is very simple. In his words, "It has a core of polyethylene, unmodified polyethylene, that will burn a lot". It has the potential to cause, in his words, "a very big fire".

One year ago, in Kingspan Insulation's closing submissions for Module 2 on 28 June, we said this: any rainscreen insulation, including non-combustible insulation, will play some part in a cladding fire, not least because its insulating properties act to retain heat from combustion of the cladding system.

On the basis of the extensive modelling carried out by Efectis, we also said this at paragraph 12 of those

submissions: the nature and speed of the spread of the fire across the exterior of the tower was a result of the PE-cored ACM cladding and would not have been materially different if non-combustible insulation had been used.

Last week Professor Bisby reported on his experiments. Those experiments confirmed the points we made a year ago. It is the capacity of insulation to retain heat which is relevant in cladding fires involving PE-cored ACM and not whether that insulation is combustible or non-combustible. Professor Bisby's experience also showed that the speed and spread of the fire over the PE-cored ACM cladding was materially the same whether that cladding was combined with combustible insulation or non-combustible insulation. Professor Bisby's conclusions are entirely consistent with the peer reviewed published papers by Efectis.

Any rainscreen cladding products sold for use in the UK must take into account the reality that it will be used in conjunction with insulation, given the need underpinned by regulatory requirements for effective insulation on buildings. This means that the cladding must be designed to be capable of withstanding the heat that is inevitably retained in the system by insulation in the event of a fire. It is clear that Arconic's

PE-cored ACM cladding was not safe for use in a rainscreen cladding system with either combustible or non-combustible insulation.

From a regulatory perspective, there are significant questions as to (a) how and why the regulatory regime failed to prevent PE-cored ACM from being marketed as suitable for use, given that it was so dangerous; and (b) how and why the regulatory regime failed to prevent PE-cored ACM from being used on Grenfell Tower. Those, in our submission, are key questions which need to be answered as part of this Module 6 analysis.

Secondly, the failure of the government to act on the information it held about the risks posed by PE-cored ACM.

The starting point for this analysis is the remarkable fact that large-scale testing undertaken by the BRE for the government in 2001 had shown that PE-cored ACM was unsafe when used in combination with non-combustible insulation.

Dr Colwell's evidence was that she was shocked by the 2001 PE ACM test, which failed, in her words, "extremely rapidly". She was, she said, shocked at the speed it took off. The test had to be manually terminated very early, at 5 minutes and 45 seconds, because it was such a significant fire. This was

notwithstanding the fact that the PE ACM tested had achieved class 0 certification. In light of that test, Dr Colwell concluded that PE-cored ACM was not an appropriate product for use for external cladding of high-rise buildings.

Those government tests demonstrated precisely the failure mechanism which later resulted in the Grenfell Tower fire, namely the failure of the aluminium skin exposing the polyethylene core, which then burned.

Professor Bisby said that he was left speechless when he learned of these government tests carried out in 2001 and reported in 2002. Prior to the Grenfell Tower fire, there was very little, if any, information available in the public domain about any large-scale testing involving PE-cored ACM, but it is now clear that the government was in possession of such information and, for whatever reason, it was not published and not acted upon.

In 2017, following the Grenfell Tower fire, the government carried out large-scale testing to systems comprising PE-cored ACM with combustible PIR insulation and non-combustible mineral fibre insulation. The conclusion of the independent expert panel following those tests was this: ACM cladding with unmodified polyethylene filler presents a significant fire hazard

on residential buildings at any height with any form of insulation.

What is so shocking is that precisely the same conclusion could and should have been drawn by the government 15 years earlier when it received the 2002 BRE report in respect of the 2001 PE-cored ACM test. The regulatory regime could and should have been amended at that stage to prevent the use of such PE-cored ACM cladding on tall buildings.

The 2001 test of a system using PE-cored ACM was never published by the government. At paragraph 47 of its written closings, the Department for Levelling Up, Housing and Communities accepts that research commissioned and funded by public monies should be published. It expresses regret that the report of the 2001 test was not published. It describes this as an oversight.

In the event, no action whatsoever seems to have been taken in light of the 2001 test commissioned by the government. It is one of a number of issues of key importance that appears to have been missed by officials acting for the department.

Leaving aside the failings of individuals for a moment, what does this tell us about the regulatory regime? How and why were steps not taken at any stage

between 2002 and 2015 to ensure that the regulatory regime precluded the use of PE-cored ACM cladding in light of the knowledge acquired by the government from its own tests? The obvious answer is that the system in place failed to even recognise the importance of the test data held by the government, or the importance of the multiple other reports of concerns about PE-cored ACM. Part of the reason for this failure is that no emphasis was placed by the regulatory regime or by the relevant government department on the need for test data to be collated and shared transparently, even in respect of the data held by the government.

Another part of the reason for the failure may have been over-reliance by the government on individual product testing, rather than a proper appreciation of the value of large-scale system testing. Nor was there any real appreciation of the need to amend ADB to deal with the risk so clearly posed by PE-cored ACM.

The written closing submissions of the Department of Levelling Up, Housing and Communities accept, as they must, a series of crucial failings on their behalf, including the failure to recognise the extent of the risk posed by PE-cored ACM despite multiple warnings over a period of years. The department also states that it deeply regrets that the gravity of the risk posed by

PE-cored ACM cladding was not appreciated even when this was expressly raised in the CWCT meeting on 2 July, see paragraph 97 of the department's submissions. In addition, the department also accepts that it failed to keep ADB up to date or address known ambiguities, including the term "filler" in paragraph 12.7.

There are multiple lessons to be learned here, as the government recognises. Apart from anything else, there needs to be a reliable system for the collation and sharing of large-scale test data on which the government, the regulatory authorities and appropriately qualified professionals can rely.

Thirdly, the danger still posed today by the regulatory regime in relation to the linear routes to compliance.

The government's failings in respect of the regulatory regime do not end with past mistakes in respect of PE-cored ACM. The linear route to compliance provided by Approved Document B was flawed back in 2015, and we submit remains flawed today.

In 2015, the linear route was based on small-scale testing of individual products. It did not expressly require any consideration to be given as to how products will perform when used together in a system. That same fundamental weakness in respect of the linear route to

compliance remains today. It is still possible for a cladding system to be deemed to comply with the linear route based on small−scale testing of individual components, when in fact the system would fail a large−scale BS 8414 test.

This is a point which has now been made by Professor Bisby at paragraph 326 of his report on desktop studies. He says this:

"It is conceivable that an external wall arrangement that abides by the recommendation of ADB's linear route might even fail to meet the requirements of BR 135 if tested to BS 8414."

Professor Torero made a related point very simply, when he said:

"So you can have a perfectly non−combustible material that is an extreme hazard because it deforms and breaks apart very rapidly."

As the Inquiry knows, there are documented examples of A1 and A2 systems failing when tested to BS 8414. Kingspan Insulation has provided the Inquiry with five systems which have failed to meet BR 135 criteria when tested to BS 8414, even though they would have been permitted under the linear route because they comprise only A1, non−combustible, and A2 insulation and cladding products. Those examples are set out at paragraph 145

of our written closing submissions in Phase 2 to Module 2. It's not clear to us whether Professors Bisby and Torero have been provided with copies of those five system tests, but they do illustrate very clearly the point that they are now making, and the point that Kingspan Insulation has been making for many years.

Kingspan Insulation witnesses were heavily criticised during the course of Module 2 for the fact that Kingspan Insulation had drawn the parliamentary select committee's attention to this point in 2018. The validity of the point Kingspan Insulation was making is now clearly accepted by Professors Bisby and Professor Torero, and it's hoped its importance will now be accepted by the Inquiry.

It remains unclear to Kingspan Insulation whether the Inquiry has sought disclosure from the BRE or other test houses as to whether they hold test data relating to other large−scale tests of systems comprising A1 or A2 insulation and cladding which would be deemed to comply with the linear route but which have failed when tested to BS 8414.

We do, however, invite the Inquiry to try to collate information relating to any such tests from test houses and make any such data publicly available. The failure of the government to publish the BRE's 2001 PE−cored ACM

test was a very significant mistake, and it's hoped the Inquiry will now play an important role in ensuring that test data relevant to systems comprising A1 and A2 insulation and cladding and the linear route to compliance are now made publicly available. Such data are likely to assist informed decision−making in respect of the risks inherent in the linear route to compliance. The Inquiry has now seen that Brian Martin accepted in emails back in 2013 that he never expected the linear route to result in a system that would always pass the BR 135 criteria.

Professor Bisby explains at paragraph 333 of his desktop assessment report that he believes that it is self−evident that a system which complies with the linear route could still fail to meet the requirements of BR 135 classification when tested to BS 8414. He observes that the linear route has the potential to mislead incompetent designers into thinking that they have met requirement B4 of the Building Regulations.

In contrast, Dr Colwell of the BRE considered it, in her words, an "extraordinary proposition" to suggest that a system which complied with the linear route might not be expected to pass BR 135 criteria.

A regulatory system is clearly not fit for purpose if its unstated assumptions are not clear to even highly

specialist and competent professionals such as Dr Colwell, with years of relevant experience. Just as the government new that PE−cored ACM systems were dangerous back in 2002 and did nothing about that fact, so it is clear that the government now knows that the linear route to compliance is not fit for purpose.

The government's reaction to the Grenfell Tower fire was to ban the use of combustible products over 18 metres. That decision was taken without the benefit of the expert evidence now obtained by this Inquiry and without a full understanding of the unintended consequences. These issues are not simple. The evidence of the Professors Bisby and Torero demonstrates the complexities of cladding systems. As both Professor Bisby and Torero have made clear, cladding systems must not be looked at as merely a collection of independent products, with assumptions being made as to how they will perform together. Simple, intuitive assumptions like "combustible products must be unsafe" and "non−combustible must be safe" do not work.

Professor Bisby explained at paragraph 17 of his Phase 2 experiments work package 2 that, in his words:

"The experiments presented in this report have highlighted the immense complexity of the heat transfer environment within a ventilated rainscreen cladding

cavity. This suggests that an intuitive understanding of the factors that govern fire initiation, growth and spread in such situations can very easily lead to false or incorrect assertions."

The fact that these issues are not intuitive matters reinforces the need for a truly scientific approach to be taken to the safety of cladding systems. As Professor Torero has correctly stated, banning combustible materials will not solve the problem. That merely provides a false sense of security.

Professor Torero described an ideal system where material properties were measured and used by competent professionals to model façade performance in the context of a chosen fire safety strategy. He espoused the use of large-scale system testing, for example testing to BS 8414, to provide additional data and model validation as part of this process. Kingspan Insulation agrees with this approach.

It is clear from the evidence heard by this Inquiry that BS 8414 testing has not been perfect in the past, but the fact that the BS 8414 test is not perfect does not mean that large-scale system testing should be abandoned. Rather, the focus should be on improving the testing to ensure that it captures more data which can then be used to greater effect.

It is submitted that proper use of computational fluid dynamics, or CFD for short, should be part of the modelling approach. Professor Torero recognises the advantages of CFD modelling, albeit that it must be undertaken by very competent professionals.

Improvements such as scrutiny of the testing process by regulators will also help to prevent abuse of the system.

Fourthly, the position of Kingspan Insulation in relation to certain assertions advanced in Module 6.

Kingspan Insulation has accepted that there have been shortcomings in the past in respect of the testing and certification of its K15 insulation. It has identified those shortcomings and apologised for them in its Module 2 opening and closing statements.

Issues concerning the testing and certification of K15 were explored again in Module 6 for the purpose of exploring the failings on the part of others who were involved in the relevant testing and certification processes, including the BRE, LABC, the NHBC and the BBA.

Some of the questions put to witnesses from those organisations have sought to suggest that Kingspan Insulation may somehow have placed improper pressure on or had some form of improper dealings with those

independent bodies. Such allegations were denied on multiple occasions by various witnesses from those organisations. Kingspan Insulation's position on these allegations is very clear: at no time did it have any improper dealings with any of these bodies, whether in respect of testing, certification, guidance notes or otherwise.

It's worth saying a word about Arconic's current position. It's clear from their written and their oral submissions today that, even now, they do not accept they were at fault for selling a cladding product which was so very dangerous. We note that at paragraph 76 of their written submissions, it is suggested, yet again, that K15 manufactured after 2005 was somehow more flammable than the K15 that was tested in 2005. As we have repeatedly said, that assertion is not based on any scientific evidence and it is not true. The allegation appears to rely largely on the December 2007 test of a Sotech system which failed with K15. But that same system failed in January 2008 with non-combustible mineral fibre. These two tests must be seen together. The failures were due to the thermomechanical properties of the A1 aluminium cassette cladding system, rather than the type of insulation. The 2008 test is one of the five examples that Kingspan Insulation has provided

of a system which would comply with the linear route, but nevertheless fails when subjected to a large-scale test.

In their oral closing submissions on Monday, the BSR Team 1 suggested, again, that Kingspan Insulation was somehow responsible for the use of any and all combustible materials at height. This apparently stems from K15 being the first combustible insulation to be part of a system that passed a BS 8414 test. This assertion is without merit. Kingspan Insulation has never promoted the use of combustible materials generally. It promoted its own K15 insulation following a BS 8414 test in 2005 of a cladding system which incorporated K15, and there have been 14 other cladding systems incorporating the type of K15 used on Grenfell Tower which have passed BS 8414 tests since. Kingspan Insulation is not responsible for the different products produced by other manufacturers.

It was also suggested on Monday that Kingspan Insulation had lobbied for the widening of TGN18 by the BCA. There was no evidence cited for this assertion. It is an assertion which is incorrect and wholly unsupported by any evidence.

In addition, there was an allegation on Monday that Mr Nick Jenkins had somehow assisted Kingspan Insulation

to manipulate the outcome of a Building Safety Programme test. This is completely incorrect; there was no manipulation of this programme by either Kingspan Insulation or Mr Jenkins.

Fifthly, the importance of reviewing the Module 6 evidence in light of the expert evidence now provided.

Kingspan Insulation has set out in its written submissions the issues which it considers ought to have been subject to greater scrutiny in Module 6. These include the extent of the problems which still remain in respect of the regulatory regime and the potential dangers still posed by the linear route to compliance.

However, it is submitted that the service of the latest expert evidence of Professors Torero and Bisby has been a watershed moment in this Inquiry. Those reports drill down into many of the critical issues concerning both the true causes of the speed and spread of the Grenfell Tower fire, as well as the weaknesses, past and present, of the regulatory regime. We would invite the panel to revisit the Phase 2 evidence, particularly the Module 6 evidence, in the light of the crucially important evidence now given by these two experts.

Our concluding remarks.

Ultimately, Arconic must bear responsibility for the

fact that its Reynobond PE–cored ACM product was unsafe and unfit for use as rainscreen cladding in combination with either combustible or non–combustible insulation. However, the government must also bear its share of responsibility. The government knew about the dangers posed by PE–cored ACM cladding since at least 2002 and did nothing to prevent its use. The objective of the regulatory regime is to achieve safe buildings. The regulatory system should have prevented the use of unsafe PE–cored ACM, not permitting it under the linear route without any large–scale testing.

It is apparent that the regulatory regime was unfit for purpose at the time of the Grenfell Tower refurbishment in 2015; Kingspan Insulation's position is that it still remains unfit for purpose today.

The linear route to compliance is not the way forward, nor are inappropriate blanket bans. Rather, the regulatory regime must be founded on a properly scientific approach so as to ensure that only safe cladding systems are built in the future. Only those with proper competence should be responsible for assessing the safety of individual designs.

The evidence of Professors Torero and Bisby over the last two weeks has been enormously helpful in clarifying many of the problems and potential solutions. Their

evidence is warmly welcomed.

Kingspan Insulation will make further submissions in respect of recommendations for improvements to the regulatory regime in due course and in accordance with the timetable set by the Inquiry.

Thank you for your patience, sir.

SIR MARTIN MOORE–BICK: Well, thank you very much, Mr Green, that's very helpful.

Finally this morning we're going to hear a closing statement by Sam Leek Queen's Counsel on behalf of the Building Research Establishment, and Ms Leek is going to address us remotely as well.

Good morning, Ms Leek, I can see you; can you see us?

MS LEEK: I can, thank you, sir. Can you hear me?

SIR MARTIN MOORE–BICK: We can hear you, thank you, and I hope you can hear us as well.

MS LEEK: Thank you.

SIR MARTIN MOORE–BICK: Thank you for making yourself available a little bit sooner than we had suggested in the timetable, but that's all to the good. We are ready to hear you, if you would like to make your statement.

Thank you.

Module 6B (Government, Testing and FRA) closing submissions on behalf of the Building Research Establishment by MS LEEK

MS LEEK: Thank you, sir.

Sir, first of all, BRE again would like publicly to recognise the courage and determination of all of the bereaved, survivors and residents who have been involved in the hearing process, knowing that, for many, this will have been a painful and distressing experience. On behalf of BRE, I would like to offer heartfelt condolences to all who have been affected by the fire and its aftermath.

Throughout this module of Phase 2 of the Inquiry, BRE and its legal team have attended many days of hearings in person and remotely and have observed Counsel to the Inquiry's probing forensic examination of more than 30 years of work carried out by public authorities and private organisations which touches the regulation of cladding systems in the UK. This is the first time that there has been such comprehensive and intense scrutiny on that subject. As an organisation which has worked to improve the built environment and to ensure the health and safety of those who use it, BRE welcomes this scrutiny. BRE has co–operated fully with the Inquiry to provide evidence on matters within its knowledge and which concern its own work for government and private entities.

As the evidence was heard, it became apparent that

BRE's role in the regulatory system has been misunderstood by others, including stakeholders working in the building industry and the Inquiry's expert, Professor Luke Bisby. The same misunderstanding was apparent from questions posed by Counsel to the Inquiry. BRE is not the department and its role is not akin to that of the department.

Sir, today I will address the following topics, all of which are dealt with in more detail in our written closings: first, the correct analysis of BRE's role; second, the regulatory system applicable to the external walls of buildings, including cladding systems, and BRE's role in it, or lack thereof; third, BRE's specific research projects for government, as raised by Counsel to the Inquiry in questions to BRE witnesses; fourth, an accurate summary of BRE's knowledge and steps taken about three particular issues addressed in evidence by Counsel to the Inquiry: industry confusion about the meaning of ADB, use of ACM PE on high-rise buildings in the UK and Kingspan's misleading claims about its K15 product; fifth, the department's knowledge from other sources; and, sixth, UKAS's assessment of BRE last year.

First of all, BRE's role.

It is correct that BRE used to be an executive agency within the Department of the Environment. That

link with government ceased 25 years ago in 1997, when BRE was privatised. BRE then became a group of companies owned by an independent charitable trust. When it was privatised, BRE ceased to be funded by government. It became an independent, self-funding body, generating income and receipts from its activities through contractual arrangements for the supply of services. Clients include government departments, other public bodies and private sector customers.

The parameters of BRE's work and obligations, whether for public or private sector clients, are defined by contract and regulatory requirements. BRE companies are obliged to fulfil their contractual and regulatory obligations and to maintain client confidentiality.

Profits are used to serve wider society for the public benefit, or are invested internally to make improvements at BRE.

In the last 20 years, BRE Trust has funded over £20 million of research for the public benefit, produced or updated over 300 publications and supported more than 300 postgraduate students through its university partnerships.

BRE's structure and its history under government control afforded no regulatory function nor any special

status. Those who believe that BRE has a function or a status that changes its duties from those of a private entity to those of a public authority are misguided. BRE is not a part of government, it is not a public authority, it is not publicly funded, it is not a regulator, as acknowledged by Mr Seaward and Ms Barwise Queen's Counsel on Monday. BRE does not have any other status to oversee what is placed into the built environment. BRE does not draft Building Regulations, nor approved documents.

Some core participants still appear to misunderstand BRE's role. By way of example, it is not correct that BRE's Dr Sarah Colwell "wrote the book, together with the department's Brian Martin", as was suggested by BSR Team 2 in their opening and closing submissions for this module. It is not correct that BRE were "involved in drafting Approved Document B and were therefore very familiar with its content", as was wrongly stated by an employee of Wintech in a witness statement. It is not correct that BRE was advising government of necessary changes to the provisions in clauses 12.5 to 12.9 of Approved Document B 2006, as Professor Bisby wrongly stated in his Phase 2 report. It is not correct that it fell to BRE to provide clarification on ADB, as the industry body CWCT wrongly stated in a witness

statement. It is not correct that BRE's role was to advise government on ADB, as the Mayor of London wrongly stated in his written closing.

Each of those misapprehensions suggests that BRE has a role in the regulatory system akin to the department or a government-appointed regulator. It does not. BRE now understands that questions put to its witnesses under Rule 9 and orally perhaps laboured under the same misapprehensions about BRE's role.

The work of BRE companies primarily covers two core areas: testing and research. This work, carried out under commercial contract with public and private bodies, is quite different from the work of the department or a regulator. Commercial work of these types is carried out by other companies in the building industry who, like BRE, are engaged under contract.

In its testing function, BRE carries out UKAS accredited testing, classification and certification of construction products for manufacturers to the standards set by government and regulatory bodies. BRE companies have no unique regulatory status from being a testing house. Those wanting testing services are free to use other commercial testing houses, such as Warringtonfire.

UKAS accredited testing houses are specifically required not to disclose test sponsors' confidential

information. This regulatory requirement of confidentiality is in turn contained in contracts between BRE and test sponsors.

In its research function, BRE undertakes independent research on behalf of its customers, whether the commissioning client be a government department or a profit-making company. Again, BRE has no special regulatory status as a result of undertaking that research.

Government contracts are let through a competitive tender process. BRE is under no obligation to bid for or to accept a government contract, and government is under no obligation to engage BRE. The objectives, assumptions, scope and budget of a research project are set by the contract, which are the parameters within which BRE must operate when delivering the contract. The product of the contract is owned by the commissioning client, who may use it, or not, to fulfil their objectives. As with other commercial arrangements, it is not open to BRE to disseminate information in breach of confidentiality.

Second, the regulatory system and BRE's role in it, or the lack thereof.

Sir, in order for the regulatory system to be scrutinised and BRE's role within it to be properly

understood, it is crucial that the Inquiry and participants in it accurately understand that system and the role of different entities within it.

At a very basic level, there are six layers of documents in the regulatory system for external walls on high-rise residential buildings:

First, the Building Act 1984, being statute passed by parliament. BRE has no part in drafting statute.

Second, Building Regulations, which the Secretary of State of the department has power to make pursuant to the Building Act. The Secretary of State is advised by the Building Regulations Advisory Committee, or BRAC, on the exercise of the power to make Building Regulations. The Building Regulations contain functional requirements, as you know. For cladding systems, the relevant functional requirement is functional requirement B4, which applies to external walls. BRE has no statutory role in drafting Building Regulations. Further, no BRE employee sat on BRAC when the 2010 Building Regulations were drafted.

Third, Approved Document B, which the Secretary of State has power to issue pursuant to the Building Act. BRAC is the statutory advisory body to be consulted on amendments to approved documents. Approved Document B records, among other things, the

Secretary of State's view on how functional requirement B4 can be complied with. BRE has no statutory role in drafting Approved Document B and, again, no BRE employee sat on BRAC when Approved Document B 2006 was drafted.

Fourth, BR 135 was a document produced by BRE in 1988 when it was part of government, and which has since been updated. It became part of the regulatory system, having been incorporated into Approved Document B by the Secretary of State. The Secretary of State and BRAC remained responsible for determining whether and how to use BR 135 in the regulatory system for external walls. BR 135 being a part of the regulatory system does not somehow make BRE a regulator, nor responsible for that regulatory system.

Fifth, BS 8414-1 and 2 are BSI documents based on BRE's Fire Note 9 of 1999. BS 8414-1 and 2 were incorporated into ADB by the Secretary of State. The Secretary of State and BRAC remained responsible for determining whether and how to use Fire Note 9 and then the 8414 documents in the regulatory system for external walls. Again, this does not somehow make BRE a regulator or responsible for that regulatory system.

Sixth, building control completion certificates. Local authority building control have the statutory

power and duty to give such a certificate when building work is deemed to comply with the applicable functional requirements. BRE does not issue completion certificates. BRE has no status to provide an interpretation of Building Regulations or approved documents that might inform whether a local authority gives a completion certificate. Whereas other entities, such as the Building Control Alliance or the National House Building Council, may issue guidance on the meaning of Building Regulations or approved documents to assist local authority building control, BRE does not do so.

BRE's work may inform a building control officer's decision in a narrow and distinct way. BRE, as a testing house, can be contracted to carry out a test on a cladding system to one of the BS 8414 methods. If test data meet the criteria in BR 135, BRE may issue a test report and a classification report to evidence that the specific cladding system is classified to BR 135. That classification report may then be relied upon by a local authority when exercising its power to give a completion certificate.

For the avoidance of doubt, BRE was not engaged to and therefore did not test the cladding systems installed onto Grenfell Tower prior to their

installation , nor did BRE issue a BR 135 classification for the cladding systems installed onto the tower. No testing house did.

It has become apparent in this Inquiry that regulatory failure occurred prior to the fire at Grenfell Tower. The cladding systems fitted onto Grenfell Tower should have been subjected to a BS 8414 test before even being considered for the refurbishment project. Those cladding systems never would have passed a BS 8414 test and therefore never would have been classified to BR 135. Had those cladding systems been directed down the appropriate route to compliance with Building Regulations, being 135 classification , they would not have been fitted onto Grenfell Tower and would not have been signed off by building control by way of a completion certificate. As the Inquiry's expert Professor Bisby said last week in his oral evidence, "If you test ACM PE on an 8414 test, I defy you to pass that test".

BRE had no role in setting or interpreting the regulations which should have clearly directed specifiers of those cladding systems to BR 135, nor in applying or enforcing the regulatory regime by giving a completion certificate or otherwise.

It has become apparent in this Inquiry that ADB 2006

was unclear, that specifiers lacked competence to interpret ADB in a way that met functional requirement B4, and that building control too lacked competence to interpret ADB in a way that met functional requirement B4. Participants in the Inquiry who believe that it was BRE's role instead of or in parallel with the department to uncover or address those regulatory failures do not understand the role of BRE.

Third, BRE's specific research projects for government, as discussed in evidence with Counsel to the Inquiry. Evidence in this module, and as summarised in BRE's written closing submissions, covers BRE's contracts with government over nearly three decades. We refer you to those written submissions for fuller detail.

BRE's research for the department, time and time again, provided the department with the knowledge that, first of all , class 0 alone is an inadequate predictor of tolerable fire spread across cladding systems; and, second, that full-scale testing was the only method which could satisfactorily assess the performance of cladding systems. That knowledge ought to have resulted in the department formulating a regulatory system which was intelligible to stakeholders, that prohibited the use of ACM PE on the external walls of high-rise

residential buildings. It was not BRE's role to formulate that regulatory system. It was for the department to do so. It was for the department to act on objective data and technical conclusions provided by BRE, and on information provided by others if it so chose in line with its policy objectives.

I will now address briefly four specific projects undertaken for the department that were discussed with Counsel to the Inquiry.

First, pre-privatisation, in the mid-1990s, when cladding systems were first emerging in the UK building industry, BRE's Dr Raymond Connolly conducted a series of tests for the department. From the test results, Dr Connolly concluded that cladding material achieving class 0 rating may suffer extensive burning, and there is a clear need for full-scale testing of performance in fire. That research project unequivocally informed the department, more than 20 years prior to the tragic fire at Grenfell Tower, that class 0 alone is an inadequate predictor of tolerable fire spread across cladding systems, and that full-scale testing should be used to assess the safety of cladding systems.

Second, as a consequence of Dr Connolly's findings, in 1998 the recently privatised BRE produced for the department Fire Note 3. Fire Note 3 reflected the

full-scale test method recommended by Dr Connolly. Fire Note 3 was succeeded by Fire Note 9 which, as I have already stated, was succeeded by the BS 8414 test methods. As a result of BRE's research, the department had been provided with the solution to the concerns raised by BRE's Dr Connolly about the emerging use of cladding systems. It was for the department to decide whether to cite Fire Note 9 in Approved Document B and, if so, how, including whether to excise a linear route to compliance in favour of mandatory full-scale testing.

Third, contract 1924, dating between 1999 and 2002, also known as cc1924, has been much discussed in this module. It is important to understand the true and contractual purpose of cc1924 and the significance of the work product.

Cc1924 was to produce data to input into the drafting of a new version of BR 135. The data were to be used and were used to set the criteria in BR 135 so as to exclude cladding systems whose combination of materials deployed intolerable fire spread. The contract achieved that objective.

As scientists do, BRE presented objective data and technical conclusions to the department, not emotive language. BRE's technical conclusions included the following:

"The aluminium sheet product satisfied class 0 requirements, but in the full-scale, intermediate-scale and single burning item test proved to be one of the worst performing products."

And:

"The full-scale test was the only method which satisfactorily assessed the system performance, including detailing such as fire barriers."

Again, BRE's test data and technical conclusions informed the department that, first, class 0 alone is an inadequate predictor of tolerable fire spread across a cladding system; and, second, that full-scale testing was the only method that satisfactorily assessed tolerable fire spread.

As a consequence of cc1924, BR 135 was updated. The process of updating was by the formation of an industry advisory group, which consulted with BSI technical committees FSH/21 and 22. Prior to publication, BR 135 2003 was agreed by the department. BRE's witnesses' evidence was that BR 135 precludes the use of ACM PE in a cladding system, as a system that incorporates ACM PE will not meet the BR 135 criteria. It was for the department, equipped with BRE's data and conclusions, to ensure that those types of cladding systems were directed down the BR 135 route to compliance, which

could prevent them from being put into the built environment. If the department's policy choice favoured a different outcome, or if its policy was to achieve that outcome but it was poorly executed in ADB, the responsibility for that does not lie with BRE.

BRE's witnesses were asked why they did not warn industry about the dangers of ACM PE as a result of cc1924. BR 135 was the published warning to industry not to use ACM PE, as a cladding system containing it would fail to meet the BR 135 criteria. BRE had provided the department with the knowledge and means effectively to ban ACM PE. That was precisely the point of cc1924.

Fourth, the Investigation of Real Fires programme was also much discussed between BRE's witnesses and Counsel to the Inquiry, and its work product has been criticised by the Inquiry's expert Professor Bisby. These criticisms are misplaced. The Investigation of Real Fires programme must not be equated with BRE having powers to investigate fires as a regulator. BRE had and has no such remit or powers. The programme was a contractual research project, with the product belonging to the department for use or not as it saw fit. It operated on a limited budget, with the department setting criteria for the types of fire that

were to be investigated.

The department was aware of the constraints placed on the IRF programme by its budget. BRE's written closing submissions for this module detail how BRE raised the issue of those constraints with the department, see in particular paragraph 70 and footnote 53.

More significant fires were escalated by BRE's production of Fires of Special Interest reports. I now turn to a few notable example reports produced under the IRF programme.

First of all, Garnock Court.

CTI asked BRE's witnesses about BRE's report for the department on the fire at Garnock Court in 1999. BRE entirely rejects the suggestion that text was malignly deleted from this report when compared to BRE's reports for Irvine Council. That suggestion is groundless and was rejected by BRE's witnesses and the department's alike. The first paragraph of the report expressly states that it is a simplified version of a report prepared for Irvine Council.

Further, the report for the department expressly referred the department to the select committee's earlier report on that fire. The select committee had reported concerns about the adequacy of class 0 as

a predictor of tolerable fire spread across cladding systems, citing BRE's Dr Connolly's work and recording that there is a clear need for full-scale testing. The department was again presented with BRE's technical conclusions about class 0 and large-scale testing, about which BRE reminded the department in its report on Garnock Court. It was for the department to act.

BRE notes that Professor Bisby, having suggested in his Phase 2 report that information was removed from the Garnock Court report, retracted that suggestion in his oral evidence, preferring the explanation that mention of class 0 was not necessary anymore, transcript {Day290/195:1-5}.

The Edge Building.

CTI also asked BRE's witnesses about their reports for the department about The Edge Building in 2005. In a Fires of Special Interest report, BRE expressly raised with the department the potential for ADB to be read, rightly or wrongly, as allowing combustible material in a cladding framework without a BR 135 classification. As acknowledged by Ms Barwise Queen's Counsel on Monday, this report amounted to "a clear warning from Martin, Colwell and Greenwood, all then at BRE, that the provisions of section 12 of ADB governing external fire spread were insufficiently clear". It was for the

department to remedy that concern or not, as it saw fit.

Lakanal House.

BRE's witnesses were asked about reports for the department on the fire at Lakanal House in 2009. BRE produced a first draft Fires of Special Interest report for the department 13 days after the fire. It was then instructed by the department to cease investigating this fire. BRE had no obligation or authority to continue investigating.

Separately, BRE was contracted by the Metropolitan Police Service and the London Fire Brigade to investigate this fire for a different purpose. The contract expressly excluded investigations that pertained to Building Regulations.

Criticisms about the content of BRE's reports for the department, the police and the Fire Brigade fail to understand the contractual nature of BRE's work and the parameters set. BRE had no authority, remit or funding to investigate matters outside of how it was contracted.

BRE's Investigation of Real Fires reports from 2001 until 2015 contained, as you have heard, a generic statement as follows:

"The findings from this period have reaffirmed the overall [and I underline 'overall'] effectiveness of the building regulations and AD B ..."

It was put to BRE's witnesses that this generic statement was false. BRE says as follows:

First, this statement must be read against the common understanding between BRE and the department that Approved Document B required most components of an external wall to be of limited combustibility unless the cladding system had been classified to BR 135.

Second, this statement must be read with the underlying assumption that professionals can be expected to act with competence and integrity. It is wholly unrealistic to suggest that BRE ought to have predicted that people in the building industry, from architects to manufacturers and industry bodies to building control, would adopt an interpretation of ADB that failed to meet functional requirement B4.

Third, where a specific fire gave rise to a concern about how Building Regulations and ADB had been applied in the built environment, BRE drew that concern to the department's attention. The Edge fire is an example, as already discussed.

Finally, as detailed in BRE's written closing submissions for this module, the statement was accurate. As Dr Crowder put it in his oral evidence, the statement communicated that BRE at that time did not see a need for a total rewrite of Building Regulations and ADB. As

he said:

"... it doesn't indicate a fundamental problem and a fundamental need to go back to the drawing board, but this was followed up with then specific recommendations."

Sir, the Inquiry is invited to consider that the real problem in hindsight at that time was with compliance. As Professor Bisby said, ACM PE panels would never have passed 8414.

Fourth, BRE's knowledge and steps taken by BRE.

This part of BRE's oral closing will cover BRE's employees' knowledge in relation to three specific issues raised by CTI: industry confusion about the meaning of ADB; the use of ACM PE on high-rise buildings in the UK; and Kingspan's misleading claims about its K15 combustible insulation board.

BRE must be judged against its actual, not perceived or assumed, role within the building industry, and against factually accurate findings, not assumptions, about what BRE's employees knew.

BRE's position is that the department was in possession of the relevant information concerning confusion about the meaning of ADB and of the risks of ACM PE to a greater degree and/or earlier than BRE. BRE's position is that it, BRE, acted appropriately when

information about industry practice was provided to it.

Sir, I expand briefly as follows:

First, with regard to industry confusion about the meaning of ADB, as detailed in BRE's written closing submissions, BRE's employees became aware of this confusion in or around October 2013, when BRE was contacted by Trespa. BRE's Tony Baker then raised the matter with the department the following month. This was the appropriate thing to do, as Approved Document B is the department's document. The department, not BRE, had the authority to act.

Second, with regard to the use of ACM PE on high-rise buildings in the UK, as detailed in BRE's written closing submissions, it was in January or February 2016 when BRE first became aware, when Nick Jenkins of Booth Muirie raised the matter. In February 2016, Dr Sarah Colwell referred Mr Jenkins to the department. Again, this was the appropriate thing to do, as the department regulates the industry. Again, it was the department, not BRE, which had the authority and the responsibility to act.

Third, with regard to Kingspan's misleading claims about its K15 insulation board, certain misrepresentations were made about a BS 8414 test report that BRE had produced for Kingspan. BRE acted to stop

misrepresentations about this BRE document. First, when in 2006 Kingspan issued a misleading flyer entitled "What's lurking behind your façade?", BRE complained to Kingspan, after which the flyer was removed. Second, BRE informed BBA that its certificate in respect of K15 wrongly represented that K15 itself satisfied ADB. In both those instances, BRE acted appropriately.

Suggestions were put to BRE's witnesses that BRE should have done more, first, actively to uncover regulatory failure, and, second, to address regulatory failure when BRE employees learnt about issues in the industry. These suggestions mistake BRE's role for that of the department. It was simply not open to, let alone advisable for, BRE to start acting as if it had regulatory powers.

Suggestions were made that after cc1924, BRE ought to have warned the industry about the dangers of ACM PE. These suggestions misstate both BRE employees' knowledge about the use of ACM PE and misunderstand the scope, purpose and the significance of the outputs of the contract for competent professionals.

Suggestions were made that the Investigation of Real Fires programme ought to have surveyed existing building stock for ACM PE. Again, these suggestions misstate both BRE employees' knowledge about the use of ACM PE

and, more fundamentally, misunderstand the scope and purpose of the contract.

Suggestions were made that the Investigation of Real Fires programme ought to have investigated the fires at Taplow House and Sudbury House and downward fire spread at Lakanal House. These suggestions again misunderstand the scope and purpose of the contract. As I have said, BRE is not a regulator, and it has no investigatory powers.

FAQ, frequently asked questions.

Misunderstandings in the industry about BRE's role have been further evidenced by Dr Sarah Colwell being asked to draft an FAQ to address confusion about the meaning of ADB. As you will recall, she was asked to do so in July 2014, at a CWCT meeting. Earlier I addressed CWCT's misunderstanding about BRE's role as stated in a witness statement before this Inquiry. BRE's Dr Sarah Colwell accepted that she did not raise the matter of an FAQ with Brian Martin after the CWCT meeting, although the evidence is that she had already suggested an FAQ to Mr Martin prior to that meeting. In reality, Dr Colwell's error was to engage with any suggestion that an FAQ would originate from BRE. Dr Debbie Smith's evidence was that she was puzzled by Dr Colwell's agreeing to help with an FAQ as "it's not

BRE's role to write the guidance directly, nor to interpret the guidance". Dr Debbie Smith's statement about BRE's role is correct.

Fifth, the department's knowledge from other sources.

It is clear from the evidence heard in this module that the department was aware of the following:

First, paragraphs 12.5 to 12.7 of ADB 2006 were being interpreted differently from BRE's interpretation and what BRE understands to have been the department's interpretation.

Second, industry was interpreting those paragraphs in a way that failed to protect against the risks of intolerable fire spread identified by BRE's Dr Connolly's report in 1994 and by BRE's experimental programme under cc1924 in 2002.

Third, ACM PE was in fact being used on high-rise residential buildings in the UK.

Fourth, combustible insulation boards were also in fact being used on high-rise residential buildings in the UK without any technical basis for doing so.

It is evident that the department was aware of these matters at least as early as BRE was and to a greater degree, yet was unwilling or unable to act.

Brian Martin's oral evidence to the Inquiry was

plain that in the period after the CWCT meeting of July 2014, he was not going to act on the information available to him. His view was that guidance from industry bodies was the appropriate way to disseminate a stricter interpretation of paragraphs 12.5 to 12.7 of ADB 2006 version.

Mr Martin stated that the department relied on the recently published BCA Technical Guidance Note 18 issue 0 of June 2014 and the NHBC communication entitled "The use of combustible materials within the external wall construction of buildings over 18 metres in height", which attached BCA Note 18, as he said, "as a way of flagging the BCA guidance note to NHBC members, which is nearly every housebuilder in the country". His evidence was that this would be a more effective means of ensuring widespread readership than an FAQ on the department's website.

There was nothing material that BRE could tell the department that the department did not already know. As already stated, BRE time and time again informed the department that class 0 is an inadequate predictor of tolerable fire spread across cladding systems and that full-scale testing was the only method which could satisfactorily assess cladding systems' performance. Upon learning that specifiers of cladding systems and

building control were interpreting ADB differently, perhaps so as to rely on class 0 alone in lieu of BR 135 classification, it was for the department to act.

Sixth, UKAS's assessment of BRE in May 2021.

BRE is mindful of the evidence in Phase 2, Module 2 of this Inquiry, UKAS's consequent assessment of BRE in May 2021, and UKAS's evidence in that regard in this module.

It is acknowledged that UKAS identified certain improvements required in BRE's quality management systems for the purpose of ISO accreditation, but —— and BRE emphasises —— that there is no evidence that any such issues impacted on BRE's test results. The UKAS reporting process included discussions with testing personnel, who were expressly recognised by UKAS as being competent, well trained and who correctly carried out test procedures. BRE reiterates that UKAS raised no concern about BRE's conduct of BS 8414 tests. Indeed, UKAS concluded that there was no obvious indication of any testing having been performed incorrectly. BRE also wishes to reiterate that the concerns raised by UKAS are in no way connected with the fire at Grenfell Tower.

Like many organisations, BRE constantly seeks to improve the quality of its work and internal processes. BRE continues to seek improvements based on learning

from this Inquiry and from UKAS assessments.

Sir, in conclusion, the Inquiry determined in Phase 1 that the cladding systems put onto Grenfell Tower should never have been signed off by building control at the Royal Borough of Kensington and Chelsea and could never have met functional requirement B4 of Building Regulations 2010.

The evidence seen and heard in this module has disclosed that prior to the tragic fire at Grenfell Tower, paragraphs 12.5 to 12.9 of ADB 2006 were interpreted by industry stakeholders in a manner that failed to accord with functional requirement B4.

BRE has addressed in these closing submissions other misunderstandings on the part of industry stakeholders concerning BRE's role in the industry and detailed its true role. BRE did not draft ADB, BRE does not have any other status to oversee what is placed in the built environment, and where BRE heard concerns, it passed them on to the appropriate authority.

BRE's research data and technical conclusions demonstrated time and again to the department that class 0 alone was an inadequate predictor of tolerable fire spread and that full—scale testing was the only method which could satisfactorily assess cladding systems' performance. Professor Bisby's evidence on

9 June 2022 likewise leads to the conclusion that cladding materials must be tested as part of a system in a large—scale test. This has been known since BRE's Dr Connolly's work in the 1990s.

The evidence before the Inquiry in this module has revealed regulatory failure in the years leading up to the fire at Grenfell Tower. Participants in the Inquiry and those in industry who believe that it was BRE's role instead of or in parallel with the department to address that regulatory failure do not understand the role of BRE.

Finally, BRE hopes that the examination of practices, policies and regulations will contribute to the public understanding as to how unsafe cladding systems came to be signed off on Grenfell Tower and other buildings. BRE proposes to provide written submissions setting out changes to its own practices and its proposals for recommendations.

As was stated at the conclusion of Module 2, BRE is committed to learning whatever lessons for the future can be learned from this Inquiry and to play its part in the strengthened building safety regime. The Inquiry's report and recommendations will be analysed carefully and the lessons learned will be shared within the organisation and beyond to ensure continued

organisational development and improvement in this critically important area of building practice.

Thank you, sir.

SIR MARTIN MOORE—BICK: Well, thank you very much, Ms Leek.

That brings us to a close for this morning, and we shall now rise and sit again at 2 o'clock, when we shall hear a closing statement on behalf of the Local Authority Building Control from Mr Adamson Queen's Counsel. But that will be at 2 o'clock.

Thank you very much. 2 o'clock, please.

(12.56 pm)

(The short adjournment)

(2.00 pm)

SIR MARTIN MOORE—BICK: Well, we're now going to hear a closing statement on behalf of the Local Authority Building Control by Mr Dominic Adamson Queen's Counsel.

So, Mr Adamson, take your place at the lectern and begin when you're ready. Thank you.

Module 6B (Government, Testing and FRA) closing submissions on behalf of Local Authority Building Control by MR ADAMSON

MR ADAMSON: Good afternoon, Mr Chairman, Ms Istephan and Mr Akbor.

LABC wishes to begin this statement by once again expressing its sincere condolences and apologies to the families of those who perished in the Grenfell fire, to

the survivors of this tragedy and to others affected by it.

LABC intends to address you today, and it has six points that it wishes to make.

First, the evidence in Module 6 has conclusively demonstrated that there was longstanding confusion over the meaning of class 0 and the concept of limited combustibility. LABC was in no way responsible for that confusion, which existed long before it was formed. The confusion was manipulated by unscrupulous players within the construction industry, such as Kingspan and Celotex.

Second, the evidence in Module 6 has conclusively demonstrated that successive governments implemented and thereafter maintained a competitive building control regime within a non-prescriptive framework of legislation without sufficient control or oversight. This led to what many refer to as a race to the bottom.

Third, LABC acknowledges once again that there were shortcomings in its type approval and registered detail certification for K15 and its registered detail for RS5000. The evidence conclusively demonstrates that those shortcomings were symptomatic of industry confusion rather than its cause.

Fourth, LABC rejects the baseless criticisms that it was corrupt and/or dishonest in the manner in which it

operated its type approval and registered detail schemes. It emphatically denies the suggestion that decisions it took were financially motivated and/or driven by a desire to preserve a commercial relationship with Kingspan and/or Celotex. It is denied that these baseless allegations also demonstrate regulatory capture of LABC.

Fifth, although LABC issued deficient certificates in relation to both K15 and RS5000, those errors had been corrected by the time those products were considered for the Grenfell Tower refurbishment. There is absolutely no evidence that LABC certification, deficient or otherwise, influenced the decision to use those products.

Sixth, LABC rejects attempts which have been made by other core participants to use LABC as a shield for their own shortcomings.

As the Inquiry knows, LABC has made radical changes to its company structure and strategic direction. It has already introduced extensive measures to drive up standards in the building control profession. However, it does not regard its work as being done. It has been invited by the panel to participate in the process of identifying potential recommendations arising from the evidence heard in Phase 2. LABC welcomes that

recommendation and will actively participate in the process.

Point 1: industry confusion.

According to Professor Bisby, the widespread compounding of class 0 with non-combustible appears to have been a serious problem since at least 1991 and openly discussed with the government since at least 1999. There cannot be, and LABC does not believe there is, any dispute with that proposition, nor does there appear to be any dispute that successive governments singularly failed to address the confusion despite multiple opportunities to do so following devastating fires at Knowsley Heights in 1991, Garnock Court in 1999 and at Lakanal House in 2009.

In particular, LABC notes that what is now the Department for Levelling Up, Housing and Communities, and which I'll refer to as "the department", accepts that it failed to keep ADB up to date or to address known ambiguities, including around class 0. It acknowledges that Approved Document B was poorly drafted and that it had the potential to cause confusion amongst industry and building control. It accepts it missed numerous opportunities over a period of years -- LABC would suggest decades -- to identify and understand issues with enforcement and compliance with

Building Regulations.

Against such a background of admitted failure by successive governments, it can be no surprise that the confusion which Professor Bisby highlights persisted or that it manifested itself in LABC certification. LABC takes little comfort from the fact that its deficient certification was a symptom of the widespread confusion and misunderstanding within the industry over the meaning of class 0 and the distinction between it and materials of limited combustibility, but LABC insists it was not the cause of this confusion and misunderstanding.

The industry confusion, coupled with the catalogue of government failures, led to a regulatory regime which was exploitable and exploited by the unscrupulous. LABC realises that it was manipulated by manufacturers who preyed on industry-wide confusion to obtain LABC certification. It naively believed that applicants acted in good faith.

But there must at least be a measure of understanding of the point made by Mr Ewing of LABC when he said to this Inquiry:

"I'm still struggling to come to terms with why anybody would actually try and sell a product that wasn't fit for purpose, particularly in relation to

fire safety."

I am sure he speaks for many.

The answer to the question which Mr Ewing posed, namely why would anyone do that, is two-fold: first, successive governments allowed them to do so; and, second, the manufacturers' greed.

The government had known for many years that manufacturers were selling products which were likely to be unsafe. For example, the moment it became cognisant of the RADAR 2 research which identified that only four of the 11 aluminium rainscreen products tested, similar to those used on Grenfell Tower, satisfied class 0 requirements, it should have appreciated that there was something profoundly wrong. This was hard data which proved that the majority of the products tested did not even achieve class 0. Rather than impose stringent performance criteria on cladding materials, the government preferred not to distort the marketplace or to be a barrier to trade.

The department accepts this was "another missed opportunity for the department to have reviewed the adequacy of class 0 and also to have potentially uncovered the manner in which the manufacturers were gaming the testing system". It states that it is difficult to understand why the government didn't take

action. LABC agrees, and it is grateful to the department for its mostly accurate appraisal of its shortcomings.

Point 2: competitive building control.

LABC has read with interest the submissions made in particular by the BSRs and the Royal Borough of Kensington and Chelsea relating to the introduction of competition into the building control arena. Mr Maxwell-Scott Queen's Counsel on behalf of RBKC identifies a tension between, on the one hand, the introduction of competition to the building control system by the introduction of approved inspectors and, on the other, the requirement that local authority building control, at least from 2010 onwards, be cost neutral. This was and is the only regulatory regime which was subject to competition. Such a unique arrangement required central government to keep a close eye upon how the system was operating in practice. He contends that a close eye was not kept. LABC agrees. Moreover, the demand that building control bodies be cost neutral placed under-resourced local authority building control teams at a disadvantage to approved inspectors.

The expectation that building control bodies would work collaboratively with applicants could compromise

their ability to perform their primary function. There was a risk of blurring of lines caused by the expectation that building control bodies would work with an applicant rather than performing a regulatory function.

The BSR Team 2, led by Mr Mansfield, observed that the story of NHBC clearly demonstrates that, in practice, allowing regulatory services to be carried out by private bodies leads to inevitable conflicts of interest. This chimes with the observation made in a department paper in July 2015, which noted that there was no incentive for approved inspectors to inform local authorities where enforcement action may be needed. To do so would be to bite the hand that feeds them. BSR Team 2 assert, with some justification, that regulatory functions do not belong in private hands. LABC agrees.

Point 3: shortcomings in LABC's certification.

Briefly and by way of recap, LABC accepts, first, with respect to K15, the type approval summary issued in 2009 should not have stated that K15 could be considered a material of limited combustibility and suitable for use above 18 metres. Mr Jones of Herefordshire Council's judgement that K15 could be considered of limited combustibility was incorrect. Errors he made

could and should have been identified during LABC's member peer review process.

Second, with respect to the K15 registered detail issued in August 2013, it wrongly stated that the product can be used on buildings with storeys greater than 18 metres from ground level, provided it is used in combination with suitably non-combustible substrates and ancillary components. It was wrong because it could only be used in a system which was identical to that which had been the subject of the actual BS 8414 test.

Third, with respect to RS5000, LABC's first registered system document in 2014 should not have stated that RS5000 was acceptable for use in buildings with storeys above 18 metres in height, subject to the board being fixed to a non-combustible substrate, without explicit reference to the required caveats; specifically, it could only be used in a system which was identical to that which had been the subject of the BS 8414 test.

Having regard to the prevailing industry confusion, LABC contends that its principal failings occurred during two distinct periods: first, in 2009, when the type approval certificate was issued by Herefordshire Council, and subsequently through Mr Turner's failure to respond appropriately or

effectively with the Rockwool complaint. That complaint should have been dealt with more effectively. LABC notes that this was a failing which Mr Turner shared with the department, who were copied to that complaint, and who acknowledged that they too missed an opportunity.

Second, from July 2014 to November 2014, when LABC was too slow and insufficiently decisive in the manner in which it dealt with the shortcomings in the RD for K15, during which time there was a growing appreciation within LABC of the industry confusion.

It should now be clear that the original errors made by LABC were a direct result of industry confusion that had permeated the industry for at least 20 years prior to the issue of the first system approval for K15. This confusion, of which government was well aware, eventually resulted in George Lee of the BBA issuing the misleading agrément certificate for K15 which LABC relied upon when issuing its 2009 system approval and 2013 registered detail. When he gave evidence to this Inquiry, Mr Lee remained under the assumption that class 0 is equivalent to limited combustibility.

Point 4: the baseless criticism of LABC.

Although LABC does not wish to detain this Inquiry with these submissions, it is necessary to address

certain points which appear in the closing statements produced by other core participants. First, the baseless allegation made by BSR Team 1 that LABC was dishonest in the manner in which it issued the certification. Second, the baseless allegation made by the FBU that the content of the certification was driven by LABC's financial dependency on Kingspan.

Dealing first with dishonesty.

BSR Team 1 allege that:

"Dishonest and unrepresentative testing carried out and certification by BBA and LABC was client–focused and executed by insufficiently competent staff."

It is unclear whether that is an allegation of dishonesty levelled at both BBA and LABC or just BBA. Any allegation of dishonesty made against LABC is absolutely refuted. LABC does not accept that there is a scrap of evidence that it deliberately intended readers of its certificates to be misled by them.

BSR Team 1's detailed critique of LABC is to be found at section 9 of its written statement. Three points are made: first, there was a catalogue of errors in the certification from 2009 onwards for K15 and RS5000; second, it suggests that there was a flawed certification process; and, third, it suggests LABC was "played all the way but ready to indulge Kingspan and

Celotex". None of these points to LABC's dishonesty. The specific allegation of indulgence is denied.

LABC notes that it was never suggested to Mr Turner or Mr Ewing that they were dishonest, and it does not accept either was. However, LABC is not and has never been blind to the unsatisfactory nature of parts of their evidence. By way of example, LABC has readily accepted that Mr Turner's response to the complaint made by Mr Cody of Rockwool in 2009 about the literature produced by Kingspan for K15, which indicated that it was a material of limited combustibility, was wholly inadequate. But such a failing falls well short of dishonesty. LABC also accept that Mr Ewing's decision to agree to an extension of the RD certificate for K15 to November 2014 was also wrong. He described it as foolhardy, which it was, given that he knew that a BBA certificate existed and he was aware of concerns which had been raised about the use of K15 by Mr Martin of the department with Mr Evans of NHBC.

BSR state that the admission was warranted. It is clear that the content of the K15 certificate was at that time under active consideration. Mr Ewing was wrong to allow an extension, but that decision was corrected. This clearly demonstrates that he was not dishonest.

Financial dependency.

The FBU suggest that Mr Turner and Mr Ewing's shortcomings in their handling of the Kingspan matter can only be credibly explained by LABC's financial dependency upon Kingspan. This is a risible suggestion. The income LABC derived from Kingspan was minuscule and could in no way give rise to a dependency. The flimsy basis upon which this allegation has been explored in evidence cannot be overstated. For example, obviously flippant emails and jokes relating to bonuses and saving failing companies between colleagues have been treated as if they were fact. LABC was not beholden to the cladding industry generally or any particular manufacturer or supplier. There was limited financial benefit behind each registration. Neither LABC nor LABC staff were driven by profit and the need to certify applications for financial gain, or to maintain a relationship with any other entity. LABC derived no income from the original 2009 type approval which included the erroneous statement.

Despite this, the allegations of financial dependency persist. Far more credible explanations for the conduct of Mr Turner and/or Mr Ewing have been ignored. For example, Mr Turner accepted that, between 2008 and 2011, he had frequently engaged and had

positive dialogue with Kingspan on matters such as thermal performance, which had become "more important to building control". It was Kingspan who had become accessible through government-convened groups in which he was partaking. He accepted with hindsight that this may have affected how he dealt with concerns about fire performance. He also explained that he had no budgetary responsibility and no responsibility to generate income. Surely a much more credible explanation for Mr Turner's conduct is that he naively trusted Kingspan and thought wrongly that they were a responsible organisation.

As for Mr Ewing, he was not afraid to make concessions about his and LABC's shortcomings. He accepted the possibility that Kingspan may have been attempting to sweeten LABC with the promise of further registered detail work at a time when there were active concerns about the RD for K15 in 2014. But a proper analysis of the evidence demonstrates that Mr Ewing was not corrupted by the possibility of losing further work.

In December 2014, Kingspan made a verbal threat to LABC that it would not proceed with £31,000 worth of registered detail work in relation to other products if the RD for K15 was not extended and/or re-issued. If LABC was financially dependent in the way that has been alleged, then one would have expected Mr Ewing to do

what Kingspan wanted them to do, to extend or re-issue the certificate, in order to preserve the relationship and secure the work. LABC did nothing of the sort. As Mr Ewing explained:

"... we didn't do anything and didn't jump to the tune I think just demonstrates that we weren't that finance-driven, the questions you were asking me earlier. You know, this had to be right, and we knew at this point that any registered detail had to be correct when it went out the next time, which wasn't until, I think, March of 2015."

Thus, the evidence clearly demonstrates that the allegation of financial influence of LABC by Kingspan is completely unfounded. Even if Kingspan was attempting to sweeten up LABC, they failed. Mr Ewing accepted that LABC was "played all the way" by Kingspan and Celotex, but neither he nor LABC indulged either Kingspan or Celotex.

The FBU goes even further and suggests that the content of LABC's certificates are a clear example of regulatory capture. The submission is confused insofar as it suggests that the certificates reflect LABC's financial dependency on Kingspan and the like. Tailoring the content of certificates to preserve commercial relationships is corruption, not regulatory

capture. This is emphatically denied and without foundation. LABC was played but it was not corrupt.

Point 5: the impact of deficient LABC certificates.

LABC has two submissions. First, there is no evidence before the Inquiry of any undue significant weight being attached to LABC's certification to demonstrate proof of compliance in accordance with ADB. The Inquiry received evidence of an occasion in July 2014 when Mr Ewing was approached by Mr Everett of Europa Façades, who indicated that a specialist contractor had sought to rely on the RD for K15 as proof of compliance with ADB and BR 135. The specialist contractor, singular, he was referring to was Kingspan. This was the only example of such conduct which was ever brought to LABC's attention. It is clear that Mr Everett did not accept Kingspan's claim at face value and he gave careful thought to the issue of whether the use of K15 was permissible on that development.

In its written submissions, LABC has provided numerous examples from the evidence before you which suggests that LABC itself and LABC's certification were not widely known of or relied upon in the construction industry. Thus, there is limited evidence for the suggestion that the construction industry professionals were relying on LABC's K15 certification to justify its

use. The evidence before the Inquiry of reliance on LABC certification in relation to RS5000 is, we would submit, non-existent.

Secondly, and most importantly, there is no evidence that LABC's historically deficient certificates played any role in the decision to use K15 or RS5000 as part of the Grenfell Tower refurbishment. LABC addressed these points in detail in its closing submissions to Module 2. Nothing in Module 6 has undermined the force of the points made. Fundamentally, this was because, by the time the decisions were taken about insulation on Grenfell Tower, the LABC certificates for K15 and RS5000 were correct. The historic errors could not and did not make any difference. The only positive evidence of actual reliance was the very late and false claim from Mr Hoban of RBKC that he had considered an LABC certificate. LABC invites the Inquiry to reject his evidence. For examples of the lack of reliance on LABC certification, LABC invites the Inquiry to consider annex B to its closing statement of Module 6.

Point 6: LABC should not be used as a shield.

It is regrettable that some core participants have sought to use LABC as a shield to justify, defend or mitigate their own failings. I believe two examples here suffice.

First, Kingspan sought to justify its continued marketing of K15 on the basis of an LABC certificate, despite the fact that it knew it was wrong and had been obtained on false premises. LABC need not say anything more about that risible proposition.

Second, NHBC has sought to suggest that it was powerless to take action against the use of K15, and it has attempted to blame local authority building control bodies and LABC. It argues that if it had declined to issue final certificates on a development with K15, it would not have made a difference because the matter would have been referred back to the local authority who, it asserts, would not have taken enforcement action. Mr John Lewis of NHBC said this:

"I think one point which we at the NHBC did have in mind at the time was that, legally, if NHBC was not prepared to accept the building with K15 on it, then that meant we would not be able to issue a final certificate, and the regulatory process meant that then those schemes would have to revert back to Local Authority Building Control for them to take enforcement action. We had in the back of our minds that LABC had a certificate accepting it as a material of limited combustibility and were generally accepting buildings with this material on it, and so we were kind of

thinking: well, is there a great deal of point in rejecting them and sending them back to the local authority if they're likely to still only get approved under the local authority's ways of doing things?"

LABC does not accept this is true. LABC is unaware of a single example of this happening in practice. This is NHBC's way of abrogating its responsibility for building control. If NHBC, the single largest private sector building control body in the country, had declined to issue the certificate because it was not satisfied that K15 was safe, and it had made clear that this was the basis for its refusal, it is not accepted that LABC's members would disregard that conclusion in the manner NHBC suggest.

Concluding remarks.

In opening Module 6, Counsel to the Inquiry indicated that certain core participants were attempting to obfuscate or smuggle something past Counsel to the Inquiry. Whilst it's not clear which parties CTI was referring to, it is most definitely not LABC. LABC has engaged fully with the Inquiry since 2018 in an open and honest manner and has provided full and prompt disclosure. LABC also proactively highlighted where and why mistakes were made. With this in mind, LABC must again categorically refute any allegation that decisions

or errors were made based on financial motivation or undue influence. Such allegations, we say, are entirely without merit and not evidence-based.

LABC accepts historic mistakes were made and it was manipulated by manufacturers who preyed on industry-wide confusion to obtain LABC certification. It naively believed the applicants acted in good faith.

LABC has monitored the Inquiry's proceedings and listened to the evidence presented extremely closely. LABC has acknowledged historic errors and has learned from these errors and addressed competency issues. The steps it has taken included but are not limited to the creation of an independent, accredited and audited standards framework for local authority building control teams. This quality management system ensures that surveyor competence is matched to project complexity. It has developed Ofqual accredited qualifications for building control professionals, and it's developed a UKAS audited competency validation assessment to measure competence of building control professionals. It has also wound down its registered detail scheme.

However, it does not regard its work as being done. It wants to continue to work to regain the public's trust. In that respect, it will actively participate in the process of formulating Phase 2 recommendations, as

it has been invited to do so by the panel.

That concludes my oral statement on behalf of LABC, and I'd like to thank you for affording me the time to address you.

SIR MARTIN MOORE-BICK: Well, thank you very much, Mr Adamson.

The next statement is going to be made by Mr Matthew Butt Queen's Counsel on behalf of the National House Building Council.

So, Mr Butt, if you would like to come up.

Thank you. When you're ready, then. Thank you very much.

Module 6B (Government, Testing and FRA) closing submissions on behalf of the National House Building Council by MR BUTT

MR BUTT: Thank you, sir.

NHBC repeats its commitment to assisting this Inquiry to ensure that what occurred at Grenfell Tower never happens again. It is crucial that the housebuilding industry learns from the events that took so many lives on 14 June 2017. NHBC again expresses its deepest condolences to those who lost loved ones in the Grenfell Tower fire, to the survivors of that fire and to all those affected by this tragedy.

We invite the Inquiry to analyse the position of NHBC with the following six points in mind.

First of all, as a building control body, NHBC operates within a system that, at its heart, relies upon subjective assessments regarding whether systems such as external wall arrangements will meet the functional requirements of the Building Regulations. That system is imposed by and can only be strengthened by government.

Secondly, NHBC is only one of a large number of organisations offering building control services, and it should not be held to a higher standard than others simply because of its market share. Where NHBC has been criticised for allowing combustible cladding systems to be used above 18 metres, and in particular K15, in reliance upon BBA certificates, NHBC did so based upon third-party assessment of products and materials as outlined in government guidance. The evidence shows that the same or a less stringent approach was taken by other BCBs. What this points to is a wider problem within the industry as opposed to a failing by NHBC.

Thirdly, to the extent that NHBC and others have been criticised for working with the building industry, that was what government policy required of BCBs both at the relevant time and today.

There have been some suggestions that NHBC's actions in addressing the use of K15 were driven by a desire to

hide past errors and/or were commercially motivated, and that some evidence from NHBC witnesses has been an ex post facto rationalisation given to the Inquiry. These are serious allegations which require cogent evidence before any such conclusion can be drawn.

The evidence is that between 2013 and 2014, it was primarily NHBC staff challenging Kingspan, requesting test evidence, and ultimately driving the industry away from reliance upon certificates which it is now known were issued in error and based upon deception by manufacturers. Whilst NHBC accepts it should have done more and acted more quickly, the panel will of course examine what other industry groups and BCBs were doing at the relevant time before drawing adverse conclusions against NHBC.

Fifthly, NHBC has always recognised that the use of testing or desktop reports was only evidence that could assist in showing whether minimum standards have been met as required. Wherever NHBC considered such reports as a means of showing compliance, NHBC's own fire engineers and their line managers would critically evaluate the reports against the background of their own professional knowledge and experience. Further information would be required from the builder and/or its fire engineer as necessary before NHBC would reach

a conclusion as to whether all of the evidence showed that minimum standards had been met.

Sixthly, whilst the actions of NHBC and its staff have been carefully scrutinised, it is important not to lose sight of the fact that NHBC was not involved at any stage in the refurbishment of Grenfell Tower. The evidence is one way. Neither the guidance issued by NHBC nor that of the industry group, the Building Control Alliance, was applied, referred to or contemplated by RBKC or the relevant architects.

NHBC has undergone a period of self-reflection since the fire, including in the wake of evidence heard at this Inquiry, to consider what it could have done differently during the relevant period, and NHBC accepts the following:

First of all, it should not have placed the level of reliance it did upon the Kingspan K15 BBA certificates, given the potential for an error within such certificates. The evidence shows there was over-reliance throughout the industry upon these.

The panel might think that a particularly unsatisfactory element of the current regime is that independent certification is capable of showing evidence of compliance with the regulations, but the test evidence behind these certificates is confidential to

the manufacturer and not available to builders or BCBs who seek to rely upon that certificate. Instead, the BBA refers builders and BCBs to the manufacturer for any additional or supporting evidence they require. NHBC submits this has created the opportunity for unscrupulous manufacturers to exploit certificates issued in error to an alarming degree. Had the BBA and others known that -- had there been a system whereby NHBC had been able to obtain the test evidence upon which some BBA certificates were based, this would have exposed Kingspan's misconduct far earlier.

Secondly, NHBC accepts it should have acted more swiftly to change its own policy once the problems with Kingspan became apparent. The level of Kingspan's deceit and manipulation that has been exposed in this Inquiry is utterly shocking. NHBC was not aware until receiving disclosure in this Inquiry as to how far this manufacturer was prepared to go to market its products.

It is accepted that one way of tackling the problem could have been for NHBC to refuse to issue building control final certificates where K15 was specified over 18 metres. It is hard to say in 2022 what effect this would have had had NHBC taken this stance alone at the time. Other BCBs would have issued building control final certificates, and the possibility of effective

enforcement action would have been limited. Nevertheless, it's accepted that unilateral action at that time would have raised awareness of the issue and could have forced swifter and more decisive action.

Thirdly, it's accepted that NHBC's 2016 guidance note was insufficiently clear. This is in view of, first of all, the drafting of that document; secondly, the fact that, unbeknownst to NHBC staff, there was a class B 100% PE—core ACM panel on the market in 2016; and, thirdly, what NHBC now knows about the quality of some option 3 reports which had been prepared in the industry. The evidence, however, demonstrates that this guidance, which could only apply to NHBC customers, was not in fact used by the builders as a route to demonstrating that any ACM PE cladding façades were compliant.

As the Inquiry is aware, NHBC is a private company limited by guarantee. It has no shareholders, and is non—profit distributing. Any revenue above operating costs is reinvested in the organisation to fund its purpose and ensure sufficient capital is in place to back its insurance business. NHBC provides building control services through its subsidiary, NHBC BCS, as an approved inspector.

NHBC is not the housebuilding industry's regulator.

Whilst NHBC BCS must apply and interpret Building Regulations and make judgements as to whether these have been complied with, which NHBC staff confirmed they do fearlessly, independently and without regard to commercial considerations, this does not make NHBC a regulator in a technical or legal sense.

NHBC's reputation, built over more than 80 years, is grounded in public, industry and customer confidence in the safety of the buildings that it's involved with for both warranty and building control services. Upholding standards is a key part of ensuring that reputation is maintained. Each NHBC witness was questioned about their expertise and qualifications, and it's submitted that those in key positions at NHBC were suitably qualified and experienced to perform the roles required of them.

At the time of the fire in 2017, between Mr Evans, Mr Lewis and Ms Marshall, there was a combined total of nearly 100 years working in the building control industry. Mr Evans has a degree in building surveying and, since he began working as a building surveyor in 1991, he had been involved in buildings ranging from small houses to airport terminals and football stadiums. Ms Marshall holds a first—class degree in building engineering and is a past president of the Chartered

Association of Building Engineers. Mr Lewis holds a BSc in construction management and an MSc in fire and explosion engineering. He has been a building surveyor since 1994, and from 2013 was a specialist fire engineer. Other external and internal fire engineers were employed where necessary. This meant that for the key period in question from 2013 onwards, NHBC had either internal and/or external fire engineering advice available, and its approach was always to take specialist external advice where required.

To the extent that it's been suggested to NHBC witnesses that they or NHBC's actions in dealing with Kingspan were motivated either by a desire to cover up past mistakes or to increase market share for commercial advantage, this is strongly refuted and is inconsistent with a fair reading of the evidence.

NHBC would ask the panel to consider the following four matters in this regard:

First of all, raising standards in the industry and improving the quality of housing is why NHBC exists. Any profits that are made are reinvested for that purpose. Brian Martin said that NHBC was more than just a commercial enterprise, and had taken positive steps in dealing with combustible cladding problems. The

suggestion that standards were lowered for profit was strongly refuted by all NHBC witnesses. As Mr Evans said in evidence when it was put to him that it would have been bad for business had NHBC stopped accepting the use of K15 over 18 metres:

"It was not done to protect market share, it was not done for any other reason than to allow industry to give us the information so we could make an informed decision, which we did in 2015 ... I'm a building control professional. I've been in the industry 32 years. At no time was any approach made to me to find a solution to protect NHBC's ... integrity or historic buildings ... if anyone had, I would not be working for that employer."

This typified the reaction of all NHBC staff when such suggestions were put to them.

There is no evidence that could reasonably and safely lead to a conclusion that NHBC's actions were in some way designed to cover up past mistakes. NHBC has disclosed all relevant communications and documents from key personnel over an extensive period. No document has been identified which supports any posited theory that evidence now given is a recent invention, far less that NHBC was acting out of a desire to secure a commercial advantage. The evidence shows clear and candid concern

on the part of NHBC about, in particular, the actions of Kingspan, and a determination to get to the bottom of whether K15 was safe for use above 18 metres and, if so, in what circumstances.

As to being driven by profits, it was the evidence of Steve Evans that the letter sent to NHBC's customers in March 2015, informing them of the change in NHBC procedure to require compliance with the BCA guidance note, caused difficulties with NHBC customers, and led to projects being rejected and negative commercial consequences for NHBC.

One example of this is the Apex project, a warranty proposal where a desktop report was provided by the builder supporting the use of ACM PE cladding. NHBC refused to provide a warranty for this building as its own internal procedures suggested that the cladding makeup was not compliant. This refusal was made notwithstanding the very full evidence provided from Dr Raymond Connolly, who had provided further updated reports insisting that the cladding was compliant with the regulations and presented an acceptable risk. NHBC was also aware that this project had received a final certificate from the relevant local authority who provided building control for the project.

Following this refusal, a different warranty

provider was content to offer a warranty and took a fee for doing so, notwithstanding the presence of 100% PE ACM cladding in the façade.

John Lewis also gave evidence that NHBC's customers were complaining that NHBC was requiring more than their interpretation of ADB required, which is supported by contemporaneous correspondence.

CTI has also established from each of NHBC's witnesses that NHBC interpreted ADB as requiring compliance with both paragraphs 12.7 and diagram 40 of ADB, thus requiring that all elements of the cladding makeup, including filler materials, were materials of limited combustibility. As the Inquiry has established, this was far from the universal approach adopted across the industry, with some designers, manufacturers and builders considering only the combustibility of the outer face and not its core. Had NHBC been attempting to lower standards for commercial advantage, then it could have chosen to interpret ADB as requiring compliance with either paragraph 12.7 or diagram 40, which would have enabled combustible materials to be used in a wider variety of makeups without desktop reports. It is untenable to suggest that these were the actions of an organisation seeking to lower standards for commercial advantage.

This Inquiry has confirmed that the Building Regulation regime before the Grenfell fire was complex and non-prescriptive with a deficit of clear guidance. The extensive reform of fire safety and building safety regulation and guidance following the fire at Grenfell Tower amply demonstrates the pressing in the end for reform which existed in 2017.

One of Dame Judith Hackitt's key findings was that the package of regulations and guidance in the form of approved documents can be ambiguous and inconsistent. NHBC and the industry as a whole had to work within that imperfect framework.

It is the builder's sole responsibility under the regulations to ensure works comply with those regulations. A BCB cannot provide a guarantee of compliance with the regulations, and the process does not remove the obligation of the person carrying out the work to achieve compliance, and also cannot insist on a higher standard than that set out in the Building Regulations.

There has long been confusion over the application of ADB, so much so that the coroner in the Lakanal inquest, Her Honour Frances Kirkham CBE, made recommendations in 2013 to government in which she concluded that "ADB is a most difficult document to

use". Her recommendations included that clear guidance in relation to regulation B4, with particular regard to the spread of fire over the external envelope of the building, was provided and expressed in words intelligible to the wide range of people engaged in construction, maintenance and refurbishment of buildings.

The Secretary of State responded, as set out at paragraph 43 of our written submissions, assuring the coroner that the department was committed to a process of simplification, and that research was commissioned which would feed into a review of ADB and a new edition in 2016/17 to ensure the guidance was capable of being more easily understood. The reality, however, was that the recommendations within the Lakanal House report were not acted upon before 2017 and, instead, government relied upon the industry to issue guidance in the interim.

Industry guidance obviously does not have the same status as statutory or government guidance. Nevertheless, MHCLG's approach was to rely on industry guidance to fill at least a temporary gap where interpretation was required, because it did not have, according to Brian Martin:

"... a mechanism for changing the approved documents

very quickly. So ... we'd try to get industry guidance to resolve problems that might have arisen in between reviews."

The evidence was that had industry not sought to adopt a consistent application of the Building Regulations through guidance, there would have been what Brian Martin described as "a really big problem, bigger than the one we are dealing with now".

NHBC submits that the housebuilding industry should not have been placed in this position, and the panel should be slow to criticise those who used their best efforts to ensure consistency and drive improved standards in the industry whilst working within an imperfect system.

The use of combustible materials in construction is not new. MHCLG was aware of the issues concerning external cladding systems throughout the review of ADB which led to the 2006 edition being published. It was suggested to NHBC witnesses that reliance upon the BBA certificate was an ex post facto justification for NHBC accepting K15. This is strongly refuted. Reliance on an independent certificate as evidence of compliance is and was wholly permissible, as confirmed by several authorities set out at paragraph 46 of our written submission. The use of BBA certificates has long been

a part of industry-wide building control processes in the UK and remains so today.

NHBC of course accepts that, in its role as an AI, it is concerned with whether there is compliance with a specific or functional requirement of the Building Regulations, and is required to take reasonable steps to satisfy itself within the limits of skill and care. In doing so, BBA certificates may be relied upon by a BCB. NHBC knew the BBA to be an accredited and trusted organisation and had no reason to doubt its competence.

The actions of NHBC in respect of the various BBA certificates relating to in particular K15 do not however show that it blindly relied upon those certificates. If that had been the case, NHBC would not have needed to have undertaken its own extensive investigations into K15.

The BBA certificate for K15 had been in use and accepted by other BCBs since 2008. Prior to 2013, no concerns had been raised in the industry or by government about it. Mr Evans told Mr Martin in July 2014 that on the basis of the BBA certificate of 2008, NHBC and other BCBs had accepted the use of K15. This did not cause Mr Martin to contact Mr Evans and raise concerns over this.

It is beyond dispute that other BCBs accepted the

BBA certificate at face value and that this was standard practice within the industry. It was Mr Evans' evidence that other BCBs interpreted paragraph 7.3 of the certificate in the same way as NHBC, that it allowed for K15 to be used over 18 metres either based on the certificate alone or by reference to the manufacturer. This was confirmed in the Philip Pettinger email of 3 April 2014, in which he stated that:

"On warranty only jobs [NHBC] are accepting K15 if the building control body is happy and deem it to comply. They always are and always do."

Mr Turner of LABC, who had previously worked for a local authority providing building control, said that:

"... whenever ... in my role within a local authority, when anybody came to me with a product that I'd never heard of or not even before, my question was: does it have a BBA certificate? Does it meet the requirements laid down?"

Indeed, as the panel is aware and has just heard, LABC went further and issued its own registered detail certificate for K15. This was issued on the basis that K15 had the appropriate BBA certificate. LABC's position remained supportive of K15's use even when concerns were raised with LABC by another manufacturer.

There were also real problems with the BCB suddenly

taking a unilateral stance to refuse to accept the certificate. As Mr Evans explained to the Inquiry, had NHBC refused to accept K15, its only real power as an AI would have been to refuse to issue a final certificate so that the development would revert back to the local authority for enforcement action. Mr Lewis said that NHBC knew that, given a local authority BCB would regard the use of K15 as compliant, given the existence of the BBA certificate and/or the LABC registered detail, they were consequently unlikely to take enforcement action. It is unclear how a local authority could both accept K15 in its role as a BCB but then also take enforcement action against a builder when they had used it, regardless of the position of the AI who had acted for building control. NHBC's refusal would not have stopped the use of K15 and was likely to have created more confusion in the industry.

Mr Evans was asked to explain why he allowed NHBC surveyors to permit the use of K15, having seen the amended BBA certificate dated 6 April 2010, but published in 2013, with retrospective effect, which suggested K15 could be used in accordance with paragraph 12.7.

First, as Mr Evans explained, NHBC had questions at the time that it wished to explore when faced with this

certificate produced by a reputable accredited body. As Mr Evans said:

"In our mind, there had to be a reason why BBA were making that statement. Kingspan must have provided them with information at that time in order to make that statement. What we wanted to understand was: what information had they provided? What information had they got which we hadn't, which allowed them to make that statement?"

Whilst it's of course accepted that Kingspan would not be able to show that K15 was a MOLC, it was not unreasonable to think that, having apparently passed one test, Kingspan would be able to provide, as repeatedly promised, further tests which would demonstrate K15's reliability in a variety of wall makeups.

After the re-issue of the certificate on 17 December 2013, NHBC knew that complex buildings being designed would not have concluded their construction stage for quite some time, so there was time for NHBC to complete its investigation when Kingspan was repeatedly assuring it that it could provide further information to demonstrate compliance with the Building Regulations. As the BBA would not provide the information used in its assessment, NHBC took the only available route it had and raised its concerns and requests for evidence

directly with Kingspan. Brian Martin's evidence was that in this difficult situation, "I thought NHBC waiting for more tests to come back was the best available answer we had".

NHBC was not permitting Kingspan to mark its own homework. What it was doing was investigating the evidence to support Kingspan's claims. The fact that Kingspan prevaricated and lied to NHBC significantly contributed to the length of the process.

There was a suggestion in questioning of NHBC's witnesses that it could have sought information from the BBA. The reality is the BBA would not have provided such information to NHBC on the basis of its confidentiality agreement with Kingspan and would have referred NHBC to Kingspan with whom it was already in dialogue.

NHBC refutes any suggestion that it took a lax approach to fire safety. The evidence is that NHBC was regarded as difficult by the building industry, particularly in relation to building control, and that this harmed its commercial relationships. Contrary to any suggestion that NHBC was in league with Kingspan, Brian Martin said in evidence that NHBC was taking leadership over dealing with Kingspan, and that he saw NHBC doing this both as a positive thing, and reflecting

the way the government encouraged industry to behave.

NHBC's efforts to confront Kingspan are evidenced by the volume of correspondence seen by this Inquiry, which shows NHBC staff challenging Kingspan and pressing it for test data, absent which builder customers would have been informed that the product would not be accepted. For example, on 16 June 2014, Mr Evans wrote to Kingspan explaining that, unless it provided additional test evidence, NHBC would need to consider whether it would accept K15 in buildings over 18 metres as fit for purpose.

Further, on 10 October 2014, at a meeting with Kingspan, NHBC explained that unless it received a letter of comfort from BRE and Arup, it would start to inform its builder customers that K15 was no longer acceptable in buildings over 18 metres. This was followed up by email, where NHBC emphasised the need for Kingspan to move quickly, and the letter to Kingspan dated 5 February 2015, in which NHBC set out the action it was taking and additional requirements that K15 would now be subject to. These were then communicated to all NHBC builder customers.

Kingspan were sufficiently concerned by NHBC's actions that they went as far as to instruct lawyers to threaten NHBC with an injunction, which did not change

NHBC's decision to change its policy.

When considering the degree to which it's fair to be critical of NHBC for its approach, the panel might ask what evidence there is of other BCBs, including local authorities, taking similar steps during the relevant period. Whilst NHBC did more than others in the industry, it accepts that it was not enough.

In terms of BCA guidance, Mr Evans explained that one of the reasons for the formation of the BCA was because, as a profession, BCBs didn't want to compete on technical standards, and as builders shouldn't be shopping around for lower standards. The panel must of course be careful to differentiate between NHBC and the BCA. The two organisations are separate and perform different functions from one another.

The BCA members are represented on its committees by professionals working within the building control industry with the expertise to contribute and review proposed guidance independently. In putting their names to the guidance under the BCA umbrella, each member, including LABC, had an obligation to its own organisation to ensure that it reviewed and agreed with the terms of that guidance. Draft guidance was also provided to MHCLG as a papers-only member of the BCA. Aside from receiving relevant documents, MHCLG could and

would occasionally attend meetings. In relation to the BCA guidance note, Mr Martin said this was a short-term solution to the problem.

We've addressed both options 3 and 4 in our written closing. Given time constraints, I will confine these oral submissions briefly to option 3.

It is unsustainable to suggest that desktop assessments were a creation either by NHBC or the BCA or that they were created to legitimise alleged past practice. They were an established convention. NHBC had seen desktop reports for other elements of construction, such as fire doors and cavity barriers. Steve Evans confirmed that, "these reports were part of our daily work".

The use of desktop reports for external wall systems was first raised not by NHBC or by the BCA, but at a meeting with and by Wintech in November 2013, as documented in NHBC's note of the meeting and the evidence of Stuart Taylor of Wintech, such a report having been provided to Wintech by the BRE.

Further, at no time did MHCLG raise any concerns or suggest that option 3 was not compliant with ADB. In an email to Mr Evans on 21 June 2016, Mr Martin said:

"I'm comfortable with the principles set out in the BCA guidance note. The 4 options are a matter of fact."

Mr Martin's evidence was clear that the BCA guidance note was a good thing, and that he said it was more restricted than at least some interpretations of ADB. He also said it made ADB safer.

Where option 3 desktop assessments were provided to NHBC, these would be scrutinised, challenged and further evidence required, where necessary, before NHBC would issue a final certificate for building control purposes. The process was that a fire engineer would review each option 3 assessment and it would then be escalated to Steve Evans for a further review, who would send it for formal internal sign-off by a senior manager, usually Diane Marshall or Ian Davis. Whilst not qualified fire engineers, Ms Marshall and Mr Evans are longstanding professionals who are familiar with the requirements of the regulations. Had there been any desire to lower standards, NHBC would not have put in place a multi-layered approvals process.

It is correct that Mr Martin discussed with NHBC concerns about some desktop reports, but he clarified these were not for NHBC projects. Mr Martin said he was happy with how Mr Evans, speaking on behalf of the BCA, addressed the issue during his presentation at the Façades to Tall Buildings conference in July 2016, and said he hoped this would improve the industry's

understanding and provide clarity until the issue could be addressed by way of a review of ADB.

NHBC witnesses have been closely questioned on the motive behind publication of Technical Guidance Note 18 and if this was an attempt to make compliance easier. It's important to repeat that it was the BCA and not NHBC that published the BCA guidance note.

The panel will also appreciate the point that if it was truly NHBC's motive to increase its own profits by winning more work for itself by allowing option 3 reports, it would have issued the guidance in its own name and not worked with other bodies around the BCA table to produce, review and issue the BCA guidance.

The 2014 note was amended in June 2015 to allow option 3 desktop assessments to be undertaken by "any suitably qualified fire specialist". As with all previous BCA guidance, this was agreed by all BCA members and the technical committee. Neither MHCLG nor any members of the technical group raised the responsibility that the term "fire specialist" might be misunderstood and/or lead to less qualified people undertaking the assessment. As far as NHBC was concerned, any review by it of a desktop assessment would have picked up any deficiencies, including the expertise of the author. There is no evidence the

change in language in fact led to a dilution in standards. As the Inquiry is aware, "fire engineer" is not a protected title. The only way for that problem to be remedied is for regulation of this field of work, which is something NHBC would welcome.

It was suggested to John Lewis that BRE Trust BR 135 guidance, if read side by side with ADB, would suggest that option 3 was not a valid form of compliance as there was no means of extrapolating test data from BS 8414 tests.

The evidence is that this could not preclude option 3 from being a possible route to compliance, not least of all as ADB sets out possible as opposed to exhaustive or prescriptive routes. Paragraph 0.21 expressly states that there may be alternative ways of achieving compliance with the Building Regulations than provided in the guidance.

If it were the intention of government to exclude an otherwise standard route to compliance, then this would be explicit. To the contrary, the effect of appendix A is to allow desktop assessments. This was Brian Martin's understanding of the wording of BR 135, as explained to the Inquiry.

As to the refurbishment of Grenfell Tower, RBKC did not refer to the BCA guidance during its work on

Grenfell Tower. It had no impact on the project.

In terms of NHBC guidance, the purpose of NHBC's external guidance was to set out in a transparent manner that if the NHBC builder customer could show it had followed that guidance, NHBC Building Control Services was likely to accept that project in question for building control purposes. That was not, however, a foregone conclusion, because NHBC would always check each project on a case-by-case basis.

As explained in evidence, the 2016 NHBC guidance note was based upon NHBC's experience of reviewing option 3 and option 4 reports. There is simply no evidence that it resulted from lobbying by Kingspan or any other manufacturer. The guidance note was launched at the July 2016 conference where Brian Martin was present and whose view was that this was, in principle, a permissible approach, and did not widen the routes to compliance within ADB.

NHBC has accepted there were shortcomings with the document, and when asked by CTI, Mr Evans said he did not stand by the 2016 NHBC guidance note based upon the post-fire MHCLG testing. Importantly, this guidance note was not in the event used to accept any buildings with ACM cladding. Steve Evans said that NHBC checked all builds which had used the 2016 note and no buildings

with ACM cladding had used the guidance as a means of showing compliance.

After the fire, NHBC reviewed all its relevant guidance to reflect the withdrawal of the 2016 guidance note. This resulted in NHBC issuing new internal guidance in August 2017, then updated in December 2018.

The 2016 guidance note could not have been used when considering whether the cladding on Grenfell Tower was compliant. Other BCBs should not have used NHBC guidance to complete their own work, and the evidence is that RBKC did not do so. In fact, the publication date was after John Hoban issued a final certificate for the refurbishment work. John Lewis said in evidence that if Grenfell Tower had been an NHBC project, it would have been referred to him and he would not have accepted it.

Finally, reviews.

As has been well established, NHBC conducted various reviews into projects where it provided either building control services or warranty insurance that are relevant to combustible cladding. The 2015 combustible cladding review looked at schemes that were registered from 1 January 2014 and projects still in build registered prior to that date. This review required that, for all projects which had commenced pre-2014, there was confirmation from Kingspan that K15 was suitable for use

over 18 metres on that project. For all projects where notice was issued in 2014 or 2015, NHBC ensured that one of the routes in the BCA guidance note had been followed, which included checking the internal escalation procedure, which I've already explained. None of the buildings in the 2015 review had specified the use of ACM cladding with a PE core.

The 2017 post-fire review looked initially at projects that had been accepted under the 2016 NHBC guidance note as the basis for compliance. A small number of buildings were identified which specified ACM cladding. However, none of these had used the 2016 guidance note as a route to show compliance and none had a PE core. The buildings specifying ACM were then investigated under the terms of NHBC's internal guidance, B600, which took account of new MHCLG test evidence. Once this process had been completed, it was extended to a review of all projects under construction to ensure that wherever option 3 or 4 had been used as a route to compliance, they met the required standard. These too were checked under the revised procedure under B600.

CTI has pressed NHBC witnesses as to why the reviews did not cover historical projects where NHBC had provided building control services as the high market

share enjoyed by K15 would suggest a large number of projects would have been completed with this product. There are three matters we ask the panel to consider in this regard.

The first is an AI has no power to impose conditions or propose modifications to completed works. The powers of an AI are limited and cease completely after a final certificate has been issued.

Secondly, in relation to buildings constructed between 2008 and 2014, where K15 had been specified, NHBC would have issued a final certificate, assuming all other matters were compliant, if K15 had been used in accordance with the BBA certificate, including reference having been made by the builder to Kingspan as the manufacturer. Once that had been issued, NHBC would have no power to contact the builder and require or request the cladding used be checked.

Thirdly, this must take into account what has happened since 2017. There has of course been extensive publicity about K15 and combustible cladding generally since the tragic fire at Grenfell. This has led to enquiries with builders and warranty providers in order to establish whether the cladding that has been used was compliant. As a result, central and local government conducted its own review into properties which might

have combustible cladding. As the panel is aware, after the Grenfell fire, a letter was sent to all local authorities asking them to assess all buildings over 18 metres within their region in order to assess risk from ACM cladding, and NHBC of course has co-operated with that process.

Sir, in conclusion, NHBC reiterates its commitment to assisting the Inquiry to ensure that what occurred at Grenfell Tower never happens again. We wish to reiterate that at all times NHBC acted with its core purpose to improve standards in housebuilding, often going further than other BCBs or industry bodies, and that this came before any commercial considerations.

Finally, NHBC is keen to learn any lesson it can and to play its full part in ensuring an improved fire system in the UK housebuilding industry for the future.

Sir, those are my submissions.

SIR MARTIN MOORE-BICK: Well, thank you very much, Mr Butt.

We are running a little bit ahead of time, but I think that's a good point at which to take our afternoon break.

When we come back, we'll hear a final statement from DLUHC, which is going to be delivered by Mr Beer Queen's Counsel.

We'll rise now, we'll come back at 3.25, and then

we'll hear Mr Beer.

Thank you very much. 3.25, please.

(3.10 am)

(A short break)

(3.25 pm)

SIR MARTIN MOORE-BICK: Finally this afternoon we're going to hear a closing statement on behalf of the Department for Levelling Up, Housing and Communities made by Mr Jason Beer Queen's Counsel.

Thank you very much.

Module 6B (Government, Testing and FRA) closing submissions on behalf of Department for Levelling Up, Housing and Communities by MR BEER

MR BEER: Thank you very much, sir. I'll again refer to the department as "the department".

SIR MARTIN MOORE-BICK: Yes.

MR BEER: As it has done throughout the Inquiry, the department has assisted and supported Module 6 by providing, by way of disclosure, thousands of documents to the Inquiry; by providing 26 witness statements to the Inquiry from 19 witnesses, ranging from the then Secretary of State to former ministers to the then Permanent Secretary, other senior civil servants and very junior civil servants, from which number the Inquiry heard oral evidence from ten departmental

witnesses; and, finally, by setting out, in its 45-page written opening statement, its position in relation to the issues that arise in part 2 of Module 6 of the Inquiry, namely the adequacy or otherwise of the Building Regulations and approved documents, as well as the amendments to them; the adequacy or otherwise of other standards and guidance, including in relation to fire safety measures; the fitness for purpose of the testing, certification and classification regime for exterior wall materials; and the adequacy or otherwise of the department's response to recommendations from various sources in the years leading up to the fire on 14 June 2017.

As the department set out in its written opening, it accepts responsibility for the failures of the past and, in particular, its failure to understand how and whether the regulatory system was working in practice or how it was being enforced. In this regard, the department failed to exercise sufficient oversight of a system that it owned as the sponsoring government department.

Furthermore, the department accepts that it should have put in place a system that enabled officials within the department to take on board, to work on, and then to progress the lessons learnt and recommendations given following other fires, including those tragic events at

Lakanal House in July 2009.

Whilst the department's recognition of these failures cannot change the terrible events of 14 June 2017, nor atone for the immeasurable loss and grief suffered by the bereaved, survivors and residents, the department hopes that its sincere commitment to learning the lessons of this tragedy will give a measure of solace to those affected.

The issues that arose for the Inquiry in Module 6, Phase 2, can be summarised in the following way: up until June 2017, what was the system in place for the testing, certification and classification of exterior wall products? Up until June 2017, what was the legislative system in place in England and Wales in respect of Building Regulations and what role did the department play in it? How did the regulatory system develop and was it adequate? What recommendations were made and from what sources as relevant to the risk of fire at Grenfell on 14 June 2017, bearing in mind its composition and occupancy? And what steps did the department take to address such recommendations? Were those steps appropriate as related to the risk of fire in high-rise residential buildings?

The extent to which any inadequacies in the Building Regulations, approved documents, standards or

other guidance, or to what extent any failure to act upon warnings or recommendations as to the risk of fire spread in high-rise residential buildings caused or contributed to the manner and speed of the spread of fire at Grenfell Tower, the extent of the damage and the number of casualties is ultimately a matter for the Inquiry.

Turning briefly, then, to the testing, certification and classification of exterior wall products. This is an area in which the department has historically had less involvement, and I will therefore leave it to other, better placed core participants to outline the relevant structure for the Inquiry.

However, notwithstanding the extent of the department's historical involvement, it has listened carefully to the evidence throughout the Inquiry, and notes that this evidence has established that the system of testing and certification was being gamed by certain manufacturers.

The department has already introduced the Building Safety Act 2022, paving the way for a new national regulator for construction products, covering all construction products marketed in the UK, with powers to withdraw products from the market if they present a safety risk.

In addition, this will no doubt be one of the issues considered by the independent review of the effectiveness of the system that the department has already established in line with the findings of Dame Judith Hackitt.

To the extent that the Inquiry is considering within Module 7 the adequacy or otherwise of small-scale tests as a means of classifying exterior wall products, and the issue of desktop assessments as a means for certifying such systems, the department looks forward to any recommendations from that evidence. However, the department's preliminary view is that both retain some benefit as methods of classifying products and demonstrating compliance and, in this regard, I would highlight the point made in the written closing submissions of this module by others, namely that tests, and particularly small-scale tests, should not be relied on in a vacuum. A competent designer should also consider how those components are to be used within a whole system, and that issue of the competent designer is one to which I will return later.

So the system of Building Regulations and the department's role in it.

The department set out in some detail in its written opening for Module 6 the genesis and development of the

regulatory system of the Building Regulations, and I will therefore not repeat that here. However, the essential features of it -- noting that some of them have now changed through the Building Safety Act -- and which are relevant to the issues that I'm going to address are as follows.

First, the system enshrined at the time in legislation by the Building Act 1984 and the various Building Regulations made thereunder was and continues to be an outcomes-based regulatory model, which provided flexibility in an era of complex, infinitely varied and evolving systems of construction. The Secretary of State has responsibility for the overall system and the department is the sponsoring department.

Approved documents are produced under the provisions of the 1984 Act and are approved by the Secretary of State to provide guidance for those involved in the construction industry for common building situations. There was and still is no legal requirement to follow the guidance provided in an approved document.

Whilst the approved documents cover a range of topics, Approved Document B obviously concerned fire safety. The fire protection of buildings, including their design, is a complex subject, and therefore whilst Approved Document B is intended to

provide guidance for common situations, such guidance is necessarily for the benefit of competent professionals. That is something which is recognised by others in their written closing submissions. Where it is suggested that it is "obvious from a perusal of paragraphs 12.5 to 12.9 of Approved Document B that compliance with the linear route is an issue that should have required expert advice and input on behalf of the department", I would respectfully agree.

The system was a decentralised one, and once the Secretary of State had set the standards in the form of the Building Regulations and, if he or she chose to do so, given guidance by way of the approved documents, it was then for local authorities to monitor and enforce compliance. The department did not at that time have any superintending role within the Building Regulations to ensure that local authorities were carrying out their role properly. Both local authority building control bodies and approved inspectors can provide certification that works have been carried out in accordance with the Building Regulations. The department played no role in that. Ultimately, it is for the person carrying out the building works, whether themselves or through their contractors, to comply with the provisions of the Building Regulations.

I would invite the Inquiry to keep those propositions as to the system in place at the time in mind when considering the evidence given by the department's and other witnesses during the course of the Module 6 hearings.

So the development of the Building Regulations and Approved Document B.

This Inquiry has heard a great deal of evidence detailing the changes to the Building Regulations and the approved documents, spanning a period of 32 years from the Building Regulations 1985 to the date of the fire.

In respect of the Building Regulations themselves, whilst there was a period in which functional requirement B4 was arguably stronger, at least semantically, because the word "adequately" was omitted, I would note the conclusion respectfully that the Inquiry drew in its Phase 1 report namely:

"Although in another context there might be room for argument about the precise scope of the word 'adequately', it inevitably contemplates that the exterior must resist the spread of fire to some significant degree appropriate to the height, use and position of the building."

The department respectfully submits that that is

exactly the conclusion that should be drawn when the Inquiry is considering functional requirement B4, and that it must follow that the inclusion or exclusion of the word "adequately" does not materially affect the suitability of this drafting. A competent professional would or should have understood that functional requirement B4 inevitably contemplated that the exterior wall of a high-rise building must resist the spread of fire to some significant degree.

Turning to the approved document, the department accepts that the Inquiry has identified aspects of the drafting in various versions of ADB that were potentially confusing to industry and to building control. Much of the Inquiry's evidence on the issues identified within Approved Document B focused on the 2006 edition, and the amendment of the title to paragraph 12.7 to "Insulation Materials/Products" and the introduction of the word "filler".

Whilst the department accepts, as did Mr Martin during his evidence, that both of these amendments were capable of causing confusion, the department would reiterate that a competent professional faced with the decision as to whether to use, for example, an ACM PE panel, should have, in the face of any ambiguity in Approved Document B, been referring themselves back to

the functional requirement and considering whether specifying such a product would meet the overall objective of ensuring that the exterior wall in question resisted the spread of fire to some significant degree.

The department would suggest that it is plain that the professionals engaged in the refurbishment of Grenfell Tower, and those professionals engaged in the construction and refurbishment of other high-rise residential blocks in the country, cannot claim to have seriously turned their minds to the question of compliance with functional requirement B4 in any meaningful way.

Furthermore, the preponderance of high-rise buildings clad with ACM PE panels and combustible insulation demonstrates that local authority building control and approved inspectors were not applying their minds, or not competently applying their minds, to the basic functional requirement. This position is supported by the BRE's written closing submissions for this module, and indeed by Professor Bisby's report, "Phase 2 – Regulatory Testing and the Path to Grenfell", at paragraphs 929 and 930.

To the extent that it has been suggested by some core participants that the department's interpretation of "filler" as including the core of an ACM PE panel is

an ex post facto rationalisation, or that it represents a political lie, this must be viewed against the unequivocal evidence of the BRE's witnesses that Approved Document B in 2006 prohibited the use of ACM PE panels. There has been no collusion between the department and other parties in asserting that the term "filler" was intended to cover the core of such panels. The simple truth is that cores were one of the "things", to use Mr Martin's term, that the word "filler" was intended to cover.

It was the department's belief throughout the period in question that if a competent professional applied the provisions of paragraph 12.7 of Approved Document B correctly, it prohibited the use of ACM PE panels because of the presence of the highly combustible core. To the extent that it has been argued by Arconic that the wide use of ACM PE panels demonstrates that they were treated as acceptable by government, I would invite the Inquiry to consider that the department's role was a decentralised one, and it did not hold any sort of database about what products were being specified and where. This is supported again by the written closings of the BRE, which reinforce the department's position that generally compliance with the Building Regulations and guidance was thought to be being achieved, and that

until relatively recently, before 14 June 2017, the department was not aware that ACM PE panels and insulation were being widely used in practice.

Certain core participants have suggested that the department adopted a "head in the sand" approach rather than facing up to the predictable legacy of buildings clad with ACM PE panels. For the reasons that I've just explained, this is not the case. Properly considered and applied by a competent professional, functional requirement B4 would not permit the use of such materials, and ADB 2006 was always intended to effectively prohibit the specification of composite materials with combustible cores. The department, in its decentralised role, with a lack of any superintending function did not appreciate such materials were being widely specified in practice until much later.

Turning to relevant recommendations and the department's response.

The department has set out in its closing submissions for Module 6 a chronological list of its responses to historical recommendations, and it accepts that it failed to take heed of the various warnings given over a number of years that might have enabled it to identify the widespread non-compliance with the

Building Regulations that the Inquiry has uncovered.

Because the Inquiry has our written closing, I do not propose to rehearse each occasion on which the department accepts that it missed an opportunity to reflect on whether the Building Regulations system was operating as intended, but I would wish to take this opportunity to respond to one discrete point made by some of the bereaved, survivors and residents in their written closing submissions for this module, and to reinforce the reasons why the department considers that those recommendations and warnings were not heeded in the way that the bereaved, survivors and residents might have expected them to have been.

Dealing first with a point made in BSR Team 1's closing submissions.

It's asserted that the Inquiry should draw conclusions from a document suggesting that the Knowsley Heights fire be "downplayed" or "played down". The simple point I would wish to make in response to this is that the Inquiry hasn't heard any oral evidence from any witness who can speak to what the intention of that suggestion was, what lay behind it, what it meant, and therefore the Inquiry should, in our submission, be slow to draw any conclusions in respect of it.

As to the reasons why the department missed the

opportunities presented to enquire into the effective operation of the system, the department would suggest respectfully that they're four-fold: firstly, the lack of a formal oversight role for the department in the regulatory framework; secondly, and connected to that, a reliance on industry; thirdly, financial constraints in the department; and, fourthly, the deregulatory policy. The department would suggest that these elements combined led to a situation where officials felt unable to escalate concerns when they arose.

It's apparent from the submissions made by other core participants that it is appreciated that financial constraints are accepted to have had an impact on the department's operations. It's of particular note that others recognised that whilst Mr Martin himself asserted that he was a single point of failure, in reality responsibility was not one that could possibly fall on one person's shoulders.

In respect of deregulation, whilst the department would not accept that the delays to the publication of the seven workstreams was due to it being "enslaved to the deregulatory agenda, despite safety warnings", as has been suggested by others, the delays, I would suggest, are primarily demonstrative of an under-appreciation of the risks by the department in

not updating Approved Document B sooner, based upon a false understanding that the system was generally operating as it should be.

But the department would accept that deregulation played a part in underpinning a culture in the department where officials felt unable properly to escalate warnings when they were raised or to progress work in response to recommendations and, in particular, those made by the coroner following the Lakanal House fire.

The department would accept that an exemption for the Building Regulations, or at least those aspects of them which concerned life safety, should have been sought from the deregulatory agenda, although to the extent that it's suggested by the FBU that Dame Melanie herself should have known about the lack of such an exemption, apparently drawing, the FBU do, a direct line between her time as Permanent Secretary and Lord Pickles' time as Permanent Secretary(sic), I would respectfully remind the Inquiry that Dame Melanie was only in post as Permanent Secretary during Lord Pickles' tenure for ten and a half weeks.

The department regrets that such a culture was allowed to form, and has overhauled its risk management procedures in the years following the fire to ensure

that, in future, risks are properly flagged and are escalated. The department remains committed to learning from the tragedy and to taking steps to ensure that such a fire cannot happen again in England and Wales.

The Fire Safety Act 2021 and the Building Safety Act 2022 will bring about improvements in building safety, the biggest improvements in building safety for a generation. The latter Act paves the way for the establishment of the building safety regulator under the umbrella of the Health and Safety Executive, and a new national regulator for construction products as part of the Office for Product Safety and Standards.

In addition, the department has committed to invest £5.1 billion to address the fire safety risks caused by unsafe cladding, of which £1.7 billion has already been allocated. An additional £60 million has been provided to replace waking watch measures with fire alarms in all buildings, regardless of height or the nature of the building or the reason for needing the watch.

The Building Safety Act puts residents at the heart of the building safety regime, and it gives them a strong voice in the management of their building's safety. It ensures all residents are informed about building safety, are engaged in how their building is kept safe and are empowered to be able to challenge

those responsible for their safety.

In addition, the department has removed much of the burden for meeting the cost of remediation from leaseholders, as well as improving leaseholders' ability to seek redress. Extending liabilities to include associated companies and extending limitation periods are part of this. This and other work in the department will help ensure that those who created building safety issues pay for them to be fixed, and that the work is done properly.

The department continues to seek pledges from developers, those companies who have profited from the broken Building Regulation system, to remediate life critical fire safety defects in buildings over 11 metres in height without recourse to the government's £5.1 billion funds. To date, 45 residential development companies have signed such pledges, and the department actively seeks pledges from others.

Whilst the department maintains that the tragedy at Grenfell could have been avoided had those professionals engaged in its refurbishment actually stopped and properly considered the use of ACM PE panels and combustible insulation as against the simple functional requirements set down in paragraph B4 of the schedule 1 to the Building Regulations, a position supported by the

closing submissions made in this module on behalf of many bereaved, survivors and residents.

The department recognises that it too bears the responsibility for failing to take notice of warnings that the regulatory system was inadequate and operating sufficiently poorly, such that it would permit such a state of affairs to arise.

The department will continue to reflect on the evidence that has been heard throughout Module 6 as it works to reform the building safety system, and will look forward to receiving the Inquiry's recommendations in due course.

That's the department's closing submissions.

SIR MARTIN MOORE-BICK: Well, thank you very much, Mr Beer.

Well, that brings us to the end of the oral statements closing Module 6, so we shall rise in just a moment. It only remains for me to say that there will be no hearing of the Inquiry tomorrow. We shall resume on Monday of next week at 10 o'clock, when we shall hear closing statements relating to Module 4.

So that's the end for today. We resume at 10 o'clock on Monday next week. Thank you very much.

(3.51 pm)

(The hearing adjourned until 10 am on Monday, 27 June 2022)

INDEX