

Update on the implementation of the Grenfell Tower Inquiry Phase 1 recommendations

March 2020

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Background

The Grenfell Tower fire was an appalling tragedy and Londoners will always remember the 72 people who lost their lives in a fire that should never have spread on such a scale. We owe it to the people who died, their loved ones and those who survived to ensure that nothing like it ever happens again.

On 30 October 2019, the Grenfell Tower Inquiry, chaired by Sir Martin Moore-Bick, published its Phase 1 report.¹ This phase looked at the events of the night of 14 June 2017. Phase 2, now underway, is looking at events leading up to that night and the immediate response.

The Phase 1 report highlighted some serious issues for the London Fire Brigade (LFB) and for fire and rescue services more generally, as well as failings in the building itself. While it is clear that every single firefighter, member of Control staff and other LFB staff member who responded that night did so to save lives, it is also clear that the LFB was overwhelmed by the unprecedented nature of the fire. Institutional failures meant that the overall response to the disaster was not good enough.

The national Government is responsible for building regulations, including those that relate to building safety. Issues relating to the construction, refurbishment and management of Grenfell Tower will be examined in more detail in Phase 2 of the Inquiry, but it is vital that the Government, housing and building industries do not wait for the Inquiry's next report to take action on such an important issue.

Since the fire, the Mayor has been calling for urgent changes to building safety regulations, including for the Government's ban on combustible cladding to be extended to all buildings, and for sprinklers to be made compulsory in all purpose-built blocks of flats, regardless of height, as well as in schools, care home and other places that are home to vulnerable people. The Government has so far failed to implement the wholesale reforms that are needed to fix a broken system.

The Mayor has committed to personally doing everything within his power to ensure that the Inquiry's recommendations are implemented, and to be relentless in holding to account those responsible for implementing the remaining recommendations. This report is the Mayor's third monthly update on progress with the implementation.

¹ The report can be found here: <https://www.grenfelltowerinquiry.org.uk/phase-1-report>

London Fire Brigade's transformation process

The London Fire Brigade accepted all the Inquiry report's recommendations, many of which have direct implications for the Brigade's operations. Changes made as a direct response to individual recommendations are detailed in the following section, but the institutional failures detailed in the report have wider implications for the way the Brigade will take its work forward.

Andy Roe took up the role of London Fire Commissioner on 1 January 2020, following confirmation by the London Assembly of the Mayor's proposal to appoint him. Andy Roe brings to the role a wealth of experience of dealing with major incidents and having operational command of Britain's busiest fire and rescue service. This includes having operational command for the Croydon tram crash in 2016 and taking the decision to revoke the 'stay put' advice minutes after becoming incident commander at the Grenfell Tower fire.

Andy will be working both to rebuild LFB leadership's relationship with the Grenfell community, and to ensure that the Brigade makes the changes that are now required to respond both to the recommendations and the conclusions of the Inquiry report. The Brigade is also responding to the findings of its 2018/19 inspection by Her Majesty's Inspectorate of Constabulary and Fire and Rescue Services (HMICFRS), which was published in December 2019. This was the first inspection of the Brigade since an inspection regime was re-introduced by the Government. The report highlighted a number of areas where the Brigade needs to improve, for instance in training, which correlated closely with the findings of the Grenfell Tower Inquiry Phase 1 report.

The Brigade has now developed a new transformation plan, published in February.² This plan addresses issues raised by both the HMICFRS and the Grenfell Tower Inquiry, and feed into the next London Safety Plan, scheduled for publication in April 2021. Future versions of this report will provide an update on the delivery of the plan.

It is clear the need for transformational change is urgent and the Mayor has been working with the LFB to consider what external assistance should be secured to support the effective and timely delivery of the transformational change required. This work will include how LFB and the Mayor obtain assurance about the changes being implemented by the Brigade. A key element of this will be the establishment of a new audit committee for the LFB, alongside the oversight provided by the Deputy Mayor's Fire and Resilience Board. A

² <https://www.london-fire.gov.uk/media/4339/lfc-0294x-lfb-transformation-delivery-plan.pdf>

new LFB Director of Transformation will be appointed in the coming months, and external consultants have already been engaged to provide recommendations to the new Commissioner on the changes that should be made in the immediate future.

Implementation of the recommendations

The Phase 1 report made 46 recommendations, directed at bodies including the London Fire Brigade, fire and rescue services more widely, other emergency services, national Government and owners and managers of residential buildings.

The Mayor oversees the London Fire Brigade, which is part of the Greater London Authority (GLA) Group of organisations, and he has undertaken to ensure that the recommendations directed at the Brigade are implemented. Recommendations aimed at other bodies such as the Government or building owners are outside the Mayor's direct control, although the Mayor will use the full extent of his influence to ensure other organisations do everything they should to implement the recommendations in full.

The Mayor has published an open letter to building owners and managers in London to draw attention to a range of recommendations to improve the safety of residential blocks, including recommendations made in the Grenfell Tower Inquiry Phase 1 report.³ This letter encourages building owners to implement a number of urgent actions for existing buildings and start preparing for a number of other recommendations, ahead of legislation.

The Government's formal response to the Phase 1 report indicated that the planned Fire Safety Bill will enable the Government to lay regulations needed to deliver the legislative recommendations made by the Inquiry.⁴ The Home Office has indicated that it intends to consult on these proposals in Spring 2020.

Summary of this update

This is the third update from the Mayor of London on the implementation of the recommendations from the Phase 1 report, summarising progress as at 17 March 2020.

There are 14 recommendations directed solely at the London Fire Brigade in the Phase 1 report. Action to deliver these recommendations is underway for all of these recommendations.

There are 15 recommendations directed either at fire and rescue services or emergency services generally, which includes the London Fire Brigade. A further two recommendations are aimed at other emergency services not including the Brigade. Action by the Brigade to deliver the recommendations directed at the organisation is underway for

³ <https://www.london.gov.uk/what-we-do/housing-and-land/housing-and-land-publications/responses-and-correspondence-building-regulations-and-fire-safety>

⁴ <https://www.gov.uk/government/publications/grenfell-tower-inquiry-phase-1-report-government-response>

14 of these recommendations. One recommendation, on introducing smoke hoods, has been completed by the Brigade but not yet by all other fire and rescue services.

There are 12 recommendations aimed primarily at the Government. This includes 11 recommendations where the report recommends a change in the law to place new requirements on building owners and managers. We await details of how the Government will take these recommendations forward. A further three recommendations are aimed at building owners and managers, but without requiring legal changes. Nine of the recommendations aimed at the Government or building owners and managers will have significant implications for the London Fire Brigade, which is working to ensure that it is in a position to implement these recommendations in the most effective way.

Progress made on the implementation of each recommendation is set out below.

Knowledge and understanding of materials used in high-rise buildings

- 1. That the owner and manager of every high-rise residential building be required by law to provide their local fire and rescue service with information about the design of its external walls together with details of the materials of which they are constructed and to inform the fire and rescue service of any material changes made to them.**
- 2. That all fire and rescue services ensure that their personnel at all levels understand the risk of fire taking hold in the external walls of high-rise buildings and know how to recognise it when it occurs.**

Recommendation 1 is for new requirements on building owners and managers to provide information on their external walls. The Government announced a Fire Safety Bill and a Building Safety Bill in the Queen's Speech in December, and we await further details of how these pieces of legislation will address the safety issues that been highlighted by the Grenfell Tower fire and the GTI phase 1 report. The Government's formal response to the GTI phase 1 report in January indicated that the Fire Safety Bill will enable the Government to lay regulations to deliver this recommendation. The Brigade is contributing views on the content of legislation to the Home Office via the National Fire Chiefs Council.

The Brigade has already established an Operational Risk Information project to improve how it gathers, records and disseminates this type of information for the purposes of responding to incidents. In preparation for new legislation, LFB held a workshop in December to consider the volume, frequency and format of information that building owners and managers have been instructed to share with fire and rescue services. The outcomes of the workshop reinforced the need for a consistent national approach to information systems. Brigade officers seconded to the National Fire Chiefs Council's (NFCC) Building Safety Programme have been contributing to the development of new standards with the Ministry of Housing, Communities and Local Government (MHCLG).

The Brigade has already provided new written guidance to firefighters on responding to the rapid spread of fire on the outside of buildings; this was issued in August 2019. This included advice on buildings with combustible cladding, Fire Survival Guidance calls (advice given by Brigade Control operators to people trapped by fire), operational discretion for firefighters responding to incidents, and incidents with rapid or abnormal fire spread. The guidance also identified a number of methods of communicating with residents to initiate an emergency evacuation. Training for operational staff on the new guidance took place after it was issued, with over 95 per cent completion among firefighters for the guidance.⁵

The Brigade has also revised its Policy Note (PN) 633 on High-Rise Firefighting.⁶ This document sets out the procedures firefighters should follow when responding to a fire in a high-rise building. The new PN 633 covers operational tactics for use in exceptional circumstances when a building is not behaving as designed in order to provide the greatest possibility of reaching all parts of the building for the purpose of emergency evacuation of residents.

The LFB plans to implement the revised PN 633 from 31 July 2020, following the procurement of new equipment, a series of 'proof of concept' exercises, and the completion of a robust training programme being delivered to all station based officers; so far 225 senior officers have received an initial awareness briefing prior to the station based officer training roll out. This policy will remain under review until such time as national guidance, changes in legislation and subsequent remediation work have been undertaken.⁷

⁵ This is below 100% completion to long-term staff sickness and secondments. Staff returning to duty at the Brigade will complete the training.

⁶ <https://www.london-fire.gov.uk/media/4305/lfc-304x-d-high-rise-firefighting-policy-663.pdf>

⁷ PN 633 will be subject to monthly review. As stated in the policy: "We recognise that as building legislation changes and the outcomes of Phase 2 of the Inquiry (once published) will require the policy to be reviewed and changed. We have already formally agreed with the London region [of the Fire Brigades Union] to undertake a monthly review of the policy within the Brigade Joint Committee for Health, Safety and Welfare to ensure it remains current and reflect the changing circumstances."

Visits under Section 7(2)(d) of the Fire and Rescue Services Act 2004

3. That the LFB review, and revise as appropriate, Appendix 1 to Policy Note 633 to ensure that it fully reflects the principles in Generic Risk Assessment 3.2: Fighting Fires in High Rise Buildings (GRA 3.2).
4. That the LFB ensure that all officers of the rank of Crew Manager and above are trained in carrying out the requirements of PN 633 relating to the inspection of high-rise buildings.

Section 7(2)(d) visits, also known as familiarisation visits, enable firefighters to learn about buildings in their local areas, to help prepare for possible incidents in that building. National guidance on conducting effective visits in high-rise buildings is set out in a document called Generic Risk Assessment (GRA) 3.2. This recommendation requires the London Fire Brigade's own procedures to reflect national guidance.

The Brigade is implementing Recommendation 3 by producing relevant guidance based on GRA 3.2 in a revised Policy Note (PN) 800 on the Management of Operational Risk Information. This document sets out how London firefighters should inspect buildings, record information, and so on. The revised PN 800 will be published in March 2020. As part of this review the Brigade is specifically considering how to include guidance on Section 7(2)(d) visits. The training requirements for the new guidance were considered by the Brigade's Operational Risk Information project board in February. The existing computer based training for PN 800 will be updated to reflect the content of the new policy, and solutions for face to face training are also being considered.

Building plans

5. That the owner and manager of every high-rise residential building be required by law to provide their local fire and rescue services with up-to-date plans in both paper and electronic form of every floor of the building identifying the location of key fire safety systems.
6. That the owner and manager of every high-rise residential building be required by law to ensure that the building contains a premises information box, the contents of which must include a copy of the up-to-date floor plans and information about the nature of any lift intended for use by the fire and rescue services.
7. That all fire and rescue services be equipped to receive and store electronic plans and to make them available to incident commanders and control room managers.

Recommendations 5-6 are for new requirements on building owners and managers to provide information on their buildings. The Government announced a Fire Safety Bill and a

Building Safety Bill in the Queen's Speech in December, and we await further details of how these pieces of legislation will address the safety issues that have been highlighted by the Grenfell Tower fire and the GTI phase 1 report.

In preparation for new legislation, LFB held a workshop in December to consider the volume, frequency and format of information that building owners and managers have been instructed to share with fire and rescue services. The outcomes of the workshop reinforced the need for a consistent national approach to information systems. We understand the Home Office will convene key stakeholders, including the Brigade, in the near future, to consider the governance, scope and funding for this work.

The Brigade has already established an Operational Risk Information project to improve how it gathers, records and disseminates this type of information for the purposes of responding to incidents. The Brigade is planning to implement a 'One Risk' solution to consolidate building risk information it receives into one database. A draft system specification is due to be complete by September 2020. The Brigade's existing Operational Risk Database can provide an interim solution for the management of information buildings owners may have to provide, depending on the requirements of proposed legislation and any national solution developed by the Government.

Lifts

- 8. That the owner and manager of every high-rise residential building be required by law to carry out regular inspections of any lifts that are designed to be used by firefighters in an emergency and to report the results of such inspections to their local fire and rescue service at monthly intervals.**
- 9. That the owner and manager of every high-rise residential building be required by law to carry out regular tests of the mechanism which allows firefighters to take control of the lifts and to inform their local fire and rescue service at monthly intervals that they have done so.**

It is essential for public safety that firefighters are able to take control of lifts in emergency situations in high-rise buildings, so ensuring that lifts and control mechanisms are in working order is vital.

These recommendations are for new requirements on building owners and managers to inspect and test the lifts in their buildings, and to provide information to fire and rescue services. The Government announced a Fire Safety Bill and a Building Safety Bill in the Queen's Speech in December, and we await further details of how these pieces of legislation will address the safety issues that been highlighted by the Grenfell Tower fire and the GTI Phase 1 report.

In preparation for new legislation, LFB held a workshop in December to consider the volume, frequency and format of information that building owners and managers have been instructed to share with fire and rescue services. The outcomes of the workshop reinforced the need for a consistent national approach to information systems. We understand the Home Office will convene key stakeholders, including the Brigade, in the near future, to consider the governance, scope and funding for this work.

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Communication between the Control room and the Incident Commander

- 10. That the LFB review its policies on communications between the control room and the incident commander.**
- 11. That all officers who may be expected to act as incident commanders (i.e. all those above the rank of Crew Manager) receive training directed to the specific requirements of communication with the control room.**
- 12. That all CROs of Assistant Operations Manager rank and above receive training directed to the specific requirements of communication with the incident commander.**
- 13. That a dedicated communication link be provided between the senior officer in the control room and the incident commander.**

These recommendations are about improving communication between the Control room and the Incident Commander. The London Fire Brigade's Control room is a facility based at Merton, where officers receive emergency calls from the public and mobilise firefighters to incidents. The Incident Commander is the officer in charge of the Brigade's response at the scene, responsible for the tactical plan to resolve the incident and the safety of firefighters.

Communication between the Control room and the Incident Commander is a key area for the London Fire Brigade to address following the Grenfell Tower fire. In particular, Control staff need to be able to provide information from Fire Survival Guidance (FSG) calls –

where Control operators give advice to callers trapped by fire – to the Incident Commander at the scene.

To implement Recommendation 10, the London Fire Brigade has reviewed the operational procedures set out in its Policy Note 790 on Fire Survival Guidance calls. This policy is now being revised to ensure it serves to improve communications. New procedures have been tested, included at a large-scale exercise in south-east London on 27 February. The policy is being consulted on in March and will be finalised in May 2020.

To implement Recommendation 11 and 12 on training, following the completed revision of PN 790 a new training package will be rolled out for all Brigade operational staff and Control officers, specifically addressing the requirement of communications between Control and the Incident Commander. Regular FSG exercises will take place using fire stations, Command Units and Control. This training package will be finalised by July 2020.

The Brigade is also exploring how to implement Recommendation 13 for a dedicated communication link between the Control room and Incident Commander. This issue is also addressed under Recommendation 24 below. An IT solution to increase situational awareness and communication between the incident and Control is being developed, which will enable information from FSG calls to be displayed simultaneously at the incident and in Control; a new IT application is expected to be completed by March 2021.

The LFB is also implementing the 999 Eye system, which will improve the situational awareness in the Control room. This system enables secure live streaming of an incident via a smart phone.

Emergency calls

- 14. That the LFB's policies be amended to draw a clearer distinction between callers seeking advice and callers who believe they are trapped and need rescuing.**
- 15. That the LFB provide regular and more effective refresher training to CROs at all levels, including supervisors.**
- 16. That all fire and rescue services develop policies for handling a large number of FSG calls simultaneously.**
- 17. That electronic systems be developed to record FSG information in the control room and display it simultaneously at the bridgehead and in any command units.**

The London Fire Brigade received an unprecedented number of Fire Survival Guidance (FSG) calls – where Control operators provide advice to people trapped by fire – on the night of the Grenfell Tower fire. The Brigade has identified the need to improve the way it

handles these calls, and arrangements for when a large number are received simultaneously.

The Brigade has completed its review of Policy Note 539 on Emergency Call Management and concluded that this policy is now superfluous. Operational policy on Fire Survival Guidance calls will instead be incorporated into Policy Note 790 (Fire Survival Guidance), to help address Recommendation 14. A training package on the new guidance will be rolled out to all staff by July 2020.

Refresher training on FSG calls was delivered in December 2018 and December 2019, and will continue to be provided on an annual basis, as required by Recommendation 15. This recommendation is not yet considered complete, however, as the refresher training will be reviewed once the revised operational procedures on Fire Survival Guidance (see above) are finalised. A new competency framework for Brigade Control staff is also being developed and will be rolled out in July 2020. This is part of a wider Control Improvement Plan, which the new Assistant Commissioner for Control and Mobilising has produced and is currently implementing.

The enhanced policy and training will enable the Brigade to more effectively manage multiple Fire Survival Guidance calls, addressing Recommendation 16. The National Fire Chiefs Council is undertaking work on the dissemination of risk critical information between Control rooms, including protocols for sharing information beyond current mutual aid agreements, which will also help to address Recommendation 16. LFB has now developed a protocol to assist control rooms across the country with the challenge of large call volumes, and share risk critical information quickly. This will occur via a new talk group on Airwave, the communication network used by emergency services. Agreement on this new protocol has been reached with the NFCC Mobilising Officers Group, and the national talk group will go live when policy note 790 has been formally agreed and implemented.

To implement Recommendation 17, an IT solution to increase situational awareness and communication between the incident and Control is being developed, which will enable information from FSG calls to be displayed simultaneously at the incident and in Control; a new IT application is expected to be completed by March 2021. This recommendation is similar to Recommendation 25 – these actions are relevant to the implementation of both.

Emergency calls – transition from ‘stay put’ to ‘get out’

18. That policies be developed for managing a transition from ‘stay put’ to ‘get out’.
19. That control room staff receive training directed specifically to handling such a change of advice and conveying it effectively to callers.

The Grenfell Tower Inquiry has identified that the London Fire Brigade did not recognise the extent of the building failure at Grenfell Tower soon enough, or alter its advice to residents to ‘get out’ as quickly or effectively as it should. The Mayor has ensured the Brigade is prioritising action in this area.

The Mayor and the Brigade have called for the Government to initiate a national review of the ‘stay put’ principle of building design, specifically to respond to circumstances of building failure, recognising that mass evacuation is not without challenges and risk. The Mayor has urged the Government to act quickly to put in place new national guidelines for the total or partial evacuation of residential high-rise buildings. A national steering group has been established by the Home Office to consider new national protocols; this group met to agree the scope of the work in December.

The Brigade has also revised its Policy Note (PN) 633 on High-Rise Firefighting. This document sets out the procedures firefighters should follow when responding to a fire in a high-rise building. The new PN 633 covers operational tactics for use in exceptional circumstances when a building is not behaving as designed in order to provide the greatest possibility of reaching all parts of the building for the purpose of emergency evacuation of residents. The LFB plans to implement the revised PN 633 from 31 July 2020, following the procurement of new equipment, a series of ‘proof of concept’ exercises, and the completion of a robust training programme being delivered to all station based officers; so far 225 senior officers have received an initial awareness briefing prior to the station based officer training roll out. This policy will remain under review until such time as national guidance, changes in legislation and subsequent remediation work have been undertaken.⁸

The Brigade is also reviewing the operational procedures set out in its Policy Note 790 on Fire Survival Guidance calls, with the policy due to be finalised in April 2020. The Brigade carried out a large-scale exercise in south-east London on 27 February to test new operational procedures for both policies.

⁸ PN 633 will be subject to monthly review. As stated in the policy: “We recognise that as building legislation changes and the outcomes of Phase 2 of the Inquiry (once published) will require the policy to be reviewed and changed. We have already formally agreed with the London region [of the Fire Brigades Union] to undertake a monthly review of the policy within the Brigade Joint Committee for Health, Safety and Welfare to ensure it remains current and reflect the changing circumstances.”

The revision of PN 790 will specifically address Recommendation 19, with training provided to Control operators in how to manage a change in advice by June 2020.

Control officers have created a new screen layout for Fire Survival Guidance callers on the Vision mobilising system, and this was successfully tested at the recent high rise/FSG exercise on the 27 February. The new layout provides an easily accessible telephone number for callers trapped in a building that Control staff can access quickly in order to pass on any change in guidance or additional information.

In addition, the mobilising system is now set up to ensure callers who have been waiting the longest can be contacted first. Instant messaging is also being explored as part of the new 999 Eye system.

The project to procure the next iteration of the mobilising system has now begun and Grenfell-related recommendations, including call back, will form a part of the technical specification.

Emergency calls – other controls rooms

- 20. That steps be taken to investigate methods by which assisting control rooms can obtain access to the information available to the host control room.**
- 21. That the LAS and MPS review their protocols and policies to ensure that their operators can identify FSG calls (as defined by the LFB) and pass them to the LFB as soon as possible.**

These recommendations are aimed at addressing problems the Grenfell Tower Inquiry identified in communication between London Fire Brigade Control and other services during the incident. A number of other Control rooms handled calls from people at Grenfell Tower during the fire, but there was a lack of effective information sharing between them and the Brigade. This included information from Fire Survival Guidance (FSG) calls, where operators provide advice to callers trapped by fire.

The National Fire Chiefs Council is undertaking work on the dissemination of risk critical information between Control rooms, including protocols for sharing information beyond current mutual aid agreements, which will help to address Recommendation 20. LFB has now developed a protocol to assist control rooms across the country with the challenge of large call volumes, and share risk critical information quickly. This will occur via a new talk group on Airwave, the communication network used by emergency services. Agreement on this new protocol has been reached with the NFCC Mobilising Officers Group and the national talk group will go live when policy note 790 has been formally agreed and implemented.

The Brigade is working with the Metropolitan Police Service (MPS) and London Ambulance Service (LAS) to address Recommendation 21. In February 2020, the three services ran a trial of a 'control

hub' for seven days at the MPS special operations room to test ways of improving joint communications. The trial considered practice on FSG calls; the Brigade will be issuing guidance to MPS and LAS once the revision of PN 790 is complete (see above).

Command and control – breathing apparatus crews

- 22. That the LFB develop policies and training to ensure better control of deployments and the use of resources.**
- 23. That the LFB develop policies and training to ensure that better information is obtained from crews returning from deployments and that the information is recorded in a form that enables it to be made available immediately to the incident commander (and thereafter to the command units and the control room).**

The Grenfell Tower Inquiry team has clarified that Recommendation 22 refers to the management and use of breathing apparatus (BA), and to deficiencies in how officers in command at the incident exercised control over deployed firefighters. Related to this, Recommendation 23 requires improvements to the debrief process for crews returning from deployments to ensure crucial information is obtained and used. These issues are being addressed in a number of actions:

- The Brigade's operational procedure on Fire Survival Guidance (Policy Note 790) will be revised, to improve how BA crews are deployed on tasks related to FSG calls. This will be finalised by April 2020.
- A review of the Brigade's radio channels has been completed. As a result of this, a radio channel has been identified for allocation only to specific tasks as required during an incident, to be determined at the discretion of commanding officers. This will be communicated to officers in the Operational News publication in April.
- The Brigade has undertaken a review of BA and telemetry data from the Grenfell Tower incident, in order to assess the effectiveness of extended duration breathing apparatus (EDBA) compared with Standard Duration Breathing Apparatus (SDBA) in fighting high-rise fires. Findings will be provided to the Grenfell Tower Inquiry and shared with BA manufacturers and the National Fire Chiefs Council in April, to inform the development of operational procedures and BA equipment in the future.
- The Brigade's operational procedure on Search and Rescue Procedures within Structures (Policy Note 803) is being reviewed, including consideration of how to improve debriefs, with any changes to be finalised by April 2020.

Command and control – communication

- 24. That the LFB develop a communication system to enable direct communication between the control room and the incident commander and improve the means of communication between the incident commander and the bridgehead.**
- 25. That the LFB investigate the use of modern communication techniques to provide a direct line of communication between the control room and the bridgehead, allowing information to be transmitted directly between the control room and the bridgehead and providing an integrated system of recording FSG information and the results of deployments.**

Recommendations 24 and 25 overlap with Recommendation 13, which recommends a dedicated communication link between the Control room and Incident Commander, and Recommendation 17, which requires the Brigade to display information simultaneously at Control and in Command Units. Actions under these earlier recommendations will also contribute to the Brigade's response to Recommendations 24 and 25.

An IT solution to increase situational awareness and communication between the incident and Control is being developed, which will help address Recommendations 24 and 25. The system will enable information from FSG calls to be displayed simultaneously at the incident and in Control; a new IT application is expected to be completed by March 2021. Additional visual display technology has already been delivered in the primary Control room.

A large-scale exercise in south-east London on 27 February acted as a 'proof of concept' exercise for an enhanced procedure to address the recommendation on communication between the bridgehead and control room. The use of a dedicated Airwave radio channel for FSG calls, with an FSG coordinator located in Control, facilitated the exchange of information to and from the incident ground. Further exercises will be held in the coming weeks.

In addition, the Brigade is trialling the use of aerial drones at incidents. Drones have now been deployed to 115 operational incidents. Information provided by drone technology can improve situational awareness for commanding officers and will be live streamed at Brigade Control. The Brigade is now implementing a proposal to locate drone capability on a Command Unit, with a further report on trial findings due in March 2020.

Equipment

- 26. That the LFB urgently take steps to obtain equipment that enables firefighters wearing helmets and breathing apparatus to communicate with the bridgehead effectively, including when operating in high-rise buildings.**
- 27. That urgent steps be taken to ensure that the command support system is fully operative on all command units and that crews are trained in its use.**

At the Grenfell Tower fire, there were serious problems with radio communication between the bridgehead (the safe position within a building from where firefighting operations are carried out) and deployed firefighters. The London Fire Brigade is now addressing these issues, as set out below.

Responding to Recommendation 26, the Brigade is in the process of replacing and upgrading the radios that it uses at incidents. This project is being taken forward in two phases. The first phase, complete by April 2021, will deliver a new single type of radio used for both fireground and breathing apparatus communications. This will be a more powerful radio for breathing apparatus communications than the current model.

The second phase of this project, complete by October 2022, will be the delivery of new breathing apparatus including improved communication capability.

Problems were also experienced with the command support systems on the Brigade's Command Units. Recommendation 27 is aimed at addressing these. The Brigade has identified that connectivity issues were the primary cause of the problems. An interim measure was implemented in January 2019, to ensure all Command Units have 4G-enabled laptops. In addition, servers on Command Units are being upgraded to support 4G connectivity, a project that will be complete in March 2020.

In the longer term, new Command Units and a command support system are being procured. This project is due to be completed in October 2021.

Evacuation

- 28. That the government develop national guidelines for carrying out partial or total evacuations of high-rise residential buildings, such guidelines to include the means of protecting fire exit routes and procedures for evacuating persons who are unable to use the stairs in an emergency, or who may require assistance (such as disabled people, older people and young children).**
- 29. That fire and rescue services develop policies for partial and total evacuation of high-rise residential buildings and training to support them.**

The Grenfell Tower Inquiry has identified that the London Fire Brigade did not recognise the extent of the building failure at Grenfell Tower soon enough, or alter its advice to residents to 'get out' as quickly or effectively as it should. The Mayor accepts this finding and has ensured the Brigade is prioritising action in this area.

The Mayor and the Brigade have called for the Government to initiate a national review of the 'stay put' principle of building design, specifically to respond to circumstances of building failure, recognising that mass evacuation is not without challenges and risk. The Mayor has urged the Government to act quickly to put in place new national guidelines for the total or partial evacuation of residential high-rise buildings. A national steering group has been established by the Home Office to consider new national protocols; this group met to agree the scope of the work in December.

The Brigade has also revised its Policy Note (PN) 633 on High-Rise Firefighting. This document sets out the procedures firefighters should follow when responding to a fire in a high-rise building. The new PN 633 covers operational tactics for use in exceptional circumstances when a building is not behaving as designed in order to provide the greatest possibility of reaching all parts of the building for the purpose of emergency evacuation of residents. The LFB plans to implement the revised PN 633 from 31 July 2020, following the procurement of new equipment, a series of 'proof of concept' exercises, and the completion of a robust training programme being delivered to all station based officers; so far 225 senior officers have received an initial awareness briefing prior to the station based officer training roll out. This policy will remain under review until such time as national guidance, changes in legislation and subsequent remediation work have been undertaken.⁹

The Brigade has also completed a draft of a new Emergency Evacuation and Mass Rescue policy. The Brigade is consulting on the policy internally, after completing two

⁹ PN 633 will be subject to monthly review. As stated in the policy: "We recognise that as building legislation changes and the outcomes of Phase 2 of the Inquiry (once published) will require the policy to be reviewed and changed. We have already formally agreed with the London region [of the Fire Brigades Union] to undertake a monthly review of the policy within the Brigade Joint Committee for Health, Safety and Welfare to ensure it remains current and reflect the changing circumstances."

rounds of peer review, and is engaging with the NFCC to help ensure this work is reflected in national guidance.

Evacuation – duties for building owners and managers

- 30. That the owner and manager of every high-rise residential building be required by law to draw up and keep under regular review evacuation plans, copies of which are to be provided in electronic and paper form to their local fire and rescue service and placed in an information box on the premises.**
- 31. That all high-rise residential buildings (both those already in existence and those built in the future) be equipped with facilities for use by the fire and rescue services enabling them to send an evacuation signal to the whole or a selected part of the building by means of sounders or similar devices.**
- 32. That the owner and manager of every high-rise residential building be required by law to prepare personal emergency evacuation plans (PEEPs) for all residents whose ability to self-evacuate may be compromised (such as persons with reduced mobility or cognition).**
- 33. That the owner and manager of every high-rise residential building be required by law to include up-to-date information about persons with reduced mobility and their associated PEEPs in the premises information box.**

These recommendations are aimed at placing new duties on building owners and managers of residential high-rise buildings to help enable residents to be safely evacuated. The Government announced a Fire Safety Bill and a Building Safety Bill in the Queen's Speech in December, and we await further details of how these pieces of legislation will address the safety issues that have been highlighted by the Grenfell Tower fire and the GTI phase 1 report.

Recommendation 30 would require building owners and managers to provide evacuation plans to fire and rescue services. The Brigade has already established an Operational Risk Information project to improve how it gathers, records and disseminates this type of information for the purposes of responding to incidents. In preparation for new legislation, the London Fire Brigade is considering how it would receive, record and use any new information provided by building owners and managers. A national steering group has been established by the Home Office to consider new national protocols; this group met to agree the scope of the work in December.

Recommendation 31 requires building owners and managers to install facilities for firefighters to send an evacuation signal to residents. At a national level, a new British Standard (BS8629) has been designed for design, installation, commissioning and

maintenance of evacuation systems, and was published in November 2019.¹⁰ Building owners and managers are primarily responsible for implementing this recommendation, although the Brigade is considering the policy and training implications that may arise, taking into account possible changes in national guidance on evacuation.

Recommendations 32 and 33 do not require the London Fire Brigade to take specific steps to implement them. However, Recommendation 33 would mean new information on evacuation plans for residents with reduced mobility to be placed in premises information boxes, which are used by firefighters at incidents. The Brigade will review its relevant operational procedure in Policy Note 513 on Premises Information Box Systems. A focus group with internal stakeholders was conducted in December, with further work to be taken forward when the Government has clarified its proposed legislation in this area.

Evacuation – smoke hoods

34. That all fire and rescue services be equipped with smoke hoods to assist in the evacuation of occupants through smoke-filled exit routes.

Smoke hoods, also known as fire escape hoods, are provided by firefighters to people caught in smoke-filled environments, to help enable them to safely escape. The hood is worn over the head, and a tight seal around the hood prevents any smoke from getting in. Air comes into the hood through a filter, which removes the toxic gasses found in smoke. This provides clean, safe air for 15 minutes. Smoke hoods can be provided by firefighters when trying to get someone through a smoke-filled area, or when someone needs to stay in a smoky environment until they can be rescued.

The London Fire Brigade did not have smoke hoods available at the time of the Grenfell Tower fire. However, they were introduced in 2018, and the LFB is the first fire and rescue service in the country to implement this capability. They have been issued to all fire stations and are carried on all breathing apparatus sets on all fire engines. The Brigade will now be increasing the provision of smoke hoods through the introduction of grab packs, each containing five hoods, onto each frontline appliance to support an emergency evacuation or mass rescue. Rollout will begin in March 2020.

The Brigade is also developing a proposal to purchase an additional aerial drone, with a view to carrying out trials to deliver smoke hoods to high floors of a building. Progress on this proposal will be included in a future report.

The Brigade's research into smoke hoods and their use has been shared with the National Fire Chiefs Council, to support national implementation of the recommendation.

¹⁰ <https://standardsdevelopment.bsigroup.com/projects/2019-01237>. A standard is not necessarily mandatory and enforceable in its own right. For further explanation please see: <https://www.bsigroup.com/en-GB/standards/Information-about-standards/standards-and-regulation/>

Internal signage

- 35. That in all high-rise buildings floor numbers be clearly marked on each landing within the stairways and in a prominent place in all lobbies in such a way as to be visible both in normal conditions and in low lighting or smoky conditions.**
- 36. That the owner and manager of every residential building containing separate dwellings (whether or not it is a high-rise building) be required by law to provide fire safety instructions (including instructions for evacuation) in a form that the occupants of the building can reasonably be expected to understand, taking into account the nature of the building and their knowledge of the occupants.**

These recommendations are aimed at placing new duties on building owners and managers of residential buildings to display floor numbers and fire safety instructions. This may require new legislation, so the Government must act on this point.

The Government announced a Fire Safety Bill and a Building Safety Bill in the Queen's Speech in December, and we await further details of how these pieces of legislation will address the safety issues that have been highlighted by the Grenfell Tower fire and the GTI phase 1 report. The GLA is considering the best ways to encourage building owners/managers in London to implement these recommendations as quickly as possible and ahead of legislation. The London Fire Brigade will provide support and advice to the Government and building owners and managers to assist with implementation as required.

Fire doors

- 37. That the owner and manager of every residential building containing separate dwellings (whether or not they are high-rise buildings) carry out an urgent inspection of all fire doors to ensure that they comply with applicable legislative standards.**
- 38. That the owner and manager of every residential building containing separate dwellings (whether or not they are high-rise buildings) be required by law to carry out checks at not less than three-monthly intervals to ensure that all fire doors are fitted with effective self-closing devices in working order.**
- 39. That all those who have responsibility in whatever capacity for the condition of the entrance doors to individual flats in high-rise residential buildings, whose external walls incorporate unsafe cladding, be required by law to ensure that such doors comply with current standards.**

These recommendations are aimed at placing new duties on building owners and managers of residential buildings to ensure fire doors are working properly and regularly checked. This may require new legislation, so the Government must act on this point. In its formal response to the GTI Phase 1 report, the Government has indicated that all fire doors,

including their closers, should be routinely checked or inspected by qualified professionals. In January, the Government also published updated advice on fire doors as part of the consolidated Expert Panel advice note. Alongside the previous progress report, the Mayor wrote to building owners and managers in London highlighting the need to implement this recommendation.

The Government announced a Fire Safety Bill and a Building Safety Bill in the Queen's Speech in December, and we await further details of how these pieces of legislation will address the safety issues that been highlighted by the Grenfell Tower fire and the GTI phase 1 report. The London Fire Brigade will provide support and advice to the Government and building owners and managers to assist with implementation as required.

Co-operation between emergency services – Joint Doctrine

- 40. That the Joint Doctrine be amended to make it clear that each emergency service must communicate the declaration of a Major Incident to all other Category 1 Responders as soon as possible.**
- 41. That the Joint Doctrine be amended to make it clear that on the declaration of a Major Incident clear lines of communication must be established as soon as possible between the control rooms of the individual emergency services.**
- 42. That the Joint Doctrine be amended to make it clear that a single point of contact should be designated within each control room to facilitate such communication.**
- 43. That the Joint Doctrine be amended to make it clear that a "METHANE" message should be sent as soon as possible by the emergency service declaring a Major Incident.**

The Grenfell Tower Inquiry Phase 1 report identified problems with the way London's emergency services worked together on the night of the fire. In particular, the report was critical of emergency services for each declaring the fire a Major Incident, but without immediately informing each other they had done so. A Major Incident is "an event or situation with a range of serious consequences which requires special arrangements to be implemented by one or more emergency responder agency," as defined in the National Operational Guidance on Major Incidents.

These recommendations are aimed at all emergency services and are about the content of the Joint Doctrine. This is an interoperability framework setting out a standard approach to multi-agency working and training material. It is developed by the national Joint Emergency Services Interoperability Programme (JESIP), a partnership of emergency service chief officers.

"METHANE" refers to a model promoted by JESIP for managing the initial stages of an incident. It stands for:

- Major Incident
- Exact Location
- Type of Incident
- Hazards
- Access
- Number of Casualties
- Emergency Services

The METHANE model tells emergency responders what information they need to gather and share about an incident. The Inquiry's recommendation is that a message containing this information is shared by the service declaring a Major Incident.

Each of these recommendations will primarily be addressed by JESIP. Lead chief officers for each of the emergency services have committed to a review of the Joint Doctrine, including consideration of these recommendations. The revised Joint Doctrine is due to be published in September 2020. The London Fire Brigade has committed to incorporating any changes to the Joint Doctrine into its own policies and training.

London's emergency services are also working together to address these issues at the city level. These recommendations were considered at two meetings of the 'Blue Lights' panel of London Emergency Services Liaison Panel (LESLP) in December 2019 and January 2020. The Blue Lights panel is responsible for London's Major Incidents Procedures Manual, and agreed to review these procedures. There is now a procedure in place for the activation of a conference call between London's emergency service control rooms following the declaration of a major incident.

In February 2020, the Brigade participated in a trial with the London Ambulance Service and Metropolitan Police Service of a 'control hub' for seven days at the MPS special operations room to test ways of improving joint communications. A debrief report on the trial is currently being compiled; further trials for the co-location of control officers are also being planned.

Co-operation between emergency services – information-sharing

- 44. That steps be taken to investigate the compatibility of the LFB systems with those of the MPS and the LAS with a view to enabling all three emergency services systems to read each other's messages.**
- 45. That steps be taken to ensure that the airborne datalink system on every NPAS helicopter observing an incident which involves one of the other emergency services defaults to the National Emergency Service user encryption.**
- 46. That the LFB, the MPS, the LAS and the London local authorities all investigate ways of improving the collection of information about survivors and making it available more rapidly to those wishing to make contact with them.**

The Grenfell Tower Inquiry Phase 1 report identified problems with the way London's emergency services worked together on the night of the fire, including the way key pieces of information were collected and shared.

As discussed in relation to the Recommendations 40 to 43, these issues are being considered by the national Joint Emergency Services Interoperability Programme (*JESIP*), a partnership of emergency service chief officers, which will publish its updated Joint Doctrine on how services work together in September 2020.

In London, the 'Blue Lights' panel of London Emergency Services Liaison Panel (LESLP) met in December 2019 and considered Recommendation 44 on the London Ambulance Service, London Fire Brigade and Metropolitan Police Service reading each other's messages. Consideration is being given to a long-term solution using a cloud-based communication system for London's emergency services to share information about incidents.

In February 2020, the Brigade participated in a trial with the London Ambulance Service and Metropolitan Police Service of a 'control hub' for seven days at the MPS special operations room to test ways of improving joint communications. A debrief report on the trial is currently being compiled; further trials for the co-location of control officers are also being planned.

Recommendation 45 refers to the images recorded by the police helicopter present at Grenfell Tower. These images may have assisted firefighters in responding to the fire, but the encryption of the information was incompatible between the London Fire Brigade and the National Police Air Service (NPAS). The recommendation from the Inquiry is that common encryption is used in the future.

The Brigade already has the capacity to receive images from the NPAS. It will engage with the NPAS to ensure that arrangements for sharing these types of images are

implemented, and improved if necessary. The Government addressed this recommendation in its own response to the GTI Phase 1 report, stating:¹¹

“NPAS have completed refreshed training to ensure that all tactical flight officers and pilots are up to date and competent with the encryption systems. Since December 2019, all NPAS aircraft are now manually set at the beginning of each shift to ensure data links can be received by all emergency services as the default. NPAS are working on a technology solution to automate this when aircraft are powered on and this work is due to be completed in July 2020.”

As discussed in relation to Recommendation 24, the Brigade is also trialling the use of aerial drones at incidents. Images from drones are therefore already being used by commanding officers and live streamed at Brigade control. Results of the trial are being assessed.

Recommendation 46 is about improving the way information about the survivors of an incident is collected and shared by London’s emergency services and local authorities. Procedures for this are already set out in London’s Major Incidents Procedures Manual, which is produced by the ‘Blue Lights’ panel of London Emergency Services Liaison Panel (LES�P). The Blue Lights panel has considered this recommendation, and will now work with the Humanitarian Assistance Working Group to take forward a review of the current guidance by September 2020.

¹¹ <https://www.gov.uk/government/publications/grenfell-tower-inquiry-phase-1-report-government-response>

Other action taken by the Mayor and GLA on building safety in London

Since the Grenfell Tower tragedy, the Mayor has done everything he can to improve the safety of buildings by using his powers directly or lobbying the Government for change. For the first time, the London Plan (currently with the Secretary of State for formal approval) requires all development proposals to achieve the highest standards of fire safety. The London Plan ensures that safety is considered at the very earliest stage of building design.

In addition, the Mayor wants to be at the forefront of best practice in fire safety when commissioning new homes on his land. New housing developments delivered on GLA land via the London Development Panel will require the provision of sprinklers, control over combustible items in the walls in buildings of any height and the registration of white good products. The Mayor has produced guidance for other landowners encouraging them to do the same.

The Mayor is responsible for administering the Social Sector Cladding Remediation Fund and the Private Sector Cladding Remediation Fund on behalf of the Government for buildings in London. All decisions regarding the scope and design of the fund, and approvals of applications, are carried out by the Government. The Mayor has called on the Government to extend the Funds to cover all types of unsafe cladding and interim safety measures.

The Government is in the process of reforming the Building Regulations and the processes around how homes are built and managed safely. The Mayor is actively engaged in shaping these proposals. For instance, the Mayor has been a long-time supporter of the London Fire Brigade's campaign for increasing the installation of sprinklers. In his response to the consultation on sprinklers and other fire safety measures in high-rise blocks of flats, he has called again for the inclusion of sprinklers in all purpose-built flats.

With respect to the Grenfell Tower Inquiry Phase 1 report, many of the recommendations addressed to building owners and managers will require new legislation. The Mayor is exploring, with the housing sector, the best ways to encourage building owners/managers in London to appropriately implement Phase 1 recommendations prior to legislation. The Mayor has written an open letter to building owner or manager to draw attention to a range of recommendations to improve the safety of residential blocks, including some of the recommendations made in the Phase 1 report.¹²

¹² <https://www.london.gov.uk/what-we-do/housing-and-land/housing-and-land-publications/responses-and-correspondence-building-regulations-and-fire-safety>

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