

Coroner's Inquests
into the London
bombings
of 7 July 2005:
Review of progress

May 2012

Introduction

1. On 6 May 2011, the Coroner, Lady Justice Hallett, issued a report under Rule 43 of the Coroner's Rules 1984, making nine recommendations. She concluded that "the evidence I have heard does not justify the conclusion that any failings on the part of any organisation or individual caused or contributed to any of the deaths". Her recommendations were directed to areas in which she believed that the evidence gave rise to a concern that circumstances creating a risk of other deaths would occur or would continue to exist in the future. A full list of the recommendations is provided at Annex A.
2. Two of the recommendations related to the preventability of the event and were directed to the Secretary of State for the Home Department and Security Service, and a third recommendation relating to the emergency response was directed, in part, to the Secretary of State for Health. The Government accepted these three recommendations. Six recommendations related to the emergency response in London and were directed primarily to Transport for London, London Resilience Team, London Ambulance Service, and the Barts & London NHS Trust. The organisations to which these recommendations were directed also accepted them.
3. In June 2011, the Government submitted a formal response to the recommendations directed to it as required under Rule 43A(1) of the Coroner's Rules. This report was made available to the public in July 2011. Other responses were also submitted and published, and all the reports can be found at 7julyinquests.independent.gov.uk. The Government response commented on the specific recommendations directed to it and also provided comment on the broader narrative made by the Coroner where, although there was not a Rule 43 recommendation, there was a need for Government to address a concern. The Government response also addressed wider UK implications of those recommendations directed specifically towards London.
4. In its response the Government stated it would review progress against these commitments by the end of March 2012. This report publishes the findings of that review and covers the recommendations directed to Government and other organisations. For ease of reference the report mirrors the structure and sequence used by the Government in its response to the Coroner.

Preventability

5. The Coroner made two recommendations directed to the Home Secretary and the Director General of the Security Service which related to the handling of photographs and the recording of assessment decisions. The Coroner also made some observations which stopped short of full recommendations that related to the handling of photographs, record keeping, and the way in which draft reports by the Intelligence and Security Committee (ISC) were checked.
6. The Government response to the Coroner outlined actions which had already been taken and other ongoing work to address the Coroner's recommendations and observations. Further progress since June 2011 is reported below.

Recommendation 1: Photographs

7. The Coroner recommended that consideration be given to whether procedures could be improved to ensure 'human sources' who are asked to view photographs are shown copies of the best possible quality, consistent with operational sensitivities. Whilst not a formal recommendation, the Coroner hoped that a proper record would be kept of the circumstances of the identification procedure, and also commented on the procedures for reviewing old photographs to be shown to agents.

8. Since 2004, the Service has concentrated effort on improving its capability to share and exploit high quality images with key partners, particularly the police, and to record and analyse which images have been shown to which sources. As the Government response to the Coroner sets out, the Security Service's systems and technologies for the handling of photographs had improved significantly by 2011, including deciding which photographs should be shown to which sources and keeping a record of this.

9. In its response, the Government noted ongoing work by the Security Service trialling improvements to its database recording which images had been shown to which agents. The lessons learned from this trial have now been addressed. The Service has noted that it still needs to improve electronic connectivity with partners with whom it shares images and is, therefore, continuing to review connectivity with its most important partners with an eye to routine digital transfer of the best quality images (in parallel with ongoing investment to improve interoperability and keep pace with technological advances). This review has focused on making progress that will deliver operational benefit in time for the Olympics and improvements so far include strengthened electronic links with the law enforcement community and new guidance to staff. After the Olympics the Service will continue to look at other opportunities to enhance connectivity with partners, and exploit developing technologies.

Recommendation 2: Recording of assessment decisions

10. The Coroner recommended that procedures be examined by the Security Service to establish if there was room for further improvement in the recording of decisions relating to the assessment (prioritisation) of targets.

11. As the Government response to the Coroner sets out, the Security Service is confident that a far more formal structure is now in place to capture an improved decision-making process. The Service now records in more detail than in 2004 the decisions made to prioritise investigations, and the individuals within those investigations, within an ongoing programme of investment to upgrade IT capability. In its response, the Government noted the intention of the Security Service to introduce a new investigative record in 2011 to hold key investigative and prioritisation decisions more easily. The Security Service has actively progressed the development of a number of tools, including the investigative record, to further strengthen its capture of the overall narrative of investigations.

12. Whilst not formal recommendations, the Coroner made a number of other comments on preventability and further progress since June 2011 is reported below.

Security Service and the Intelligence and Security Committee (ISC)

13. The Coroner asked for consideration to be given to whether procedures could be improved to ensure the accuracy and completeness of information provided by the Security Service to the ISC, and to whether procedures could be improved to allow the Service to review draft reports of the ISC more effectively, with a view to ensuring it had not inadvertently included any inaccurate or potentially misleading information.

14. The ISC chair has underlined the importance of this to the security and intelligence agencies, which has led to a refocusing of efforts to this end. In line with this, the Green Paper on Justice and Security published in October 2011 made a number of proposals aimed at expanding and strengthening the remit of the ISC, including its ability to access information from the intelligence community. Independent oversight of the security and intelligence agencies is also delivered by two Intelligence Services Commissioners. Their role complements executive oversight by departments and Secretaries of State; Parliamentary oversight by the Intelligence Services Committee; and judicial oversight by the Investigatory Powers Tribunal.

15. The Green Paper on Justice and Security proposed a number of changes to make oversight of the intelligence and security agencies, and the wider intelligence community, more effective and credible. On the Commissioners it proposed strengthening their role by expanding their statutory remit to cover a general responsibility for overseeing the effectiveness of operational policies. Steps have also been taken to increase the public profile of the Commissioners by establishing a dedicated website (see www.mi5.gov.uk/output/intelligence-services-commissioner.html) and revising their annual reports to make them more readable. The Justice and Security Bill, which will include provisions for strengthening oversight of the intelligence community, will be introduced in this Parliamentary session.

Hydrogen peroxide

16. The Coroner raised concerns around the ease with which the four bombers were able to purchase and store the hydrogen peroxide required to build their explosive devices, without raising any suspicion. Whilst not a recommendation, the Coroner believed it appropriate to support the introduction of sensible regulation of the supply of hydrogen peroxide and other explosives precursor substances and urged that appropriate restrictions be implemented as soon as possible.

17. The Government response highlighted continued efforts to increase security around hydrogen peroxide and other explosives precursor chemicals through both voluntary and regulatory measures. Government has worked in partnership with chemical manufacturers and wholesalers to replace explosives precursors present in readily available consumer products. As a result, hydrogen peroxide and other explosives precursors are now less available.

18. The Home Office has also published 'Secure Your Chemicals' advice to business and academic users of explosives precursors, resulting in improved physical security through the introduction of simple security processes. This has made theft or the diversion of explosives precursor chemicals more difficult to achieve, and easier to detect by law enforcement authorities. Some UK chemical dealers that had been exposed to the awareness raising campaign were visited in 2010 and found to be working to best practice guidelines.

19. 'Know Your Customer' campaigns continue to be aimed at retailers of hydrogen peroxide products such as pharmacies so that suspicious purchasing activity is more likely to be identified and reported (eg via the Anti-Terrorist Hotline). These campaigns have been promoted through trade association journals, and suspicious transaction reporting has been included in industry and business codes of conduct. Since 2005, over 90,000 campaign leaflets and posters have been distributed to suppliers. The Anti-Terrorist hotline continues to receive calls from chemical suppliers about suspicious transactions. This has resulted in investigations and criminal charges, most recently in October 2011. The National Counter-Terrorism Security Office is refreshing the 'Know Your Customer' campaign electronically through relevant trade and professional associations to remind retailers to remain vigilant in the run up to the Olympics.
20. Detailed research into the availability and security of hydrogen peroxide products across their entire supply chain has found evidence that suppliers targeted by the 'Know Your Customer' campaigns follow the advice provided and have made improvements to the security of their sites. The Home Office and National Counter-Terrorism Security Office are in the process of testing the effectiveness of 'Know Your Customer' advice. It would be inappropriate to comment on this work in progress as to do so would jeopardise the exercise.
21. The Government is also testing technology with the potential to identify suspicious transactions automatically. Work on developing a proof-of-concept software tool is scheduled for completion by March 2013 and final results will be used to inform future policy decisions.
22. As part of our wider efforts, the Government is in negotiation for EU-wide regulation focused on reducing access to explosives precursors such as hydrogen peroxide. The proposed regulation sets concentration limits on certain chemicals (including hydrogen peroxide) and restricts access by the general public above these thresholds. Such controlled access would make it more difficult for terrorists to obtain precursors to produce viable homemade explosives, and increase detection, prevention and tracing possibilities for law enforcement. An EU-wide approach would also ensure terrorists could not exploit lower standards in other states.
23. The Government is closely involved with ongoing negotiations in Brussels over the final text of the proposed EU regulation as we continue to see considerable benefit in achieving a baseline standard across the EU. Progress has been slower than anticipated initially but following a productive Ministerial meeting in April we hope to secure agreement on this important regulation before the summer.
24. Finally, Government continues to consider other options such as the use of inhibitors that when added to commercial products containing explosives precursors prevent their use in the manufacture of homemade explosives. The Government continues to fund work in this area as a high priority, in close collaboration with industry, with the intention it will support forthcoming explosives precursors regulation.

Emergency response

25. In the second half of her report the Coroner made seven formal recommendations related to the emergency response. The majority of these recommendations were directed at London organisations and, as such, the responses to these were set out in replies to the Coroner's report coordinated by the Mayor in June 2011. One of the seven recommendations related to emergency response was also directed to the Secretary of State for Health. The Coroner also made a number of observations, particularly on how the emergency services and other key responder organisations had worked together and shared information in the initial stages of the response.

26. The Government response to the Coroner, and other responses coordinated by the Mayor, outlined the progress which had already been made and set out other commitments. Further progress since June 2011 is reported below.

Recommendation 3: Inter-agency training

London

27. The Coroner recommended that the London Resilience Team (LRT) reviews the provision of inter-agency major incident training for frontline staff, particularly with reference to the London Underground (LU) system.

28. The LRT convened a meeting on 6 June 2011 including the emergency services, Transport for London (TfL), LU and NHS London to review the provision of current training. Each organisation provided their core requirements for training and the LRT subsequently pulled this together to create a 'training outline' that could be implemented in the way most suited to each respective organisation.

29. The training outline provides all the agencies involved with a common understanding of respective roles, responsibilities and procedures in the immediate response phase. The outline is in two parts, the first focusing on frontline emergency response and the second providing greater awareness of London Emergency Services Liaison Panel (LESPL) arrangements regarding the prescribed command and control structure to manage a major incident. The outline is currently being considered by partners prior to signoff and implementation with individual organisations. The LRT also established links with Cabinet Office on their work to review training outside London to facilitate read across between the reviews nationally and in London.

FORWARD DEFENSIVE

On 22-23 February 2012 a national counter-terrorism exercise called FORWARD DEFENSIVE took place as part of a series of exercises to test and rehearse Government and police readiness for the Olympic and Paralympic Games. This specific exercise scenario tested and evaluated the safety and security arrangements for responding to a terrorist incident in London during Games time. The scenario commenced with a terrorist incident on the London Underground requiring an emergency service response and addressed many issues raised by the Coroner, specifically:

- how effectively the fire, police and ambulance services work together at all levels (including below Gold and Silver commanders) at the scene of a terrorist incident, particularly on identifying and communicating the nature of the incident and mobilising resources;
- use of AIRWAVE radio by the emergency services, including during the initial stages of a terrorist incident, to test capacity issues and adherence to operational protocols; and
- using shared principles around scene assessment, casualty management and hazard management.

The 'live play' element of the exercise also tested a range of other issues raised by the Coroner, specifically:

- the way in which TfL is alerted to a major incident and informs the emergency services of an emergency on its network;
- procedures regarding a common initial rendezvous point for the emergency services;
- the application of multi-casualty triage procedures, in particular with respect to the role of basic medical intervention at the scene; and
- the use of plain English by the police and emergency services to ensure information can be communicated speedily and helpfully during a major incident.

The post exercise report has been distributed to partners with specific lessons made to those bodies with responsibility for implementation.

Nationally

30. Noting that Recommendation 3 was directed to London, the Government response stated that further improvements to training were required at the frontline ('bronze') level nationally. To support this, the Government undertook to emphasise the need for responders to engage and support multi-agency exercising in exercises of all tiers in a revised publication of 'Emergency Preparedness' (the statutory guidance on emergency planning that supports the Civil Contingencies Act 2004). Revisions to 'Emergency Preparedness' were made accordingly in November 2011 (see www.cabinetoffice.gov.uk/resource-library/emergency-preparedness).

31. The Government also committed to coordinate a wider review of multi-agency considerations in single-service training outside of London, consistent with the review that was to be conducted in London. The Government committed to ensuring that the results of both reviews (London and national) were shared across the UK and work to address any shortcomings was coordinated across all relevant organisations.

32. Cabinet Office completed the national review in March 2012, drawing on the findings of the London review. The Cabinet Office assessment identified the need for an 'aide memoire' style resource for frontline ('bronze') commanders and operational personnel to foster greater awareness of inter-agency roles, and proposed the basic format and content of the document.

33. The aide memoire will help ensure frontline ('bronze') commanders from one emergency service are able to work effectively with frontline commanders and operational personnel from other emergency services during a major incident, addressing knowledge gaps and misunderstandings that can hamper joint working at the frontline. As part of a new programme of work to improve interoperability (see below) the emergency services have taken ownership of the aide memoire, which will be rolled out between now and June 2012 prior to the Olympics.

34. By way of context, the Government can report significant investment and progress in developing the capability and capacity of the emergency services across England and Wales. This includes the development of joint operating principles, joint training and joint exercising for specialist teams targeted towards particular risks, including the response to a firearms attack such as the one that took place in Norway in July 2011 and incidents involving chemical, biological, radiological and nuclear substances.

35. The English Health Sector has developed Hazardous Area Response Teams (HARTs) whose role it is to respond to a wide range of major incidents. These teams have been trained to provide life-saving medical care at mass casualty incidents, significantly improving immediate medical care and scene management. They are trained to operate in particularly challenging environments, including in response to a terrorist attack where chemical, biological or radiological conditions may be present. Currently, there are fourteen such teams across England increasing to fifteen before the Olympics. Two are based in London (increasing to three during the Olympics) and similar capabilities have been developed in Wales, Scotland and Northern Ireland.

36. The Government is currently working with partners to ensure these teams are trained and equipped to respond to the highest standard and can work in a number of challenging situations, including a marauding firearms attack. A similar upgrade in training and equipment is also being given to specialist fire and rescue teams in key cities across England.

37. As part of this work, new 'joint operating principles' have been developed by the emergency services supported by the Home Office that set out clearly how the three services should work together to rescue casualties from the scene of a fast-moving incident involving firearms and other hazards (eg fire). This approach was tested with specialist police, fire and ambulance teams in a major exercise in December 2011. A training package based on these principles has been developed and is currently being delivered locally in high priority areas. Priority sites will have further opportunities for on-the-ground testing and exercising before the Olympics.

38. The Home Office also has a long standing programme of work to develop the UK capability to quickly and effectively respond to, and mitigate, a chemical, biological, radiological or nuclear (CBRN) terrorist attack. This has focused primarily on the development of a police, fire and ambulance multi-agency joint response framework, improving interoperability between these emergency responders. The Home Office has equipped eighteen sites nationwide with trained officers to improve the multi-agency response to a CBRN attack, and all but two of these sites have completed a three-stage multi-agency training and exercising programme for their geographic area, the final two being completed before the end of the year.

39. CBRN training has also been provided on mass decontamination for 90% of fire and rescue personnel to enable them to reduce public exposure following contamination. In addition, over 650 multi-agency emergency service commanders have been trained in CBRN specialist courses at the Police National CBRN Centre in Ryton.

40. Building on these initial projects, the Home Secretary met with senior representatives from the emergency services last year and commissioned these organisations to identify where there are more fundamental opportunities to improve interoperability in the medium to longer-term for all major risks. A national blue-light interoperability programme has now been established, led by the emergency services with the Home Secretary's oversight, with the aim of delivering a better joint response to any major incident by focusing on the areas of doctrine, training, people and organisation. The Home Secretary met with Ministerial colleagues and the emergency services on 8 May to agree the programme, which will take into account lessons learned from national exercises, Olympic Games planning, other events (such as the Cumbria shootings and wide area flooding), and related work on specific risks (for example, adapting the joint operating principles for a marauding firearms attack to cover other types of emergency).
41. The Government is committed to making progress on this important issue and has set out clearly the expectation of interoperability between the emergency services in both the National Fire Framework for England consultation document and, more broadly, in the shadow Strategic Policing Requirement. These documents will set the strategic direction for the police service, fire and rescue authorities when tackling national risks. Her Majesty's Inspectorate of Constabulary conducted an assurance review of interoperability between the blue-light services in March 2012. The most significant recommendation is that a tri-service forum should be established with the aim of improving the ability of the three services to plan, test and learn together. This forum will be set up shortly, reporting to the Home Secretary.

The use of plain English

42. Whilst not a recommendation, the Coroner asked that a sensible approach to the use of language be applied by the emergency services and other organisations involved in emergency response.
43. The Government response highlighted improvements since 2005 to ensure effective communication both within and between those organisations involved in responding to critical incidents. The Government committed to updating the 'lexicon' of civil protection terminology to ensure definitions were in plain English where possible, and to include the lexicon in relevant documents.
44. An updated lexicon, including Olympics specific terminology, is now cross-referenced and aligned with the revised statutory 'Emergency Preparedness' guidance supporting the Civil Contingencies Act 2004, and used in the 'Counter Terrorism Contingency Planning Guidance' distributed to police forces and other stakeholders in March 2012. This latter guidance is applicable across the spectrum of terrorism incidents and contains good practice derived from Her Majesty's Inspectorate of Constabulary thematic reviews, operational debriefs, and terrorist and other real-life incidents as well as learning from the national counter-terrorism exercise programme.
45. The Government also undertook to develop a set of commonly defined map symbols to complement the lexicon. Common map symbols have now been developed and issued to responders for use. The lexicon and map symbols facilitate communication between partners, reducing the scope for ambiguity and misunderstanding.

Recommendation 4: Declaration of major incidents

London

46. The Coroner recommended that Transport for London (TfL) and the London Resilience Team (LRT) review the protocols by which TfL (i) is alerted to major incidents declared by the emergency services that affect the underground network, and (ii) informs the emergency services of an emergency on its own network (including the issuing of a 'Code Amber' or a 'Code Red', or the ordering of an evacuation). By way of explanation, 'Code Red' on the London Underground (LU) requires that trains are brought to an immediate stop, and 'Code Amber' requires that trains are brought into the next station and await further instructions.

47. Work to address this recommendation has been coordinated by the London Resilience Forum (LRF). They have confirmed to Government that, in respect of TfL being alerted to major incidents by the emergency services, these notifications will be received directly from the Metropolitan Police Service (MPS) to take account of the Coroner's concern that information was received in a piecemeal fashion on 7 July. Further detailed work is being coordinated through the London Emergency Services Liaison Panel: modified operational procedures have been discussed which the LRF anticipates will be finalised shortly in advance of the Games.

48. The LRF has confirmed to Government that they have reviewed protocols with partners in respect of TfL alerting the emergency services to major incidents on the London Underground. Arrangements are now in place for the TfL Network Operations Centre to notify British Transport Police, MPS, London Fire Brigade and London Ambulance Service in the event of a network declaration of 'Code Amber' or 'Code Red'. These emergency services will also be notified of an individual line 'Code Red' immediately and an individual line 'Code Amber' once in excess of fifteen minutes. The London Emergency Services Liaison Panel has revised its Major Incident Procedure Manual to incorporate all relevant lessons from 7 July in addition to learning from other incidents, exercises and changes in organisational structures since the publication of the previous version in July 2007. The revised manual was published in May 2012.

Nationally

49. Noting that the recommendation was directed to London, the Government response undertook to draw it to the attention of rail operators nationally. Rail and light rail operators in Great Britain were asked to review their existing procedures in light of the Coroner's recommendations. All operators have undertaken this review, and have each provided assurance to the Department for Transport on the arrangements they have in place with the emergency services.

50. As part of a wider assurance programme, the Government is currently liaising with operators of security regulated rail and light rail stations serving Olympic venues to confirm that their protocols have also been reviewed and where necessary revised before the Games.

51. The Government also undertook to revise the statutory and non-statutory guidance documents for the Civil Contingencies Act 2004 to ensure better clarity on the regulations and the Act regarding the declaration of major incidents nationally. A revision to the statutory 'Emergency Preparedness' guidance supporting the Act was made in October 2011, and inclusion in other non-statutory 'Emergency Response and Recovery' guidance related to the Act will be completed before the Olympics.

Transmitting capacity of AIRWAVE radios underground

52. Whilst not a recommendation, the Coroner raised a concern that at a number of priority sub-surface tube stations with just one AIRWAVE base radio there was a risk the communications structure could become overloaded in the event of a major incident, if the emergency services did not quickly start to manage their radio traffic. AIRWAVE is the communications network for the emergency services.
53. The Government committed to consider options to improve the capacity of AIRWAVE in the London Underground at priority sub-surface stations, and is investing around £40m to improve the AIRWAVE infrastructure specifically for the Olympics, as well as increasing AIRWAVE capacity at key London Underground stations before the Games. This will provide added resilience and allow increased use by the police and other emergency services.
54. The Government also committed to work with the emergency services on improving the understanding of, and adherence to, operating protocols designed to manage information flows.
55. Nationally, the AIRWAVE user community engages at a senior level with the service provider through the Emergency Services Airwave Strategy Group. This Group currently meets quarterly and has the lead role in promoting multi-agency use of AIRWAVE. Government continues to engage with Local Resilience Forums with the objective of enhancing communications resilience and interoperability. An updated national picture will be captured in the planned 'National Resilience Capabilities Survey 2012'. This work will also report on steps to test interoperability arrangements and consider lessons from the public disorder seen in summer 2011.

Ability of the police and emergency services to share information simultaneously about an emerging incident

56. The Coroner raised a concern that despite the emergency services using electronic information capturing systems (such as the computer aided dispatch system used by the police) there was no means by which an agency could see another's information system. She commented that no comparable electronic links existed between the London Fire Brigade and any other emergency service, or between the London Ambulance Service and the British Transport Police or City of London Police.
57. The Government response highlighted ongoing work to investigate the most efficient and effective ways of sharing information, both voice and data, between responders during a crisis. It also undertook to update the relevant parts of the statutory 'Emergency Preparedness' guidance for the Civil Contingencies Act 2004 on information sharing. Revisions to 'Emergency Preparedness' on information sharing were made in February and April 2012 and statutory regulations which support emergency responders to enact information sharing protocols took effect on 1 April 2012 (the protocols themselves were published at the end of March 2012).
58. These revised regulations emphasise the requirement for all responders to share information and cooperate with each other. Further, the new protocols give 'Category 2' responders like the Health and Safety Executive flexibility to agree with other local partners bespoke means of sharing information and cooperating which will be more effective and efficient than the standard generic process. The Government is now considering whether an additional guide consolidating all existing guidance on data handling and information sharing is required.

59. In setting guidelines and regulations the Government is seeking to promote joint working rather than mandating which (commercial) products the emergency services and other partners should use. To facilitate joint working and information sharing Cabinet Office is continuing to roll out the National Resilience Extranet (NRE) across the emergency responder community. The NRE provides all emergency responders with the capability to store and share sensitive information up to and including that classified as 'restricted'. The NRE now has over 3400 users from over 720 organisations, and has been selected as the primary information sharing tool for emergency responders during the Olympics.

60. In addition, Cabinet Office is working with the support of the Welsh Government and Association of Chief Police Officers to pilot 'Direct Electronic Incident Transfer' (DEIT). DEIT enables the electronic exchange of incident logs between frontline (Category 1) responders with compatible command and control systems. The pilot, which facilitates information sharing using a central hub, is being conducted between Gwent Police, South Wales Fire & Rescue Service and Newport City Council. This removes the need for information on incidents to be passed verbally and, through the use of a common gazetteer (list of locations), ensures all partners are aware of the exact location of an incident. A web-based viewer has also been developed for the pilot to allow other organisations to view and update incident logs. The pilot is progressing to plan, and evaluation will take place in summer 2012. Results from the pilot will be used to assess the value of further roll out.

Recommendation 5: Initial rendezvous point

London

61. The Coroner recommended that Transport for London (TfL) and the London Resilience Team (LRT) review the procedures by which (i) a common initial rendezvous point is established, and its location communicated to all the arriving emergency services (ii) the initial rendezvous point is permanently manned by an appropriate member of London Underground (LU).

62. Work to address this recommendation has been coordinated by the London Resilience Forum (LRF). After the July 2005 attacks, LU introduced a system using 'unique reference codes' agreed with the London Fire Brigade and London Ambulance Service to designate initial rendezvous points. Revised LU 'formal incident procedures' now identify the role of Liaison Officer whose responsibility is to ensure information is exchanged with the emergency services. The revised procedures provide a member of staff, in a newly created position, who is responsible for emergency services liaison at the rendezvous point for the duration of the incident. This rendezvous point will be manned at all times where it is practicable to do so during an incident. The LRT has confirmed to Government that both these new procedures have been reviewed with the emergency services and information shared with partners.

Nationally

63. Noting that the recommendation was directed to London, the Government response undertook to draw it to the attention of rail operators nationally. Rail and light rail operators in Great Britain were asked to review their existing procedures in light of the Coroner's recommendations. All operators have undertaken this review, and have each provided assurance to the Department for Transport on the arrangements they have in place with the emergency services, depending on the nature of their networks. For example, operators of stations all have pre-arranged rendezvous points, but for incidents which occur between stations, arrangements are in place for setting these points at the time of the occurrence at the most relevant location.

64. As part of a wider assurance programme, the Government is currently liaising with operators of security regulated rail and light rail stations serving Olympic venues to confirm that their protocols have also been reviewed and where necessary revised before the Games.

65. Finally, the Government undertook to revise the non-statutory 'Emergency Response and Recovery' guidance for the Civil Contingencies Act 2004 in a review to be carried out in 2011. This revision will be now included in advance of the Olympics as part of a broader programme of work in consultation with the Department for Communities and Local Government to update all UK Government guidance on resilience to reflect other organisational changes.

Recommendation 6: Traction current

London

66. The Coroner recommended that Transport for London (TfL) and the London Resilience Team (LRT) review the procedures by which confirmation is sought on behalf of any or all of the emergency services that the traction current is off, and by which that confirmation is disseminated.

67. Work to address this recommendation has been coordinated by the London Resilience Forum (LRF). TfL have reviewed arrangements and a revised protocol (involving a locally appointed London Underground (LU) task leader at the scene of any incident requiring traction current discharge) was presented to London Fire Brigade and London Ambulance Service in December 2011. The new arrangements are included in an update of the London Emergency Services Liaison Panel (LESPL) Major Incident Procedure Manual which was published in May 2012. Communication about use of the procedure at an incident has also been improved by the provision of Connect and AIRWAVE radio.

68. More detailed operational procedures have also been completed by the emergency services and LU around how the principles will work in practice to confirm traction current has been discharged and that trains have come to a halt (as some trains may not stop immediately).

Nationally

69. Noting that the recommendation was directed to London, the Government response undertook to draw it to the attention of rail operators nationally. Rail and light rail operators in Great Britain were asked to review their existing procedures in light of the Coroner's recommendations. All operators have undertaken this review, and have each provided assurance to the Department for Transport on the arrangements they have in place with the emergency services, depending on the nature of their networks (eg street trams run on overhead wires). Operators have confirmed well established arrangements are in place between their control rooms and the emergency services; and protocols in place with emergency services which are regularly reviewed.

70. As part of a wider assurance programme, the Government is currently liaising with operators of security regulated rail and light rail stations serving Olympic venues to confirm that their protocols have also been reviewed and where necessary revised before the Games.

Blue light status for the Transport for London's Emergency Response Unit

71. The Coroner considered whether blue light status should be given to Transport for London's Emergency Response Unit but did not make a formal recommendation.

72. This was considered by London Underground (LU) who started a trial on 9 February 2012 involving three emergency response vehicles with British Transport Police (BTP) livery and driven by a BTP officer under 'blue lights' when appropriate. This means that TfL's Emergency Response Unit vehicles will travel under the same 'blue light' conditions as used by police, ambulance and fire services. The trial is funded for a year and will be reviewed periodically to assess progress. LU report that the trial has resulted in response times to critical incidents almost halving in the first three months of operation. LU will be considering the success of the trial based on whether there has been a reduction in response time to incidents and in lost customer hours, as well as considering individual incident outcomes before determining the way forward. The Department for Transport stands ready to consider any request from TfL for blue light status once the trial has concluded.

Operational discretion for the London Fire Brigade

73. Although not a formal recommendation, the Coroner asked that the London Fire Brigade continue to review its protocols, procedures and training on a regular basis to ensure lessons from operational experience are learned.

74. In response to the Coroner's comments, the Government undertook to publish the National Operational Guidance on Railways, Tunnels and Underground with lessons incorporated from 7 July and other operational incidents. It also undertook to draw the attention of this guidance to all fire and rescue authorities who have a responsibility to regularly review protocols, procedures and training to ensure lessons from operational experience are learned.

75. The revised National Operational Guidance on Railways, Tunnels and Underground was published on 23 March 2012 and the Chief Fire and Rescue Adviser wrote to all Chief Fire Officer's in England (copied to the Chief Fire and Rescue Advisers for the Devolved Administrations) to advise them of the revised guidance. There are no national requirements regarding when protocols should be updated and this is a matter for individual fire and rescue authorities. As a matter of course, the London Fire Brigade continues to undertake reviews to ensure lessons are learned from operational experience.

Recommendation 7: First aid boxes and specialist stretchers

London

76. The Coroner recommended that Transport for London (TfL) (i) reconsider whether it is practicable to provide first aid equipment on underground trains, either in the driver's cab or at some other suitable location, and (ii) carry out a further review of station stretchers to confirm whether they are suitable for use on both stations and trains.

77. The work in London has been coordinated by TfL. Immediately following the incidents in 2005, London Underground (LU) considered putting first aid equipment on trains but determined it was an unfeasible solution due to a lack of space in the driver's cab, hygiene issues, vandalism concerns and the size of a potential kit to be effective for a mass casualty incident.

78. In response to the Coroner's recommendation in 2011, LU reconsidered the issue again with independent specialists, including the Red Cross and London Ambulance Service. This review concluded that the issues surrounding the provision of first aid kits on trains were still pertinent and the provision of such kits would not be workable. The expert panel also concluded that the NHS 'major incident dressing packs' located on stations remained suitable (see below) but suggested some changes to the quantity and size of dressings which have been actioned.

79. There are 36 NHS 'major incident dressing packs' located at larger underground stations in the capital. These large (1 metre cube) green bags contains enough dressings and ancillary items, such as sterile gloves, to provide first aid to around 100 casualties. The packs are designed for use by anyone (staff, other first responders and members of the public) as a 'self help' measure until the arrival of emergency services. Larger packs can also be brought by the LU Emergency Response Unit.

80. In addition, LU have provided 170 'multi casualty kits' which are briefcase size packs of bandages, dressings and accessories to be taken to a train or station by LU staff who are likely to be first on scene following a major incident. The principle is that they will be given to customers, staff and initial emergency responders to start using them ahead of the arrival of further emergency services. These have been put in place at underground stations and depots across the tube network with a bias towards Zone 1 underground and interchange stations.

81. A comprehensive review of stretcher provision was undertaken by TfL in 2006 in consultation with the emergency services. This resulted in all stretchers being replaced on the LU network after a series of trials were conducted to determine the most appropriate type of stretcher for use in the unique operating environment present on underground trains and stations. TfL carried out another review following the Coroner's recommendation in 2011. This review included consideration of findings from Department of Health studies and other research into this issue and concluded that the current stretchers were fit for purpose and the most suitable for the challenges presented in the underground working environment.

Nationally

82. Noting that the recommendation was directed to London, the Government response undertook to draw it to the attention of rail operators nationally. Rail and light rail operators in Great Britain were asked to consider the provision of first aid kits and stretchers in light of the Coroner's recommendations.

83. Given the distributed nature of these networks, mass casualty arrangements are predicated on the response of the emergency services. In support of this, the Department of Health provided NHS 'major incident dressing packs' to major transport hubs in addition to those provided at 36 underground stations in London (at 103 train stations, 14 airports and 10 others including ferry ports plus 14 at shopping centres). In total 270 packs have been distributed: 112 throughout the Greater London area and another 158 across the rest of England.

84. Equipment required to remove patients from an incident is different for different environments. Most ambulance work is in domestic properties and on streets and, as such, every ambulance is equipped with a wheeled trolley that has a stretcher bed. These cannot be carried and are designed for wheeling on roads/pavements. There is also a wheeled chair used for going up and down short flights of stairs.

85. When patients need to be transported over rough ground or in tunnels then a stretcher is needed. These are not standard ambulance equipment so for an incident on a rail track or a tunnel the ambulance service would bring stretchers. The Hazardous Area Response Teams (HART) arrangements noted above use specialist vehicles and equipment, including a stretcher that can be used on uneven ground or for long distance casualty movement.

The public as first responders and provision of additional medical supplies

86. As noted above, since 2005 major transport stations on the underground, national rail network and places elsewhere have been supplied with NHS 'major incident dressing packs' to be used by customers, staff and initial emergency responders.

87. It should be noted all emergency ambulances carry enough equipment to treat up to ten casualties. At a major incident in the capital, the London Ambulance Service (LAS) has a pre-determined minimum attendance of twenty ambulances to each site and can deploy more if necessary. All ambulance services also have additional vehicles that contain equipment, dressings, fluids, blankets to take to an incident, for example, the LAS has seven such 'large equipment vehicles' (rising to nine during the Olympic Games).

88. The Department of Health has also established a network of 24 'mass casualty equipment vehicles' placed strategically across England. Each vehicle contains 100 rucksacks, each containing all the equipment needed to care for a seriously injured patient. These vehicles also provide specialist medications and equipment to supplement the usual ambulance service supplies, and there are also bandages and dressings for 250 casualties with more minor injuries. The vehicles can be deployed at the request of the ambulance service and can be moved around the country at immediate notice to support clinical care wherever needed. Three of these vehicles are based in London, and it would be possible to have another five vehicles in London within approximately one hour of an incident.

89. Further, as noted with respect to inter-agency training, there are now fourteen Hazardous Area Response Teams (HART) across England increasing to fifteen before the Olympics. Two are based in London (increasing to three during the Olympics) and similar capabilities have been developed in Scotland, Wales and Northern Ireland. These teams have been trained to provide life-saving medical care at mass casualty incidents, significantly improving immediate medical care and scene management.

90. The clinical skills of paramedics have also developed over the last seven years and include improvements in the treatment options for patients who have suffered major trauma, as well as improvements in the pain relief available to paramedics that previously would have required a doctor to administer. Registered paramedics have access to, and can provide, morphine sulphate injection or morphine sulphate oral to a maximum strength of 20mg for the necessary treatment of sick or injured persons.

91. In addition, the Home Office introduced a legislative instrument in Parliament in March 2012 which clarifies that, under existing legislation, paramedics in specific situations have authority to possess certain drugs (including ketamine for pain relief and midazolam for sedation) as well as the authority given to them in 2003 to supply, offer to supply or administer. This is another step towards ensuring paramedics can make better use of available pain care relief in treating injured persons at a major incident and the change came into effect on 23 April 2012.

Recommendation 8: Triage

92. The Coroner recommended that the London Ambulance Service (LAS), together with the Barts & London NHS Trust (on behalf of London Air Ambulance) review existing training in relation to multi-casualty triage (ie the process of triage sieve) in particular with respect to the role of basic medical intervention. A number of actions have been taken forward to support this recommendation.

93. The LAS worked with Barts & London NHS Trust to review existing training. Following this review, arrangements were changed to include a requirement to undertake basic medical interventions during the triage process (for example, control of catastrophic haemorrhage and use of basic airway management manoeuvres for patients who are unconscious). The LAS started to train staff in the new triage arrangements in October 2011 with the aim of delivering formal training to all operational ambulance staff by June 2013. An e-learning programme will be provided for LAS staff in 2012/13 to supplement formal training and provide early information to all staff prior to the Olympics.

94. The LAS has also introduced a 'two clinician' system which is deployed to major incidents. This system works with one clinician following the triage clinician and who can perform time critical interventions to the most seriously injured patients. This has been proven to work in the exercises run by the Home Office and emergency services looking at the response to a terrorist firearms incident. The approach allows paramedics to work as a team to triage and treat casualties at a much quicker speed: moving from patient to patient, performing life-saving interventions and when necessary confirming death (noting the time and covering the deceased). The process of triage is exercised and trained as part of every mass casualty exercise occurring in the lead up to the Olympics.

95. Following consultation with London Air Ambulance and ambulance trusts around the country, the LAS advised the Coroner in its response that its 'major incident plan' would be revised to take into account patient dignity, operational need, scene clearance and scene of crime management in relation to the preservation of evidence. The plan has since been revised and is expected to be published in June prior to the Olympics.

96. The Government undertook to work with the National Health Service, Joint Royal Colleges Ambulance Liaison Committee, and relevant professional bodies to facilitate these changes nationally should the London review suggest changes to ambulance staff protocols. Reflecting improvements made in the arrangements for London, publication of revised national protocols is expected in June 2012 prior to the Olympics.

Covering of deceased people

97. In their response to the Coroner, the London Ambulance Service (LAS) NHS Trust detailed revised arrangements regarding the covering of deceased people to be included in its major incident plan. The Service has advised that changes have been made to the way they manage deceased victims at a major incident to ensure that appropriate triage/clinical assessments take place and that dignity is maintained wherever possible. These revised arrangements are to be included in its major incident plan.

First aid training in the community

98. In their response to the Coroner, the LAS NHS Trust provided details of their efforts to train members of the public in basic first aid and resuscitation skills. They have advised that this work continues.

Recording of the administration of medicines at the scene of a major incident

99. In their response to the Coroner, the LAS NHS Trust noted their efforts to address this issue in respect of multi-casualty scenarios. They have advised that changes have been made to the way administered medicines are recorded during a major incident: every patient must have a full patient report form completed for them which captures data on the use of medicines.

Recognition of pre-hospital care as a sub-specialty

100. The Coroner lent her support to an application before the General Medical Council (GMC) to accredit pre-hospital care as a sub-specialty. The Government response noted that accreditation would be supported but we would not want to pre-empt the findings of the GMC.

101. 'Pre-Hospital Medicine' was recognised as a sub-specialty in July 2011 following the support of the GMC and Academy of Royal Colleges. Work is continuing to develop the curriculum and assessment process to match the main specialty being followed by the doctor in training. The first doctors have recently been recruited to a training scheme in east England.

Recommendation 9: Formal recognition of MERIT and public funding for the London Air Ambulance

102. The Coroner recommended that the Department of Health, the Mayor of London, the LRT and any other relevant bodies review the emergency medical care of the type provided by London Air Ambulance and MERIT and, in particular (i) its capability and (ii) its funding.

Medical Emergency Response Incident Team (MERIT)

103. As noted in the Government's response, the Department for Health supports in principle the concept of MERIT and issued guidelines on development and deployment in January 2010, noting that local arrangements may need to vary to ensure the best possible pre-medical care.

104. London currently has MERIT arrangements via an 'on-call' 24/7 system providing a minimum of three Medical Incident Advisors (doctors) to support paramedics at major incidents. The scheme has a further pool of trained doctors and paramedics who can be called on to provide additional support. In response to the recommendation, the Department for Health worked with NHS London and other partners to review arrangements in the capital, to see if those arrangements are appropriate and to look at what future developments may be needed.

105. The London Ambulance Service (LAS) and NHS London are now working to enhance existing arrangements, and funding has just been agreed, to introduce a formal rota for MERIT doctors to ensure greater availability. Additionally, the LAS and NHS London are developing continuation training and an exercise programme to integrate the MERIT function into the wider incident response for the capital.

106. The Department for Health intends to consider how revised arrangements in London, once implemented, have implications nationally. As part of ongoing wider assurance processes, Strategic Health Authorities in England are currently reviewing local major incident arrangements, which include MERIT, to ensure relevant additional support can be provided to the ambulance service in responding to incidents in their area.

107. The Government's response noted that Strategic Health Authorities were implementing regional networks for Major Trauma Care throughout NHS England (with support from the Department of Health) and these have been operational since 1 April 2012. These networks of acute hospitals, grouped around an identified Major Trauma Centre, will ensure that seriously injured patients are taken to the hospital equipped to give them the best outcome and chance of survival.

108. The Department for Health continues to work with partners to make arrangements for emergency medical care with respect to the Olympic and Paralympic Games, nationally and in London.

Air ambulances

109. As noted in the Government's response, the Department of Health recognises that air ambulances play an important role in delivering emergency care, and provide an effective means of ensuring better and faster access to hospitals, supporting transfers between hospitals, and help to bring resources to the scene. The Department continues to support charities and ambulance trusts working together to agree how these services can maximise their contribution to high quality patient care in their areas. The Department also continues discussion with London Air Ambulance on the emergency medical care provided, including capability and funding.

London Air Ambulance as a Category I responder

110. The Government undertook to ensure that specific references to air ambulance services were made in a revised version of the statutory Emergency Preparedness guidance. The revision was made in October 2011.

Conclusion

111. As the Government's original response sets out, by 2011 a considerable number of improvements had already been made compared to the arrangements in place at the time of the attacks, including much closer working between the counter-terrorism and law enforcement communities and a significantly greater investment of resources to tackle terrorism.

112. This report has set out in detail the progress made against the actions that the Government, and other partners, committed to take in their respective responses to the Coroner. We believe clear and substantial progress has been made since June 2011 and that the lessons learned from the events on 7 July 2005 have improved our ability to respond to terrorist attack. Where work is ongoing, we are satisfied each lead department and agency is aware of its public commitments and is progressing actions accordingly.

Annex A: Coroner's recommendations

	Recommendation	Page
1	I recommend that consideration be given to whether the procedures can be improved to ensure that "human sources" who are asked to view photographs are shown copies of the photographs of the best possible quality, consistent with operational sensitivities. (Home Office / Security Service)	3
2	I recommend that procedures be examined by the Security Service to establish if there is room for further improvement in the recording of decisions relating to the assessment of targets. (Home Office / Security Service)	3
3	I recommend that the London Resilience Team reviews the provision of inter-agency major incident training for frontline staff, particularly with reference to the London Underground system. (London Resilience Team)	6
4	I recommend that TfL and the London Resilience Team review the protocols by which TfL (i) is alerted to major incidents declared by the emergency services that affect the underground network, and (ii) informs the emergency services of an emergency on its own network (including the issuing of a 'Code Amber' or a 'Code Red', or the ordering of an evacuation). (Transport for London / London Resilience Team)	10
5	I recommend that TfL and the London Resilience Team review the procedures by which (i) a common initial rendezvous point is established, and its location communicated to all the arriving emergency services (ii) the initial rendezvous point is permanently manned by an appropriate member of London Underground. (Transport for London / London Resilience Team)	12
6	I recommend that TfL and the London Resilience Team review the procedures by which confirmation is sought on behalf of any or all of the emergency services that the traction current is off, and by which that confirmation is disseminated. (Transport for London / London Resilience Team)	13
7	I recommend that TfL (i) reconsider whether it is practicable to provide first aid equipment on underground trains, either in the driver's cab or at some other suitable location, and (ii) carry out a further review of station stretchers to confirm whether they are suitable for use on both stations and trains (TfL)	14
8	I recommend that the LAS, together with the Barts and London NHS Trust (on behalf of the LAA) review existing training in relation to multi casualty triage (i.e. the process of triage sieve) in particular with respect to the role of basic medical intervention. (London Ambulance Service and Barts & London NHS Trust)	17
9	I recommend that the Department of Health, the Mayor of London, the London Resilience Team and any other relevant bodies review the emergency medical care of the type provided by LAA and MERIT and, in particular (i) its capability and (ii) its funding. (Department of Health / London Resilience Team)	18

ISBN: 978-1-84987-755-8

© Crown copyright 2012

You may re-use this information (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence.

To view this licence, visit www.nationalarchives.gov.uk/doc/open-government-licence/
or write to the Information Policy Team,
The National Archives, Kew, London TW9 4DU,
or e-mail: psi@nationalarchives.gsi.gov.uk.