IN THE MATTER OF THE GRENFELL TOWER INQUIRY BEFORE SIR MARTIN MOORE-BICK

OUTLINE OF CLOSING SUBMISSIONS ON BEHALF OF THE CLIENTS REPRESENTED BY THE G11 FIRMS

We have divided our submissions into three parts: -

- 1. Paper A Non compliance with Building Control and Fire Spread (separate paper)
- 2. Paper B
 - (a) Coordination of the Emergency Services
 - (b) The process of the inquiry

Paper A

"Grenfell has to stand for something this has to be the one when it stops." 1

"Grenfell Tower should never have been handed over with this rainscreen system, in circumstances where a Stay Put evacuation strategy was in place" ² "It shouldn't have been occupied." ³

Introduction

1. The public inquiry into the causes of the Grenfell Tower disaster must start with the patent facts. From the beginning of the fire it was obvious that the building was not behaving as it should, and it soon became apparent that the terrible events unfolding on 14 June 2017 were most likely attributable to the building's new façade: TMO's chief executive Robert Black knew early in the morning there were "questions about the cladding and spec....health and safety compliance [and] the refurbishment would be a primary focus."

¹ Nicholas Burton, Grenfell Tower Inquiry 6.11.18/Burton/Page 89-90Line 25

² Barbara Lane Supplementary Report at 2.11.15/[BLAS0000002] /Barbara Lane oral evidence on 22.11.18 []) ³ 22.11.1/ Lane/p170/line 12-14:"I'd actually go even further than that...if those materials had been known..the building shouldn't have been occupied."

⁴ Robert Black email 06.00 on 14.6.18 1M010031176 0009

- 2. Whilst the Article 2 investigations may establish multiple causes (or potential causes)⁵ for individual deaths, and near deaths, the rainscreen cladding system installed as part of the 2016 refurbishment will be ubiquitous to them all. Its presence critically undermined the building's fire safety integrity such that it would inevitably fail its occupants and the fire fighters charged with rescuing them.
- 3. Numerous other important failings of a secondary order existed in the Tower on 14 June 2017.

Definition of the rainscreen cladding system (RCS)

4. Dr Barbara Lane ("Lane")'s description of the rainscreen cladding system ("RCS") includes the ACM panels, insulated in-fill panels and extract-fan surrounds, thermal insulation behind the rainscreen cavity and around the new windows, the windows frames (old and new) and the EDPM membrane between the new windows and the existing concrete wall and cavity barriers.⁶

Effect of the RCS on fire spread: a multiple compartment fire was inevitable in GT

- 5. Lane documents and explains how the RCS's composition, arrangement and construction detailing created "*multiple catastrophic fire-spread routes*."⁷
- 6. These routes were lateral and vertical (including downwards) and occurred despite the ostensible fitting of vertical and horizontal cavity barriers in some (but not all) required locations.⁸
- 7. The RCS was similarly critical in permitting <u>fire egress</u> from the compartment of origin (Flat16). Lane identifies the combustible insulation panel around the extract fan (and the fan itself) as a potential route, whilst Professor Torero ("Torero") explains that any modest (non-flashover) kitchen fire close to the window (viz. a 300kW fire no more than 3.1m away/1m if obstructed), would have caused the UPVC surround to lose its mechanical properties and bring the combustible materials in the RCS to ignition and render external fire spread "inevitable" [55-57].

⁵ In the context of endeavouring to prevent future fatalities, potentially causative contributions are as material as causative ones - *R* (*Lewis*) v *Mid and North Shropshire Coroner* [2010] 1 WLR 1836 at [28].

⁶ Lane at 8.2.3 [BLAS0000008]

⁷ Lane at 2.9.9 [BLAS0000002]

⁸ Lane Section 10

⁹ Lane 9.5.21 BLAS0000009 0046

¹⁰ Professor Luke Bisby says egress from the kitchen of Flat 16 was most likely caused by a combination of both these routes: paras 15, 694, 712, 713. [LBYS0000001]

- 8. Torero confirms that modest fires of this type in residential kitchens are <u>certain</u> to occur.

 11 Therefore, a fire across the external wall of GT was similarly <u>bound to happen</u> one day.
- 9. Moreover, LANE confirms that the RCS <u>accelerated ingress</u> of the fire into other flats¹² and Torero states, <u>in any event</u>, it is "not reasonable to expect an external fire occurring on the building will not start internal fires within the building."¹³
- 10. Therefore, the RSC meant a multiple internal compartment fire was essentially inevitable in GT.

The respective contribution of the components in the RCS

11. The RCS comprised numerous components made of different materials. The respective contribution of these various components to the fire spread is the subject of separate submission (see addendum below). Their precise contributions may be the subject in Phase 2 of some disagreement amongst the experts or transpire to be essentially indeterminable, but it is clear that the ACM panels were the cause of the most rapid external flame spread (because of their PE core and their bespoke detailing which exposed edges).

12. The Non-compliance with ADB 2013

ADB12.6-12.8: the "prescriptive" or "linear" route

- 13. Based on the relevant test evidence submitted to the Public Inquiry, Lane finds none of the construction materials in the RCS complied with their individual fire performance requirements for a building with a storey 18m or more above Ground Level set out in ADB 12.6-8. In summary:
 - a) The external surfaces (ACM panels and the in-fill and extract fan panel insulation) did not achieve Class O or otherwise comply with Diagram 40 as required by ADB 12.6 (11.36).
 - b) The insulation (attached to the external walls and around the windows) was not of limited combustibility as required by ADB 12.7/Appendix A (11.63).
 - c) The cavity barriers such as had been installed did not comply with the required fire performance set out in ADB 12.8 and Section 9 (11.66/87).

¹³ Torero [122-3] JTOS0000001 0005

¹¹ Torero 52-4 [JTOS0000001 0003]

¹² 22.11.18/lane/p58/line 10-14

- 14. The Inquiry will be conscious that other from Lane it hasn't heard evidence regarding the question of compliance with ADB. However, it should not be deterred from adopting her assessment for that reason: Arconic¹⁴, Celotex¹⁵, Siderise¹⁶ and Kingspan¹⁷ do not contend their products used in GT complied with the requirements in ADB 12.6-8.
- 15. This also means that it is not necessary for the Inquiry to determine as an anterior issue of interpretation the question whether "filler" in ABD 12.7 applies to the PE in ACM, in respect of which Lane¹⁸ and Colin Todd¹⁹ disagree and G11 reserves its position.

ADB 12.5 – full scale testing route

- 16. Lane confirms that having reviewed the material disclosed by Celotex and Kingspan, there is no evidence that a <u>relevant</u> full-scale test was carried out (11.22), i.e. one where there was <u>no fundamental difference</u> between the system as tested and the as-built construction at GT (Lane 3.9.4.4/11.89).
- 17. Celotex, Kingspan and Arconic suggest that their products used in GT can be ADB compliant via full-scale testing route, but do contend that a similar or identical system to that fitted to GT has ever been full scale tested.²⁰
- 18. Therefore, as with paragraph 12.6-8, there is no reason why the Inquiry should not state in its Phase 1 report that the recommendations in ADB 2013 were not complied with.

Conclusion on ADB 2013

19. The prospect of the Inquiry receiving evidence in Phase 2 that would merit a departure from Lane's assessment of the RCS's compliance with ADB is negligible and it should therefore make appropriate findings in Phase 1, subject to the caveat that if it is shown to be necessary they can be revisited in Phase 2.

Non-compliance with the Building Regulations 2010: functional requirement B4²¹

20. Irrespective of its approach towards compliance with ADB 2013, the Inquiry should not refrain from doing that which in G11's submission it must do above all else in its Phase 1

¹⁴ Arconic appears to accept that the core of an ACM panel is filler for the purposes of 12.7 and that the PE in Raynobond 55 PE is not of limited combustibility [22]. Even if that is wrong and Lane's interpretation is the correct one it is plain that Raynobond 55 PE was not class 0 throughout.

¹⁵ Celutex PS at 9.11.2 confirms RS5000 was Class D and was not of limited combustibility [CEL00007954]

¹⁶ Siderise have said nothing about this. [SIL00000251]

¹⁷ Kingspan have said nothing about this. [KIN00000461]

¹⁸ Lane 2.31.29

¹⁹ Todd 2.58 [CTAR00000001 16]

²⁰ Kingspan state categorically that the system at GT was not the same as that tested with Kooltherm K15 [KIN00000461]

²¹ Part B of Schedule 1 to the Building Regulations 2010

report, which is to <u>conclude</u>, (A) as a mixed question of fact and law, that having regard to the height, use and position of the building, the external walls of GT did not adequately resist the spread of fire over the walls; <u>and</u>, (B), therefore, the installation of the RCS constituted a material alteration pursuant to regulation 3 Building Regulations 2010 as it resulted in GT non-complying with, or being more unsatisfactory in relation, functional requirement B4 of Schedule 1 to the 2010 Regulations.

21. The reasons for this submission are as follows:

(A) Non-compliance with functional requirement B4

- a. ABD 2013 is guidance only and s.7 of the Building Act 1984 explicitly states that non-compliance (or compliance) with Approved Documents does not equate to contravention (or non-contravention) of the Building Regulations.
- b. Therefore, as there may be ways of achieving compliance with the Building Regulations other than following the guidance in ADB (see paragraph 0.21 and Celotex's opening statement), there must also be ways of contravening the Regulations other than by failing to follow the ADB.²²
- c. This is particularly the case with external building façades like the RCS because their fire behaviour is dependent on the overall system's performance, rather than the performance of the individual components. As Torero explains "the complexity of this façade system is such that observations and tests, such as BS 8414, do not provide sufficient information to be able to reach incontestable conclusions. The specificity of the scenario used for these tests and the quantity and quality of the data recorded does not allow for a reliable extrapolation of the test results."²³
- d. Ultimately, as Torero explains, compliance with the Building Regulations is dependent on holistic risk assessment by competent professionals.²⁴ Notably, Lane found that having "reviewed all of the fire test evidence provided to the Public Inquiry at this stage, and in general found it not to be relevant test evidence for Grenfell Tower. None of it demonstrates that the relevant material or product at Grenfell Tower is in accordance with a specification or design which has been shown by test

²⁴ Torero 8-9 [JTOS0000001 0004]

²² Approved Document L states this explicitly.

²³ Torero 8-9 [JTOS0000001 0004]

- to be capable of meeting the required performance. This remains the case having reviewed even more information provided to me since April 2017^{7, 25}
- e. In accordance with all of the above, Lane's clear opinion is that "irrespective of all of the non-compliances", the RCS was "fundamentally non-compliant with the Building Regulations" because the external wall could not adequately resist the spread of fire to an extent that supported (a) the Stay Put policy and (b) Defend in Place fire-fighting regime for which GT was designed when the RCS was installed, and which were not changed subsequently (2.9.8). Luke Bisby also states B4 was breached.²⁶
- f. Lane supports this opinion with the after the event evidence she considers demonstrates the external wall did not in fact adequately resist the spread of fire.²⁷
- g. Importantly, Lane confirmed that her opinion assumed all other active and passive fire protection measures in GT were fully compliant and in working order. In her view it was simply "not possible to mitigate the type of fire that those materials [in the RCS] would cause". ²⁸ In other words, the RCS would have made GT's design incompatible with a Stay Put strategy even if, for example, the fire doors and smoke extract system were compliant, the fire lift worked and wet risers present.
- h. Lane therefore concludes that "Grenfell Tower should never have been handed over with this rainscreen system, in circumstances where a Stay Put evacuation strategy was in place." (2.11.15)

(B) RCS installation was a "material alteration"

- i. It is transparently obvious and incapable of contradiction that the RCS worsened GT's performance in relation to external fire spread. It would be manifestly pointless for the Inquiry to leave this issue open in its Phase 1 report (subject to the caveat expressed in paragraph 19 above).
- 22. In summation, it is submitted that (A) "adequately" in requirement B4 cannot reasonably be interpreted in a manner consistent with its statutory purpose ("securing the health, safety, welfare and convenience of persons in or about building"²⁹) and the extent of

²⁵ Lane 2.30.4

²⁶ Bisby, para.749, 750. [LBYS0000001]

²⁷ [11.2.33/11.23.14-16] [B:AS0000011]

²⁸ 22.11.18/LANE/page 183 line 6-16

²⁹ Section 1(1)(a) of the 1984 Act.

external fire spread that the RCS inevitably would, and indeed did, cause at GT and (B) as the works to install the RCS resulted in GT being non-compliant with (or less satisfactory in relation to) requirement B4, they did not comply with regulation 4 of the Building Regulations 2010.

- 23. The reason why it is so critical that the Inquiry makes this finding in Phase 1 is not only because it is unavoidable in law and fact, but because any prevarication on this issue would threaten to undermine public confidence in the Inquiry, so obvious is it that the RCS caused an unstoppable and unacceptable fire in GT.
- 24. Finally, there can be no principled or legal objection to the Inquiry making this finding. Non-compliance with the Building Regulations does not of itself give rise to civil liability on the part of the building owner, builder or local authority.³⁰ Therefore, the issue of liability for the consequences of the non-compliance would remain entirely unfettered.

The other failures in GT

- 25. The reason why Lane states the RCS was incompatible with the Stay Put design principle is because, contrary to the definition at ADB 2.3, there was no longer a sufficiently low probability of fire spread beyond the compartment of origin to mean that simultaneous evacuation of the building was unlikely to be necessary in the event of a fire.
- 26. Moreover, GT had a single escape stair and no central fire alarm and was therefore not designed to accommodate simultaneous evacuation. Equally, GT was set up to facilitate internal firefighting only.
- 27. Although Lane does not go so far as to state internal fire-fighting was fundamentally incompatible with simultaneous evacuation in GT,³¹ the spread of fire and smoke would have posed serious threats to the health and safety of residents and significant obstacles to effective fire-fighting in any event. For example, it is instructive that she believes stair doors being kept open during fire-fighting activities was the most likely cause of the "hot zone" on the mid-floors which so obstructed escape and rescue.

³⁰ Section 38 of the Building Act 1984 which provides a civil remedy has not been brought into force. Also see Lord Oliver in <u>Murphy v Brentwood DC [1991] 1 A.C. 398</u> at 490, HL. Contravention of the building regulations may be evidence of want of care by the contractor but, apart from contract, the builder of a house or other structure is liable at common law for negligence only where actual damage, either to person or property other than the building or structure itself, results from carelessness on its part in the course of construction

^{31 22.11.18/}Lane/p180/line5-8

28. Therefore, there were always going to be very significant difficulties responding to the fire on 14 June 2017 even if all other safety measures had been fully functional and in working order. However, it is similarly incontrovertible that numerous other serious failings in the building worsened those difficulties, including:

a. The non- compliances identified with the composite fire doors installed in 2011- 2012 refurbishment.³²

b. The removal and failure to fix the self-closing devices on the flat fire doors.³³

c. The malfunctioning and in any event non-compliant smoke ventilation system.³⁴

d. The non-functioning fire safety lift.³⁵

e. The absence of a wet riser in non-conformity with the regulations.³⁶

f. The inappropriate location of the dry risers.³⁷

g. Multiple breaches of compartmentation by heating and gas risers.³⁸

29. These myriad failings severely impacted the LFB's capacity to abandon the Stay Put policy and the scope for self-evacuation by the occupants. Their respective contributions will be established in the Article 2 investigations/Phase 2. It is nevertheless vital that they are set out in the Phase 1 report as they catalogue the systemic neglect that was routine in GT and underline the disregard for human life that such neglect entailed.

The fire-fighting response in the context of the building failure

30. This is a subject taken up elsewhere. Of course, events should have unfolded differently, and serious mistakes were made. Lessons must be learnt. Critically however, it must be understood and repeatedly asserted, that a compliant building would not have rendered the safety of so many of its occupants reliant upon the decisions of the fire brigade. As Lane states, that is the "foundation" of effective Stay Put policy.³⁹

Conclusion

³² Lane Appendix M

³³ Lane Appendix M

³⁴ Lane Appendix J

³⁵ Lane Appendix L

³⁶ Lane Appendix H

³⁷ Lane Appendix H

³⁸ Lane Appendix K

³⁹ 22.11.18 Lane/line 20/21

31. The primary cause of the disaster at GT was the RCS. This can best be reflected in the Phase 1 report by a finding that the work to install the RCS did not comply with the Building Regulations 2010. There is no further testing, evidence or submission which can properly lead to any other conclusion and a failure to acknowledge that fact now risks the Inquiry losing vital momentum.

Addendum: Cause and spread of the fire

Introduction

- 1. This part of the closing submissions sets out the factual findings that G11 suggest can (and should) be made as regards the cause and spread of the fire.
- 2. These are not *all* the findings that will need to be made as regards cause and spread. For example, it is not yet possible to determine *precisely* what role each element of the Rainscreen Cladding System⁴⁰ played in the fire. These are matters that Prof. Bisby has expressly reserved for Phase 2. Nor are there any findings about matters of procurement, design, planning and policy decisions. Such matters fall to be dealt with in Phase 2.
- 3. Nonetheless, the proposed findings are, it is respectfully suggested, uncontroversial and wholly supported by the expert evidence. They enable the Inquiry to comply with its Phase 1 obligations. They set a framework for the future management of the Inquiry and, importantly, start the process of identifying clear and obvious flaws which can be addressed by interim recommendations.

Where did the fire start?

4. There is no room for doubt on this question. The fire started in the kitchen of flat 16 when a Hotpoint fridge-freezer caught fire.⁴¹

Spread to the cladding

- 5. Professor Bisby considers that there are two possible routes and that each is as likely as the other: viz that the fire escaped via gaps or holes around the refurbished windows and through the weatherproof membrane. ⁴² In this regard, the Inquiry is respectfully asked to note (and approve) his evidence that the configuration and dimensions of the windows and associated products "varied considerably between different parts of the building", so that the detailing had been done "in an improvised manner". ⁴³
- 7. The second hypothesis is that smoke and hot gasses exited the window of flat 16.44

⁴⁰ Adopting the comprehensive definition at Lane, para.8.2.3, *i.e.* ACM panels, insulated in-fill panels and extract fan surrounds, thermal insulation behind the rainscreen cavity and around the new windows, the windows frames and the EDPM membrane between the new windows and the existing concrete wall and cavity barriers. [BLAS0000008]

⁴¹ Bisby, paras.9 & 10 [LBYS0000001]; Daeid, paras.5.4, 8.8.4, 8.8.17 [NNDS00000001]; see also the cross-references to the Glover report in the Daeid report.

⁴² Bisby, para.13. [LBYS0000001]

⁴³ Bisby, para.276. [LBYS0000001] This is also consistent with the various BSR statements about the ingress of wind around the windows following the refurbishment works.

⁴⁴ Bisby, para.14. [LBYS0000001]

- 8. The reality, as Professor Bisby concludes (and as the Inquiry is asked to find) is that each hypothesis is equally likely and that the true position is probably some combination of the two.⁴⁵
- 9. In addition, the failure of the kitchen extractor fan is likely to have contributed to the spread onto the cladding⁴⁶ and may well have been the first part of the external façade to burn.⁴⁷

Spread on the cladding

- 10. Whatever the precise causal mechanism by which the fire spread to the cladding, once it had done so, the reasons for the spread *on* the cladding are clear. There is no escaping the central role played by the polyethylene filler in the ACM rainscreen cassettes. The evidence is clear and the Inquiry should not shrink from making findings consistent with that evidence.
- 11. Whilst other features may have played some role in the spread⁴⁸, the primary cause is the PE filled ACM cladding. Professor Bisby puts that finding beyond doubt:⁴⁹
 - "...the primary cause of rapid and extensive vertical and horizontal external fire spread was the presence of polyethylene ("PE") filled ACM rainscreen cassettes in the building's refurbishment cladding system and in the architectural crown detail."
- 12. Professor Bisby places the PE filled ACM rainscreen cladding at the heart of the vertical, downward and horizontal spread.
 - (a) "I consider the presence of PE filled ACM rainscreen cladding cassettes to be, by a considerable margin, the most important factor contributing to upward vertical fire spread (and indeed to external fire spread generally) during the Grenfell Tower fire." ⁵⁰
 - (b) The PE filler was also the "dominant and decisive" factor contributing to the downward vertical fire spread.⁵¹
 - (c) The rate and extent of horizontal fire spread was "predominantly due to the presence of aluminium composite (ACM) rainscreen cassettes with polyethylene (PE) filler material."⁵² Indeed, "all available evidence" supports this view.⁵³

⁴⁵ Bisby, paras 15, 694, 712, 713. [LBYS0000001]

⁴⁶ Bisby, para.14. [LBYS0000001]

⁴⁷ Bisby, para.683. [LBYS0000001]

⁴⁸ And their role will be examined in Phase 2.

⁴⁹ Bisby, paras16 and 17. [LBYS0000001]

⁵⁰ Bisby, para.859. [LBYS0000001]

⁵¹ Bisby, para.948. [LBYS0000001]

⁵² Bisby, para.1115[LBYS0000001]

⁵³ Bisby, para.1116. [LBYS0000001]

13. The central role played by the PE filled ACM rainscreen cladding is also consistent with the post-Grenfell testing programme undertaken at the behest of the government.⁵⁴

Why did the PE filled ACM present such a fire hazard?

14. The installation of the ACM rainscreen cassettes resulted in them being extensively cut and folded so that there was exposed PE filler material at the edge of the cassettes and along all the re-entrant corners.⁵⁵ This meant that as soon as the fire had penetrated the window then the PE filler was directly exposed to fire.⁵⁶

PE filler inappropriate

- 15. PE filler is well-known to melt and drip when it exposed to heat. It can also generate flaming droplets.⁵⁷ That PE filler has these properties has been clear from the academic literature since at least the mid-1970's and to the general industry since at least 1988.⁵⁸
- 16. The Inquiry is invited to find that these properties would have been known by any competent fire-safety professional:

"the general principle that a thermoplastic will melt and drip and burn quite vigorously is very clearly highlighted in any of the reference text that one would expect a competent fire safety professional to have at least skimmed, if not know quite well." ⁵⁹

- "Q) is it fair to say that, since 1988, there has been a recognised body of opinion on the dangers of thermoplastic materials from a fire safety perspective?
- A) Absolutely."60

Conclusions and summary of findings sought in relation to cause and spread

- 18. G11 seek the following findings:
 - (a) the fire started in the kitchen of flat 16;
 - (b) it spread to the exterior of the building through a combination of:

⁵⁴ Whilst generally critical of those tests, Prof. Bisby does note that it was the exposed (*i.e.* cut) PE filler which first burned (Bisby, para.839). [LBYS0000001]

⁵⁵ Bisby, para.241. See also para.1119 for the position as regards the crown; again, the cutting/folding has exposed PE filler. [LBYS0000001]

⁵⁶ Bisby, para.285. [LBYS0000001]

⁵⁷ Bisby, para.430. The first such droplets appear at Grenfell Tower by about 1.09am (Bisby, para.685) (*i.e.* around 15 minutes after the fire had been reported – Bisby, para.468). [LBYS0000001]

⁵⁸ Bisby, para.432-434. [LBYS0000001]

⁵⁹ Bisby, oral evidence, pg.21.

⁶⁰ Ibid, pg.22.

- (i) fire egress from around poorly installed windows;
- (ii) smoke and hot gasses existing through windows;
- (iii) the kitchen extractor fans.
- (c) once it had exited flat 16 by whatever means the PE filler in the ACM cassettes was directly exposed to fire because of the way in which the cassettes had been cut and folded;
- (d) the PE filler was the primary cause of the spread of the fire, whether up, down or across the building;
- (e) any competent fire safety professional should have been aware of the hazard posed by the PE filler in the ACM cassettes.

Paper B

(a) COORDINATION OF EMERGENCY SERVICES – DUTIES PURSUANT TO THE CIVIL CONTINGENCIES ACT (2004) AND JOINT EMERGENCY SERVICES INTEROPERABILITY PRINCIPLES (JESIP)

Civil Contingencies Act (2004) and JESIP

- 1. The structure for managing the local multi-agency response to emergencies is based on the Civil Contingency Act 2004 (CCA) which is supported by the guidance set out in Emergency Preparedness (EP) and Emergency Response and Recovery (ERR).
- 2. The CAA (2004) imposes a legal duty on category 1 responders to assess risk, plan for emergencies and to cooperate and share information with other responders. ⁶¹ The EP guidance deals with the emergency planning phase of a disaster while the ERR sets out the multi-agency framework for responding to and recovering from emergencies in the UK.
- 3. The Joint Doctrine: Interoperability Framework (JESIP) embodies this guidance and recognises the need for Category 1 responders to work together in public emergencies. These principles are also applicable to the wider Category 2 response organisations.
- 4. The JESIP doctrine focuses on the police, fire and ambulance interoperability in the early stages of the response to a major or complex incident. The London Emergency Services Panel (LESLP) incorporates the JESIP principles and sets out the duties of the London Category 1 responders, including the Local Authority to major emergencies.
- 5. The key principles for joint working, set out in JESIP⁶² are co-locate⁶³, communicate⁶⁴, co-ordinate⁶⁵, joint understanding of risk⁶⁶ and shared situational awareness⁶⁷. The events of the morning of 14 June 2017, sadly depict a picture of palpable lack of coordination, limited communication, no apparent understanding of joint risk with the resulting failure in situational awareness and mass casualty.

⁶¹ CCA (2004) s.2

⁶² LAS0000000

⁶³ Co-locate with commanders as soon as practicably possible at a single, safe and easily identified location near to the scene

⁶⁴ Communicate clearly using plain English

⁶⁵ Co-ordinate by agreeing the lead service. Identify priorities, resources and capabilities for an effective response, including the timing of further meetings,

⁶⁶ Jointly understand risk by sharing information about the likelihood and potential impact of threats and hazards to agree potential control measures

⁶⁷ Shared situational awareness by using METHANE and the Joint Decision Model.

Timeline

6. A brief analysis of key points in the timeline of the events of the morning of 14 June 2017 highlights missed opportunities by the emergency services as a result of a lack of coordinated response:

00:54:29 – Mr Kebede's 999 call⁶⁸, **00:57:44** –Turnstall Alarm company to LFB control (logged as the 2nd call)⁶⁹, **01:16:45** – LFB control call to MPS advising of 6 pump fire at Grenfell Tower⁷⁰, **01:23:28** – CAD Entry 119BS Other flats at risk of fire.....going to be a mass evacuation⁷¹ **01:26:05** – CAD Entry is there any CCTV, and consider linking with the Council re evacuation⁷², **01:26:27** – this is turning into a critical incident⁷³, **01:26:32** – MPS declaration of major incident, **01:28:37** – the building is 30 stories high – it is being evacuated now...lots of burning masonry falling off the building, **01:28:48** – NPAS preparing to lift, **01:29:44** – GPC Contacting the local authority, **01:30:08** – call back from CRO Jessica Urbno (flat 201) call last almost 55 minutes at the end of which she reports she can't see and can't breathe anymore then becomes unresponsive⁷⁴ **01:33:05** - BS1N...top two floor of building is on fire, **01:32:27** – MPS Major incident recorded on CAD, **02:06** -LFB Declaration of a major incident.

LFB Contact with the MPS at 01:16

7. By 01:16 the fire had been increased to 6 pumps, compartmentation had been clearly breached and there was considerable external fire spread⁷⁵. Barbara Lane's evidence was that... *around*

⁶⁸ LFB00000301

⁶⁹ LFB00000470 - Extract: We've got a call from a fire alarm at Lancaster West estate, Grenfell Tower, Grenfell Road, London W11. - Operator - any particular flat or main panel - Caller - main panel - Operator - We're getting calls to fires at Grenfell Tower at the moment - take the reference on that - 76029 - Caller - think the main door can be accessed Operator - we're en route to a fire there- we'll be forcing an entry

⁷⁰ INQ00000285 Extract of transcript: Call between MPS and LFB operator-(Debbie?) Real. LFB informing MPS of fireCall from flat 16 not sure if that is where fire is yet. 6 pump fire ref-76029. MPS Op- surprising not been called for that. LFB- we only had 3. LFB-5 room flat on 4th floor. 75% alight, so quite a lot... got there pretty quick.. why we had only a few calls. MPS Op- take it you don't know what set it off at the moment? LFB- no. MPS Op .. residential, I'm gonna do that on an I Grade. Name? LFB- initials DR. MPS Op – our ref is CAD 482 and the 16th

⁷¹ MET00023294 CAD entry made by PC Sangha

⁷² MET00023294

⁷³ MET00023294

⁷⁴ LFB00000507

⁷⁵ Professor Bisby: A video captured outside the building showing fire on the external cladding and considerable burning material falling from the building [MET00007243(Figure71) referenced in BISBY report, p.113, LBYR00000001] - Intermittent external flaming exists between floors 6.5 and 7.5. [BISBY report, p.135, LBYR00000001] - Continuous flaming is observed between floors 4.6 and 6.5 [BISBY report, p.135, LBYR00000001] - The highest point of intermittent external flaming is in the vertical of the junction between the column line and the faces of the spandrels [BISBY report, p.135, LBYR00000001] - A hose stream is applied

- 01.13, you can see the flames above the compartment floor line at level 5", "Within 120 seconds, you can actually see the flame flashing underneath the cladding, on the column at level 5 so now that is compartmentation breach⁷⁶
- 8. The obvious questions arising are whether the LFB should have contacted the MPS sooner and what difference would this have made to the coordinated response. In relation the latter, given the lack of overall coordination of the emergency services, perhaps none. However, the delay in making initial contact raises questions as to the need for guidance and best practice protocol in similar emergencies.

MPS Declaration of a Major Incident

9. It is apparent from PC Sangha's CAD entry at 01:23:2 that his assessment of the fire spread was that other flats were at risk of fire and that a mass evacuation of the building was necessary. Arguably, had this been acted on, the outcome may have been different.

The fire spread by 01:23

- 10. By 01:23 there were 999 calls reporting smoke in the building and Professor Bisby describes the vertical extent of the fire spread between 01:21:37 01:23:10 as follows⁷⁷: Maximum vertical extent of the fire is to the top of the 10th floor, In 45 seconds, the maximum vertical extent of the fire is the top of 11th floor, In 90 seconds, the maximum vertical extent of the fire is the top of level 12, with intermittent flaming, During this time the rate of vertical fire spread is approximately 0.75 floors per minute (1.3 minutes per floor).
- 11. It was therefore essential for there to have been coordination of the resources of all Category 1 responders at this stage.

Fire spread by 01:26:

12. Dr. Lane's opinion was that by 01:26, 20 flats had been impacted by external flame front" by which time "it became a fire that could not be mitigated and was clearly not going to stop" She also agreed that by 01:25, compartmentation and the stay put evacuation regime had significantly failed. The failure lack of a coordinated response between the MPS and LFB at

onto the external cladding from ground level with water applied to the cladding below level 4 [BISBY report, p.136, LBYR00000001] - Burning materials continue to fall [BISBY report, p.136, LBYR00000001]

⁷⁶ Lane transcript .11.2018 page 167 lines]

⁷⁷ BISBY report, p.136, LBYR00000001

⁷⁸Lane Report, figure 12.1, page 8 of Chapter 12, BLAS0000012]

⁷⁹ Barbara Lane transcript page 170

- this stage represented a missed opportunity to life lives, which diminished with each passing minute.
- 13. It is clear from PC Sagha's assessment of the fire spread and need for evacuation as well as PC Thatcher's evidence that the MPS's declaration of a major incident at 01:26:32 was in response to the attendant risk to life. It was critical to the effective coordination of both responders at this stage for the declaration to have been communicated to the LFB.
- 14. WM Dowden was the incident commander and the incident had been made up 10 pumps by 01:24. It is unclear whether PC Rees spoke to WM Dowden but there is no evidence that that the police assessment of fire spread, breach of compartmentation and the need for evacuation by 01:26 was communicated to fire fighters.
- 15. Whilst the LFB and MPS witnesses have sought the minimise the consequence of the declaration of a Major Incident by an Emergency responder, JESIP makes it clear that the declaration of a major incident triggers a predetermined strategic and tactical response from each emergency service and other agencies. It takes time for operational structures, resources and protocols to be put in place. Declaring a Major Incident is in progress as soon as possible means that these arrangements can be put in place as soon as possible.
- 16. It is clear that the MPS declaration of a major incident was never communicated to either WM Dowden or DAC O'loughlin, the early incident commanders. This error resulted in a lack of proper coordination of resources, sharing of critical information and making tactical decisions, evidenced by the LFB's later declaration of a major incident at 02:06.
- 17. Having declared a Major Incident, the MPS should have sent a METHANE message to the other Category 1 responders, (including the LFB). Inspector Thatcher confirmed that a METHANE message as never sent. He appeared unfamiliar with the acronym METHANE and didn't appear to appreciate its significance⁸⁰.
- 18. The failure of the MPS to send a METHANE message following its declaration of a major incident at 01:26, contributed to the failed coordination of the emergency services at this stage. This finds support in FF Michael Moulholland evidence: ... METHANE message is an acronym for a message we send from the fire ground once we have declared a major incident. That's about letting the other blue light responders know. It is a recognised message that sits within

^{80 12.11.2018} Transcript Inspector Thatcher page 42 lines 12-20

Q: Inspector, did you know that the JESIP joint doctrine operability framework says that each responder agency should send a METHANE message to their control room as soon as possible? No. You didn't? No. It wouldn't have made any difference either. When you declared a major incident at 01.26, did you ask for a METHANE message to be sent? No, because as soon as you say the words "major incident", that's when the machine wakes up and that's when the control room comes into its own. So you assume, do you, that the control room is going to send a METHANE message itself? I trust, not assume.

the protocols of joint working amongst the emergency services. So that would go to the police and ambulance control rooms and they would be aware that we have now declared a major incident.⁸¹

19. The MPS failure to trigger the procedures the Major Incident procedures is JESIP by 01:26 / 01:32 was arguably a missed opportunity to coordinate the resources of the emergency responders and save lives.

The Local Authority

- 20. It is unclear from the CAD message generated at **01:29:44** whether contact was made with the local authority at 01:29. It is also unclear whether the MPS CAD generated at 02:10:02 was the first contact made with the RBKC informing them of the fire. However, there is a clear gap of 40 minutes between the first message at 01:29 for the local authority to be contacted and 02:10 when contact was made.
- 21. The Local Authorities' duties under the CCA (2004) include: cooperating with other local responders to enhance coordination and efficiency; ensuring information is shared with other local responders to enhance coordination, carrying out risk assessments, having emergency plans in place, having business continuity management arrangements in place and having arrangements in place to be able to warn and inform the public in the event of an emergency⁸².
- 22. Accordingly RBKC's legal obligation to share information with other local responders in order to enhance coordination included a charge to promptly provide the LFB with the details of the residents, plans and layout of the building.
- 23. The absence of a plan of the Tower and the details of the residents who occupied the Tower, impacted the LFB's ability to fire fight, rescue and save lives. This is confirmed by Theresa Brown⁸³ and Andy Roe.⁸⁴

⁸³ TMO10048960_0002 I recall information being requested by the LFB about numbers of floor numbers of flats, details of occupants and technical information such as the presence of asbestos.....I recall by way of example a senior fire fighter asking Graham and myself if he came out of the stairs on the 11th floor and turned left what numbers would be there....

^{81 01.08.2018} transcript Page 37 lines 14 - 21

⁸² LESLP RBKC00013294

^{84 26.09.2018} Any Roe Transcript page 143 144 lines 22- 25, 1-21 23 "Soon after that ..." It's not exactly easy to see precisely when that is: "... there was another Tactical Co-ordination Group Meeting (TCGM) between various organisations such as the Police/housing/TFL/water authority/Council, and others. During this meeting, AC Roe had asked the Council to provide plans of the building, including the internal layout. It is vital that we have plans, as mentioned.... There was no detailed information or comprehensive notes of the building layout from a London Fire Brigade aspect .. All we had was a recent photograph ..."...."The female representing the Council said that she would get the internal layout plans for us and was working on it. About 45 minutes later, I went onto the incident ground and spoke to the same female asking for an update on these plans. She told me she had not yet found the plans and were still working on it. At a TCG meeting later that morning, AC Roe asked the female for the plans again and they still were not present. AC ROE expressed that this will be a big

24. We therefore invite the Inquiry to find that the failure of the local authority to expeditiously mobilise its resources in response to the fire was in breach of its legal obligation under the CCA.

Lessons Learned

Inadequacy of the training and lack of coordination

- 25. It is clear from Inspector's Thatcher's evidence that he was unfamiliar with the principles of JESIP and the coordination of a multiagency response to a major incident, particularly in the early stages of an incident. He had no training in JESIP prior of 2016 which was a desk top exercises and his only involvement in interagency emergency coordinated meetings were desk top exercises⁸⁵. He also had no prior experience of responding to a large scale high rise fire.
- 26. This raises the question of awareness of the principles of JESIP across the MPS, adequacy of training and the service provider.
- 27. It is important to have these questions answered to ensure that lessons are learned.

thing that when asked for one thing, the Council could not provide it. This had slowed the crews down in accessing the incident." Minutes - Tactical Group Meeting at 07:29/30

⁸⁵ Thatcher transcript page 11,12 lines 24-24;4-8 Q. Before July 2016, when you were trained about the joint doctrine that did you ever have any other training about interoperability between emergency services? The closest would've been working as part of the Chelsea Flower Show team.....So, again, another tabletop scenario......

Paper B

(b) THE PROCESS OF THE INQUIRY

EFFECTIVE PARTICIPATION

Effective participation includes, being able to ask questions through their lawyers, having their relevant questions asked of witnesses, timely meaningful disclosure, an opportunity to be advised on the evidence before it is heard by the Inquiry, having sufficient time to review evidence and consult with lawyers.

1. Disclosure

(a) Schedule of Unused

Full and timely disclosure of all relevant material is essential to the effective participation and the discharge of the Inquiry's Article 2 function. We remain deeply concerned that the Inquiry has not, to date, provided a schedule of disclosable material to enable CPs to make representations on disclosure arising. We impress upon the Inquiry the importance of disclosing a schedule of disclosable material in its possession as we move toward phase 2.

(b) Disclosure of audio recording and transcripts of 999 calls including BT calls

- (i) The events of the night, remain unclear for many of our clients, in particular the bereaved whose loved ones made 999 calls, complied with the stay put advice, waiting to be rescued. The 999 calls would have recorded the final moments of their lives and are of vital evidential importance in understanding the circumstances of their death. There is an obvious evidential gap in the cases of those who died in the tower which in some case may only be filled through the analysis of the audio recordings. It is therefore imperative that there is disclosure of all 999 calls including those handled by the BT call handlers.
- (ii) By way of example Raymond Bernard was the resident of flat 201. Although (as far as we are aware) Raymond made no calls., Several 999 calls were made by many individuals who took refuge in his flat and who sadly died there. Calls were made by Jessica Urbano, Debbie Lamprell and Biruk Hafton, Birkti Hafton's, son. It appears from the transcript of the call made by Biruk that Raymond can be heard speaking in the background. We, are however, unable to confirm this, as this call has not been disclosed. This causes the Bernard family distress.
- (iii) Non-disclosure of the audio recordings has invariably restricted our ability to properly advise our clients on questions to be asked of CROs who took these calls. We do not

- know, for example, whether the recordings contain other background noises such as the sounds of fire or coughing which may be relevant to advice to be given to the clients.
- (iv) The legal representatives of the family of Anthony Disson have reviewed the chronology of Tony's movements during the early hours of 14 June, in particular the 999 calls and are concerned that there are four 999 calls which are yet to be disclosed.

(c) Late disclosure

Our ability to take proper instructions from our clients to enable us to properly put question to witnesses called and assist their understanding of the evidence is severely impaired by the late disclosure of material. We have listed a few instances below where there has been disclosure of material relevant to a witness who has already given evidence:

- (i) Helicopter footage: Our clients were unable to ask critical questions relating to the helicopter footage as a result of its late disclosure on 21.09.19 and NPAS pilot statements on 28.9.18. The images on the footage were directly relevant to evidence of CROs: Sharon Darby⁸⁶, Peter Duddy⁸⁷, Debbie Real,⁸⁸ Angie Gotts⁸⁹ and Alexander Norman,⁹⁰ Senior LFB Officers DAC Fenton⁹¹ and Jason Oliff⁹² who were in the Control room and Control Manager Jo Smith⁹³, who recommended the abandonment of stay put. Our clients would have wished to ask the CROs and the senior fire officer in the Control Room questions on their advice given and change of stay put, using the images. Similarly, we were unable to use the images to ask questions concerning risk assessment and the decision to change stay put of fire fighters on the CU Dan Meyrick⁹⁴, Dan Egan⁹⁵, Tony Peckham⁹⁶, Peter Johnson⁹⁷, Norman Harrison⁹⁸ and Incident commanders Michael Dowden.
- (ii) Joint Emergency Services Interoperability Principles (JESIP) and London Emergency Services Laison Panel (LESLP) which are both relevant to our clients' understanding of the coordination of blue light responders following the MPS' declaration of a major incident, were disclosed on 10.9.2018 and 25.9.2018 respectively. This was in excess of 2 months after WM Dowden gave his evidence and after the evidence of the fire

⁸⁶ evidence on 1-2.8.18

⁸⁷ evidence on 13.9.18

⁸⁸ evidence on 17.9.18

⁸⁹ evidence on 17.9.18

⁹⁰ evidence on 13.9.18

⁹¹ evidence on 17.7.18

⁹² evidence on 16.7.18

⁹³ evidence on 11.7.18

⁹⁴ evidence on 10.7.18

⁹⁵ evidence on 3.7.18

⁹⁶evidence on 26.7.18

⁹⁷ evidence on 4.9.18

⁹⁸ evidence on 19.9.18

fighters on the Command Unit who would have had the responsibility of coordinating the blue light responders. Again this late disclosure has prevented our clients from asking these witnesses questions arising from the JESIP and LESLP.

(d) The evidence from the other Emergency Responders

- (i) Although the inquiry has admitted the statements of MPS and LAS witnesses who attended Grenfell tower as part of the blue light emergency response into evidence, many of our clients have questions of these witnesses that can only be properly answered through oral evidence, some of which we detailed in our written submissions on emergency responders.⁹⁹
- (ii) In particular we urge the Inquiry to call the first MPS responders, PC Sangha and PC Rees to give oral evidence during the remaining section of phase 1. Their assessment of the incident shortly after arrival, in particular PC Sangha's assessment of the need for evacuation of the building at 01:28 was at a critical time when more lives could have been saved. We are mindful of Barbara Lane's assessment that stay put should have been abandoned by 01:26 and that safe evacuation of those physically able was possible up to 01:40 or later depending variables such as the floor. It is therefore essential to know what discussion PC Rees had with the incident commander, if at all, and whether there was a discussion about evacuation given the MPS' initial assessment.
- (iii) Likewise the evidence of the helicopter pilots is critical to our clients' understanding of the response of the emergency responders and how their loved ones died. This evidence is of particular interest to the Choucair family, the family of Raymond Bernard and the family of Gloria Trevisan.
- (iv) It is imperative that the MPS control room operators who advised Zaineb Dean to wave at the helicopters is called to answer questions relating to that advice given. Our clients are genuinely concerned that other residents who travelled from the lower floor to the roof were advised to do so by members of the emergency services in order to be rescued by the helicopters. This concern is corroborated by Fahred Neda's evidence that Mrs Afrasiabi mentioned that they had been told that helicopters would rescue them from the top¹⁰⁰. Fahred also recalled a discussion about them going on the roof to be rescued by helicopters. Although Fahred didn't know the source of this information it was apparent that Mr Afrasiabi had received this information during a phone call¹⁰¹. Mrs

⁹⁹ G11 Submissions for ER witnesses 17.10.2018 and 2.11.2018

^{100 18.10.2018} Fahred Neda transcript page 49 lines 12 - 16

 $^{^{101}18.10.2018}$ Fahred Neda transcript page 68 lines 11-24

- Neda was also unclear whether the advice to wait to be rescued by the helicopters from the roof had come from the fire fighters¹⁰².
- (v) Our clients' own suspicions are that the presence of the helicopters gave residents, particularly those on the upper floors, false hope of rescue was shared by Fahred¹⁰³ and other fire fighters as we heard from FF Alan Moore¹⁰⁴.
- (vi) These concerns can only be properly allayed from the testimony of MPS control staff who took calls from residents in the tower and disclosure of MPS call handling guidance protocols.

(e) List questions not asked

We are increasingly concerned that a number of questions submitted on behalf of our clients to particular witnesses have not been asked, or where they have, these have been inappropriately paraphrased by CTI which then loses the meaning of the question and

Q: Was there a discussion about them going onto the roof at any time, do you think? Yes. I think one of the Iranian ladies had mentioned that there would be -- when she mentioned that they would be sending helicopters, I think my mum had mentioned to her that there's no way up for us, no way for us to get onto the roof, it's locked... Q. Where she got the idea of helicopters from? A. Well, she had spoken to someone on the phone before coming up. She did mention that she was speaking to someone on the phone. I don't know who it was.

she told me, "The firefighter told us, you go up, the helicopter rescue come and rescue." I told, "There is no way out to go to the roof, how told you?" She said, "No, I don't know, they said go upstairs, the helicopter coming and rescue." And she was keep saying, always asking me, "Why the helicopter is not coming? They told us." Doing the best you can with that conversation at that time, how sure are you that she said to you that she'd been told by a firefighter that a helicopter was coming to rescue you? A.I'm not too sure, but she said -- she said to me, but I'm not sure it was.

¹⁰³ 18.10.2018 Fahred Neda transcript page 69 lines 1-3

A. And then I think just the fact that the helicopters were outside the tower, were flying above the tower, probably influenced that a bit more onto her.

¹⁰⁴ 04.09.2018 Alan Moore Transcript page 75-76 lines 20- 25; 1-13 "This lead[sic] us onto talking about the helicopter that was circling Grenfell Tower ..." And you go on to say: "I think this helicopter gave false hope to people, I think that people in the tower thought that they were going to be rescued from the building by the helicopter like what happens in films ..." "This lead[sic] us onto talking about the helicopter that was circling Grenfell Tower ..." And you go on to say: "I think this helicopter gave false hope to people, I think that people in the tower thought that they were going to be rescued from the building by the helicopter like what happens in films ...First of all, could you see anything in the way people were responding at windows or otherwise that led to the view that false hope was being generated? There were a lot of members of the public where I was as safety officer and they were all shouting, "The helicopters are coming, they're going to get them out by helicopter, they're going to get them off the roof". And from where I was, I couldn't see people looking out the windows now, but the other side, there could've been -- you could hear people and see people shouting and pointing to the helicopter, behind me and to my right, which was the initial fire point.

thereby elicits the wrong answers. We respectfully submit that the method adopted by the Inquiry of filtering all question through CTI does not enable our clients to meaningfully participate in the Inquiry. By way of illustration, we have identified some of our clients' questions submitted in advance to the Inquiry and others that have arisen during through course of the evidence which have not been asked by the Inquiry, which we have set out in *Schedule A*.

Leslie Thomas Q.C.
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G11 Firms

6 December 2018