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21 April 2011

The Secretary  
Senate Environment and Communications References Committee  
Parliament House  
Canberra ACT 2600

By email: [ec.sen@aph.gov.au](mailto:ec.sen@aph.gov.au)

Dear Mr Palethorpe

### **Inquiry into Emergency Communications**

Airwave Solutions Australia (Airwave) and its associated company, Broadcast Australia (BA), are pleased to have the opportunity to respond to the Committee's inquiry into the capacity of communications networks and emergency warning systems to deal with emergencies and natural disasters.

Airwave and BA are both owned by the Broadcast Australia Group, which is in turn 86% owned by Canada Pension Plan Infrastructure Board, a global long-term investor in infrastructure assets and businesses. Airwave specialises in the business of emergency services communications networks and has a strategic alliance with Airwave UK, which owns and operates emergency services networks on behalf of the UK Government. BA owns and operates the vital national broadcasting infrastructure network relied upon by a wide range of customers throughout Australia including the Australian Broadcasting Corporation (ABC) and the Special Broadcasting Service (SBS). BA provides analog and digital radio and television transmission services to its customers, plus site sharing and infrastructure services to other broadcasters and telecommunications providers including some emergency services communications providers.

BA's national infrastructure network has been tested by a series of natural disasters in recent years including recent cyclones that have affected North-Eastern and North-Western Australia, the floods throughout Eastern Australia earlier this year as well as the Victorian bushfires of February 2009.

This Inquiry seeks to investigate the efficacy of emergency communications at two fundamental levels. The first of these relates to the technologies and systems used by emergency services organisations in responding to and managing crisis situations – Airwave is well-placed to advise on these communications networks. The second is the communications technologies and services available to the community to preserve life and property in a crisis situation – and, insofar as this relates to terrestrial broadcast services such as the ABC’s role as the nation’s emergency services broadcaster, this is the core business of BA.

## 1. An Overall Vision for Emergency Services Communications in Australia

Airwave/BA believe that the appropriate starting point for the Committee’s consideration of the adequacy and effectiveness of emergency services communications in Australia is to define the key characteristics of world’s best practice in this area. This provides a basis for comparison of current arrangements in Australia and modifications, enhancements and further investment that ought to be considered by policymakers.

In relation to an appropriate vision for emergency services networks, Airwave contends that its key characteristics must include:

- Dedicated networks for mission-critical voice and data use, and the ability to utilise public wireless communications networks for non-critical data applications.
- These dedicated public safety networks must be highly resilient to enable guaranteed operational continuity in emergency situations, whether climate-related or man-made.
- Dedicated public safety networks must be engineered to continue to operate at times of extreme stress when commercial wireless networks fail due to congestion or power failure.
- Recognition that critical emergency services applications necessary to effectively manage emergencies are increasingly data-rich and, therefore, bandwidth hungry.<sup>1</sup>
- These dedicated networks should be characterized by maximum interoperability between emergency services organizations within a State, but also between States.
- A ‘shared network’ model provides the opportunity for governments to avoid duplication, maximize spectrum efficiency, and consider procurement models that leverage the strengths of the private sector.

Airwave believes that the emergency services communications network model currently operating in the United Kingdom is worthy of note by the Committee in considering potential benchmarks for Australia. This comprises the largest multi-agency public safety network in the world with around 250,000 users, 99% land coverage and 100% population coverage, and is operated by the private sector. This is described in greater detail in the Attachment 1 - Airwave Corporate Presentation.

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<sup>1</sup> For further discussion on this issue please refer to Analysys Masons – White Paper <http://www.analysysmason.com/About-Us/News/Newsletter/Mobile-broadband-demands-are-driving-a-need-for-additional-spectrum-for-public-safety-users/>

In relation to a vision for the community engagement dimension of emergency information management, BA considers that some of these elements might include:

- A 'multiple communication platforms' approach to the dissemination of emergency-related information – broadcast radio and television, telephony and internet.
- Broadcasting services, particularly radio (reception of which is not dependent on mains power supply), will have a critical role to play for the foreseeable future in the provision of real-time information to affected communities particularly where power blackouts disrupt other consumer communications networks.
- While broadcast radio services have performed reasonably well in the context of recent Australian emergencies, network resilience can and should be improved. The only acceptable public policy objective in this context is that 'emergency broadcaster' services should be 100% available and operational during an emergency event.

## 2. The Effectiveness of Current Emergency Services Networks

Australia has a diversity of emergency services communications networks currently in operation, with a number of different approaches in evidence between state jurisdictions. Some of the key characteristics include:

- Large numbers of standalone government networks in some jurisdictions.
- A strong culture among police and emergency services organizations to control and manage their own communications networks.
- Differing approaches to governance between jurisdictions but with a trend toward centralization to maximise efficiency and reduce duplication.
- In many cases, existing technology solutions are based on 'closed', proprietary (ie. vendor-specific) standards, rather than readily available 'open' standards equipment that promotes interoperability, competition and value-for-money outcomes.
- A current shift from legacy, analog technologies towards digital technologies which will promote network consolidation (i.e. shared networks) and interoperability between emergency services agencies.
- Significant limitations on the ability of state governments to fund network replacement or substantial capital upgrade projects due to tight fiscal circumstances.

An interesting question that arises from this diversity of approaches is whether there is a different and more strategic role that the Australian Government can and should consider playing in the area of emergency services communications. The Australian Government already plays an important role in emergency policy and response – for instance, in critical infrastructure protection, emergency policy and capability development (through the Attorney-General's Department and Emergency Management Australia) and, in the communications area through spectrum planning and allocation and standards-setting (through the Australian Communications and Media Authority). A greater national leadership role for the Australian Government may be warranted given the fact that emergency situations – whether natural or man-made – do not respect state borders, and that technological advances provide a range of new options for interoperability and elimination of duplication.

Specific initiatives that the Committee ought to consider recommending to the Australian Government include:

- Co-funding State Government projects that seek to deliver multi-agency network services (i.e. consolidating existing single agency networks), with the aim of fast-tracking these initiatives and the benefits they will produce in terms of coverage, functionality and capacity on shared public safety networks.
- Implement policy to reserve adequate spectrum for dedicated public safety network services for future high bandwidth mission-critical data applications, as part of the allocation of the digital dividend spectrum and other spectrum policy initiatives.
- Co-funding for establishment of resilient network sites, infrastructure and backhaul within and across State boundaries, creating a network core suitable for State Government funded access technologies.
- Consider allocation of the 380 -400 MHz band currently allocated to Defence for co-use with dedicated government radio networks – this extra capacity could:
  - relieve the spectrum congestion in major cities that currently limits the operational capability of existing networks, and
  - provide radio networks for Defence across Australia to covering its logistical requirements

Airwave believes that innovation through technology as well as new approaches to governance and procurement provides Australia with the opportunity to rapidly evolve the effectiveness of its approach to emergency services communications. Some of these transformational developments and opportunities include:

- The type of critical information required by emergency service responders is becoming 'richer', and carriage of this richer information is being made possible by new communications technology, such as the Long Term Evolution (LTE) family of standards. Traditional voice-based services are progressively being augmented with data and the future promise of enhancements such as images and video information which will substantially improve situational awareness and effective operational command for emergency service responders. This information, requiring high bandwidth capability, includes high resolution photographs (eg. to enable identification of suspects), mobile video surveillance, CCTV, face recognition analysis, maps and building plans etc. The implications in terms of spectrum management and planning are discussed further in Section 5, below.
- Additionally, there are a range of productivity applications that enable emergency services personnel in the field to operate with greater efficiency, generating benefits in the form of real time awareness and cost savings. These applications – similar to those available to the general community and other enterprises (e.g. mobile email, routine document access and submittal) – can be considered non-mission critical information in the context of emergency situations. Depending on the spectrum utilized by relevant networks, public safety users are able to roam on to commercial networks (e.g. 3G and, in future, LTE) for non-mission critical applications and functionality.

- The differentiation, above, between critical and non-critical information in the context of managing and responding to emergency situations gives rise to a profound distinction in the way networks are designed and configured for maximum effectiveness and efficiency:
  - Dedicated emergency services (or ‘public safety’) networks, designed and built with very high levels of resilience, are required to host mission-critical information and communications. This ‘designed-in’ resilience means that these networks, and the communications they support, can continue operating in a disaster scenario independent of electricity, telecommunications and other broadband networks that may be disabled for extended periods of time. The ‘designed-in’ resilience also considers the operational service model managing these networks and ensures appropriately skilled and resourced personnel are available to recover from network failures should they occur. By way of example, the emergency services network in the UK is engineered to operate without mains power or refueling for up to seven days. These dedicated networks may use the same or similar underlying technologies as commercial networks, but are designed and engineered with high levels of ‘spare’ capacity that can be used by responders in the context of an emergency event and operate independently of commercial networks that will inevitably be congested/overloaded in the context of an emergency or disaster. These dedicated networks are also designed for the prioritization of calls and ‘all informed’ talk groups to ensure all those responders who need certain information obtain it in the timeliest manner possible.
  - By contrast, commercial mobile networks – current (GSM and 3G) and future (LTE/4G) – are not designed and engineered for the very high level of resilience required by public safety agencies in mission-critical situations such as fire, flood, cyclone or terrorism. These current and future networks do not offer the technical and functional capability required by emergency service operators such as extremely short call set-up times (500 milliseconds), multi-level call prioritization, pre-emptive call priority and fail-safe mode of operation. Importantly, emergency situations are precisely the time during which these commercial networks are likely to be overloaded with important consumer traffic (“It’s OK I am safe” messages). That is not to say that commercial mobile networks do not serve a useful purpose in emergency situations – as the London Assembly Review Committee following the London Bombings found, these networks can be used to stop mass panic as people are able to indicate that they are unharmed and, even where networks become overloaded, the messages do eventually get through to their intended recipients. The Review Committee also noted the importance of dedicated networks for effective emergency services communications<sup>2</sup>.

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<sup>2</sup> London Assembly –Report of the 7th July Review Committee, Findings and Recommendations –page 128  
<http://legacy.london.gov.uk/assembly/reports/7july/report.pdf>

- Designing and building emergency (and other government) communications services using shared network models. Leading international examples include the United Kingdom (provided on an outsourced basis by Airwave UK), Norway (Nodentt) and networks in Germany and, in Australia; this direction is being pursued, for example, in New South Wales, Victoria and South Australia through their respective Government Radio Networks (GRNs). The shared network model provides a range of benefits:
  - More efficient use of capital by avoiding duplication of physical infrastructure (ie. transmission sites and associated facilities, backhaul capacity) and the efficiencies that can be gained from eliminating a profusion of reception equipment.
  - Recurrent expenditure savings from streamlined management, operations and maintenance functions, as well as the operational efficiencies associated with interoperability between agencies.
  - Spectrum efficiency is maximized through the establishment of a single high-capacity network versus a large number of low-capacity networks. This efficiency is increasingly important in the context of strong demands by advanced communications technologies for scarce radiofrequency spectrum.
  - Economy of scale in a shared network encourages procurement of greater coverage, capacity and resilience in the network design thereby creating greatest benefit for all shared network users at the lowest cost per user.

An extension of the above point, recognising the fiscal constraints on Australian State Governments and the relatively significant capital expenditures associated with major public safety network upgrades, is the consideration being given to outsourcing of shared network procurement. This approach has been successfully implemented over the last six years in the United Kingdom through Airwave UK. Victoria has successfully implemented this model for the Metropolitan Mobile Radio, Mobile Data Network and Emergency Alerting System networks. Outsourcing permits government to avoid the upfront costs associated with capital upgrading and replacement, minimizes risk associated with asset ownership and, through long-term agreements with private network owners, sees governments pay for services as they are used. Government can also benefit from the one-off proceeds from the sale of the existing network infrastructure as was, for instance, the case with the 1999 sale of the National Transmission Network which formed the core business for BA.

#### **4. The Effectiveness of Current Consumer Communications Networks**

Free-to-air television and radio services play a critical role in the timely dissemination of emergency-related information to affected communities. These free-to-air services are the primary means of mass communication by emergency services organizations in the warning/preparation phase for a natural emergency event and also for the provision of real-time updating during their occurrence (as well as potentially during, and in the immediate aftermath of, a terrorist incident).

Radio's role is particularly important as many reception devices operate without mains power (either through long-life batteries or in the car), unlike televisions and also computers/laptops and mobile phones (which have relatively short battery lives prior to needing to be recharged).

Terrestrial broadcasting has the advantage of transmission sites being designed and engineered to a high standard of reliability and resilience and, importantly, these sites are relatively few in number (ie. large coverage areas) and often well-located with respect to emergency risk (hilltops, isolated positions away from rivers etc). In some instances, however, these locations can be challenging depending on the natural event concerned – for instances, hilltop locations in national parks where the risk relates to bushfires.

ABC Radio has had longstanding arrangements in place with Australian governments to act as ‘emergency broadcaster’. This requires ABC radio stations to interrupt normal programming as required with emergency warnings and information during emergency situations. The ABC has rightly received widespread praise for its role in the provision of accurate, timely information during a number of recent major natural disasters – including over recent months in Queensland, Victoria and Western Australia. Comprehensive memoranda of understanding have been entered into, for example, between the state of Victoria and the ABC and, more recently, with commercial radio stations.

In its 2009 submission to the Victorian Bushfires Royal Commission, BA made a number of recommendations that it believes are of more general application across Australia. These include:

- Periodic risk assessment at transmission sites by fire authorities. (The same point could also be made in relation to flood and cyclone risk at certain sites).
- The listing of broadcast transmission sites on government critical infrastructure registers.
- Inclusion of broadcast transmission organizations in telecommunications group meetings that are convened during emergencies.
- Ongoing coordination mechanism between state emergency planning groups and broadcast transmission providers.
- Access for specialist BA staff to fire-affected areas (based on provision of appropriate fire training) to enable effective maintenance and operation of transmission equipment.

From the perspective of continuity of ABC broadcast transmissions, the 2009 Victorian bushfires were a more serious event than the cyclone and flood events of early 2011 in northern Australia. The fires of 7 February 2009 resulted in significant damage to broadcast transmission infrastructure at the Latrobe Valley site (a major regional site) and the seven smaller ‘translator’ sites fed by it, as well as the smaller Marysville site. Services were progressively re-established at these sites from days two to five after the fire event. The cyclone and flood events of early 2011 resulted in no service interruption, although BA – in conjunction with the ABC - pre-emptively established temporary radio transmission facilities at some locations in Queensland to support existing infrastructure and minimise the risk to local communications.

It is BA’s view that, as a matter of public interest, the objective of governments, the ABC and BA as its transmission service provider, must be to achieve as close as possible to 100% service availability in the context of emergency events. At a general level, as it is currently provisioned, the broadcast transmission network has high levels of resilience but is clearly susceptible to certain extreme weather-related events. BA believes that there would be merit in a nationwide risk assessment of national broadcaster transmission services to

identify those sites where Australian Government investment in additional resilience measures would be appropriate. Such measures might include:

- Availability of a permanent satellite back-up to program inputs.
- Establishment of emergency power plant at each site.
- Location of additional or back-up transmitters on site.
- Provision of additional equipment to allow establishment of temporary local services.

## **5. The Impact of Extended Power Blackouts / Community Education**

The impact of extended power blackouts has been indirectly referred to in several sections of this submission. From the perspectives of Airwave and BA, the implications for emergency services organizations and affected citizens from disruption to mains power include at least:

- The imperative for dedicated emergency services communications networks, with core network transmission components (eg. sites and dedicated microwave backhaul) able to function for at least several days without mains power, and the utilization of purpose-built terminal equipment in the field with substantial battery life (ie. substantially in excess of conventional mobile phones).
- The vulnerability of most of the key communications equipment and services to mains power failure – including television receivers, mobile telephones and laptops (limited battery life prior to recharging) and fixed internet services.
- Broadcast radio is a key communications platform for pre-emergency warnings to affected communities and the provision of real-time information during the crisis. Many, but not all, households have a battery operated radio and access to a car with a radio. The desirability of having disposable batteries on hand for household radios should clearly form an important component of messaging to communities on preparations for surviving natural disasters.

## **6. Potential of New and Emerging Technologies; Opportunities Associated with Spectrum**

Currently, public safety networks in Australia are utilizing spectrum allocated in the 400MHz band. These networks are providing voice and basic data services for emergency services organizations. The increasingly data-rich applications required for effective mission-critical emergency operations set out in Section 2, above, cannot be accommodated in the 400MHz band; hence the recent public debate around the scope for an emergency services allocation in the 700MHz band.

As has been widely commented upon, the 126 MHz ‘digital dividend’ that will become available following the shutdown of analog TV services in Australia (frequencies from 694 to 820MHz, known as the ‘700MHz’ band), presents a unique opportunity for Australia (as it



does for many other countries planning for digital TV switchover). The 700MHz band is a large contiguous block of spectrum that is ideally suited to high bandwidth, wide area coverage services and, therefore, is highly sought-after by a range of users. It seems clear from government policy and the broader debate so far that the bulk of this spectrum is likely to be used for commercial LTE/4G mobile broadband services.

It is these same spectrum and network characteristics that have led emergency services leaders and peak bodies to advocate for an allocation of part of the 700MHz band for a dedicated LTE-based emergency services network. A spectrum allocation in the 700MHz band would provide additional capacity and expansion potential for data-rich (ie. images and video) applications that would complement existing P25 voice services supported in the 400MHz band. In addition, if dedicated and commercial services are both operating in the 700MHz band, it would make possible roaming from the former to the latter by emergency services users for non-mission critical communications.

The policy direction in other leading countries – particularly the US and EU – seems to be heading in the direction of a spectrum allocation for public safety networks in the top half of the 700MHz band (the US) and frequencies at the very top end of the band and beyond, 790 to 862MHz (EU). Assuming these allocations come to pass, it is clear that a substantial amount of future global network and equipment research for high-bandwidth emergency communications equipment will focus on utilization of these frequencies. From the perspective of Australia's commercial network operators, the suggestion of a 20MHz (2x10MHz pairs) allocation for emergency services within the 700MHz band raises the concern of Australia not being able to integrate into the likely Asia-Pacific spectrum standard for LTE/4G services which encompasses two 45MHz pairs plus guard bands.

In light of these competing interests, Airwave/BA believes that consideration should be given to the possibility of establishing a 14MHz allocation between 806 and 820MHz for dedicated emergency services communications on a shared network basis in Australia. As we understand the current ACMA proposal for establishment of commercial LTE/4G services, it is intended that Australia will seek consistency with the Asia-Pacific Telecommunications Wireless Forum (AWF) approach. This would see 2 x 45 MHz pairs covering 703 to 748 MHz 'uplink', a 10 MHz mid band gap, a 758 to 803 MHz 'downlink' for commercial services, and then a proposed 3 MHz guard band from 803 to 806 MHz. This leaves 14 MHz for an unspecified use (806 to 820 MHz) which Airwave/BA suggests could be considered for a national solution to inter-operable shared emergency services networks.

Airwave and BA would be pleased to discuss the issues raised in this submission. Please do not hesitate to contact the undersigned on 02-8113 4666.

Yours sincerely,

Malcolm Keys  
CEO  
Airwave Solutions Australia

Stephen Farrugia  
General Manager – Technology Futures  
Broadcast Australia

ATTACHMENT: AIRWAVE UK CORPORATE OVERVIEW AND UNITED KINGDOM  
EMERGENCY SERVICES NETWORK

# Airwave UK

EMERGENCY SERVICES NETWORK OVERVIEW

APRIL 2011



# Who Are We?



- **Airwave designed and built the UK's dedicated digital network for the emergency services on time and on budget**
- **Airwave was the first to offer secure, seamlessly integrated communications between public safety agencies**
- **The network is owned and operated by Airwave 24/7**
- **Around 250,000 users and over 300 individual organisations are using the Airwave service – customers range from the main emergency services to Local Authorities, Highways Agency and UK Immigration**
- **TETRA Technology – offering both voice and data solutions**



# So Why Is Airwave Different?

## Our touchstones:

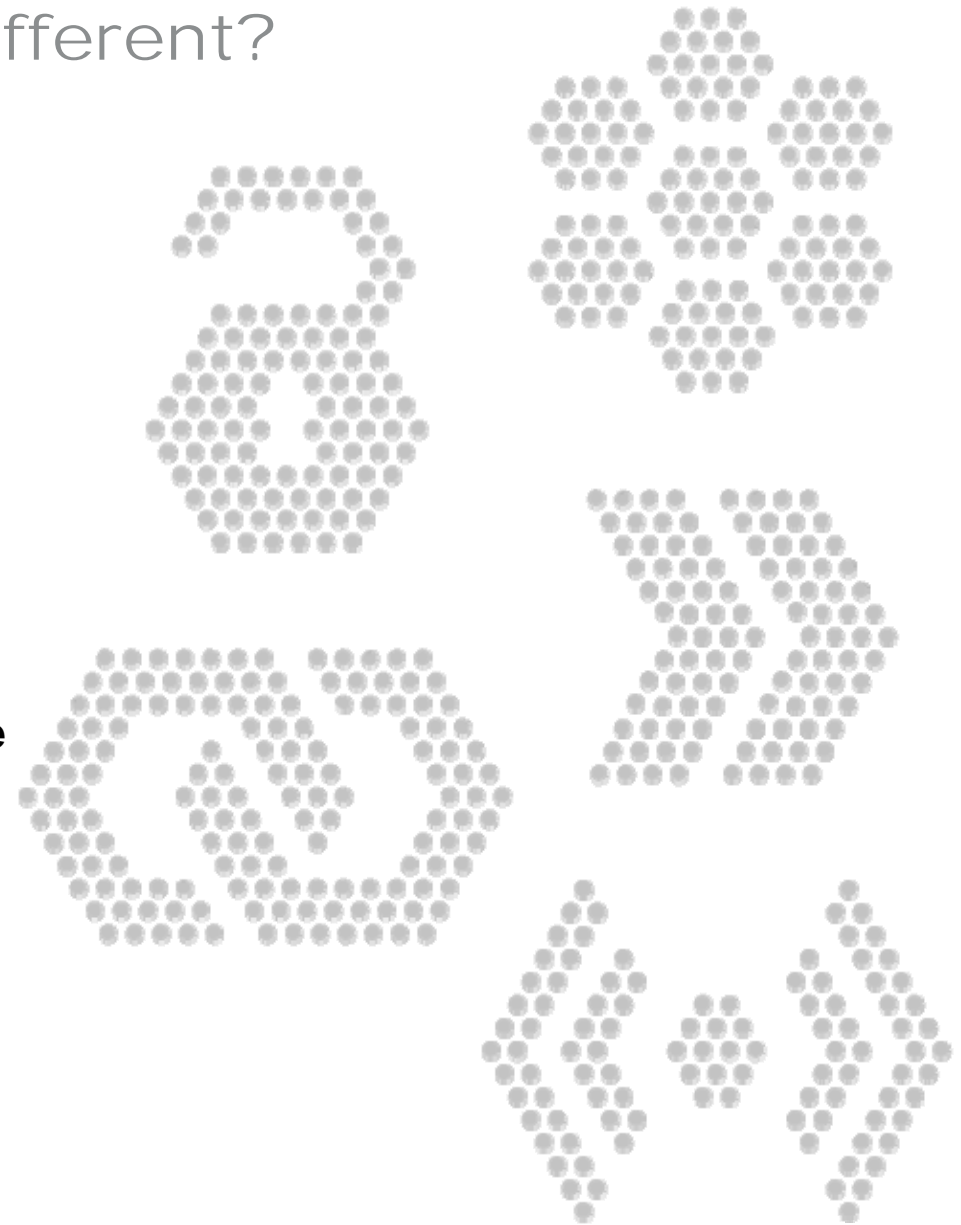
**interoperability** - for the first time all the emergency services are using the same communications platform and can communicate seamlessly

**security** - all our people are security vetted and our network can't be scanned

**responsiveness** - supporting our customers 24/7 with instantly available voice call technology

**resilience** – we have in effect two networks in case of any failure

**coverage** – our network spans 99% of Britain by geography and 100% of population



# And as a result Airwave has a unique relationship with Government



- Government's Critical National Infrastructure
  - Fully engaged with national emergency planning for UK plc



CIVIL CONTINGENCIES



- Civil Contingencies Act
  - Supporting Category 1 and 2 Responders across Government, ensuring integrated emergency and public safety services across the country
  - Attend Gold Command as required (London 7/7, 2007 floods)



- Regulated Framework
  - Approved users
  - Spectrum dedicated to the Emergency and Public Safety Services



# Company Overview



- **A Nationwide company, with offices in Slough, London, Rugby, Bridgewater and Belshill**
- **Over 800 Employees**
- **Established in 2000**
- **Owned by two investment funds - Macquarie European Infrastructure Fund II (MEIF II) and Canada Pension Plan Investment Board (CPPIB)**



# UK Emergency Services Communications in '90s

- **1992** - Over 150 different radio systems
  - a patchwork quilt
  - no interoperability
- **1994** - The Home Office & Emergency Services scoped plan for national radio system
- **1996** - ITT issued by Home Office for Police only
- **2001** - contract awarded to Airwave
- Roll-out took place on a regional force-by-force basis
- The network build out was completed by May 2005
- 100% population coverage and 99% geographic coverage (230,000km<sup>2</sup>)
- Roll-out took five years although this is considered swift in view of lengthy UK planning requirements
- Deployment timescales to users took into account their concerns about switching to a new network for critical operational purposes





# UK Emergency Services Communications Today

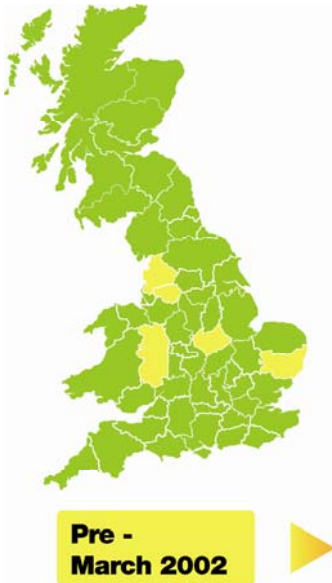
**250,000** public safety professionals from over  
**300** individual organisations have chosen Airwave

- All UK Police Forces
- All UK Ambulances
- All UK Fire & Rescue Services
- HM Prison Service
- HM Revenue & Customs
- Ministry of Defence
- The Army
- The Navy
- The Royal Air Force
- Highways Agency
- Borders Police

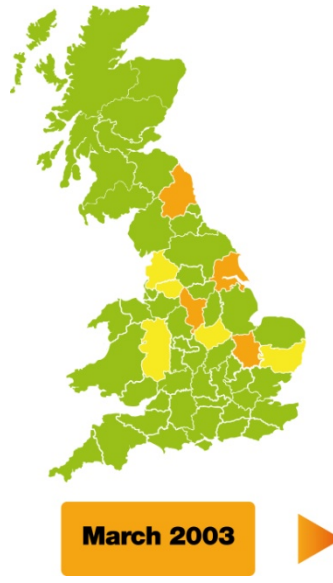


# Network Roll-out

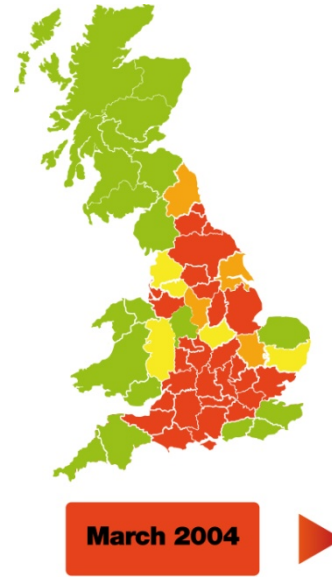
Airwave's network coverage progression



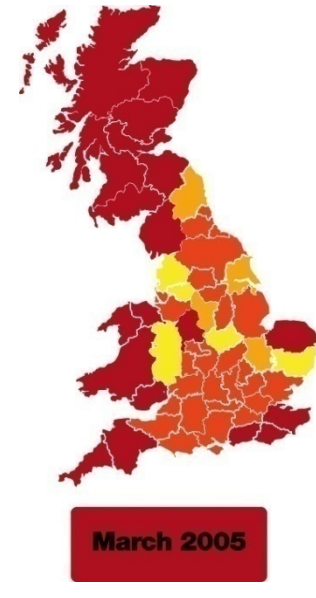
- Start of network built in late 2001
- Lancashire Police the first Police Force to start using the system
- 5 forces ready for service (RFS)
- 3,500 users; 300 sites built



- Start of major network build phase
- 10 Police forces RFS
- 7,500 users; 700 sites built



- Network deployment phase
- Service delivered to >70% of Police Forces by 2004
- 35 Police Forces RFS
- 108,000 users; 3,300 sites built



- Full national coverage completed
- Service delivered to all Police Forces
- 165,000 users; 3,500 sites built



# Network Roll-out

The network was rolled out on a regional basis by police force, with user numbers continuing to rise after the core build was complete

- Airwave has been rolled out across Great Britain since the initial trial of 3,500 users in 2001. Roll-out took place on a regional force-by-force basis
- The network build out was completed by May 2005 providing 100% population coverage and 99% geographic coverage (230,000km<sup>2</sup>)
- The roll-out and rate of deployment of the service has been steady both in terms of the roll-out timeframe and its geographical deployment
  - Roll-out took 5 years although this is considered swift in view of lengthy planning requirements.
  - Airwave has exclusive site access in some areas (such as national parks) and is prohibited from sharing these sites with other operators
  - The extensive coverage portfolio would require significant effort to replicate
  - Deployment timescales to users had to take into account their concerns about switching to a new network for critical operational purposes



# Airwave has played a major role in numerous planned and unplanned incidents



- Rail crash – Ufton Nervet
- G8 Summit – Gleneagles
- Trafalgar 200 – Portsmouth
- London Bombings – 7/7
- Buncefield oil depot fire
- 2007 summer floods
- Saving heart attack victims

Business as usual

Terror alerts across UK airports and Cities

We deal with the big emergencies, but at the same time we ensure there is no loss of service elsewhere on the network

Dealing with a major incident is part of our customers' job - at Airwave we ensure we make it ours as well



## G8 6-8 July 2005



- Largest planned policing event in UK - interoperability at work
- 9 world leaders at Gleneagles in Scotland 6-8 July including President of the USA, Russia, France, European Commission, Prime Ministers of UK, Japan, Italy, Canada & German Chancellor

*"I do not know how we would have managed the event without Airwave"*

Peter Wilson, Chief Constable of Fife

- Every Police Force in the country took part
- Every officer using Airwave (including military)
- Incident Management Centre in Motherwell – 24 hour management team operating for 7 days
- At peak over 3,000 users in 3 square mile area



7/7

...the unthinkable happened

- 3 bombs exploded simultaneously on 3 tube trains
- Then less than an hour later another bomb exploded on a bus

*"Worst attack on London since WWII"* – Metropolitan Police Commissioner

- Airwave's duty incident manager called an incident within 15 minutes of the attack. Incident room up and running within 30 minutes of bombings.
- An Airwave employee was injured on the Edgware Road train & phoned in within minutes to report what had happened before being taken to hospital for treatment
- 1,000 Airwave users on scene : British Transport Police, Military, City of London Police – interoperability at work for unplanned incident
- Military Liaison Officer flew down from G8 to observe the Airwave Incident Room : reported it was very professional and well run
- Airwave representative co-chaired the Utilities Group at Gold Command during incident



## 7/7 – Technology to the rescue

- Airwave communications solution deployed into Russell Square Underground station for use by rescue workers
- Airwave worked well doing the job it has been designed for – helping the emergency services communicate with each other

*"We've had Airwave for quite some time - and we think it's one of the best pieces of kit we've ever had"* Andy Trotter DCC, British Transport Police.

- At one point Airwave was running 3 separate incident rooms simultaneously covering G8, the London bombings and the Birmingham incident
- The network coped with large numbers of users – from different emergency services and supported interoperability between different user communities



# Airwave – Case Studies

## London Bombings – 7 July

“Worst attack on London since WWII” – Met Commissioner

## 7/7 Technology to the rescue

Airwave mobile base station rushed to London under police escort. Airwave deployed communications into Russell Square Underground station by early evening for use by rescue workers. 350 additional handsets sourced for Airwave customers including London Underground. Airwave worked well doing the job it has been designed for – helping the emergency services communicate.

“We’ve had Airwave for quite some time – and we think it’s one of the best pieces of kit we’ve ever had.”  
Andy Trotter, Deputy Chief Constable, British Transport Police





# Airwave – Case Studies

## Trafalgar 200

Trafalgar anniversary celebrations in the Solent. Multi-agencies, Navy, Army, MoD Police and Hampshire Police as well as aid from surrounding forces. The extra dimension of the operation afloat added to lessons learned.



## G8 Summit

PITO report on behalf of ACPOS covered network implications of probably the largest policing operation involving every force in the country. Analysis showed how the network coped with very high numbers of users and high traffic levels.



**“I do not know how we would have managed the event without Airwave”.**  
**Peter Wilson, Chief Constable of Fife**



# Airwave – Case Studies

## **Buncefield**

**December 2005: largest fire in Europe since WWII. 600 firefighters fought to control the inferno for 3 days. The blaze caused £70 million of damage affecting surrounding businesses, including Airwave’s Hemel site.**

**Airwave provided handsets and on the spot training for firefighters and other emergency service workers. The Government signed a contract with Airwave to provide the Airwave service to the Fire & Rescue Services in April 2006.**



# Airwave – Case Studies

## 2007 Summer Floods

The wettest June & July on record caused major disruption across the UK. Airwave's immediate priority was to guarantee power to all base stations which were in danger of being affected by the flooding. Mobile base stations & back-up satellite & generators deployed. Airwave handsets offered to non-Airwave Ambulance & Fire customers enabling them to take advantage of Airwave's higher voice quality, coverage and resilience.

**“As supplies were restored, and the operation began to wind down .... I think we all realised how narrowly we had missed a major disaster, & how by means of unstinting effort & excellent teamwork, together with outstanding support from Airwave, we had managed to keep communications going throughout.”**

**Alan Cordwell, Airwave Radio Manager for South Yorkshire Police**

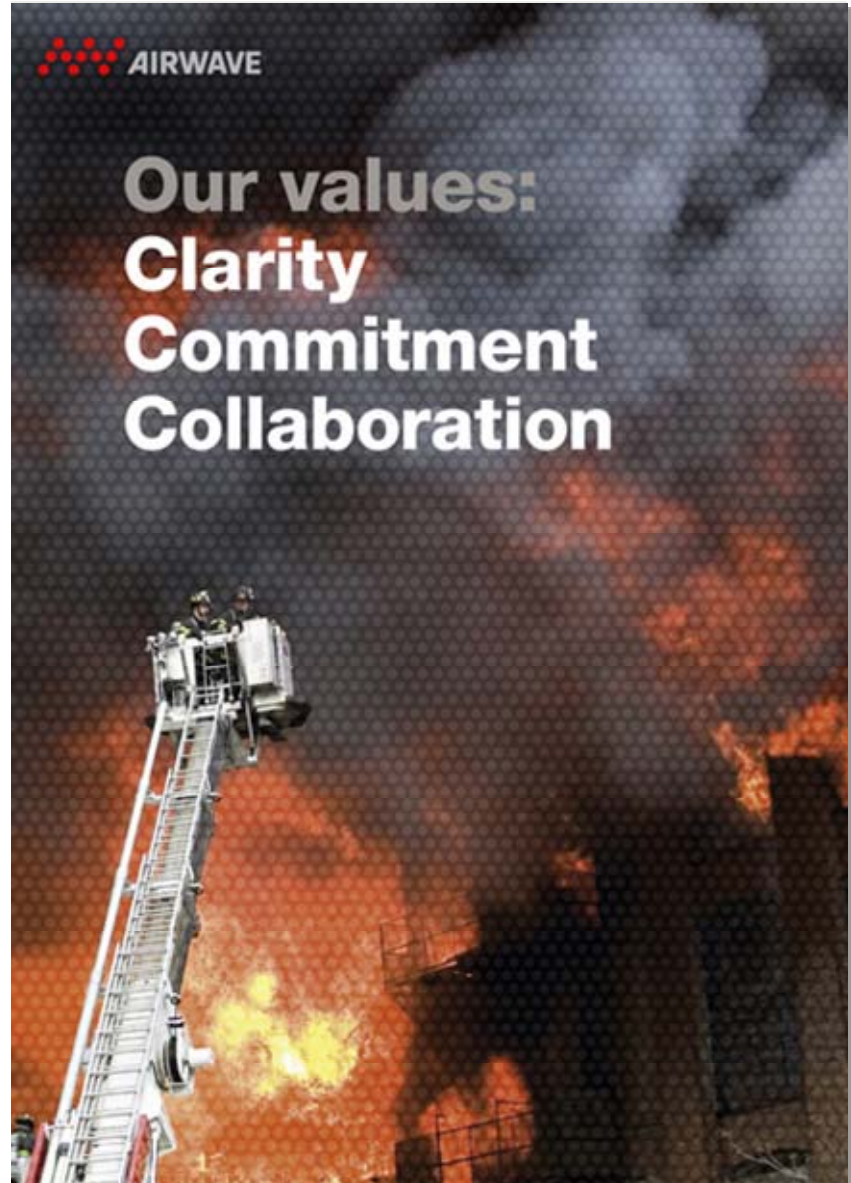




**Our vision:  
To be trusted  
as long-term  
partners providing  
solutions that  
contribute to  
a safer world.**



**Our values:  
Clarity  
Commitment  
Collaboration**



# Report of the 7 July Review Committee

**Report**

**June 2006**



# **Report of the 7 July Review Committee**

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## Chair's Foreword



What happened in London on 7 July 2005 could happen in any country, in any city, at any time. Ordinary people, going about their everyday lives, were suddenly swept up in a maelstrom of extraordinary events over which they had no control.

What is clear is that the humanitarian response to these events was astounding; from the passengers who helped and supported each other, to the underground workers, 'blue light' response teams, shop staff, office workers, hotel employees and passers-by who offered what help they could.

The individual acts of bravery and courage are too numerous to list. Often the heroes have been reticent to come forward and have stayed silent about the role they played, known only to those that they helped. We are all in their debt; in the face of terror, they restored our faith in the strength and dignity of the human spirit.

The Committee was tasked with identifying the lessons to be learnt from the events and aftermath of 7 July 2005. It was never intended to be either a substitute public inquiry or an inquiry into the background to the bombings. Rather, our task has been to identify the successes and failings of the response to the bombings, and to help improve things for the future: to help protect and secure the lives of Londoners and of the visitors to our great city in the months and years to come. We have not become involved in "What if?" scenarios – the implications of a fifth bomb, Chemical, Biological, Radiological and Nuclear (CBRN) attack, containment versus dispersal of potential victims. The London Resilience Forum, the appropriate governing bodies, and open public debate more properly deal with these issues.

What is clear is that all the relevant statutory organisations have their emergency plans in place, as indeed do many of the large non-statutory institutions. These plans have been tested, practised against and refined. However, the thread that links them all together is that in the event they proved service-specific, meeting the needs of the services, and lacked an outward focus that took into account the needs of their client groups.

If the one achievement of the Assembly's 7 July Review is to add an outward focus to emergency planning - to underscore the fact that responders are dealing with individuals not an 'incident', and that all services must work together for the public good - then we will have contributed to the protection of London, its residents and visitors.

A handwritten signature in black ink that reads "Richard Barnes". The signature is written in a cursive, flowing style.

**Richard Barnes AM**  
**Chairman of the Committee**

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**Anyone affected by the 7 July attacks should call the 7 July Assistance Centre, on 0845 054 7444 or visit their website at [www.7julyassistance.org.uk](http://www.7julyassistance.org.uk)**

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# Introduction **1**

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## Introduction

*'What happened in London on 7 July 2005 could happen at any time, in any city, in any country'<sup>1</sup>*

- 1.1 On 7 July 2005, four bombs were detonated in central London. Seven people were killed on a train at Aldgate station. Six were killed at Edgware Road. Twenty-six were killed at King's Cross/Russell Square. Thirteen were killed on a No. 30 bus at Tavistock Square. 700 people were treated for injuries. Hundreds more suffered psychological trauma which, for many people, persists to this day and has irrevocably changed their lives.
- 1.2 London had been warned repeatedly that an attack was inevitable: it was a question of when, not if. We were told that London had planned, prepared and practised its response. Emergency planners had worked for years to put in place effective plans to respond to a terrorist attack or other major or catastrophic incident<sup>2</sup> in the capital. On 7 July 2005, these plans were put to the test comprehensively for the first time, as hundreds of people from London's emergency, transport, health and other services worked to rescue the injured, ensure the safety of the wider public, and begin the largest criminal investigation ever conducted in London.
- 1.3 This report presents the findings of a review conducted by a cross-party committee of the London Assembly, the body that is elected to hold the Mayor of London to account and investigate issues of importance to London and Londoners (though clearly, as in this case, some of the issues we investigate are of national significance). The purpose of this report is to identify some of the lessons to be learnt from the response to the 7 July attacks, and to make recommendations to improve the response to any future major or catastrophic incident in London. We are interested in ensuring the fastest, most effective emergency response; in safeguarding members of the public; and in restoring order as quickly as possible. Most crucially, we are concerned to put in place systems and communications mechanisms that will facilitate the best possible response to the needs of those caught up, in whatever way, in the incidents at the time.
- 1.4 We have considered the issues from the point of view of a member of the public. The emergency and other services are all conducting internal technical reviews of their own responses on 7 July. Our approach has been to consider the issues from the point of view of individuals involved in the response, and those caught up in the attacks.
- 1.5 We have been mindful that hindsight is always twenty-twenty. On 7 July, those responsible for coordinating and delivering the emergency response were faced with a

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<sup>1</sup>London Resilience / Metropolitan Police Service training video

<sup>2</sup> For definitions of 'catastrophic' and 'major' incidents, see Glossary

situation of extraordinary pressure, uncertainty and complexity. Some things we know now could not have been known by those making the decisions. No response to a major incident can ever be perfect, and there will always be lessons to be learnt. This was particularly likely to be the case on 7 July: this was the first time that London's emergency plans - which had been completely recast following the attacks on the World Trade Center in New York on 11 September 2001 - had been put comprehensively to the test.

- 1.6 We have sought to identify ways of minimising chaos and restoring order more quickly - both at the scenes of the incidents and across London. However, we must be realistic about what can be achieved in the context of a multiple-site major incident. Assistant Commissioner Alan Brown, from the Metropolitan Police Service, was Metropolitan Police Service Gold (ie strategic) Command on 7 July. He chaired the Strategic Co-ordination Committee of the emergency and other services and therefore had overall responsibility for the strategic co-ordination of the response. He explained:

*'It is crucial to recognise the chaos that occurred following the multiple bombings. The immediate aftermath of the bombings on 7 July led to a situation where information relating to the number of dead and injured, the nature of the bombs, how they were initiated, whether there were more to follow, the motivation of the bombers, was all unclear at the time. It is within that context that the response was conducted. The need for the MPS together with its partners to help London move from chaos to certainty was paramount.'*<sup>3</sup>

- 1.7 The 7 July attacks presented an exceptionally complex, difficult, and for those directly involved, traumatic set of circumstances. The task of establishing what had happened was in itself complicated and difficult, given the location of the first three explosions in tunnels. It took some time before the emergency and transport services were able to establish accurately what had happened and where, and how many people were involved. In the minutes following the explosions at Aldgate, King's Cross/Russell Square and Edgware Road, there were unclear, conflicting reports from the scenes and within London Underground's Network Control Centre: reports of loud bangs, signs of a power surge on the Underground, and reports of a train derailment and a body on the track. Traumatized and injured people began appearing at Tube stations having left the train and walked back along the tracks to the nearest platform.
- 1.8 Putting in place an emergency response to rescue and treat the injured, care for survivors, and ensure the safety of the public, was an enormously complicated and difficult undertaking. It involved hundreds of individuals at the scenes, at hospitals, and within the emergency, transport and other services. It required the co-ordination of numerous different agencies under circumstances where communications were difficult, when the causes of the emergency were unclear, and when future events were uncertain.

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<sup>3</sup> Transcript of Committee meeting, 3 November 2005, Volume 2, page 7

- 1.9 The key to an effective response to a major or catastrophic incident is communication. This includes communication within and between the emergency, health, transport and other services. It also includes effective communication with the individuals caught up in the incident, and the public at large. For this reason, the focus of our review has been to look at communications issues on 7 July, and to identify ways in which communications could be improved in the future to maximise the efficiency and effectiveness of the response to major or catastrophic incidents.
- 1.10 Undoubtedly, the emergency plans that had been put in place and exercised during the preceding months and years contributed to what was, in many respects, an outstanding response. The crucial factor in determining the success or otherwise of the response was the sum of the actions of individuals operating within (and in some cases outside) the parameters of emergency plans. Tim O'Toole, Managing Director of London Underground, captured the importance of individuals in enacting the emergency response when he spoke to the Committee on 3 November 2005. He said, '*the big lesson for us is to invest in your staff, rely on them; invest in technology but do not rely on it*'.<sup>4</sup> On 7 July there were countless individual acts of unplanned, spontaneous bravery and compassion - many of which remain to this day unreported and unacknowledged. Emergency and transport workers, hospital doctors and nurses, and members of the public showed tremendous strength, initiative and courage.
- 1.11 We have not looked at intelligence issues leading up to 7 July – these have been covered by others and are outside the remit of the London Assembly. Nor have we considered the police investigation that followed 7 July, or the events of 21 July (when there were further attempted attacks). These investigations are ongoing, and are matters for the police and the Home Office to consider.
- 1.12 This review is not, and should not, be seen as a substitute for a statutory public inquiry. A number of those who gave us their views argued for a public inquiry into the 7 July attacks, to establish why they happened, consider the response to the attacks on the day, and to review the police investigation that followed. Survivors and bereaved families want answers to these questions as part of their own recovery process, and argue that the public interest is overwhelmingly served by a public interrogation of all the relevant facts and arguments. The London Assembly is not empowered to instigate or conduct a public inquiry. Our review focuses on communications issues affecting the response of the emergency and other services on 7 July.
- 1.13 We have received views and information from London's emergency, health and transport services, and other stakeholders and authorities including the media and local authorities. We have also had the enormous benefit of hearing testimony from people who survived the explosions, and from bereaved family members, who told us of their personal experiences. Their views and the information they provided have proved invaluable to us in piecing together a picture of the response to the 7 July attacks and identifying the lessons to be learnt for the future. We are grateful to all those who gave us their views and information.

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<sup>4</sup> Transcript of Committee meeting, 3 November 2005, Volume 2, page 60




- 1.14 We have conducted the review entirely in public, other than some private interviews with survivors of the attacks, which were conducted in private but transcribed for the public record. In order to protect the privacy of the survivors we interviewed and those who wrote to us, we use only their first names (and in some cases, pseudonyms or initials) throughout the report. All the views and information we received during the course of our review are published in Volumes 2 and 3 of this report, and are available on the London Assembly website ([www.london.gov.uk/assembly](http://www.london.gov.uk/assembly)).
- 1.15 **There is an overarching, fundamental lesson to be learnt from the response to the 7 July attacks, which underpins most of our findings and recommendations. The response on 7 July demonstrated that there is a lack of consideration of the individuals caught up in major or catastrophic incidents. Procedures tend to focus too much on incidents, rather than on individuals, and on processes rather than people. Emergency plans tend to cater for the needs of the emergency and other responding services, rather than explicitly addressing the needs and priorities of the people involved.**
- 1.16 This is particularly evident when we consider what happened to some of those who survived the attacks, both on the day and in the weeks and months that followed. In New York on 11 September 2001, many people died and few survived. The situation on 7 July was the opposite: a relatively small proportion of victims lost their lives, but there were hundreds of survivors. Because emergency plans following 9/11 are based very much on the lessons learnt from that specific incident, they tend not to consider the needs of survivors.
- 1.17 **We argue in this report that London's emergency plans should be re-cast from the point of view of people involved in a major or catastrophic incident, rather than focusing primarily on the point of view of each emergency service. A change of mindset is needed to bring about the necessary shift in focus, from incidents to individuals, and from processes to people.**
- 1.18 With this in mind, we have organised our report around the needs of individuals during each phase of the response, rather than around the actions of the responding authorities. Our findings appear in bold within the text. Our recommendations are shown in boxes throughout the report. At the end of the report there is a summary of our findings and recommendations.
- 1.19 Some of the lessons to be learnt relate specifically to the response to terrorist attacks on London's public transport network, and how we can plan an effective response to a similar incident in the future. But the public transport network is not the only potential terrorist target, the nature of the attacks on 7 July is not the only possible form of terrorist attack, and terrorism is not the only threat facing London. All major incidents can be expected to share some generic characteristics: the involvement of numerous different agencies in the response, the importance of effective communications within and between those agencies, and the crucial importance of approaching each incident from the point of view of those directly caught up in it, either as members of the public or as individuals involved in the response.

- 1.20 Many of our recommendations for changes to London's emergency plans and protocols would be relevant to any major or catastrophic incident in London or in any other city in the world. We have not ventured into 'what if' scenarios; it is for the emergency services and other authorities to draw lessons from our findings and apply our recommendations to their plans.
- 1.21 We consider this report to be a part of an ongoing process, rather than the end. We will be following up the recommendations we make (some of which call for reviews and feasibility studies to be carried out over the next six months), in November 2006 and May 2007. We will be asking the responsible authorities to tell us publicly what progress has been made in implementing our recommendations. If there has been no progress we will be asking them to explain why not.
- 1.22 We would welcome responses to this report from individuals and organisations, by 30 September 2006. We will publish the responses we receive on the London Assembly website,<sup>5</sup> and we will consider them when we conduct our follow-up review in November 2006.
- 1.23 In the absence of a public inquiry, this review is the only forum in which the lessons to be learnt from the response to 7 July have been discussed and debated in public. The discussions we have held in public during this review have already led to actions being taken in some areas. We hope this report will make a valuable contribution to future emergency planning in London and elsewhere.

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<sup>5</sup> [www.london.gov.uk/assembly](http://www.london.gov.uk/assembly) - responses to the report should be sent to [7july@london.gov.uk](mailto:7july@london.gov.uk)



**The First Hour – Establishing what had happened** **2**

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## The first hour – establishing what had happened

- 2.1 The first explosion on 7 July took place at 8.50 am on eastbound Circle Line train number 204, travelling from Liverpool Street to Aldgate station. Within one minute, a second explosion took place on a Circle Line train number 216, travelling westbound from Edgware Road to Paddington. A third bomb was detonated approximately two minutes later, on a southbound Piccadilly Line train number 311. At 9.47 am, a fourth bomb was detonated, on the top deck of the Number 30 bus at Tavistock Square. 52 people were murdered, and 700 were physically injured. Many more hundreds of people were directly affected by the attacks, including passengers who were uninjured but potentially traumatised by the experience.
- 2.2 In the minutes following the explosions on the Tube trains, passengers were plunged into total darkness. They did not know whether anyone knew they were there, or if help was on its way. The internal carriage lights went out, internal communications between the driver and passengers of each train were debilitated, and drivers were unable to communicate with their line control centres.
- 2.3 For those who were seriously injured, a fast and effective emergency response was vital. For those less seriously injured, and the uninjured, a safe and speedy evacuation was required. Immediately following the explosions, passengers needed to be given information about what had happened, and advice about what to do. For any of these things to happen, the emergency and transport services needed quickly to establish what had happened.
- 2.4 The overall picture from 8.50 am until about 9.15 am was inevitably chaotic. Multiple, often conflicting, reports were being made, some to London Underground's Network Control Centre, some to the emergency services, and some to the media. There were reports of loud bangs. There was a loss of power on sections of the Underground. 999 calls were made from nearby locations reporting smoke issuing from tunnels and from a grid in a street close to Edgware Road. It was not clear what had happened, or indeed where.
- 'Sitting at Broadway [London Underground Network Control Centre] at 8.52 am you are virtually blind and you are confused for a while as these multiple reports come in. It would be over-egging our own capabilities to pretend that we have instantaneous appreciation of what is happening. We do not, and the reports that come in conflict with one another.'*<sup>6</sup>
- 2.5 The loss of power, combined with reports of loud bangs, led the London Underground Network Control Centre initially to conclude that there had been power surges on the network, and they began to respond to that scenario. Shortly after that, the Network Control Centre received a call stating that a train had been involved, and that the

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<sup>6</sup> Transcript of Committee meeting, 3 November 2005, Volume 2, page 9

emergency services had been called to the scene. It was then thought that the train at Edgware Road had hit the wall of the tunnel, and that there was a person on the track as a result of a derailment.

- 2.6 By 9.15 am, it had become clear that there had been explosions, though the cause, severity, and precise locations of the explosions were still not known at that point. The London Ambulance Service was initially called to seven separate sites, and ambulances were being deployed to '*various places that ended up not being the main incident sites*'.<sup>7</sup> For some time, it was thought that there may have been up to five separate incidents on the Tube, and the emergency services were being deployed accordingly to five separate Tube stations. At the first news conference of the day, at 11.15am, Sir Ian Blair, Commissioner of the Metropolitan Police Service, was still reporting that there had been six explosions (including the explosion at Tavistock Square).
- 2.7 Chaos and confusion are the defining characteristics of the early stages of a major incident, and especially multiple incidents at different sites across London. However, there is scope for improving the systems by which information is gathered and shared among London's transport, emergency and other services involved in the response.
- 2.8 Major emergencies usually generate numerous 999 calls from members of the public, and this is how the emergency services are initially alerted to the problem. The emergency services are then able to compare the calls received, cross-reference them, and establish what has happened and where. Because the first three explosions took place underground, there were very few 999 calls reporting the explosions on the trains.
- 2.9 Passengers on the three bombed trains were unable to communicate with the drivers of the trains to alert them to the explosion. Had they been able to do so, they might have been able to help the transport and emergency services establish what had happened in the minutes following the explosions. Emily, who survived the King's Cross/Russell Square explosion, wrote to us about the lack of communications in the first half an hour after the explosion.

*'There needs to be a way of being able to make contact with someone, we assumed the train driver was dead as he didn't make contact with us. We waited for help, we was expecting someone to bang on the window and tell us it would be ok and that there wasn't a fire. That was the main concern, if there was smoke, there must be a fire on its way, burning down the tunnel towards us. If people had known there was no fire (through someone making contact with us) the situation could have been a lot calmer. I think the most important thing that needs to be recognised is us not having contact with anyone. Not long after the bomb went off, we all tried to stay quiet to hear for help, all we could hear were the screams from the other carriages, to our horror we then heard a train, thinking it was coming towards us people were screaming there was a train coming towards us and that no-one knew we were down there. That was the scariest part of it (apart from thinking I was going to burn alive) – not knowing*

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<sup>7</sup> Transcript of Committee meeting, 3 November 2005, Volume 2, page 15

*whether anyone was aware of what had happened to us and not knowing if help was on its way*.<sup>8</sup>

- 2.10 Kirsty, a passenger in the sixth carriage of the King's Cross/Russell Square train, told us that in the first half hour after the train came to a halt, '*There was obviously no communication from anyone; I did rather pathetically pull the emergency handle at one stage. It was a desperate need to do something*'.<sup>9</sup>
- 2.11 We discuss further the importance of communication and reassurance from authority figures in the minutes following the explosions on the Underground in Section 4.
- 2.12 Trains on the Central, Northern and Jubilee Lines currently have equipment that allows passengers to speak with the train operator in an emergency. We understand from Transport for London that District Line trains are undergoing a major refit which includes fitting a similar facility. On all other lines, such a facility will be available when new rolling stock is provided on each line, which is scheduled to happen progressively over the next decade as part of the Public Private Partnership. In addition, we understand that all Tube trains have a communication system between the Line Control Office and passengers which is automatic if the driver is incapacitated.
- 2.13 **A range of circumstances could create the urgent need for passengers to communicate with the train driver and vice versa. A large proportion of Tube trains do not currently have a facility for passengers and train drivers to communicate with each other in an emergency. This represents a significant weakness in the safety of the Tube for passengers, and limits the ability of the emergency services to respond rapidly and effectively to any incident that might take place. These facilities must therefore be put in place as quickly as possible, in the interests of the safety of passengers in the normal course of events, and in particular in the event of a major emergency.**

*Recommendation 1*

**We recommend that London Underground, Tubelines and Metronet, as part of the review of the Public Private Partnership to be completed in 2010, negotiate a more rapid rollout of facilities for passengers and train drivers to be able to communicate in the event of an emergency.**

**We would draw the attention of the Public Private Partnership Arbiter to this recommendation and others relating to the review of the Public Private Partnership.**

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<sup>8</sup> Written submission from Emily, Volumd 3, page 230

<sup>9</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 29

- 2.14 Perhaps a more significant and worrying weakness is the lack of reliable communications between train drivers and line controllers. London Underground's radio systems are antiquated and did not work, for various reasons, on any of the three affected trains on 7 July. Direct communication from the affected trains to either the emergency services or the Transport for London Network Control Centre could have led to a much more rapid assessment of what had happened and where.
- 2.15 Tim O'Toole explained to us that the radios usually used by drivers to communicate with their line control managers could not be used on 7 July because the 'leaky feeder'<sup>10</sup> antennae were damaged by the explosion. We understand that this was the case at Russell Square (we discuss this further, below). Tim O'Toole also told us that the Underground's radio systems are antiquated and '*sometimes fail us*' because of blind spots within the tunnels and temporary interruptions to the service.<sup>11</sup> What this meant in practical terms was that, as Tim O'Toole explained, '*the way we obtained information was from station staff running down to the sites and then using their radios to call in directly to the operations centre that something was wrong*'.<sup>12</sup> This is a key example of Tim O'Toole's maxim that individuals can be relied upon, whereas technology cannot.
- 2.16 Transport for London has told us that it is investing £2 billion over 20 years in a new digital radio system for the Tube, as part of the Public /Private Partnership. This is good news in the very long term. Such a system will significantly help London Underground to provide robust and resilient communications systems between drivers and line control managers. Digital radio will be crucial in the event of a future emergency on the Tube. It will also contribute to the efficient and effective management of the network on a day-to-day basis. But in the short to medium term, we are left with a radio system that is inadequate and will not be fully replaced for another 20 years. The rollout of TETRA-based digital radio communications<sup>13</sup> on the Tube may go some way to addressing this problem, though we understand that this is intended for use by the emergency services rather than train drivers. We discuss this further below.
- 2.17 **Communications from the trains to the London Underground Network Control Centre and the emergency services were inadequate or non-existent on 7 July. As a result, transport and emergency service workers had to run from the trains to the platforms and back again to communicate with their colleagues and supervisors.**
- 2.18 **Given the importance of communications in the minutes following any sort of emergency on a Tube train, we consider that the timeframe for the rollout of the new radio system must be significantly reduced from the current projection of twenty years. In the meantime, an interim solution must be identified to provide a robust and resilient form of communication between drivers and their line controllers.**

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<sup>10</sup> For explanation of this term, see glossary

<sup>11</sup> Transcript of Committee meeting, 3 November 2005, Volume 2, page 12

<sup>12</sup> Transcript of Committee meeting, 3 November 2005, Volume 2, page 12

<sup>13</sup> See glossary

*Recommendations 2 and 3*

**We recommend that, as part of the review of the PPP to be concluded in 2010, London Underground, Metronet and Tubelines seek to speed up the rollout of the new radio system to enable train drivers to communicate with their line controllers.**

**In the meantime, we recommend that Transport for London conduct a study of possible interim solutions to increase the reliability and resilience of radio communications between train drivers and line controllers. We request that Transport for London provide us with an update on progress in time for our November 2006 follow-up review.**

- 2.19 On arrival at the affected trains, emergency services personnel sought to establish what had happened, and needed immediately to communicate this information back to their control centres. The British Transport Police is the only emergency service equipped with radios that can function underground. All the other emergency services had to rely on individuals running back and forth from the train to the platform and from the platform to ground level, or use British Transport Police radios.
- 2.20 At Russell Square, the 'leaky feeder' cable that enables the British Transport Police's radios to function was damaged by the blast. Emergency and transport services personnel were therefore unable to communicate with their colleagues at ground level without making the 15-minute journey back down the tunnel to the platform. A solution in the form of a temporary leaky feeder cable was installed. It took about two hours for the equipment to be brought to Russell Square, following the request being made of O<sub>2</sub>, the communications company, at 10 am. O<sub>2</sub> then had to await clearance to enter the tunnel to install the cable.<sup>14</sup> The leaky feeder cable was finally in place at 9.00 pm on 7 July, eleven hours after the explosions. Whilst this may have helped the police and others in the retrieval of the deceased and the collection of forensic evidence in the days and weeks following 7 July, it was clearly too late to be of any use to those who arrived first at the site of the explosions and needed to communicate with their colleagues above ground. It also did not help with the rescue operation that followed in the next three hours.
- 2.21 Transport for London took over the contract for the installation of facilities for underground radio communications – the CONNECT project – when it took control of London Underground in 2003. The project is two years behind schedule, but Transport for London has provided us with assurances that it is now proactively managing the contract, and the rollout of CONNECT will be completed during the course of 2006/07.

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<sup>14</sup> Transcript of Committee meeting, 1 December 2005, Volume 2, page 81



- 2.22 CONNECT will enable emergency services equipped with TETRA-based radios, such as Airwave, to communicate underground and from below ground to the surface. These radios will be interoperable between the emergency services (though the extent to which this is desirable from their commanders' points of view is a moot point), and will provide a more resilient, reliable form of communications within each service. This will be a significant step in reducing the reliance of the emergency services on mobile telephones – we discuss this in Section 3 of the report.
- 2.23 At present, the City of London Police and British Transport Police are equipped with Airwave radios. The remaining emergency services will be putting in place TETRA-based digital radio systems as follows:

Metropolitan Police Service	By the end of 2007
London Fire Brigade	By March 2007
London Ambulance Service	By the end of 2007

- 2.24 The official inquiry into the King's Cross fire, published in 1988, included a chapter on communications. The report highlighted the lack of communications between the station surface and underground, and the inability of officers from the British Transport Police and London Fire Brigade to communicate underground unless they were within line of sight of each other. The report made recommendations aimed at putting in place effective communications within and between the emergency services underground. These were categorised by Desmond Fennell OBE QC, who conducted the inquiry, as among the most important recommendations made in the report.
- 2.25 **Metropolitan Police Commissioner Sir Ian Blair told us that he regards the inability of the emergency services to communicate underground as 'a significant problem for London'.<sup>15</sup> We agree with his assessment. The inability of the emergency services to communicate underground is not a new or novel problem. It has been recognised as a major weakness for the past 18 years, ever since the official inquiry into the King's Cross Fire in 1988. Since then, there has been a failure by successive governments to take the necessary action to install underground communications for the transport and emergency services.**
- 2.26 **There can be no excuse for failing now to deliver facilities to enable underground radio communications by the end of 2007, which was the target date given to us by the emergency and transport services in November 2005.**
- 2.27 **We intend to monitor progress towards this deadline in November 2006, May 2007 and November 2007, and will be publicly asking the emergency and transport services to provide us with update reports setting out the progress that has been made and explaining any delays.**

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<sup>15</sup> Transcript of Committee meeting, 1 March 2006, Volume 2, page 163

*Recommendations 4 and 5*

**We recommend that Transport for London provide an update on progress in rolling out the CONNECT project in November 2006, May 2007 and November 2007, so that we can monitor the delivery of the contract. The timely completion of this project is essential to enable all London's emergency services to communicate underground.**

**We recommend that the Metropolitan Police Service, London Fire Brigade and London Ambulance Service provide us with an update on the rollout of digital radio systems within their services in November 2006, May 2007 and November 2007, so that we can monitor progress towards full implementation of TETRA-based radio communications across London's emergency services.**

**We would draw this recommendation, and others aimed at the London Fire Brigade and Metropolitan Police Service respectively, to the attention of the London Fire and Emergency Planning Authority and the Metropolitan Police Authority.**

- 2.28 Installing a leaky feeder in the tunnel as an interim/back-up solution – as at Russell Square - is a slow process. It is unlikely to help in the critical first hours of an emergency, when communications underground are essential for both the safety and effectiveness of emergency services personnel.
- 2.29 We are given to understand that other alternatives are available, which are portable and do not require expert installation. Personal Role Radios, as used by the British Army, are capable of being used underground, including for underground-to-surface communications.
- 2.30 **It is going to take at least another 18 months to implement digital radio communications underground. In the meantime, an emergency system of underground communications needs to be available, which is capable of being put in place much more quickly than a leaky feeder cable. So far as we can gather, no serious consideration has been given to alternative technologies as an interim measure pending the rollout of CONNECT and Airwave, or as a back-up measure in the longer term.**

*Recommendation 6*

**We recommend that Transport for London conduct a feasibility study to assess the costs and effectiveness of Personal Role Radios and other available technologies to enable communications for emergency and transport services in underground stations and tunnels. We request that Transport for London provide an update on work in this area by the time of our follow-up review in November 2006.**

- 2.31 The key elements of the effort to establish what had happened at each site were:
- a. the first 999 calls received by the emergency services
  - b. the arrival of each emergency service on the scene
  - c. identification of the site of the incident, and recognition that there had been an explosion
  - d. communication between the emergency services about the nature and location of the incident
  - e. the declaration of a major incident.

Declaring a major incident brings into play special arrangements within each service (for example, suspending non-emergency duties and recalling units to stations) and between the services (for example, establishing special command and control structures and channels of communication).

- 2.32 The speed and effectiveness of the emergency and transport services in establishing what had happened varied across the sites. This was to some extent inevitable given the location of the explosions. For example, at Aldgate, the train had barely entered the tunnel, and passengers began to emerge from the tunnel shortly after the explosion; whereas at Russell Square it took much longer for passengers to make their way along a fifteen minute walk through the tunnel to the platform.
- 2.33 There are some inconsistencies between the timelines provided to us by the emergency and transport services. This has made it difficult in some cases for us to establish the precise timings of the initial communications within and between the transport and emergency services, and the initial deployment of the emergency services to each of the sites.
- 2.34 There are lessons to be learnt from the initial response of the emergency and transport services. We believe that, in future, communications during the critical initial period could be improved, especially in the event of another incident on the Underground, and that this could result in a slightly quicker and more effective emergency response.

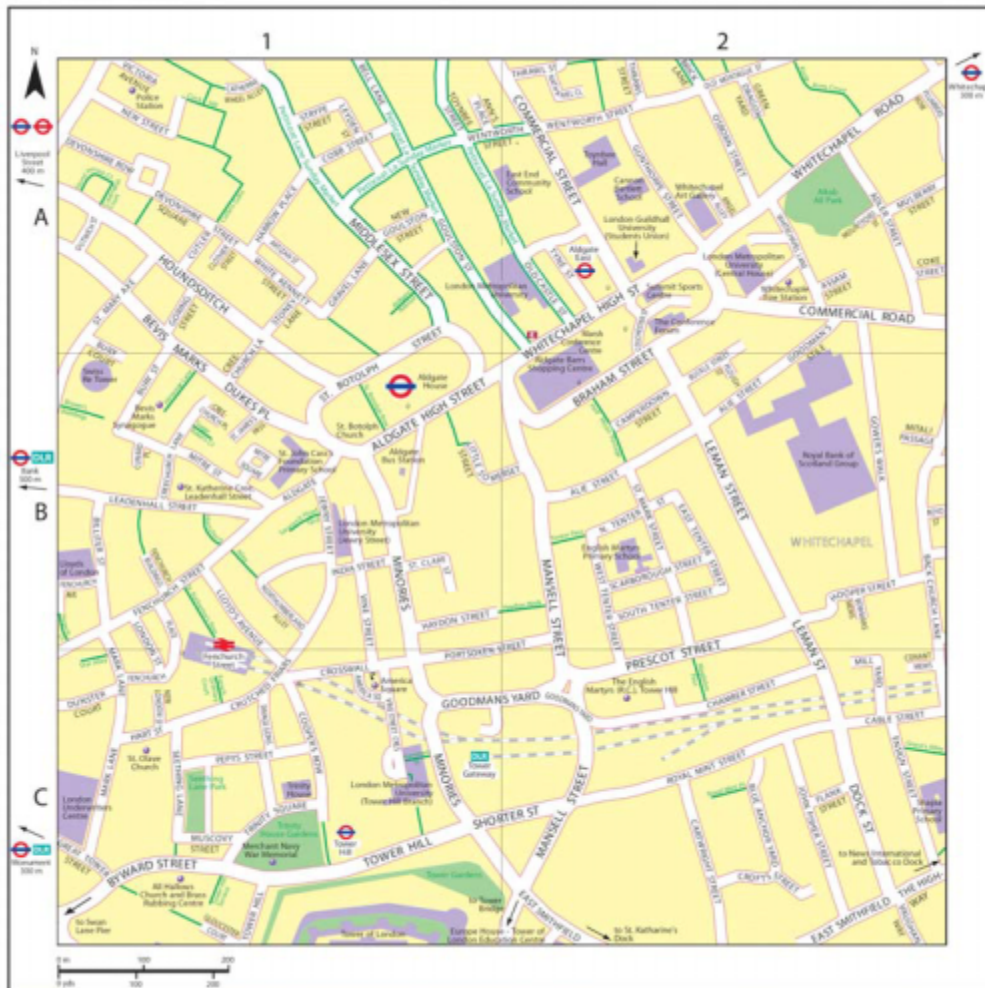




## The First Hour – Site by Site



## The First Hour - Aldgate



*'I saw the flash, the orange-yellow light, and what appeared to be silver streaks, which I think was some of the glass coming across, and what I can describe as a rushing sound. There was no bang I heard; it was just a lot of noise. I had been twisted and thrown down to the ground. About halfway down to the ground the brain clicked in that it was a bomb. You then think you are going to die. When I hit the ground, it was all dark and silent and I thought I was dying'*

Michael, survivor of the Aldgate explosion<sup>16</sup>

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<sup>16</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 19

## Aldgate - The First Hour - Timeline

### LONDON AMBULANCE

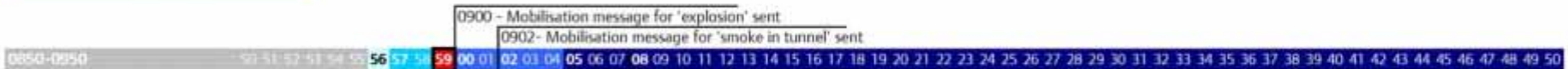
#### Liverpool Street



#### Aldgate

0900-01 - BTP requests ambulances for 3-4 walking wounded  
 0914- 5 ambulances requested  
 0924 - 30 ambulances requested  
 5 fatalities reported

### LONDON FIRE BRIGADE

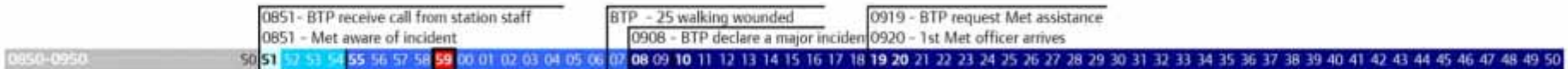


#### Aldgate

0900 - Mobilisation message for 'explosion' sent  
 0902 - Mobilisation message for 'smoke in tunnel' sent  
 0908 - Mobilisation message for major incident sent to all units in East London

### POLICE

BTP - British Transport Police    Met - Metropolitan Police    CoL - City of London Police



#### Aldgate

0851 - BTP receive call from station staff  
 0851 - Met aware of incident  
 0855 - BTP officer on scene  
 0858 - BTP - 25 walking wounded  
 0908 - BTP declare a major incident  
 0910 - CoL recognise explosion as bomb and declare major incident  
 0919 - BTP request Met assistance  
 0920 - 1st Met officer arrives

0859 London Underground's Network Control Centre places a call to all emergency services to attend incidents at Edgware Road, King's Cross & Aldgate

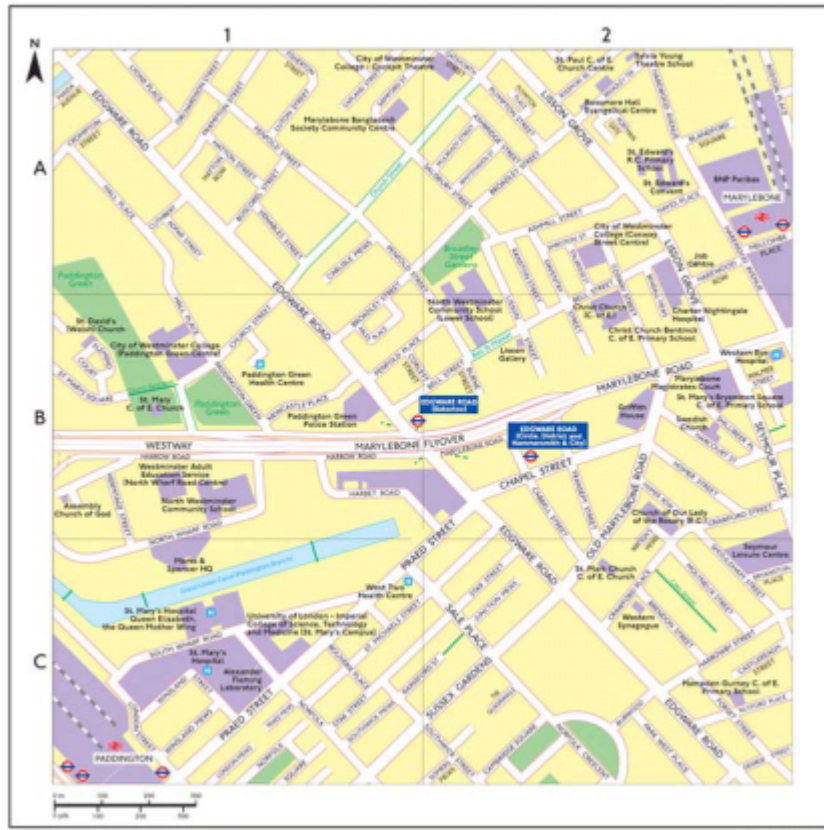
<b>Key</b>	1st call to emergency service	1st resource dispatched	1st resource at scene	Declared Major Incident	Request for more resources
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- 2.35 The first 999 call in relation to Aldgate was made to the British Transport Police by a member of London Underground staff, at 8.51am, reporting a loud bang and dust in the air. At the same time, the London Ambulance Service received a call to attend Liverpool Street station.
- 2.36 The London Fire Brigade was called to a fire and explosion at Aldgate at 8.56 am, and four units, including a Fire Rescue Unit, were deployed one minute later. Fire Rescue Units provide specialist assistance to firefighters at the scene, such as rescue cutting equipment and protective gas-tight suits.
- 2.37 The first fire engines arrived at Aldgate at 9.00 am. At 9.00 am, further Fire Brigade units were mobilised to a reported explosion at Aldgate. At 9.02 am, further appliances were mobilised, responding to reports of smoke in a tunnel. Two fire engines and a senior officer were sent to Aldgate, and an additional fire engine was sent to Liverpool Street. The London Fire Brigade declared a major incident at 9.05 am, 15 minutes after the explosion.
- 2.38 The first British Transport Police officer arrived at the scene at 8.55 am, and reported 'building shock' and smoke issuing from the tunnel, but no evidence of structural damage. At 8.58 am, the British Transport Police had identified the site of the incident in the tunnel between Aldgate and Liverpool Street, but had not discovered any injured passengers at that point. Power to the track was cut off. At 9.01 am, the British Transport Police requested attendance by the London Ambulance Service to tend to 3-4 walking wounded. By 9.07 am, there were 25 walking wounded, some of whom were badly injured. At 9.08 am, the British Transport Police at the scene reported that there had been a train accident, and declared a major incident. Two minutes later, the City of London Police recognised that there had been an explosion caused by a bomb, and declared a major incident. At 9.19 am, the British Transport Police formally requested assistance from the Metropolitan Police Service (which is the lead police service in the event of a major or catastrophic incident, even if it takes place within the jurisdiction of the City of London Police or British Transport Police). The Metropolitan Police was in fact already aware of the incident, and the first officer arrived at the scene at 9.20am
- 2.39 The first ambulance arrived at 9.03 am at Liverpool Street, followed three minutes later by an emergency planning manager. At 9.07 am, the London Ambulance Service Emergency Planning Manager advised Central Ambulance Control to place hospitals on major incident standby, identify safe rendez-vous points in case of a Chemical, Biological, Radiation or Nuclear (CBRN) risk, and mobilise equipment vehicles. At 9.14 am, an ambulance crew reported that the incident had been an explosion, and that there were five fatalities. This was 14 minutes after the Fire Brigade had first reported the explosion. The first ambulance to arrive at Aldgate station arrived at 9.14 am, 9 minutes after the Fire Brigade at the station had declared a major incident, and 13 minutes after the first request from the British Transport Police.

- 2.40 **It is clear that the initial deployment of the emergency services to Aldgate station was rapid, and it was quickly established that there had been an explosion on the train. All the emergency services were aware of the explosion at Aldgate East by 9.14 am. A major incident had been declared separately by the London Fire Brigade, the London Ambulance Service and the police, by 9.15 am, 25 minutes after the explosion.**
- 2.41 However, we note that the London Ambulance Service does not seem to have been aware of the Fire Brigade's assessment of the scene (that there had been an explosion) for 11 minutes, and the British Transport Police was still reporting a train accident at 9.08 am, eight minutes after the identification of an explosion by the London Fire Brigade. The response of the London Ambulance Service at Aldgate was several minutes later than the response of the London Fire Brigade. Whilst the first fire engine was at Aldgate station by 9.00 am, the first ambulance did not arrive at Aldgate station until 9.14 am, 23 minutes after the first 999 call was received and nine minutes after the declaration of a major incident by the Fire Brigade.

## The First Hour - Edgware Road



*'When the explosion occurred, the noise was both vast and quiet. Darkness came immediately, as did fear for my life' - Tim, survivor of the Edgware Road bomb<sup>17</sup>*

*'Just after the train left Edgware station, there was a massive bang followed by two smaller bangs and then an orange fireball. I put my hands and arms over my ears and head as the windows and the doors of the carriage shattered from the blast. Splintered and broken glass flew through the air towards me and other passengers. I was pushed sideways as the train came to a sudden halt. I thought I was going to die. Horrific loud cries and screams filled the air, together with smoke, bits and chemicals. Large and small pieces of stuff hit me and covered me. A book jammed itself between my shoulder and a panel at the side of me. I was hit on the head by a piece of metal that gave me a headache. I was covered in splinters and broken glass from the window behind me. My eyes were sore and very dry from the fireball. Rubbing them made them only worse. Small splintered pieces of glass were sticking in my head and face. I could not breathe; my lungs were burning because of the smoke and the dust. I crashed my head between my knees to get some air. There followed a silence.'<sup>18</sup>*

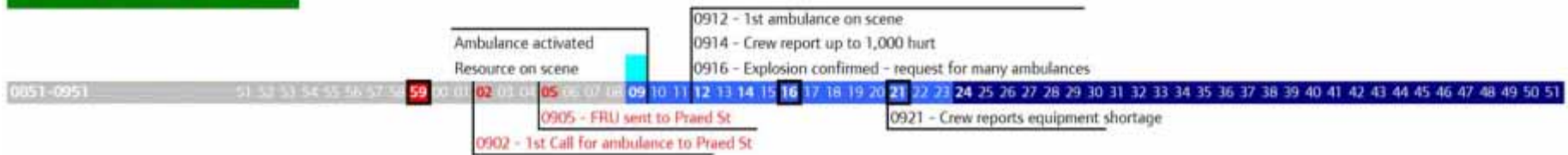
John, survivor of the Edgware Road bomb

<sup>17</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 11

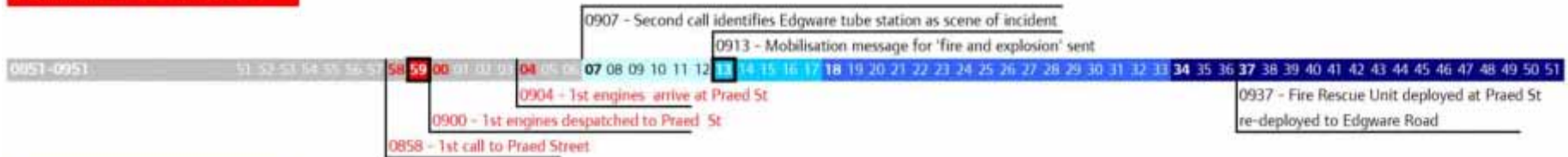
<sup>18</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 4

## Edgware Road – The First Hour - Timeline

### LONDON AMBULANCE

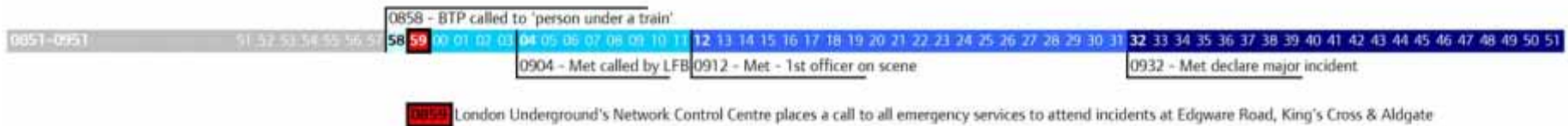


### LONDON FIRE BRIGADE



### POLICE

BTP - British Transport Police    Met - Metropolitan Police



<b>Key</b>	1st call to emergency service	1st resource despatched	1st resource on scene	Declared Major Incident	Request for more resources
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- 2.42 At Edgware Road, as at the other sites, London Underground workers were among the first to arrive at the affected trains. Steve, who works in Edgware House above Edgware Road station, described in his account of the day, kindly passed on to us by Transport for London, how he became aware of the explosion:

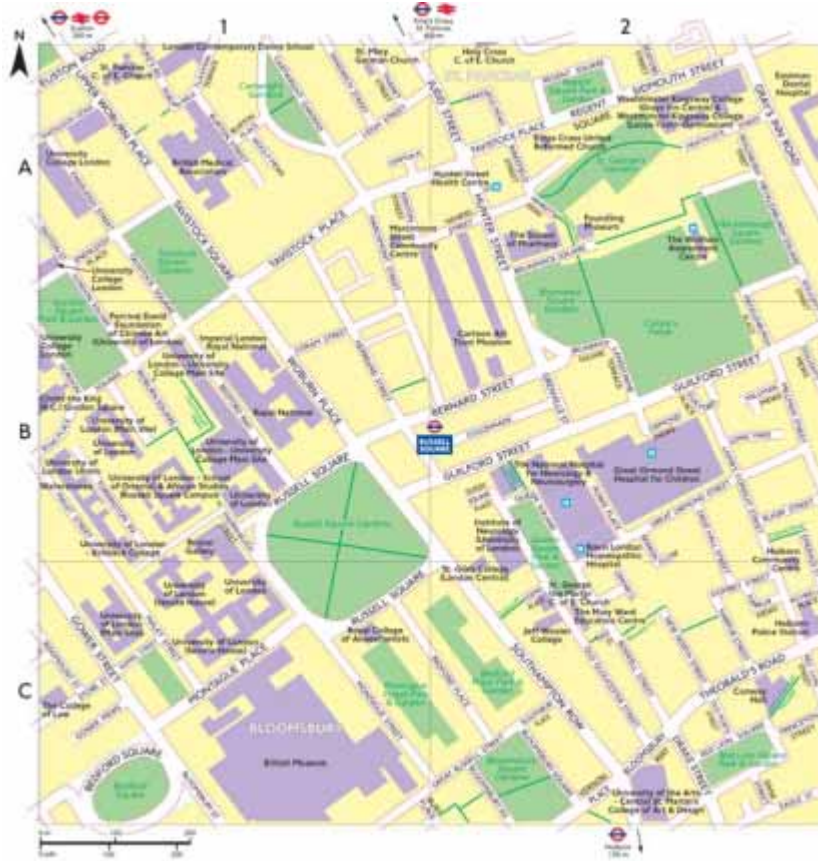
*'At about 08.50 we heard a tremendous bang which shook the whole building. We both [Steve and the duty station manager, Derek] ran towards the windows to see if anything had happened outside. Derek immediately contacted the Station Supervisor, Sue, to ask if everything was alright and she replied, "You had better come down". We could see the rear of a westbound train, which had stopped about 50 yards into the tunnel towards Paddington, with a lot of dust emanating. Train staff already on the scene had already entered the tunnel, having switched off the traction current. Passengers were appearing from inside the tunnel and staff were escorting them to the platform edge ramp. The entire station staff were pulling together to get customers out of the station as quickly as possible. I immediately telephoned the Network Control Centre to tell them what was happening and that ambulances would be needed. I then heard about the Liverpool Street incident and immediately knew what we were dealing with. My immediate thoughts then were for my wife Val, who travels through Liverpool Street.'*

- 2.43 On the basis of reports from LU staff such as Steve, London Underground's Network Control Centre placed a call to the emergency services at 8.59 am asking them to attend Edgware Road, Aldgate and King's Cross.
- 2.44 At Edgware Road, we understand that the first 999 call was made at 8.58 am by a member of the public from nearby Praed Street, reporting a fire and an explosion. At 9.00 am, the London Fire Brigade mobilised five units, including a Fire Rescue Unit and a Fire Investigation Unit, to Praed Street. The first units arrived at Praed Street (which turned out not to have been the site of any incident) at 9.04 am.
- 2.45 The first ambulance to arrive at Edgware Road arrived at 9.12 am, and by 9.14 am the crew had reported back to the control room that there had been an explosion with up to 1,000 casualties. Two minutes later they confirmed that there had been an explosion and requested 'as many ambulances as you can muster'.
- 2.46 The British Transport Police received a call to Edgware Road at 8.58 am, reporting a person under a train and a train collision with the tunnel wall. The Metropolitan Police were called by the London Fire Brigade at 9.04 am and were on the scene at 9.12 am. The Metropolitan Police Service declared a major incident at 9.32 am, 39 minutes after the explosion and 20 minutes after their arrival at Edgware Road station.
- 2.47 At 9.07 am, Fire Control received a call alerting them to the location of the incident on the Hammersmith and City Line at Edgware Road station. Seven minutes later, at 9.13 am, four vehicles were mobilised to Edgware Road. Only one of these was a redeployed vehicle from Praed Street. Paul, a member of the public, was outside Edgware Road station on 7 July and set up a reception area for survivors in a nearby Marks & Spencer store. He came to the Committee's meeting on 23 March 2006 to tell us about his experiences and give his views on lessons to be learnt from the response at Edgware Road. Paul told us that two appliances were still at Praed Street at 9.15 am, whilst he

could see no emergency vehicle in attendance at Edgware Road station. The Fire Rescue Unit that had been sent to Praed Street was eventually re-deployed to Edgware Road at 9.37 am.

- 2.48 The first fire engine arrived at Edgware Road at 9.18 am, 27 minutes after the explosion and 19 minutes after the Network Control Centre's first emergency call. The Fire Brigade declared a major incident at Edgware Road station at 9.34 am. As it turned out, this was a full 20 minutes after the London Ambulance Service had already reported to their control room that there had been an explosion with up to 1,000 casualties.
- 2.49 **It took longer at Edgware Road than at Aldgate for the emergency services to establish and communicate to each other that there had been an explosion. It is not clear to us why this should be the case, given that the train stopped only 50 yards into the tunnel, and London Underground workers alerted their Network Control Centre to the incident within minutes. The Network Control Centre called the emergency services to the scene at 8.59 am, but the first Fire Engine did not arrive until 9.18 am, 19 minutes later, and the Metropolitan Police did not declare a major incident until 9.32 am, followed two minutes later by a declaration of a major incident by the London Fire Brigade.**
- 2.50 **We can only conclude that communications at the scene, and between the scene and control centres, was less effective at Edgware Road than it was at Aldgate. This could be a result of the emergency services focusing on the incident at Aldgate, which was reported just a couple of minutes before the incident at Edgware Road.**

## The First Hour - King's Cross/Russell Square



*'The Tube was moving. The doors were shut; we started to pull into the tunnel. It was approximately 12-15 seconds ... This almighty bang. I said, "What the effing hell's that?" In this millisecond, from the time that went, there was this bright, orange light opposite, and I'm facing the double doors, with my back to the doors on the platform side. In that millisecond, it went from a bright orange to nothing. What the hell was that? Of course, audibly I hear a lot – screaming, praying. We now know that 25 people around me were just outright killed; another 25 people were seriously injured. My first reaction was – I knew where I was in relation to the carriage, and I knew I was on the first carriage – I thought, "We have hit a train". My first thought was, "We have hit a train; the driver is dead". I can't see anything. It's pandemonium; there is black smoke pouring in and I'm having a hell of a job to breathe anyway. I'm thinking, in all these seconds, "This isn't good. This isn't good, because, if this is followed by fire, or more dense smoke, you're not getting out of this, George". I had literally written myself off; I felt this is where it ends. "You're not getting out of this". I couldn't see. I had never experienced anything like that before. I can't talk for other carriages but, in the first carriage, you could see nothing'.<sup>19</sup>*

*George, survivor of the King's Cross/Russell Square explosion*

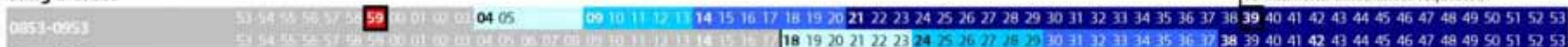
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<sup>19</sup> Transcript of interview with George, Volume 3, page 128

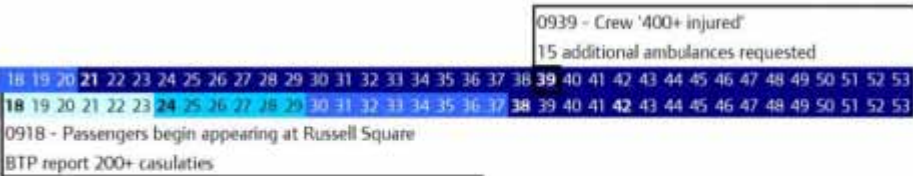
## King's Cross/Russell Square – The First Hour - Timeline

### LONDON AMBULANCE

**King's Cross**



**Russell Square**

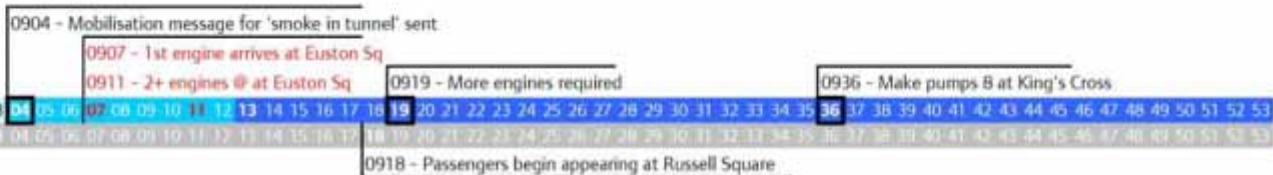


### LONDON FIRE BRIGADE

**King's Cross**



**Russell Square**



### POLICE

BTP - British Transport Police    Met - Metropolitan Police

**King's Cross**



**Russell Square**

**00:53** London Underground's Network Control Centre places a call to all emergency services to attend incidents at Edgware Road, King's Cross & Aldgate





- 2.51 The train between King's Cross and Russell Square was left completely isolated by the explosion. There were very few 999 calls reporting the explosion; mobile phones do not operate underground. Radio communication from the train had been disabled. Nobody on the train could communicate with the world outside without leaving and walking down the tunnel to a station platform.
- 2.52 The Metropolitan Police Service was first alerted to an incident at King's Cross at 8.56 am, on the basis of CCTV footage of the station.
- 2.53 The London Fire Brigade received its first 999 call, reporting smoke issuing from a tunnel at King's Cross, at 9.02 am. At 9.04 am, a 'split attendance' was mobilised, with three fire engines sent to Euston Square and one to King's Cross. Fire engines arrived at Euston Square (which turned out not to be one of the sites where passengers were emerging from tunnels) at 9.07 and 9.11 am. The first fire engine arrived at King's Cross station at 9.13 am. At 9.19 am, and again at 9.36 am, further fire engines were requested to King's Cross. There is no information to show when these further appliances arrived.
- 2.54 The first 999 London Ambulance Service call reporting an incident at King's Cross was received at 9.04 am. A London Ambulance Service Fast Response Unit arrived at King's Cross at 9.14 am, followed by the first ambulance at 9.19 am. A major incident was declared at King's Cross by the Metropolitan Police Service at 9.15 am and then by the London Ambulance Service at 9.21 am.
- 2.55 It is unclear precisely when the London Fire Brigade became aware that there had been an explosion at King's Cross. However, we do know that the ability of the London Fire Brigade to establish what had happened at King's Cross was hampered by the fact that hand-held radios did not work effectively between the platform and a control position at the top of the escalator, nor between the top of the escalator and outside the station. The Fire Brigade therefore had to use runners – individuals running up and down escalators – to communicate from below ground to the surface.
- 2.56 No Fire Rescue Unit was deployed to King's Cross in the initial stages of the response.
- 2.57 **Communications problems made it difficult for the emergency and transport services to establish what had happened to the passengers emerging from the tunnel at King's Cross station.**
- 2.58 The explosion on the Piccadilly Line train took place in the first carriage, at the Russell Square end of the train. It was via Russell Square station that the seriously injured were brought to ground level as the rescue effort got underway.
- 2.59 The first 999 ambulance call reporting an incident at Russell Square was not received until 9.18 am, 25 minutes after the explosion. Passengers began appearing at the platform, having been led from the train by one of the two drivers in the driver's cab. The London Ambulance Service despatched a Fast Response Unit at 9.24 am, which arrived at Russell Square station at 9.30 am. A major incident was finally declared at Russell Square by the London Ambulance Service at 9.38 am, 45 minutes after the explosion. At that point, the Ambulance Service Professional Standards Officer at the

scene was reporting 6-15 fatalities and 50+ casualties. This was a full 20 minutes after the British Transport Police received reports of loss of life and limbs.

- 2.60 We cannot glean from the information provided to us by the Metropolitan Police Service at what time they were aware of the incident at Russell Square, as their records treat King's Cross and Russell Square as the same incident.
- 2.61 From the information provided to us by the London Fire Brigade, it would appear that no fire engines were sent to Russell Square at any point during the first hour following the explosions.
- 2.62 **The initial deployment of ambulances and fire engines to Russell Square was much slower than at the other sites, and it took longer to establish what had happened. The first 999 call was not received until 25 minutes after the explosion, and a major incident was not declared until 9.38 am.**
- 2.63 There was no automatic deployment of the emergency services to Russell Square upon discovery of the train at the King's Cross end of the tunnel. Had this happened, ambulances and other emergency services personnel might have arrived at the scene earlier. The London Fire Brigade did order a 'split attendance', but to a station which turned out not to have been affected (Euston Square).

*Recommendation 7*

**We recommend that emergency plans be amended so that, when an incident takes place in an Underground tunnel, the emergency services are deployed to the stations closest to the train in either direction.**

- 2.64 In the absence of the Fire Brigade at Russell Square, the task of making the scene safe for other emergency services, and evacuating the injured at Russell Square, was instead carried out by the London Underground Emergency Response Unit who, along with the two drivers, evacuated passengers from the first carriage and removed the seriously injured up to the station concourse at ground level. The Emergency Response Unit is a small and little-known unit which is responsible for responding rapidly to incidents on the Tube, such as suicides, derailments, and passenger emergencies. On 7 July the unit attended each scene and played a crucial role in the emergency response. They are experts in dealing with emergencies on and around trains, and have specialist equipment for supporting tunnels, dismantling trains, and helping to rescue people from damaged trains. The unit is regularly deployed to respond to people on the tracks, as well as other emergencies.
- 2.65 We were surprised therefore to learn that Emergency Response Unit vehicles do not have blue lights, do not have the automatic right to drive in bus lanes, and have to pay the Congestion Charge. (They are later reimbursed, but this is clearly an unnecessary administrative burden.) Prior to 7 July, Emergency Response Unit vehicles were not allowed to drive in bus lanes. They are now allowed to do so, having secured an exemption, but they must produce a detailed audit trail to demonstrate that the right to drive in bus lanes is not being used outside of emergency circumstances. They

therefore regularly receive fines for driving in bus lanes, which then have to be paid and subsequently reimbursed, and in each instance this takes between an hour and 1½ hours to process. Nor are Emergency Response Unit vehicles automatically exempt from the Congestion Charge: in the three weeks following 7 July, the Emergency Response Unit paid at least 35 Congestion Charge fines. Given that there are only ever nine Emergency Response Unit vehicles in use at any one time, and bearing in mind their role in responding to emergencies on the Tube, we cannot see any reason why their vehicles could not be automatically exempt from the Congestion Charge, and entitled to drive in bus lanes, as is the case with other emergency vehicles.

- 2.66 Like the other emergency services (with the exception of the British Transport Police), the Emergency Response Unit has no means of radio communication underground. We are not aware of any plans to provide underground communications for the Emergency Response Unit.
- 2.67 **The London Underground Emergency Response Unit is a crucial element of any emergency response on the Tube. It is regularly required urgently to attend life-threatening incidents. Emergency Response Unit vehicles should be automatically exempt from the congestion charge, and should be allowed to drive in bus lanes. They should also have blue lights. These measures would help the unit to get to the scenes of emergencies on the Tube much more rapidly.**
- 2.68 **The Emergency Response Unit works mostly on the Tube network. It is therefore a cause for concern that they do not have radios that function underground.**

*Recommendations 8 to 11*

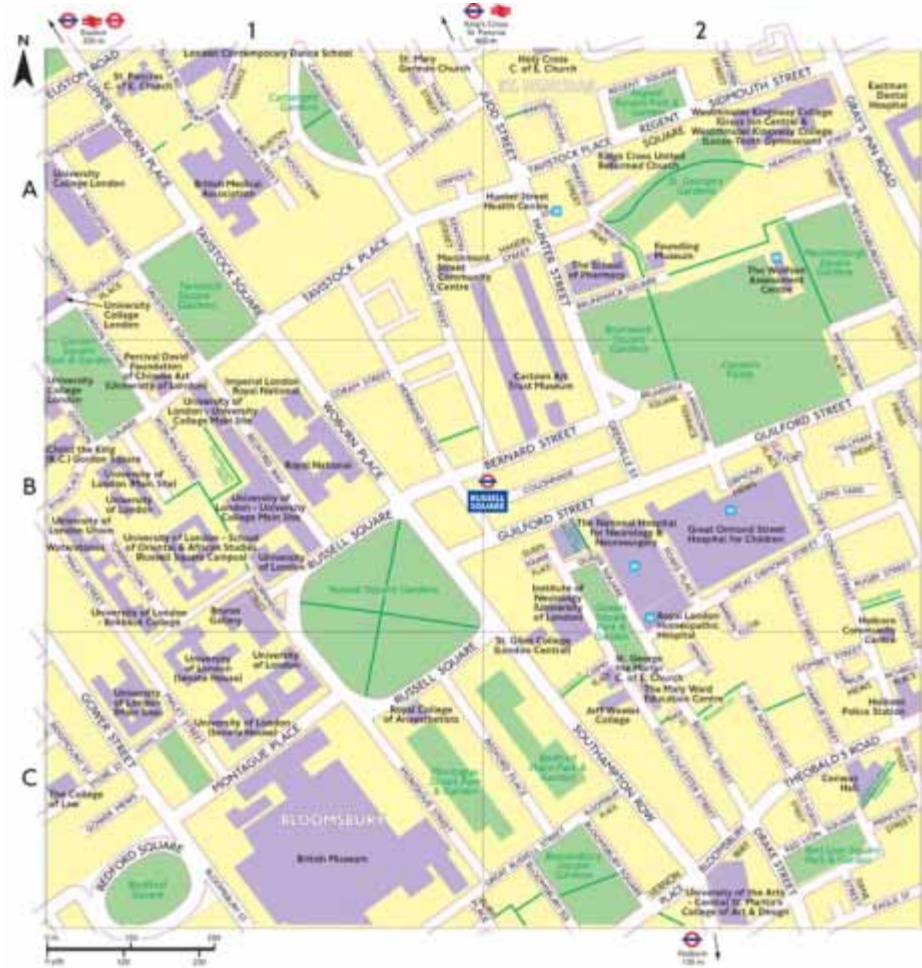
**We recommend that Transport for London lobby the Government to obtain blue light status for Emergency Response Unit vehicles. This would, amongst other things, exempt Emergency Response Unit vehicles from bus lane restrictions and the Congestion Charge.**

**We recommend that, in the meantime, Transport for London grant the Emergency Response Unit automatic access to bus lanes and an automatic exemption from the Congestion Charge.**

**We recommend that the Emergency Response Unit obtain Airwave radios to be able to communicate underground once the CONNECT project is completed.**

**We recommend that the Emergency Response Unit consider the feasibility of obtaining an interim/back-up solution to enable its staff to communicate underground, such as Personal Role Radios.**

## The First Hour - Tavistock Square



*'We just started leaving Tavistock Square when there was a very strange noise. It wasn't like a bang; it was like a muffled whooshing sound almost, but then the bus was very packed, and I was on the one in front. Being sort of ensconced, I didn't hear – I saw, but I didn't really hear it very loudly. There was a mass exodus off of our bus, as things were still coming to the ground and bits were flying everywhere. The only thing I do remember is the carnage and everything as it hit the floor. I remember looking at the bus, and I remember initially thinking, "What is a sightseeing bus doing there?" because that is actually what it looked like. From the front, that is what it looked like; it didn't look like a London bus. Now I know why, but it didn't look that way to me. It looked like one of those that has the roof off. It wasn't until I actually saw the blood, and the smells, that I thought something is really wrong here and not right. It sounds almost ridiculous to say it, but it was just such a surreal thing; I still have trouble explaining it. I can see things in my head, but I just can't find the words to describe it'.<sup>20</sup>*

M, survivor of the Tavistock Square explosion

<sup>20</sup> Transcript of interview with M, Volume 3, page 210

*'The floor went completely up to my seat, and I'm mid-air with a strand of floor remaining, keeping me from falling from the upstairs seats. I looked behind me and everybody and all the seats had vanished. I just went into flight mode. I just stuck my foot out and launched myself off. I hit the side of the bus on the way down onto the pavement ... I jumped down and I was just screaming. It is funny, because I couldn't hear anything. It was like somebody had got you and stuck you at the bottom of a swimming pool. You are so disorientated, all my clothes were hanging off me where they had all shredded. It blew the top of my shoe off – a heavy-stitched leather shoe'.<sup>21</sup>*

Gary, survivor of the Tavistock Square explosion

- 2.69 At Tavistock Square, it was immediately apparent what had happened, and the first 999 call was made at 9.47 am, within a minute of the explosion. Twelve further 999 calls were made, all before 9.56 am. A number of medics were on the site before that time: the bus was located outside the headquarters of the British Medical Association and doctors and other trained first-aiders came out of the building to care for the injured.
- 2.70 The Metropolitan Police Service happened already to have an officer at the scene. The first ambulance arrived at the scene at 9.57 am, having come across the bus in passing. The first fire engines were despatched at 9.50 am, but the records provided to us by the London Fire Brigade do not show the time of their arrival at the scene.
- 2.71 There were no other ambulances at the scene at that point. The records provided to us by the emergency services do not show when a major incident was declared by the Metropolitan Police, London Fire Brigade or London Ambulance Service.

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<sup>21</sup> Transcript of interview with Gary, Volume 3, page 202

## Establishing what had happened at each scene – findings

- 2.72 At each scene on the Tube, it took some time to establish what had happened. At the same time, the London Underground Network Control Centre was piecing together information from the emergency services and its own monitoring equipment. On that basis, the Network Control Centre put in an emergency services call to three sites at 8.59 am – Aldgate, King’s Cross and Edgware Road. The records we have been given do not demonstrate that these calls resulted in the immediate despatch of the emergency services to the scenes. For some reason, the message does not seem to have got through to the right people.
- 2.73 Communication between the control rooms of the emergency services in the event of a major incident takes places through a ‘first alert’ system. This is done through a ‘first alert’ call, which is in effect a conference call involving the emergency and transport services. The ‘first alert’ system was activated at 9.12 am, and the first conference call took place at 9.25 am.<sup>22</sup> The decision was taken at 9.15 am to declare a network emergency and evacuate the entire Tube network. The evidence we have seen suggests that communication between those involved in the ‘first alert’ call and the emergency services on the scene could be improved in the future. For example, the Metropolitan Police Service was not officially called to the scene at Aldgate until 9.19 am, seven minutes after the activation of the ‘first alert’ system. And a major incident had still not been declared at Edgware Road by the time of the first conference call between the emergency services.
- 2.74 **There is room for improvement in communications between the emergency services and the London Underground Network Control Centre.**
- 2.75 **The London Fire Brigade’s debriefing report identifies communications between the emergency services as a point for further consideration. From the information we have seen, we believe that more effective communications between the emergency services in relation to each scene, and overall, could have reduced the duration of the period of uncertainty about the location and nature of the incidents and enabled the emergency services more rapidly to put in place a co-ordinated emergency response.**
- 2.76 **The London Emergency Services Procedure Manual sets out in broad terms how the emergency services will respond to major and catastrophic incidents. It clearly states that a major incident can be declared by any of the emergency services, the implication being that this will be done on behalf of all the services. On 7 July, each of the emergency services arriving at the scenes of the explosions separately declared major incidents within their own service. It is not clear to us why each of the emergency services found it necessary separately to declare major incidents.**

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<sup>22</sup> Transcript of Committee meeting, November 2005, Volume 2, page 11


- 2.77 It is common sense that one declaration of a major incident, by whichever service is first at the scene, ought to automatically mobilise units from 'all three' services - police, fire and ambulance – and activate major incident procedures within all the services. It is difficult to envisage a major incident, especially on the Tube, which would not necessitate the attendance of the fire, ambulance and police services, at least in the first instance until the situation has been assessed and the emergency response fully mobilised.

*Recommendation 12*

We recommend that the London Resilience Forum review the protocols for declaring a major incident to ensure that, as soon as one of the emergency services declares a major incident, the others also put major incident procedures in place. This could increase the speed with which the emergency services establish what has happened and begin to enact a co-ordinated and effective emergency response.







**The First Hour – rescue & treatment of the injured** **3**

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## The first hour - rescue and treatment of the injured

- 3.1 The rapid rescue and medical treatment of those who have been seriously injured is the most urgent priority for emergency services at the scene of a major incident. When there are three separate but simultaneous major incidents, followed less than an hour later by another incident, communications between each scene and their strategic ('Gold') commanders are vital in ensuring the effective deployment of appropriate and sufficient vehicles, officers and equipment to each scene and the effective dispersal of casualties to hospitals.

### Strategic co-ordination of the response

- 3.2 Strategic co-ordination of the response takes place at the Gold Coordinating Group. This is chaired by the Metropolitan Police Service and includes senior representatives from the other emergency services and other authorities involved in the response. The Gold Coordinating Group was initially located at New Scotland Yard, but at its first meeting, at 10.30 am, the decision was taken that it should be relocated to a suite at Hendon.<sup>23</sup> The suite had been used for emergency preparedness exercises in the past, and had good facilities. However, the relocation of the Gold Coordinating Group to Hendon caused some difficulties. The control rooms of the emergency services are all in central London. Moving the Gold Coordinating Group to Hendon meant that Gold commanders could not travel easily between there and their control centres. These difficulties were compounded by the fact that the Underground had been suspended and there was considerable congestion on the roads.
- 3.3 Sir Ian Blair, Commissioner of the Metropolitan Police Service, told us that although the decision to move to Hendon was the right decision at the time, the experience of 7 July had led the Metropolitan Police Service to review potential venues for a the Gold Coordinating Group. Several potential venues are under consideration, some of which will be more centrally located. It is unlikely that Hendon would be used again in the future because of its relatively remote location.<sup>24</sup>

### Reliance on mobile telephones

- 3.4 The difficulties caused by the nature of the incidents were compounded by significant communications problems within the emergency services. Managers within the London Ambulance Service, the City of London Police, the Metropolitan Police and the London Fire Brigade relied to varying extents on mobile phones to communicate between the sites of the incidents and their Gold commanders.
- 3.5 As the news unfolded during the morning and early afternoon of 7 July, members of the public began calling their friends and family to check they were safe and not caught up

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<sup>23</sup> Transcript of Committee meeting, 3 November 2005, Volume 2, page 13

<sup>24</sup> Transcript of Committee meeting, 1 March 2006, Volume 2, page 161

in the explosions. London's telephone networks experienced unprecedented volumes of traffic. Vodafone experienced a 250 per cent increase in the volume of calls and a doubling of the volume of text messages. There were twice as many calls on the BT network as would normally be the case on a Thursday morning. Cable & Wireless handled ten times as many calls as usual to the Vodafone and O<sub>2</sub> networks – 300,000 calls were placed every 15 minutes, compared to 30,000 on a normal working day. O<sub>2</sub> would normally expect to handle 7 million calls per day. On 7 July, 11 million calls were connected – 60 per cent more than usual - and this does not include unsuccessful calls.

- 3.6 When we asked the emergency and transport services in November 2005 what impact mobile telephone network congestion had had on their ability to communicate, we were told that the difficulties with mobile telephones were an inconvenience, rather than a problem. For example, Ron Dobson, Assistant Commissioner of the London Fire Brigade, said, '*Our at-scene command communications stood up and were functional right the way through the day with no difficulty whatsoever. I think the mobile phone system being interrupted in the way that it was, was inconvenient rather than a real problem*'.<sup>25</sup> Commander Chris Allison from the Metropolitan Police Service said, '*It was an inconvenience but, because we all had radio systems that were working, the Command and Control facilities between us and the officers on the front line were working and the Command and Control facilities between the police services of London who were working for the communities were all working very well in the Command and Control room*'.<sup>26</sup> The London Ambulance Service's Deputy Director of Operations, Russell Smith, said, '*yes, mobile phones help them [managers at the scene], but they are not critical because the managers also have VHF radios in all their cars*'.<sup>27</sup>
- 3.7 Through further questioning, we have since learned that the telephone network congestion on 7 July resulted in some serious communications problems within some of the emergency services.
- 3.8 The London Fire Brigade has told us that managers in fact relied upon mobile telephones to communicate with their control room, and that this caused problems on the day. The London Fire Brigade's de-briefing report, presented to the London Resilience Forum in September 2005, states that '*Incident Commanders felt isolated as they were unable to get information about the other incidents from Gold Support ... as mobile phones weren't working*'. The Fire Brigade's Command Planning System was used to send messages, and this apparently worked well. The de-briefing report also notes that 3G telephones worked, and the TETRA police radio system worked well as a back-up system. (This system was in use by the British Transport Police, but no other emergency service, on 7 July. The City of London Police has since put in place TETRA-based digital radio.)
- 3.9 The London Ambulance Service also relied on mobile telephones as the primary means of communication between managers at the scene and the control room. It is true that managers have radios in their cars as well, but these did not work on 7 July either, as we

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<sup>25</sup> Transcript of Committee meeting, 3 November 2005, Volume 2, page 24

<sup>26</sup> Transcript of Committee meeting, 3 November 2005, Volume 2, page 24

<sup>27</sup> Transcript of Committee meeting, 3 November 2005, Volume 3, page 16

discuss below. We questioned the London Ambulance Service again in writing early in 2006. Martin Flaherty, Director of Operations at the London Ambulance Service, told us, '*We have accepted that we have become too reliant on mobile phone technology as a communication tool and it is clear now that it cannot be relied upon in a complex major incident scenario*'. The London Ambulance Service is now issuing pagers to managers as a back-up. (These were withdrawn two years ago on the basis of the system being all but obsolete.)

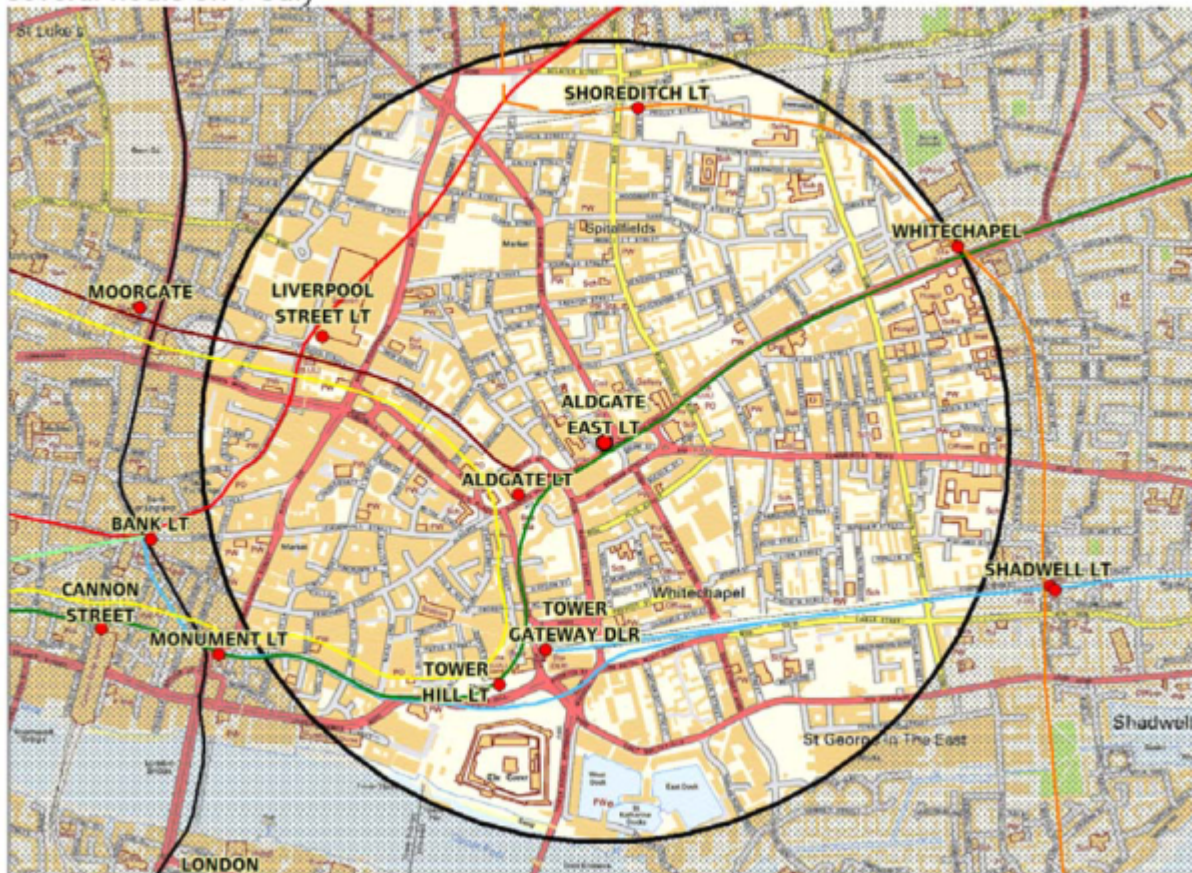
- 3.10 A system exists to restrict mobile phone network access to the emergency services within a specified area. This system, called the Access Overload Control (ACCOLC) is seen very much as a last resort. It is expensive to implement and can cause public distress or panic. The decision to activate ACCOLC can therefore be taken only at the highest level of command: the Gold Coordinating Group.
- 3.11 We asked representatives from the emergency and transport services whether ACCOLC had been activated anywhere in London on 7 July. We were told that the first meeting of the Gold Coordinating Group, at 10.30 am, considered whether to close down mobile phone networks to the public at any of the sites where the emergency rescue effort was being mounted. The London Ambulance Service told us that problems with mobile phones and radios led them to ask the Gold Coordinating Group to activate ACCOLC in the area around Aldgate station, and that their request had been refused by the Gold Coordinating Group. It was decided that ACCOLC should not be activated, because of the risk of public panic and also because it was not clear that the right personnel would be carrying ACCOLC-enabled telephones.<sup>28</sup> If they were not carrying this equipment, ACCOLC could have made matters worse. As it was, at least some mobile telephone calls were getting through some of the time. Had ACCOLC been activated, key personnel who were not carrying specially-enabled telephones would not have been able to make or receive any calls. This is clearly a major flaw in the system: there is no point in having the technology to enable key people to communicate with each other if the relevant authorities do not make sure that the right people are in possession of that technology.
- 3.12 We subsequently found out that in fact ACCOLC had been activated, by the City of London Police, on the O<sub>2</sub> network in a 1km area around Aldgate Station. This was a response to the fact that the City of London Police were experiencing serious communications difficulties in the area, and this was hampering their response. Despite the Gold Coordinating Group decision, the City of London Police made a request at 12 noon to O<sub>2</sub> to shut down the O<sub>2</sub> network to the public in a 1km area around Aldgate station. O<sub>2</sub> carried out the appropriate validation procedures, but these procedures, set by the Cabinet Office, do not include verifying the request with the Gold Coordinating Group. The O<sub>2</sub> network was therefore closed to the public – outside the command and control structure – at about noon, and remained closed down until 4.45 pm. During that period of time, O<sub>2</sub> estimates that '*Several hundred thousand, possibly maybe even more than a million*' attempted calls by members of the public were lost.<sup>29</sup>

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<sup>28</sup> Transcript of Committee meeting, 3 November 2005, Volume 2, pages 24-25

<sup>29</sup> Transcript of Committee meeting, 1 December 2005, Volume 2, page 88

Area 1 kilometre around Aldgate East, where O2 instigated Access Overload Control for several hours on 7 July



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- 3.13 James Hart, Commissioner of the City of London Police, explained to us in writing, in February 2006, how and why the decision was taken, outside the command and control structure, to instruct O<sub>2</sub> to shut down its network to the public. He told us that the senior officer in the Command and Control room '*witnessed a gradual deterioration of his ability to communicate with operational officers at the scene via the mobile phone system*'. He further told us:

*'From a City of London Police point of view, operational police units at the scene undoubtedly benefited from the activation of ACCOLC. Some examples are evident, such as an Inspector posted to the Royal London Hospital because the MPS could not provide police staff. She could not communicate with anyone until ACCOLC was activated. She was then able to assist more effectively at the point where casualties were being received.*

*The City of London Casualty Bureau also suffered from a serious breakdown until ACCOLC was activated and they were subsequently able to communicate with the Aldgate scene. Additionally, a City of London Police Press Liaison Officer could not properly manage the Press enquiries at the scene until ACCOLC was activated whereby effective information provision was established. Indeed, Metropolitan Police Service Directorate of Public Affairs representatives could not use their own mobile phones because their own mobile phone provider*

*system had collapsed (through the weight of usage by subscribers) and used the City of London Police Liaison Officer's ACCOLC-enabled mobile phone because it was the only one working'.*

- 3.14 James Hart argued that the decision did not in fact go against a decision by the Gold Coordinating Group, because at the time the senior City of London Police officer made the decision, he was not aware of the Gold Coordinating Group's decision that ACCOLC should not be activated. The decision was taken by the City of London Police in the light of their own service needs. They were not in a position to assess the potential impact of the decision on the other emergency services. This is one of the reasons why it is important that such decisions should be taken at a strategic level by representatives from all the emergency services.
- 3.15 Sir Ian Blair, Commissioner of the Metropolitan Police Service, told us on 1 March 2006 that the City of London Police's decision to invoke ACCOLC was not appropriate and was reversed, and that City of London Police had since '*reflected on their actions*'. However, the City of London Police are adamant in their view that the decision was made '*quite properly and in line with [the officer's] training*'. In fact James Hart argued that the procedure for activating ACCOLC should be reviewed, to enable commanders to activate it and the Gold Coordinating Group then to review those decisions.
- 3.16 **It ought to have been predictable that in the event of a major incident in London, mobile telephone networks would become congested and it would become difficult to make or receive telephone calls. It happens every year on New Year's Eve. It happened on a larger scale after the 11 September attacks in New York. London's emergency services nevertheless relied to varying extents on mobile phones to communicate internally among their senior officers. This led to some major communications problems on 7 July.**
- 3.17 **The rollout of new Airwave digital radio communications across the emergency services will alleviate this problem up to a point. We will be closely monitoring progress in meeting the target of the end of 2007 for the rollout of Airwave, as we consider it to be an essential element of effective communications within and between the emergency services above and below ground.**
- 3.18 **In the meantime, there is an urgent need for a wholesale review of how senior officers within the emergency services communicate with each other in the event of a major incident. At the moment, each of the services is reviewing its own communications, internally. There would be some benefit in the services cooperating to identify possible solutions, rather than each of them independently reinventing the wheel.**
- 3.19 **The decision to switch off mobile telephone networks to the public, enabling a small number of key people to communicate using specially-enabled telephones, is based on an assessment of the balance between the extent to which the public interest will be best served by providing a continuing public telephone network or closing it down to facilitate an emergency response to an incident. The tension on 7 July was between the belief that this is a strategic decision, because it is broadly in the public interest, or an operational decision, given that it applies only to a localised area. We are not in a position**

to second-guess whether it was the right thing to do from an operational point of view to invoke ACCOLC on the O<sub>2</sub> network around Aldgate on 7 July. We were not party to discussions at the Gold Coordinating Group where the decision was made that ACCOLC should not be invoked. However, there are important lessons to be learnt from the experience.

- If ACCOLC is to be maintained as a system, it is essential that the relevant authorities ensure that at any given moment the right personnel are in possession of ACCOLC-enabled telephones. There is no point in a technical facility if the relevant authorities do not make sure that the right people have the equipment to use it.
- The current command and control structure provides that only the Gold Coordinating Group can decide to turn off the mobile phone networks to the public. The City of London Police acted outside this framework. This should not be allowed to happen again; the command and control structures that are put in place in the event of a major incident exist for good reasons, not least because the individual services are not in a position to assess the potential impact of ACCOLC on other services involved in the emergency response. To be effective, these structures must be observed by all concerned.
- Protocols for operating companies to verify requests should be consistent with whatever decision-making framework is in place.

*Recommendations 13 to 16*

**We recommend that the London Resilience Forum, as a matter of priority, co-ordinate a review across London's emergency services of communications between managers at the scenes of major incidents, their respective control rooms and the Strategic Co-ordination Centre. We request that the London Resilience Team provide us with the results of this review in November 2006.**

**Members of the London Resilience Forum should put in place regular checks to ensure that key senior officers are equipped with ACCOLC-enabled mobile phones. We request that the emergency and transport services provide us with details of their plans to conduct such reviews, showing what will be done, and how frequently, to ensure that the technology can actually be effectively used if necessary.**

**The protocols which require mobile telephone operating companies to verify instructions to activate ACCOLC should be amended, so that any instructions are verified with the Gold Co-ordinating Group rather than the authority issuing the instructions. We recommend that the London Resilience Team review these protocols and report back to us by November 2006.**

**All the authorities involved in the response to a major or catastrophic incident must operate within the established command and control structure. This is essential for the effective strategic management of the response. The City of London Police must provide the Committee with assurances that, in future, it will operate within the agreed command and control structures in the event of a major or catastrophic incident in future.**

### **Communications within the London Ambulance Service**

- 3.20 According to the London Emergency Services Liaison Panel's Emergency Procedure Manual, the London Ambulance Service is the lead organisation responsible for the emergency medical response at the scene of any major incident. The London Ambulance Service shares responsibility for rescue and removal of the seriously injured with the police services and London Fire Brigade. The London Underground Emergency Response Unit also plays an important role in rescuing the injured when incidents occur on the Tube.
- 3.21 At our first meeting, on 3 November 2005, we questioned Russell Smith, Deputy Director of Operations for the London Ambulance Service, about the London Ambulance Service's response to the 7 July attacks. He told us, *'I think there is no doubt that this was a particularly testing day with four major incidents happening*



*simultaneously in London. It put us under some strain and we were tested but not found wanting*.<sup>30</sup>

- 3.22 **We are in no doubt whatsoever that individual members of the London Ambulance Service, along with the other transport and emergency services, worked extremely hard, under exceptionally difficult circumstances, on 7 July. Their many individual acts of courage, skill and initiative led to the saving of many lives that may otherwise have been lost. All four sites were 'cleared' within three hours, during which time almost 200 vehicles and 400 staff and managers were deployed, and 404 patients were transported to hospital. The fact that there were four separate incidents across London, and that three of them were in tunnels underground, made the emergency response very complex and difficult to manage systematically and effectively.**
- 3.23 On top of the problems with the mobile telephone network, the London Ambulance Service response was hampered by problems with their radio systems. These problems appear to have been the result of failings in the processes that were in place for managing and monitoring radio traffic, rather than being entirely due to technical problems.
- 3.24 The London Ambulance Service uses two separate radio systems. It employs UHF radios for managers to communicate locally at the scene, and VHF radios for ambulances and key managers. The UHF communications system, used by managers at the scenes in the absence of a functioning mobile telephone network, did not work. This was partly because there were not enough handsets available for managers to use at the scenes.
- 3.25 For communications between the scenes and the control room, managers tried to use the VHF radios. Dr Gareth Davies, a consultant in emergency medicine at Barts and The London Hospital, was Medical Incident Officer in charge of the scene at Aldgate. He came to our meeting on 11 January 2006. He told us that, *'the radio problem was intermittent. I would say that about 10-15 per cent of radio traffic was actually getting through. You could get through the odd message. It was a case of pressing the button and nothing happening'*.<sup>31</sup>
- 3.26 There were several factors contributing to the failure of the VHF radio system.
- a. Two channels were used, but they were both initially routed through one operator. Martin Flaherty, Director of Operations, told us that, *'this undoubtedly compounded some of the capacity issues which have been reported and did not help in terms of managers being able to use the radios effectively to communicate with HQ'*.

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<sup>30</sup> Transcript of Committee meeting, 3 November 2005, Volume 2, page 16

<sup>31</sup> Transcript of Committee meeting, 11 January 2006, Volume 2, page 131

- b. Managers at the scenes did not know which channel to use – they would normally be instructed via mobile phone, but mobile phones were not working so this was not possible.
  - c. There were problems caused by the huge volume of traffic generated by the five separate sites. The result was an inability to get through for much of the time.
- 3.27 Dr Gareth Davies told us that, *'The lack of mobile phones and the clogging of the radio communications meant that the individual scenes were unable to communicate with Gold Health at the Ambulance Service and pass on information to the acute hospitals ... All of the doctors who took on the [Medical Incident Officer] role at all of the incidents had that inability to speak with the receiving hospital and the inability to bring communications back to the ambulance headquarters'*.<sup>32</sup>
- 3.28 The impact of these problems was that managers and other London Ambulance service personnel at the Tube stations and at Tavistock Square were unable to communicate with the control room. Their requests for further ambulances, supplies and equipment did not get through. They did not know what was happening at the other incidents. They could not receive instructions as to which hospitals were still receiving patients.
- 3.29 Dr Gareth Davies explained how the situation on the day compared to the procedures set out in emergency plans.

*'Normally in an incident like this, we would pass the information to Gold Control. They would have an overview of the whole of London and would say, for example, 'yes, the Homerton has not been hit. We have asked it to activate its plan. Patients can be decanted from the scene to that area'. However, the reality of the situation was that your last telephone call said that there were eight bombs. That was the last message that you had received. You therefore had a picture of Armageddon – you do not know what is going on. All you can rely on is the fact that the hospital you had just left was still intact and its plan is able to cope with a certain number of people so you move patients there'*.<sup>33</sup>

- 3.30 The London Ambulance Service response was aided by the fact that the entire management of the London Helicopter Emergency Medical Service happened to be at a meeting at Barts and The London hospital, and a number of the explosions took place close to major hospitals from where nurses, doctors and others came to the scenes to help. A large number of the Service's senior managers were at a conference at Millwall, and were therefore despatched by face-to-face communication. Martin Flaherty, Director of Operations at the London Ambulance Service, told us that, *'it is clear that if we had not been in this position our difficulties would have been more pronounced'*.

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<sup>32</sup> Transcript of Committee meeting, 11 January 2006, Volume 2, page 123

<sup>33</sup> Transcript of Committee meeting, 11 January 2006, Volume 2, page 123

### **Deployment of ambulances, officers, equipment and supplies to the scenes**

- 3.31 The breakdown in communications within the London Ambulance Service had an impact on the Service's ability effectively to deploy the necessary vehicles, personnel, equipment and supplies to the incidents.
- 3.32 Survivors told us repeatedly of their surprise at the apparent lack of ambulances at the scenes, even an hour or more after the explosions. Angela told us that during the hour she spent in the ticket hall at King's Cross, she saw only two paramedics. Rachel told us that at 9.35 am there were still no ambulances at Russell Square. Paul told us of the lack of ambulances, equipment and supplies at Edgware Road. This led us to ask further questions of the London Ambulance Service, about their response at each site.
- 3.33 At all sites, the London Ambulance Service suffered from a lack of essential supplies such as fluids, tourniquets, triage cards (which are used by paramedics to assess casualties and assign a category which will dictate the order of priority in which they are treated) and stretchers.
- 3.34 Dispersal of patients to hospitals was uneven because of breakdown of communications within the Ambulance Service. In the event, this had minimal impact on the care of patients on 7 July, but we have been advised that it could have had a much greater impact if there had been more casualties or if specialist treatment had been required, such as for burns injuries.<sup>34</sup> For this reason, it is essential that the problems experienced on 7 July are examined and resolved so as to ensure that the same problems do not arise again in the future.

#### *Aldgate*

- 3.35 The site to be cleared most rapidly of casualties was Aldgate, which was cleared within about 1 hour and 20 minutes. At 10.09 am, the Emergency Planner reported that the incident would soon be clear, and advised the control centre to consider deploying resources to another location. At Aldgate, the London Ambulance Service response was rapid in the first instance. The first ambulances arrived at the scene at 9.03 am (Liverpool Street) and 9.14 am (Aldgate). A total of 17 ambulances were deployed, as well as two Fast Response Units. At 9.14 am, the ambulance crew reported that there had been an explosion, and requested a further five ambulances. By 9.24 am, the Emergency Planner declared a major incident and requested 30 ambulances, an equipment vehicle and a Medical Incident Officer.

#### *Edgware Road*

- 3.36 The response at the other scenes was less decisive. At Edgware Road, the scene was not cleared until approximately 12 noon, three hours after that explosion. We

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<sup>34</sup> Transcript of Committee meeting, 11 January 2006, Volume 2, page 124

interviewed Kathy, a survivor of the Edgware Road bomb who was among the last survivors to be taken from the carriage. She told us that she was kept on the train for an extra 45 minutes because of a lack of ambulances being available to take her to hospital. She remained in the carriage for three hours after the explosion, her condition deteriorating all the time.<sup>35</sup> John, who was himself injured but remained in the bombed carriage with seriously injured people, trying to help and comfort them and waiting for help to arrive, told us that he waited for an hour before anyone arrived to help.<sup>36</sup>

- 3.37 Unfortunately, it is not possible to examine in detail the London Ambulance Service's response to the Edgware Road explosion over the course of the morning, because records of the response were not maintained. The timeline provided to us by the London Ambulance Service contains no entries beyond 9.21 am, when it was recorded that an ambulance crew stated they were running out of equipment and requested an equipment vehicle. This failure to maintain records is not unique to the Ambulance Service; the London Fire Brigade has also commented in its debrief report on the failure to record information about its response and the need to do so in future.
- 3.38 The failure to maintain records of the response extends also to records of the times of arrival of the emergency services at the affected carriages of the bombed trains. A number of survivors from Edgware Road and Aldgate told us that they saw emergency services personnel outside the stations soon after the explosions, apparently having been instructed not to enter the affected tunnels. We have received no explanation as to why this might have been the case, and the absence of records showing the times of arrival of the emergency services in the affected carriages means that we cannot investigate the anecdotal accounts we have heard.

#### *King's Cross*

- 3.39 The first ambulance arrived at King's Cross at 9.19 am, half an hour after the explosion, and a major incident was declared two minutes later. At 9.39 am, the ambulance crew reported that there was still no officer at the scene, but that there were 400 casualties and 15 ambulances were needed. The first manager was sent to the scene at 9.46 am, almost an hour after the explosion. No further communications are recorded until 10.13 am, when the duty officer reported that there were still more than 50 casualties in the train, and requested a further ten ambulances and an equipment vehicle. At 10.22 am, four busloads of casualties were taken (by bus drivers who had taken the impressive individual initiative of offering their services) to The Royal London Hospital. They were directed to the Royal London Hospital, despite a call to the control centre seven minutes earlier requesting that walking wounded be sent to Bart's instead. At 10.27 am, the London Ambulance Service manager at the scene reported that there were still 50 people trapped in the train. No further information was recorded about the Ambulance Service's response at King's Cross, other than the time at which the scene was cleared of casualties – 2 hours and 26 minutes after the explosion.

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<sup>35</sup> Transcript of interview with Kathy, 13 April 2006, Volume 3, page 79

<sup>36</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 7

### *Russell Square*

- 3.40 At Russell Square, the scene was finally cleared when the last patient was removed, almost three hours after the explosion. So far as we can tell from the limited records that were kept by the London Ambulance Service, and from the accounts we have heard from survivors of the explosion who were brought out of the tunnel to Russell Square station, the medical response relied heavily upon voluntary assistance from doctors and nurses from nearby hospitals. There was a shortage of ambulances until after 11 am, and delays in deploying the appropriate equipment, personnel, and vehicles to the scene.
- 3.41 The information given to us by the London Ambulance Service shows repeated instances of London Ambulance Service officers requesting more ambulances, supplies and equipment and receiving no response. The British Transport Police reported that there were at least 200 casualties at 9.18 am. A Fast Response Unit arrived at the scene 12 minutes later, at 9.30 am. At 9.38 am a London Ambulance Service Professional Standards Officer declared a major incident - reporting 50+ casualties and six to 15 fatalities - and stated that there was only one ambulance at the scene, along with the Fast Response Unit.
- 3.42 At 9.40 am, the Metropolitan Police Service requested the London Ambulance Service to 'send every unit that you have got'. At 9.48 am, one ambulance was despatched from University College Hospital. At 10.02 am, a request was made for five ambulances and a bus. At 10.13 am, the manager at the scene reported that there were 40-50 walking wounded and 100 stretcher cases still in the tunnel. There was still only one ambulance on the scene at that point.
- 3.43 At 10.22 am an equipment vehicle was requested. At 10.27 am, the manager at the scene requested an estimated time of arrival of the ambulances that had been requested. There was no reply from Central Ambulance Control. At 10.42 am, the manager made a further report to Central Ambulance Control, and again requested an estimated time of arrival of the equipment. At 11.10 am, there were still only three ambulances at the scene, and a further ten were still needed. Finally, at 12.12 pm, the scene was clear of casualties.
- 3.44 The response of the London Ambulance Service at Russell Square can be partly explained by the general communications problems the service experienced across London on 7 July. These problems were exacerbated at Russell Square because of its proximity to Tavistock Square, where the bomb was detonated on the No. 30 bus. For some time after the bus explosion, ambulances destined for both sites were being directed to the same muster point on a road nearby. This was not realised until after 11am. Until that point, ambulances called to Russell Square were being diverted to Tavistock Square – a much more visible and immediately apparent emergency. Eventually, a system of runners was set up between the two scenes, and ambulances were redirected to Russell Square to take casualties to hospital.
- 3.45 The London Ambulance Service has told us that, since 7 July, it has put in place new procedures for managing incidents. This includes the despatch of a predetermined number of ambulances to the scene, *'even if there is a complete communications failure and before they are specifically requested'*. We welcome the London Ambulance

Service's acknowledgement of the issues, and its commitment to improve its processes in the future.

- 3.46 We would emphasise that, despite these problems, individuals working to rescue the injured at Russell Square managed to save lives and look after the seriously injured until ambulances became available. Staff from Great Ormond Street Hospital attended the scene '*in some numbers*' to tend to the seriously injured and take them to Greater Ormond Street Hospital for treatment. Judith Ellis, Chief Nurse at Great Ormond Street Hospital, described how staff from the hospital set up a field hospital near to Russell Square station.
- 3.47 Gill, who was severely and permanently injured in the King's Cross/Russell Square explosion, told us that on her arrival at hospital she had only four minutes' worth of blood left in her body. She was resuscitated for a total of 27 minutes on 7 July, and was expected to lose her life. Carol told us how she was rescued from the tunnel and in theatre undergoing major surgery within an hour of the explosion. It was thanks to the efforts of individual doctors, nurses, transport workers and emergency services personnel at the scene, paramedics en route to hospital, and doctors and others at hospitals that Gill's and Carol's lives were saved. Gill summed this up when we interviewed her in April 2006:

*'It's important for me to say that however haphazard and makeshift it was, whatever went wrong that day, went right for me, because I am here and I am here literally by the skin of my teeth, so to speak. It was the decisions made by a few that changed the course of my life and/or possible death that day'.<sup>37</sup>*

#### *Tavistock Square*

- 3.48 The first ambulance arrived on the scene at Tavistock Square at 9.57 am, having come across the explosion (as opposed to having been specifically despatched there). There is little detail available of the response in the following hour, because the information was not recorded. However, it is known that there was a shortage of fluids, reported at 10.27 am, despite the fact that eight casualties with serious amputations had been reported 22 minutes earlier. It was not until 11.31 am that the tactical, or 'Silver', officer at Tavistock Square reported that they had enough vehicles. It turned out that this was the result of ambulances destined for Russell Square being directed to the same muster point as those despatched to Tavistock Square. At 12 noon, the London Ambulance Service manager at the scene reported that the remainder of the casualties still needed to go to hospital.

#### *London Ambulance Service response - findings*

- 3.49 **Even allowing for the difficult circumstances that prevailed on 7 July, those on the front line were let down to varying degrees by a significant breakdown of communications within the London Ambulance Service. London Ambulance**

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<sup>37</sup> Transcript of interview with Gill, 13 April 2006, Volume 3, page 151

service personnel at the Tube stations and at Tavistock Square were unable to communicate with the control room. Their requests for further ambulances, supplies and equipment did not get through. They did not know what was happening at the other incidents. They could not receive instructions as to which hospitals were still receiving patients. This breakdown in communications led to a failure to deploy the right numbers of ambulances to the right locations; a lack of necessary equipment and supplies at the scenes; delays in getting some of the injured to hospital; and a failure to manage strategically the despatch of ambulances from the scenes to hospitals around the city.

- 3.50 The impact of the inadequate deployment of ambulances to Russell Square was likely to have been on the speed with which the less severely injured were taken to hospital. It probably did not delay the rescue of the severely and life-threateningly injured, who were cared for at the scene by London Ambulance Service staff and volunteers from nearby hospitals.
- 3.51 We welcome the steps the London Ambulance Service is taking to address the problems it experienced with its radio systems on 7 July.
- 3.52 The experience of 7 July showed the London Ambulance Service's lack of capacity to deliver equipment and supplies to the scenes of major incidents at multiple sites. As a result of this, there was a lack of basic equipment, such as stretchers and triage cards, and a lack of essential supplies, such as fluids, at the affected Tube stations and at Tavistock Square. We welcome the London Ambulance Service's acknowledgement of this problem, and its statement of intent to address it.
- 3.53 There was a general failure to maintain records of the response of the emergency services on 7 July. It is understandable that emergency services personnel will be inclined to attend to the urgent and immediate priorities of rescuing the injured, but it is important that records are kept so that lessons can be learnt from the response. It may also be important from the point of view of any investigation or inquiry following a major incident.
- 3.54 There is a perception among some survivors that emergency services personnel were prevented from entering the tunnels to rescue the injured. We have not been able to establish the extent to which this happened, or why it may have happened, because of the lack of records of the response.

*Recommendations 17 to 20*

**We request that the London Ambulance Service provide us with an update on progress in reviewing and improving its communications systems in time for our follow-up review in November 2006.**

**We request that the London Ambulance Service provide us with details of its plans to increase its capacity to deliver supplies and equipment to the sites of major incidents in time for our follow-up review in November 2006.**

**We recommend that the London Ambulance Service and London Underground review the potential for storing rescue and medical equipment at stations. We request that they report back to us by November 2006 telling us what progress has been made in conducting this review, and what options are under consideration.**

**We recommend that the London Emergency Services Liaison Panel review its emergency plans with a view to identifying a lead agency for maintaining accurate records of the response to major incidents. At each scene, there should be a nominated individual who is responsible for carrying out this task.**

### **Notification of hospitals in the vicinity of the incidents**

- 3.55 Emergency plans provide for an even distribution of casualties among major accident and emergency departments at London's acute hospitals. When a major or catastrophic incident takes place, designated receiving hospitals are placed on alert, and will increase their state of readiness to receive casualties on the basis of information that becomes available during the day about numbers of casualties and the nature of their injuries.
- 3.56 The NHS in London managed to clear 1,200 hospital beds within three hours, ready to receive casualties.<sup>38</sup> This is a remarkable achievement and is clearly an aspect of the emergency plans that worked well.
- 3.57 Not all hospitals close to the scenes of the explosions were formally notified of the incidents. Specialist and non-acute hospitals were not apparently alerted to the incidents. For example, Great Ormond Street was not alerted, despite its close proximity to Russell Square Tube station. Judith Ellis, Chief Nurse at Great Ormond Street, told us how staff there had found out about the incident at nearby Russell Square station:

*'We are not one of the 11 acute hospitals. We are not informed of any incident. For us, the communication problem was particularly important. We did not have any, apart from people hammering on the back door and asking for help. We*

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<sup>38</sup> Transcript of Committee meeting, 11 January 2006, Volume 2, page 130



*are next to Russell Square, so that was coming from the ambulances who were at the scene. We were asked for equipment ... We were not told of anything that was going on until we found our nurses' homes had been sealed in the police activity and I could not get staff in or out. We were not told because it was not an NHS incident so they felt that we did not need to know. Knowing the London picture is vital to the whole NHS.*<sup>39</sup>

- 3.58 Communications between Great Ormond Street and Russell Square station were non-existent, so medical students acted as runners between the two.
- 3.59 **Staff from Great Ormond Street Hospital played a crucial role in the rescue and treatment of the injured at Russell Square, even setting up a field hospital. It is reasonable to anticipate that staff from hospitals close to a major incident will be likely to volunteer their assistance. On 7 July, Great Ormond Street Hospital was not notified of the incident at Russell Square, and only found out about it when paramedics arrived asking for equipment and assistance. The lesson to be learnt from this is that hospitals in the vicinity of a major incident need to know about it as soon as possible, and would benefit from guidance as to how to respond.**

*Recommendation 21*

**We recommend that emergency plans be amended to provide for the notification of all hospitals in the vicinity of a major incident, even if they are not designated hospitals with major accident and emergency departments.**

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<sup>39</sup> Transcript of Committee meeting, 11 January 2006, Volume 2, page 125





**The first hour – the uninjured and walking wounded** **4**

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## The first hour – the uninjured and walking wounded

### Communication from people in authority within the first 15 minutes

*'I think simple communication and direction for people to get out was the order of the day – as quickly as possible to safety. Like good people, we sat waiting; we had no idea'*

Michael, survivor of the Aldgate explosion<sup>40</sup>

*'Information is essential when in shock people freeze and can't make rational decisions, people need to know what to do, even if it is to remain on the train and wait'*

Steve, survivor of the King's Cross/Russell Square explosion<sup>41</sup>

- 4.1 Survivors of the Tube explosions told us of the crucial importance of communication with an authority figure of some sort within the first 15 minutes after the explosion. Those who did receive some form of instruction as to what to do told us of the immense reassurance and relief this provided. Those who received no such instruction or information told us of their fear that perhaps nobody knew they were there, that there might be a fire, that they might be breathing in poisonous fumes, and spoke of their uncertainty about what to do. Passengers in carriages away from the explosion did not know what had happened, had no means of raising the alarm, and were left to speculate and wait for help to arrive.
- 4.2 George was standing approximately a metre away from the bomb in the King's Cross/Russell Square train. He told us of his immense relief when he heard a voice of authority instructing those who could get to the front of the train to do so to disembark through the driver's cab.

*'Then, somebody said, in a very commanding voice, "Right, the driver has said..." When he mentioned this word "driver" my spirits were lifted, because up to that point I thought I was a goner anyway. I thought we had hit another train. If we hit another train, he is dead; he is finished. We no longer have guards, so we have no guard, no driver, you're stuck down in the tunnel, you have this black smoke pouring in, what do you do? When this guy said "The driver said", I thought, "The driver is alive".<sup>42</sup>*

- 4.3 Ian was seriously injured in the King's Cross/Russell Square train. He was thrown into the carriage doors, which were blown out by the blast into the walls of the tunnel, where he hit electric cables. He suffered severe burns to his chest and legs, severe

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<sup>40</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 22

<sup>41</sup> Written submission from Steve, Volume 3, p. 228

<sup>42</sup> Transcript of interview with George, 11 April 2006, Volume 3, page 128

bruising to his chest, damage to his ears and a fracture in his foot. He came round from unconsciousness and heard the voice of the driver of the train, who rather than leave the train had decided to stay and help survivors. Ian spoke of the crucial reassurance that was provided by the driver, who instructed him to leave the train and make his way down the tunnel to Russell Square station.

*'What you actually look for in these circumstances is someone who can tell you what to do; even if it is a basic "Stay here" or "Move there", you just need guidance because you are a bit all over the place, as you can imagine. Having worked my way over to [the driver of the train], he said, "Walk down the track to Russell Square". I can't really overestimate the importance of someone being there because you don't know what to do. Logically, say if you were hit today, you would think, "Well, obviously you would walk down the track", but whether you would have actually done that without someone actually telling you to do it, I'm not sure. I was always quite grateful to the Tube driver'.<sup>43</sup>*

- 4.4 For those outside the first carriage of the King's Cross/Russell Square train, help did not arrive for 25 minutes to half an hour after the train was plunged into darkness. Jane was in the third carriage of the Piccadilly line train between King's Cross and Russell Square. She described to us the first minutes after the explosion:

*'In the darkness, people spoke to each other trying to work out what was going on. The thick smoke and soot meant that there was a fear of fire or maybe chemicals. People reassured each other; we tried to pass messages to the front and back of the Tube to try to work out what was going on. We did not know how long we were going to be down there; we did not know if anyone knew we were there. We kept on hoping and listening that someone was getting in contact with us and going to find us'.<sup>44</sup>*

- 4.5 Kristina was in the sixth carriage on the Piccadilly Line train. She told us of her half-hour wait for communication from anyone official:

*'There was no communication from anyone – no assistance. We were stuck there; people took charge and tried to keep everyone calm. We had no idea what had happened, being on the last carriage, no idea how we were going to get out, no idea if we could get out or if anyone knew we were there or were going to come and get us ... we were stuck there, for us, for about half an hour, not knowing if we were going to live or die, if someone was going to come and get us or not'.<sup>45</sup>*

- 4.6 Kirsty told us how some passengers, in the absence of any information or instruction, had attempted to open the doors, but despite the efforts of six men they were unable to open them:

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<sup>43</sup> Transcript of interview with Ian, 13 April 2006, Volume 3, page 177

<sup>44</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 24

<sup>45</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 47

*'They had tried to open the doors, but the doors only opened about a foot; they had three men on each side, and there was absolutely no way of getting them any further open. One man actually wedged his shoulder in between the doors, and cut himself quite badly in the process just to keep the doors open'.<sup>46</sup>*

- 4.7 Passengers managed to break the glass in the window of the door, only to discover that the wall was only 10cm away so there was no way of disembarking the train through the doors into the tunnel. People were panicking about the possibility of there being a fire. Some people wanted to disembark the train via the back door of the carriage, but others were afraid that the tracks would still be live and therefore wanted to stay in the train. For half an hour, passengers awaited instructions and assistance. After half an hour, two police officers arrived and led an evacuation back along the track to King's Cross. The arrival of those two police officers was the first communication with passengers outside the first carriage.
- 4.8 Michael, who survived the Aldgate explosion, suggested that it might have been possible for someone to use a loudhailer from the platform to communicate with passengers on the train and instruct them to evacuate. Beverli also said she had expected to see more use of loudhailers at the station.<sup>47</sup> Tim, a survivor of the Edgware Road bomb who comforted the wounded in the carriage whilst waiting for help to arrive, said, *'I do feel that the Tube drivers need a more robust system of communication that works deep underground and is not reliant on wires at all. This could also be patched into a tannoy-type system to announce where the help will come from and that, indeed, it will come. Mental reassurance cannot be understated'.<sup>48</sup>*
- 4.9 **In the minutes following the explosions on the Tube, passengers outside the affected carriages did not know what had happened, whether they were in danger, or what they should do. Those who thought about evacuating the train via the doors did not know whether or not the current was still turned on. Passengers were afraid that the smoke would be followed by fire. They did not know whether anyone knew they were there or if help was on its way. Communication from an official source is essential under these circumstances, to provide reassurance and evacuation instructions, and to protect the safety of the passengers trapped underground.**

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<sup>46</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 29

<sup>47</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 35

<sup>48</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 10

*Recommendations 22 and 23*

**We recommend that London's emergency plans be revised to include an explicit provision for communication with people affected by a major incident as soon as possible after the arrival of emergency or transport service personnel at the scene.**

**We recommend that Transport for London review the communications systems that are in place to enable station staff and/or the emergency services to communicate with passengers on trains that are trapped in tunnels. We request that Transport for London provide us with a report on how it plans to take forward this work, in time for our follow-up review in November 2006.**

### **Emergency lighting**

*'I couldn't see. I had never experienced anything like that before. I can't talk for other carriages but, in the first carriage, you could see nothing. Then somebody said, "Has anybody got a torch?" I thought, "That is fair enough". He said, "Get your mobile". What is the point of getting a mobile phone out? Then, apparently, the modern phone, if you open them up, they have quite a bright light. All you see is a beam about half an inch in diameter. You couldn't see the hand that was holding that light; you couldn't see the arm; you certainly couldn't see the person that was holding it. They soon put them away, because it wasn't having any effect at all'*

George, survivor of the King's Cross/Russell Square explosion

- 4.10 The internal lights went out, and emergency lighting systems were disabled by the explosions, so passengers in the affected carriages were plunged into total darkness. This meant that passengers could not see their way out of the carriages, and it was difficult to provide first aid in the immediate aftermath of the explosions.
- 4.11 Transport for London has told us that lighting worked well in the other carriages, but that emergency lighting in the carriages where the bombs were detonated was taken out by the blast. We understand that Transport for London is conducting research into alternative forms of emergency lighting, which would have an individual power supply rather than relying on wiring between the carriages. It has been suggested to us by survivors that drivers could carry torches in their cabs for use in the event of a malfunction in emergency lighting.

*Recommendation 24*

**We recommend that Transport for London conduct a feasibility study on alternative forms of emergency lighting for new/refurbished rolling stock, and report back to us by May 2007.**

**We recommend that Transport for London review the potential for providing torches in drivers' cabs for use in the event of loss of lighting and failure of emergency lights.**

*First aid equipment*

- 4.12 Given the delay before the arrival of emergency services at the scene of the explosions on the Tube, passengers told us of their frustration at the lack of availability of basic first aid kits on trains. Ben was in the train that stopped adjacent to the bombed train at Edgware Road. He told us, '*The driver of the train from Paddington passed through our carriage at this point checking to see if anyone was injured. I asked him if he could open the first-aid box, as we needed to get bandages etc into the second train. He told me that he did not have the key; he also said that the box would be empty anyway.*'<sup>49</sup>
- 4.13 Gill, a survivor from King's Cross/Russell Square, pointed out that there were many potential situations where basic first aid supplies would be useful on Tube trains. Ben recommended that there should be first-aid kits on public transport (not only on the Tube), and that, '*where there is provision for the kit to be available, it should actually be stocked.*'<sup>50</sup>
- 4.14 First aid kits are currently provided at every Tube station, in the supervisor's office. We understand that space considerations have made it difficult to carry first aid on all trains. Usually, if someone on a train is taken ill, the train stops at the next station where first aid can be administered.
- 4.15 We understand that London Underground is carrying out an emergency equipment review covering all its stations and trains to determine what changes in emergency equipment provision might be necessary following last July's events. This should include consideration of whether it is practicable to provide first aid and other emergency equipment on stations. An alternative, or additional, measure might be to introduce mobile facilities that can rapidly deploy the necessary equipment to affected sites. This could be organised by Transport for London jointly with the London Ambulance Service and other emergency services.

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<sup>49</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 9

<sup>50</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 11



*Recommendations 25 and 26*

**Transport for London/London Underground should produce a plan for provision of basic first aid kits on trains and at stations, in time for the 2007/08 budget-setting process.**

**Transport for London should also consider whether it would be practicable to carry basic first aid kits on buses, and Network Rail operators should produce plans for provision of first-aid kits for public use (and for use by qualified first-aiders) at mainline railway stations and on trains. We recommend that Transport for London and Network Rail report back to us on this issue by November 2006.**

**Blocked doors**

- 4.16 Passengers were unable to disembark because they were could not open the carriage doors. Ben, who was in the train that stopped alongside the bombed Edgware Road train, gave the following description of the scene as passengers attempted to open the doors of his train:

*'A man appeared at our carriage door from the bombed train, into the door that had been facing the tunnel. He had been standing in the bombed carriage; the door of his carriage had been blown off, and he was trying to force open the doors to get into our train. He was shouting for help. He was yelling and, I think that is because of the blast, he could not hear. His clothes were ripped and he was bleeding heavily. He looked like the victim of a bomb blast. It was then that we all realised that something terrible had happened. The man managed to get his hands through the rubber seal running down the centre of the door, and three of us went forward to try to open it. I do not know if it is due to the design of the train, or whether our train became buckled, but we could not force the door open more than three, maybe four, inches. It was enough for him to get his hand round; again, we could see that he was bleeding heavily.'*<sup>51</sup>

- 4.17 Michael, who survived the Aldgate bombing, told a similar story:

*'The girl who had taken charge, and another girl, tried to open the sliding doors. We saw one of the drivers, the orange glow of his coat, from outside come to the door. They could not part the doors more than a few inches. I thought I was really badly injured at the time; I did not realise how lucky I was. I shouted at three big guys standing opposite to help them, but they were looking back in*

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<sup>51</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 9

*such total shock that they could not have helped anyone. The doors would not budge. We then started to feel trapped and worried about fire.*<sup>52</sup>

- 4.18 The doors on most London Underground rolling stock are not designed to be opened by passengers. There are facilities to open selected doors via internal and external door locks in an emergency when all electrical and air supplies are lost. These may be used by London Underground staff to facilitate a controlled train evacuation. The principal method of evacuation on London Underground rolling stock is via the train ends and then onto a station platform, onto an assisting train or along the track - all these methods will usually be co-ordinated by London Underground staff. When trains stop in tunnels there is physically not enough room to escape (except onto platforms). Passengers evacuating by side doors could potentially put themselves at more risk as there is the danger of electrocution or being hit by an oncoming train. For these reasons, London Underground does not have any plans to enable passengers to open carriage doors in the event of power loss.
- 4.19 Passengers on the affected trains on 7 July did not know what to do. Some people began getting off the trains through blown-out doors. Others tried to open carriage doors but were unsuccessful. Others began to leave via the back doors of the trains. For those who were in carriages where the emergency lights were working, it might have been useful if there had been safety or evacuation instructions displayed inside the carriages, such as are displayed on overground trains.
- 4.20 Steve, who was in the second carriage of the King's Cross/Russell Square train, recommended that clearer emergency information should be displayed inside Tube train carriages. He wrote, '*If it was there I didn't see it, it needs to be clearer. Bear in mind the train was so busy and dark it was impossible to see the sides of the train for any "what to do in an emergency" signage. Possibly illuminated signs, or a pre-recorded audio instruction to get around the problem of the dark.*'<sup>53</sup>
- 4.21 **Passengers need to know what to do in the event of an emergency on a Tube train. They need to know, for example, that evacuations will normally be carried out through the end of the train rather than carriage doors. This was not clear to passengers trapped in the bombed Underground trains on 7 July.**


*Recommendation 27*

**We recommend that Transport for London install clearly visible safety notices inside the carriages on all Tube trains, instructing passengers what to do in case of emergency. We request that Transport for London provide us with a plan, by November 2006, showing the timescale for the installation of safety notices in all carriages on Tube trains.**

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<sup>52</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 20

<sup>53</sup> Written submission from Steve, Volume 228



**The First Hour** - reception of uninjured and walking wounded people

**5**

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## Reception of uninjured and walking wounded people

*'People required direction; they just did not know where to go. Lots of people from King's Cross had just walked off and left the scene. I know that is the same from Tavistock Square, because we know from reports that the bus driver walked off and ended up in hospital. There was nobody there to say, "This is where you are going. This is what you need to do". Taking control and offering direction is very, very important'*

Paul, Edgware Road<sup>54</sup>

*'What we needed at that time was somebody to come and take control of the outside of the station, and also to help look after the people inside the station'*

Rachel, King's Cross/Russell Square<sup>55</sup>

- 5.1 The first passengers to emerge from the tunnels were either uninjured or had suffered only minor injuries. They were passengers who had either disembarked the train of their own accord or had been evacuated by an Underground or emergency services officer. At the Russell Square end of train 311, the evacuation was led by one of the two drivers. At the other end of the train, two police officers arrived after approximately half an hour and led passengers to the platform at King's Cross station. At Aldgate, some passengers got off the train by themselves and walked to Liverpool Street or Aldgate station. Others waited for instructions from someone in authority. At Tavistock Square, many of those who were uninjured or apparently not seriously injured simply left the scene. These included the driver of the bus, who walked all the way home on his own having left the scene in an understandable state of shock.
- 5.2 In any major or catastrophic incident, it is likely that there will be uninjured people and people with minor injuries, and that they will be among the first people to leave the scene of the incident. The London Emergency Service Procedure Manual includes the following guidance on how uninjured people should be managed after being removed from hazard. It clearly states that they should be corralled to a survivor reception centre to collect their details and to be triaged by the London Ambulance Service:

*'[Uninjured] people will have been involved in the incident, but will not necessarily want or require medical attention. They must be removed from the hazard by the London Fire Brigade. Once these people have been removed from any hazards, and processed through a triage sieve by the London Ambulance Service they must be handed over to the Police for collation of details and witness statements.'*

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<sup>54</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 57

<sup>55</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 60

*'They will all be witnesses, however, and the Police will need to collate their details for the benefit of the Casualty Bureau as well as the Senior Investigating Officer. This can be done at a suitable premises nearby, called the survivor reception centre'.<sup>56</sup>*

### **What uninjured and walking wounded survivors need**

- 5.3 People who are able to walk away from a major incident may not require urgent and immediate medical attention. Emergency services personnel at the scenes will instinctively, and quite rightly, focus their immediate attention on those who are trapped and/or severely injured. That is why it is important that there are systems in place to meet the needs of those who are less seriously injured, or uninjured.
- 5.4 The London Emergency Services Procedure Manual contains some guidance on the needs of survivors of major incidents who are not seriously injured. The non-statutory guidance to the Civil Contingencies Act, which is now in force but was not on 7 July, includes further details. On the basis of these documents, and our discussions with survivors of the 7 July attacks, we consider that uninjured and walking wounded need the following things immediately after leaving the scene of the incident:
- a. first aid / triage
  - b. information about what has happened
  - c. advice about what to do
  - d. assistance in contacting their loved ones
  - e. support in their distress
  - f. assistance and advice to help them to get home safely
  - g. information about where to go for support in the days and weeks following the incident
  - h. to give their details to the Police
- 5.5 The best way to cater for these needs is to establish a survivor reception area somewhere close to the site of the incident. The London Emergency Services Procedure Manual stipulates that this will be done in the first instance by the emergency services, and that the relevant local authority or authorities will take over once they have established venues. **We have found that there was no systematic establishment of survivor reception areas on 7 July. As a result, many survivors simply left the scenes of the explosions, without having given their personal details to anyone or received any advice or support.**
- 5.6 Local authorities have plans in place for the establishment of casualty reception centres in the event of a major incident. Westminster prepared the Porchester Centre, and Tower Hamlets mobilised three local schools for potential use as survivor reception centres, but they were apparently not used in any systematic way, if at all (20 or so people were sent to a Tower Hamlets school, but none were sent to the Porchester Centre), possibly because emergency services at the scene did not know about them.

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<sup>56</sup> London Emergency Services Procedure Manual, para 9.2, page 34

- 5.7 At Russell Square, volunteers from Great Ormond Street Hospital set up a 'field hospital' in a nearby hotel, but this seems to have been used primarily for the injured, rather than to receive the walking wounded and uninjured or those without physical injuries. At King's Cross, some survivors were held in the ticket hall of the station before being taken to hospital by bus, but there was precious little in the way of advice, first aid, or support for those waiting there. At Tavistock Square, again local businesses were used to hold the injured whilst they awaited ambulances to take them to hospital. But many others simply left the scene and walked home.
- 5.8 At Edgware Road, a reception centre for the walking wounded was set up by a passer-by, Paul. Paul came to our meeting on 23 March 2006 and told us about his experiences. He described how he saw people coming out of the station and decided to set up what he called a casualty rendezvous point in a nearby Marks and Spencer store. There were 150 people inside the store after an hour. Paul, a former firefighter, assessed people's injuries and assigned them an initial priority category for treatment. His initiative is quite remarkable and commendable. But clearly it should not be left to a passer-by to establish a key element of the response to a major incident. Paul's actions raise the question of why none of the emergency services at the scenes set up similar reception areas for survivors.
- 5.9 Ben, who was on the train adjacent to the bombed Edgware Road train, told us that upon leaving the station, he approached a police officer and asked him what he should do:

*'I then carried on up the stairs at Edgware Road and found myself outside the station. There was quite a lot of confusion above ground. There were several police cars, ambulances, blocking off the road. I walked up to the cordon and asked a policeman what I should do. He advised me to go home. I then asked him if I needed to leave my name and address and my details. I also asked him if we needed to be tested to see if the smoke we had been breathing in may have some sort of chemical poison etc. He told me to go home and watch the news to find out'.<sup>57</sup>*

- 5.10 At Russell Square, passengers from the first carriage of train 311 began arriving in the station about 20 minutes after the explosion, having been led to the platform there by one of the two train drivers who had been in the driver's cab at the time. About 30 to 35 people walked out of the train, via the driver's cab, to Russell Square station. Rachel told us of her experience on arriving at Russell Square:

*'I was surprised when I got to Russell Square to find there were scenes of chaos. There was a member of the Tube staff handing out water that he had requisitioned from the store outside, but there were still commuters trying to get into the station at this time. I went and stood outside the station and I tried to*

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<sup>57</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 10

*prevent commuters coming into the station ... There were no ambulances; there were no doctors'.<sup>58</sup>*

- 5.11 Amy, who was in the fourth carriage of the King's Cross/Russell Square train, left King's Cross station accompanied by another passenger. Amy told us, '*we came out across the road, where Burger King is. There was no-one there – no police or anything. Obviously we heard the sirens. There was, at that point, I think, tape being taped across the road going into King's Cross. Then the lady just left me and I was standing there all by myself.*'<sup>59</sup>
- 5.12 Steve suggested that, '*A member of staff or police should prevent people from leaving the station. I was able to walk onto the street covered in blood and a head injury, public told me to go back. Two of my friends were able to leave the station without giving details, even though they were as close as me to the bomb, they could have information that was essential to the investigation which would be lost.*'<sup>60</sup>
- 5.13 M was on the bus in front of the Number 30 at Tavistock Square. He saw the explosion at close quarters and was deeply traumatised by the experience. He described the scene in the minutes following the explosion:

*'I remember coming around the front of the bus that I was on to the other side of the road because I thought I must get away from this. I don't remember a huge amount of what happened after that, other than I know there were a lot of people leaving the Square very quickly. No one seemed to know where they were going or what was going on'.<sup>61</sup>*

- 5.14 There is an understandable tendency on the part of emergency services personnel to tend to the most urgent task at the scene, which is the rescue and treatment of the seriously injured. That is why it is important for people to be at the scene whose job is to conduct the less immediately urgent but nevertheless crucially important tasks, such as triaging the less seriously injured and collecting the details of everyone involved. The problem may stem from the fact that the London Emergency Services Procedure Manual does not identify who will be responsible for the establishment of a survivor reception area, where survivors can be assessed by paramedics, and where their details can be collected and, if necessary, they can be 'tagged' – their names attached to them so that they can be identified easily on arrival at hospital if they lose consciousness. It may also arise partly from the fact that London Underground does not have any predetermined reception areas for people evacuated from stations – the shops and hotels close to the stations affected by the 7 July attacks had not been involved in any discussions prior to 7 July about the possibility of their facilities and premises being used in this way.

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<sup>58</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 52

<sup>59</sup> Transcript of interview with Amy, 18 April 2006, Volume 3, page 94

<sup>60</sup> Written submission from Steve, Volume 3, page 229

<sup>61</sup> Transcript of interview with M, 18 April 2006, Volume 3, page 210

*Recommendations 28 to 30*

**We recommend that the London Resilience Forum identify a lead agency for the establishment of survivor reception centres at the sites of major incidents in the initial stages before handover to local authorities. We believe this task would most appropriately fall to the Metropolitan Police Service, which is already responsible for the collection of personal details of survivors.**

**We invite the London Resilience Forum to report back to us in November 2006 to tell us which agency will take the lead, and what plans have been put in place to ensure that survivor reception centres are set up close to the scene of any major incident in future.**

**We recommend that London Underground Limited, train operating companies and Transport for London identify, in consultation with local authorities and the emergency services, at least two potential survivor reception centres close to Tube stations, overground rail stations and major bus stations in central London. They should then liaise with the owners/occupiers of those sites and involve them in emergency planning processes and exercises.**

- 5.15 Because survivors were not directed to a reception area, many of them walked away without their details having been collected. The collection of names and contact details of the uninjured and walking wounded is crucial for a number of reasons:
- a. In the days, weeks and months that follow the incident, survivors will have ongoing needs in terms of information, advice and support. It may be necessary for authorities to contact them for medical follow-up. It may be discovered after the event that they are at risk of health problems, for example resulting from the inhalation of noxious substances. It will then be necessary to inform them of these risks and offer medical follow-up and assistance.
  - b. The police and other services will need to contact them to provide information about the services that are available to them.
  - c. They are potential witnesses to the subsequent police investigation.
  - d. Friends and relatives of survivors will be trying to find out where they are, and if they are not able to get in touch directly they are likely to contact the Casualty Bureau and possibly arrive at the scenes or at receiving hospitals. The Casualty Bureau needs their details to marry them up with reports of people potentially involved in the incident.
  - e. The police may need to contact them to return personal belongings left at the scene of the incident.
  - f. Survivors themselves will want information in the following days about what has happened, whether there are any health risks they need to be aware of



(including post-traumatic stress disorder,<sup>62</sup> as well as other physical health risks relating, for example, to inhalation of noxious substances), and what assistance is available should they require it.

5.16 We heard from a number of survivors who told us that their details were not collected on 7 July. Jonathan was in the carriage next to the bombed carriage at Aldgate. He wrote to us, *'I was surprised that the Police did not do more to take names and addresses of those involved. They advised people to stay but most people, particularly those not directly affected by the blast, left Aldgate soon after exiting the station. The trauma of what they had experienced probably manifested itself later on, several days on in my case, yet they would have had no contact from the Police or other organisations to see how they were doing'*.<sup>63</sup>

5.17 Kirsty was evacuated from the sixth carriage of train 311, through the tunnel to King's Cross station. Having arrived in King's Cross station, she found herself on the pavement outside. Kirsty told us:

*'There was a lot of police standing around. I think by this stage the road had even been closed. I have to say that nobody approached me once, and spoke to me. Everyone was clearly in shock; everyone was covered in soot, with black faces; some people were very distressed. There was not really a very proactive effort by the officers to come and approach people, see if people were alright, let alone take anybody's details. I eventually, because it just felt like the right thing to do, went and forced myself upon an officer and gave him my details. At the time, it was really only because I thought, 'well, I have no idea what has happened here and, if someone has my details, maybe when they find out something someone might tell me'. Still nobody knew what had happened'*.<sup>64</sup>

5.18 The NHS London Development Centre estimates that around 4,000 people were directly caught up in the 7 July attacks. This is based on police intelligence accounting for the numbers of commuters, witnesses, and people injured and those on duty responding to the events. The failure to collect contact details of survivors is perhaps reflected in the numbers of 'victim statements' taken by the Metropolitan Police in relation to each scene:

Aldgate	203
Edgware Road	187
King's Cross/Russell Square	175
Tavistock Square	381

5.19 **A total of 946 injured people have given statements to the police - less than a quarter of the number of people who are estimated to have been directly caught up in the attacks.**

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<sup>62</sup> Information about post-traumatic stress disorder can be found in the written submission from the NHS London Development Centre – see Volume 2, page 245

<sup>63</sup> Written submission from Jonathan, Volume 3, page 239

<sup>64</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 29

- 5.20 **In the absence of an individual charged with the responsibility of collecting details of survivors at the scenes, it seems that the collection of contact details of survivors of the 7 July attacks was carried out in an unco-ordinated, piecemeal fashion, where it was carried out at all.**
- 5.21 **It is understandable that the immediate priority for the emergency services personnel working at the scene is to tend to the most seriously injured. Nevertheless, the failure to collect and collate the details of those who walked away from the trains and bus had significant implications for the care of survivors in the weeks and months that followed 7 July. It will no doubt have hampered the efforts of those at the Casualty Bureau to establish who was involved in the incidents. It may also have had implications for the police investigation that followed 7 July.**
- 5.22 Given the numbers of people involved, and the difficulty of containing and directing survivors in the early stages of a complex emergency, some survivors will inevitably leave the scene without having any contact with the emergency services. For those people, communications via the media and other channels through the rest of the day and the following weeks is crucial, to advise people who were involved to contact the police and make them aware of the support services that are available. We discuss this further in Section 9.
- 5.23 In addition to the failure systematically to collect the details of people who were uninjured or suffered relatively minor injuries, there were some failings in the systems for tracking injured patients once they had been taken away to hospital.
- 5.24 Carol, who was severely injured in the King's Cross/Russell Square explosion, was conscious when a doctor came into the bombed carriage. She gave him her name. She was then carried on a blanket out of the carriage, and along the tunnel. At Russell Square, Carol saw a doctor she knew, who recognised her and called her name. She then repeatedly stated to a police officer, '*I'm Carol, I am asthmatic*'. Whilst at Russell Square station, Carol fell unconscious, and did not regain consciousness until after she had undergone emergency surgery at University College London Hospital. Despite having given her name, and been recognised at Russell Square by a doctor she knew personally, Carol's name was not known at the hospital – she was recorded as 'unknown female':

*'My name didn't get through. Although my work hospital knew that I was there, my family didn't. My boyfriend trawled the streets and all through the hospitals trying to find me, and then did it again, and couldn't find me ... They didn't find me until about eleven o'clock at night. By that point, I think they thought I was dead'.<sup>65</sup>*

- 5.25 Carol went on to explain the potential significance of this failure from the point of view of her family. '*The point was I was resuscitated at the Tube station and then I was*

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<sup>65</sup> Transcript of interview with Carol, Volume 3, page 111

*taken to hospital, but I could have died in hospital three hours later, and in that three hours, my family could have been informed and they could have been there by then. Maybe not, but it would have been, "We have a Carol who is x age" or whatever, so it would have been quicker to find me'.<sup>66</sup>*

- 5.26 When Kathy was taken from the bombed carriage at Edgware Road, she gave her name to a London Underground engineer, who called her husband from a payphone at the station to tell him that she had been injured, and which hospital she was likely to be sent to. In giving her name, Kathy spelt it clearly as it is an unusual surname. By the time Kathy arrived at hospital, she was finding it difficult to speak because she had a collapsed lung. Kathy's husband arrived at the hospital and began to look for his wife's name. He could not find it, because her name had been lost somewhere between the station and the hospital. As a result, Kathy's husband waited for around two hours before finally recognising a name on a list that bore a slight resemblance to theirs. Kathy said, '*It was very frustrating for my husband and for me that there was this long delay when I was in the same building just a few floors above but he couldn't track me down because of this problem of losing my name. The engineer had gone to quite a lot of trouble to try to find what my name was, and I had tried very hard to get the spelling across'.<sup>67</sup>*
- 5.27 Lynne wrote to tell us about the difficulties she encountered in tracing her son's partner Sammy. Lynne's son and his partner were both killed by the King's Cross/Russell Square explosion. Sammy was conscious when she was rescued, and gave her name to her rescuer before she died at Russell Square station. Lynne called around the London hospitals during the day trying to find Sammy. One hospital told her that Sammy was there, and then called back to say there had been a mistake. It was nine days before Sammy's body was formally identified. Lynne raised the question, why was Sammy's name not passed on to the hospital on 7 July so that she could have been identified sooner and this mistake avoided?
- 5.28 **The London Ambulance Service has itself acknowledged that there was inadequate tracking of injured patients on 7 July. This problem causes unnecessary distress to the injured and their loved ones, and can result delays of several hours, and in some cases days, before families are notified of the whereabouts of their missing relative or loved one.**

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<sup>66</sup> Transcript of interview with Carol, Volume 3, page 120

<sup>67</sup> Transcript of interview with Kathy, Volume 3, page 79

*Recommendations 31 to 33*

**We recommend that the Metropolitan Police Service establish protocols for ensuring that personal details are collected from survivors at the scene of a major incident. We request that the Metropolitan Police Service report back to us on what action it has taken by November 2006.**

**We recommend that the London Ambulance Service review its mechanisms for finding out and recording the identity of seriously injured patients who are able to give their names and any other details at the scene of a major incident. We request that the London Ambulance Service come forward with possible solutions in time for our follow-up review in November 2006.**

**We recommend that the London Resilience Forum coordinate a review across the emergency services of protocols for identifying survivors of major incidents and ensuring that their names, once taken, are passed on to the Casualty Bureau and receiving hospitals.**



**The First Hour** – communication with wider public **6**

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## The first hour – communication with the wider public

### Communication with the public via the media

- 6.1 In the first hour following a major incident, members of the public need basic information about what has happened, and advice about what they should do. The overwhelming majority of people will turn to the radio, television, or internet. That is the basis for the standard advice to 'go in, stay in, tune in', published by the Government in its generic advice to the public on emergency preparedness. Given that the broadcast and internet media are and always will be the primary conduit of advice to the public during or following a major incident, it is absolutely essential that they are (a) involved in emergency planning, and (b) provided with accurate, up-to-date advice and information to pass on to the public as soon as possible.
- 6.2 We invited news editors from the main media outlets in the UK to a meeting on 11 January 2006 to discuss the lessons to be learnt from their point of view. They were very clear in their perception of their public service role following a major or catastrophic incident. For example, Jim Buchanan, UK Intake Editor for the BBC, said, *'we rapidly launch into the public service role to keep everyone informed of what is happening. We need to inform people of what they can and cannot do. That is why when Sir Ian Blair gave his statement it was given immediate prominence. There is a very important role: to help those affected to know what they should be doing'*.<sup>68</sup>
- 6.3 Mike MacFarlane, from BBC London, explained that the local BBC radio service has a specific role in providing civil emergency broadcasting. He explained, *'It does change the way we operate and the remit of what we do. At the point where it is clear such a situation has occurred, we change our programming immediately. Essentially, most of my colleagues on a story that size do so as well, but we have a specific responsibility to do that'*.<sup>69</sup> Pete Turner, Chair of the London Media Emergency Forum, of Gcap (which owns four London radio stations, including Capital Radio), said, *'we have a responsibility, a tradition, a heritage and a culture to inform our listeners of anything that is going on that is relevant to their lives'*.<sup>70</sup>
- 6.4 The importance of the media's public service broadcasting role is reflected in the involvement of media representatives in emergency planning. This is done through national and regional Media Emergency Forums, which were established following the 11 September 2001 attacks on the World Trade Center. The value of these forums was very apparent on 7 July – a number of issues that had previously been raised in the London forum were managed effectively on 7 July as a result. For example, the plan to establish a Media Centre arose from some work done by the Media Emergency Forum. However, we do have some concerns about the extent to which media representatives

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<sup>68</sup> Transcript of Committee meeting, 11 January 2006, Volume 2, page 134

<sup>69</sup> Transcript of Committee meeting, 11 January 2006, Volume 2, page 134

<sup>70</sup> Transcript of Committee meeting, 11 January 2006, Volume 2, page 135

are treated as an integral part of the response to major incidents, given their importance as the key conduit for advice and information to the public.

- 6.5 Sir Ian Blair, Metropolitan Police Commissioner, made a statement to us about his views on the media's public service broadcasting role during a major or catastrophic incident:

*'I think we have to be quite careful here. The media are not a public service broadcasting operation. That is not how they work; certainly not in London or anywhere else that I am aware of.'*<sup>71</sup>

- 6.6 Ken Livingstone, Mayor of London, echoed this point, stating that:

*'Although on the day I think the media did absolutely the right thing and got the message out, that is on the day, but that is the only time we are on the same side ... Only on the day of the tragedy does the press stand with us; all the rest of the time they are our critics. That is the dynamic tension ... There is that healthy tension.'*<sup>72</sup>

- 6.7 Now, clearly there is some validity in what the Mayor and Metropolitan Police Commissioner are saying: the media will always have a role as critics of those in positions of responsibility. However, we are concerned about the apparent lack of trust shown by the Sir Ian Blair and Ken Livingstone, because this could result in a failure to engage effectively with the media during emergency planning exercises and in the event of a major incident.

- 6.8 If media representatives have not been properly involved in planning for the response, they cannot be expected to know what to do to fulfil effectively their public service role. We note that media representatives were not permitted to take part in Operation Atlantic Blue, which was a desktop exercise involving the UK and the US in testing an emergency scenario. We also note that at the conference that was held at the Guildhall in September 2005 to review the lessons learned from the response to 7 July, speakers repeatedly referred to the need to work effectively with the media, but there were no speakers representing the media, and no media representatives apparently invited to attend the conference to listen and engage in the debate.

- 6.9 **Clearly, there is a balance to be struck when engaging with the media, and it is important to clarify the basis for any engagement in emergency planning. But there is a clear public interest to be served by involving the media as fully as possible in emergency planning processes and exercises.**

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<sup>71</sup> Transcript of Committee meeting, 1 March 2006, Volume 2, page 158

<sup>72</sup> Transcript of Committee meeting, 1 March 2006, Volume 2, page 159

*Recommendation 34*

**We recommend that future resilience exercises include senior representatives from the media as participants rather than simply as observers.**

- 6.10 The authorities should communicate in two ways with the media during the first half-hour following a major incident.
- accurate and timely advisory messages to pass on to the public; and
  - credible factual information about what has happened and what is being done in response.

**Advisory messages**

- 6.11 At 11.15 am, Sir Ian Blair gave a news conference. At this point, the first message of advice was communicated: '*Go in, stay in, tune in*'. The news conference was broadcast live on most media channels, including internet news sites. News editors commented to us that they believed the advice could and should have been transmitted earlier. The guidance issued under the Civil Contingencies Act 2004 suggests that advice should be given within an hour of an incident.<sup>73</sup>
- 6.12 We put this point to Sir Ian Blair. His response was that it would be unreasonable to expect the police to issue advice within two hours of an incident, given the need to collect sufficient accurate information on which to base a public announcement. We do not agree with Sir Ian's assessment. It was known by 9.15 am that there had been explosions on the Tube, and the decision was taken at that point to evacuate the entire Underground network. It is to be expected that within this time period the Police will not be in a position to release detailed *information* about the incidents. However, the Committee can see no reason why it should have taken a further two hours before the Police were ready to issue the generic *advice* to '*go in, stay in, tune in*'.
- 6.13 The Commissioner's role in a major incident was explained to us by Sir Ian Blair.
- 'There are three key roles for police commanders in this matter. First, of course, is the investigator, which was the role performed by Assistant Commissioner Andy Hayman and his team; the 'Gold' for the incident... was performed by Assistant Commissioner Alan Brown; and then there is the running of the rest of London, because while the incident is happening other things are going on in London. Consequently, the role of the Commissioner it seems to me, and it seemed to me at the time, was to ensure that all three of those functions were being enabled to be properly carried out.'*<sup>74</sup>
- 6.14 Sir Ian went on to explain to us that these priorities are his foremost concerns during a major incident, and quite rightly so. Sir Ian told the Committee that, '*frankly, even the*

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<sup>73</sup> Non-Statutory Guidance to the Civil Contingencies Act 2004

<sup>74</sup> Transcript of Committee meeting, 1 March 2006, Volume 2, page 149



*media announcement is secondary to that piece of process that needs to be done*.<sup>75</sup> Given that the Commissioner must fulfill this important role of overseeing the entire service, we do not believe it is necessary for him to act as the spokesperson for the Service as well.

- 6.15 One of the unintended consequences of Sir Ian Blair's decision to act as spokesperson at the 11.15 am news conference was that subsequent news conferences and interviews with less senior officers were not seen to supersede Sir Ian's advice. This had an impact later in the day on the ability of the police to convey a new message through a less senior officer, that it was now safe for people in London to travel home. We discuss this further in Section 8.
- 6.16 **A senior Metropolitan Police Service officer should take the primary responsibility of providing accurate, timely advice and information to the public throughout the day.**

### **Credible factual information**

- 6.17 In communicating information to the media, from the point of view of the Metropolitan Police Service, it is important that the information is accurate. This inevitably results in a delay between the media obtaining information and it being confirmed or denied by the police. In such circumstances, there is a danger that official information that has clearly become inaccurate, or is incomplete or out of date, will lack credibility. News editors told us that on 7 July the credibility of official information came increasingly into question during the first two hours following the explosions. We also received comments from members of the public who shared this view.
- 6.18 News editors told us that their organisations had been aware of the explosions on the Underground within minutes of them taking place. David Taylor, Executive Editor of the Evening Standard, told us that the Evening Standard's Transport Editor had received a call about the Aldgate incident approximately 90 seconds after the explosion, from a contact who had been on the train in front of the affected train. A further contact, with offices above Aldgate station, called shortly afterwards saying there had been a '*huge explosion*'. By 9.05 am, the Evening Standard had been contacted by '*a trusted union source who was telling us that people on the ground were saying there had been three explosions on the network*'.<sup>76</sup> By 9.30 am, the Evening Standard had heard from eyewitnesses who had seen bodies on the line at Aldgate.
- 6.19 The first official information came out in the form of a police statement at 9.25am, stating that there had been an incident at Aldgate. The message had already gone out that there had been 'power surges' on the Underground. Several brief factual updates followed during the next hour, but it was not until the explosion on the bus at Tavistock

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<sup>75</sup> Transcript of Committee meeting, 1 March 2006, Volume 2, page 156

<sup>76</sup> Transcript of Committee meeting, 11 January 2006, Volume 2, page 133

Square that the initial information about possible power surges was finally discredited, and the official 'line' was changed to reflect what had actually happened.

- 6.20 When the explosion happened on the bus at Tavistock Square, it became immediately apparent that the explosions had been caused by bombs. At 10.12 am, the MPS issued a statement that there had been explosions at multiple locations across London, but the cause of the explosions was still not confirmed at that stage.
- 6.21 **In a major emergency, a tension inevitably arises between the desire of the media to obtain information as quickly as possible and the need for the emergency services to establish all the facts before making public announcements. When this balance does not work it results in a loss of credibility on the part of the emergency services, who begin to be seen as unnecessarily secretive. On 7 July, in the first two hours following the explosions on the Tube, there was a clear gap between what was known by the media and what the Police were prepared to confirm publicly.**


*Recommendations 35 and 36*

**We recommend that the Metropolitan Police Service, in consultation with the London Media Emergency Forum, revise its plans to provide basic advice, as opposed to detailed information, for the public within an hour of a major incident if at all possible.**

**We recommend that in the event of major incident in London, the Metropolitan Police Service should appoint a senior officer, with appropriate skills, to act as the police spokesperson throughout the day. That person's primary responsibility would be to communicate with the public, via the media, to pass on accurate and timely advice and information.**

### **Communications at a local level in the first hour after the explosions**

- 6.22 Local authorities are responsible under the Civil Contingencies Act arrangements for communicating with local communities and businesses. Some local authorities in London, in collaboration with the relevant police service, have set up pager and / or e-mail alert systems for local businesses, communities and residents. The most advanced of these is the initiative run jointly by the City of London Police and Corporation of London. They provide a pager alert system, support a conference call facility, and facilitate 'buddying' schemes whereby larger businesses support smaller local businesses and communicate information to them. Some elements of this initiative are now being replicated and developed elsewhere in London by local authorities working in partnership with the Metropolitan Police Service. For example, Westminster has implemented an e-mail alert system. In the wake of 7 July, Camden is considering establishing a similar system, though it is generally acknowledged that most people will seek information from the radio and television news or news websites.



**The rest of the day** – people searching for  
missing friends and family **7**

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## **The rest of the day - people searching for missing friends and family**

- 7.1 Members of the public who were unable to track down their friend, family member or colleague needed access to a telephone line where they could register the person as missing and potentially involved, and try to find out whether they had been caught up in the incidents. The telephone line that was set up was the Metropolitan Police Service Casualty Bureau.
- 7.2 The MPS views the Casualty Bureau as the first stage in the criminal investigation and formal identification process. The official purpose of the Bureau is to collect and categorise details of people who may have been involved in the incident, and to marry this up with details collected at the sites. The 7 July Casualty Bureau was not conceived as a mechanism for providing worried members of the public with information as to the whereabouts of their loved ones.
- 7.3 The decision to establish a casualty bureau was taken at 9.30 am. The Metropolitan Police's service level agreement with Cable & Wireless stipulates that the bureau should be operational within four hours, which would have resulted in the lines opening at 1.30 pm. Unfortunately, the establishment of the Casualty Bureau was delayed by an incorrect connection at the switchboard at New Scotland Yard. It was not operational until after 4.00 pm. By this point, worried friends and relatives had been trying to get through for several hours without success, causing them a great deal of distress and delaying them in finding out whether or not their loved ones had been caught up in the attacks. People searching for their friends, relatives and colleagues spent hours trying to get through. Joe, whose wife Gill was severely injured in the King's Cross/Russell Square explosion, spent three hours dialling the number. Eventually Gill's colleague got through, having spent three hours with her telephone on automatic redial.
- 7.4 The number given out was a national rate '0870' number, which cost approximately 10p per minute. We have been told that this will not happen again, and that the number for the Casualty Bureau will in future be a free phone number. We understand that the profits made on 7 July were subsequently donated to charity – a welcome acknowledgement that it is not appropriate to charge people to call an essential public service emergency telephone number.
- 7.5 When it became operational, there were 42,000 attempted calls to the Casualty Bureau in the first hour. Each call lasted between seven and twelve minutes. We understand that, to handle the volume of calls that were received, 2,500 call-takers would be required. It is obviously not possible to put in place a Casualty Bureau of that size within hours of the onset of an incident. There will always be capacity issues. However, we have been given reassurances that the new 'Casweb' technology being introduced by the MPS will significantly increase the capacity of any future Casualty Bureau to answer large volumes of calls. It will enable calls to be diverted to other forces in the UK under 'call-off' arrangements, and will provide for the information gathered to be stored in a shared database.

- 7.6 Other members of the public will want information about what has happened, advice as to what to do, and practical information, for example about public transport. In the absence of a public information line, people may call the Casualty Bureau to make such enquiries, as happened following the Tsunami in December 2004.<sup>77</sup> This clogs up the lines making it more difficult for those concerned about their loved ones to get through. Given that we know from experience that members of the public will call the Casualty Bureau for information and advice, rather than to report missing persons, it is worth considering how to manage this demand, rather than simply hoping it will not happen or accepting it as an inevitable inconvenience. Part of the answer lies in increasing the capacity of the Casualty Bureau to receive calls. There is also a public education and awareness issue. Was it sufficiently clear to members of the public that the purpose of the Casualty Bureau was only to receive names and details of people potentially caught up in the attack? Are there ways in which the public demand for information and advice could be met other than through the Casualty Bureau, such as via a website or another telephone line?
- 7.7 Three factors might have contributed to a large volume of calls from people seeking information and advice rather than reporting missing persons. First, the messages being put out through the media during the day tended to focus on the incidents themselves, rather than practical advice for people in London. The message to *'go in, stay in, tune in'* was played continuously throughout the day, even after the announcement at 3 pm that the bus service was being reinstated. There were contradictory messages, advising the public that London would be returning to business as usual, without defining what this meant and without at the same time cancelling out the *'go in, stay in, tune in'* message. Secondly, there may have been a lack of clarity in the communication to the public of the purpose of the Casualty Bureau. Thirdly, there was no alternative telephone line for general enquiries. This is suggested in the statutory guidance on the Civil Contingencies Act; 7 July demonstrated its potential value.
- 7.8 **The Casualty Bureau was set up too slowly because of an avoidable error. This caused distress to many people who were trying to track down their loved ones and unable to get through on the published telephone number. We trust that the lessons have been learnt and this will not happen again.**
- 7.9 **The volume of calls received by the Casualty Bureau could never be handled within the Metropolitan Police Service. New technology is being put in place that will enable calls to be redirected to Casualty Bureaux outside London, and we understand that the Metropolitan Police is working with the Home Office to identify other ways to manage the initial large volumes of calls to a Casualty Bureau.**
- 7.10 **The Casualty Bureau should not have been a profit-making venture for any telephone company. However, we recognize that this lesson has already been learnt, and the profits made from the '0870' (national rate) telephone number donated to charity.**

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<sup>77</sup> Transcript of Committee meeting, 3 November 2005, page 35, Volume 2, page 37

- 7.11 **More could be done to manage the volume of attempted calls to the Casualty Bureau. For example, there could be more effective communication with the public via the media about the purpose of the Casualty Bureau. This might result in a reduced number of calls requesting general information rather than reporting missing people. It may be desirable in some circumstances to set up an alternative general public information line to meet the demand for information and advice.**

*Recommendations 37 to 40*

**We request that the Metropolitan Police Service provide us with an update on the implementation of the new 'Casweb' Casualty Bureau technology, and any other measures that might be identified to manage the initial high volume of calls to a Casualty Bureau, in time for our follow-up review in November 2006.**

**We recommend that the Metropolitan Police Service:**

- a. review the technical protocols for establishing a Casualty Bureau to ensure that errors and technical problems do not delay the establishment of a Casualty Bureau in the future.**
- b. ensure the use of a free-phone number for any future Casualty Bureau that may be set up.**
- c. prepare standard public information about a Casualty Bureau, to include instructions as to its purpose and information about sources of advice and information for people who do not need to report missing persons.**

**We request that the Metropolitan Police Service report back to us on progress against these recommendations, in time for our follow-up review in November 2006.**

**We recommend that the London Resilience Forum develop plans to establish a public information line as well as a Casualty Bureau in the event of a major incident. The plans should provide for the information line to be integrated with the Casualty Bureau and any support services that are set up in the immediate aftermath of an incident, so that callers can be transferred on to an information or support service having called the Casualty Bureau.**



**The rest of the day** – Communications with  
the public **8**

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## The rest of the day – communications with the public

- 8.1 Sir Ian Blair's news conference at 11.15 am, when it was confirmed that there had been explosions at multiple sites across London and people in London were advised to 'go in, stay in, tune in', was replayed constantly on the television news for much of the rest of the day. The advice continued to be replayed long after it had become out of date. The impact of this was that, later in the day, people in central London waiting to go home did not know when it was safe to do so.
- 8.2 We received conflicting explanations of why this happened. The Mayor placed responsibility for time-limiting advisory messages at the door of the media. He suggested that we should recommend to the media that they should '*make clear, when they are using old footage, that that is what it is*'.<sup>78</sup> News editors, on the other hand, told us that they had not received any advice as to the time-limited nature of the '*go in, stay in, tune in*' message. As we have already noted, because Sir Ian Blair gave the news conference himself at 11.15 am, subsequent interviews with less senior officers were not seen to supersede that news conference.
- 8.3 **The message to '*go in, stay in, tune in*' was replayed on the broadcast media for some time after it should have been withdrawn. This led to unnecessary confusion.**

*Recommendations 41 and 42*

**We recommend that the MPS establish a process whereby advisory messages are explicitly time-limited, and updated on an hourly basis, even if there is no change in the basic advice.**

**We recommend that the Metropolitan Police Service liaise with the Media Emergency Forum to establish a protocol for communicating publicly the time-limited nature of news statements during the response to a major incident.**

### Arrangements for taking care of children in schools

- 8.4 It was not clear to people in London what the arrangements would be for children in schools, whose parents were stuck in central London and being told not to move around the city. The question of what advice to give to schools was raised by Local Authority Gold, David Wechsler (Chief Executive of Croydon Council), at the first Gold Co-ordinating Group meeting, at New Scotland Yard at 10.30 am. At that meeting, it was decided that advice should be communicated to schools to ensure that arrangements would be in place to look after children until their parents were able to collect them.

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<sup>78</sup> Transcript of Committee meeting, 1 March 2006, Volume 2, page 156



The MPS issued a statement at 1 pm stating that schools and Local Education Authorities would make sure that children were safe until collected from school. Perhaps because this advice came quite late in the school day, some schools made their own decisions and arrangements for taking care of children. Some schools apparently closed early and sent children home, causing a great deal of anguish for their parents, who were still being advised to remain at work. News editors told us that they did not receive advice to pass on to the public about arrangements for taking care of children in schools after the end of the school day.

- 8.5 David Wechsler attended the Strategic Co-ordination Centre on behalf of London local authorities. David Wechsler suggested that overall, the problem of caring for schoolchildren in a major emergency was not widespread, but he acknowledged the need for consistency across London and a clear message to parents advising them of what arrangements would be in place to take care of their children. If this message was communicated to the media on 7 July, it was either too late or not communicated by the right person in the right way.
- 8.6 On the afternoon of 7 July, the public received conflicting messages advising them what to do in London on 8 July. On the one hand, Sir Ian Blair's message was still being played. On the other, politicians, including the Mayor, were insisting that London would return to 'business as usual' as soon as possible. This made it difficult for employers to advise their employees about whether or not to come to work on Friday 8 July. It also led to inconsistency across London about whether schools were open on 8 July. In Westminster, schools were closed on 8 July, whereas in Camden, in the face of conflicting messages, the decision was taken to open schools.

#### **Withdrawal and reinstatement of the bus service in central London**

- 8.7 The decision to withdraw the bus service in central London was taken just after 10 am at Centecom, the bus service control centre. There were two reasons for this decision: the police were unable to give assurances at that stage about the safety of passengers; and it was becoming increasingly difficult to maintain the service around the road closures and mounting congestion in central London.
- 8.8 As early as 11.30 am, Transport for London officers began to consider the question of whether and when to reinstate the bus service. Transport for London was keen to do this as soon as possible, not least because it would take some time for the service to be up and running again, and it was rightly considered important to do this in time for the evening rush hour. On the other hand, there were obviously concerns about whether there would be more bombs detonated later in the day, and whether it would therefore be safe to reinstate the bus service. Over the following three hours, there were discussions between Transport for London and the Metropolitan Police Service, which finally resulted in a decision being taken shortly before 3 pm to reinstate the bus service. We have heard anecdotal reports that there was also discussion with the Cabinet Office Briefing Room (COBRA – the emergency Cabinet committee that is convened in the event of a major or catastrophic incident). By 5 pm, most of central London's bus service was up and running again.
- 8.9 It may be the case that a decision could have been taken earlier in the day to reinstate the service. But we think it is right that there should be careful and detailed discussions

about such a decision, to ensure the safety of the public and Transport for London staff, as well as ensuring that there was public transport available to take people home from work in the evening, especially given that the Underground network was still out of operation. Given what was known at the time, and the focus that was necessarily being given to the emergency response to the attacks, we doubt it would be reasonable to expect an earlier decision or a more efficient withdrawal and reinstatement of the bus service.

- 8.10 **The decision to withdraw and subsequently reinstate the bus service in central London was difficult and based on potentially competing priorities. The decision must be taken at an operational, rather than political, level, on the basis of reaching a decision that will best serve the safety of people in London. We are satisfied that the right decisions were taken on 7 July. The withdrawal and reinstatement of the bus service in London was an enormously complicated and challenging undertaking. That the network was back in operation by 5 pm is a remarkable achievement, and one for which Transport for London staff deserve congratulations.**

#### **Advice to the public about use of mobile telephones**

- 8.11 On 7 July, all the mobile telephone networks in London suffered network congestion due to a huge upsurge in volume of calls. The problems caused by telephone network congestion were felt all over London. We have already discussed the impact on the emergency response. Survivors leaving the scenes were unable to contact their friends and family. People worried for their loved ones could not get through to them. Businesses could not communicate with their employees.
- 8.12 The networks implemented various technical fixes to prevent their networks from collapsing completely. These include call gapping, whereby attempted calls are handled in a way that ensures that at least some calls get through. Only so much can be done from a technical point of view, within the bounds of commercial viability, to plan for and manage such a dramatic increase in traffic. Telephone networks are not designed to enable everyone in London to make calls at the same time. It is simply not likely to be commercially viable to provide sufficient capacity on telephone networks to cater for the extraordinary peaks in volume of calls experienced on 7 July.
- 8.13 One of the key lessons learned for the telephone operating companies was the need for processes for managing sudden increases in traffic. Previously, their joint emergency planning efforts had tended to focus on how they would maintain business continuity in the event of damage to 'critical infrastructure'. As a result, on 7 July, their joint working procedures did not kick into action immediately; given the lack of damage to their infrastructure, they assumed that they would have no problems. More formalised processes are now in place to ensure a proactive response in the event of a major incident, regardless of whether it directly affects telephone network infrastructure.
- 8.14 It is tempting to think that some technical fix must be possible to prevent the telephone networks from becoming overloaded following another major or catastrophic incident in the future. Such a fix may exist; but it would be unrealistic to suggest that telephone operating companies should make the enormous financial investment that would be

required to allow for such extraordinary peaks of traffic. However, the demand could be better managed to mitigate the problem.

- 8.15 We asked the mobile phone network operators whether they had considered contacting their customers directly to advise them to restrict their telephone use. Vodafone's Head of Technology Policy, Security and Assurance, Michael Strefford, told us that Vodafone had placed a message on its website advising customers to keep their telephone conversations as short as possible.<sup>79</sup> A conscious decision was taken not to try to communicate with customers via text messages, because that would have entailed sending a text to all customers in the UK, which would have added further congestion to the network.<sup>80</sup>
- 8.16 The mobile telephone operating companies attempted to put out messages to the public through the media on 7 July asking customers to limit their use of mobile telephones, and use text messages rather than phone calls (text messages take up less space on the network). Unfortunately these messages were not relayed during the day on the radio or television news. This is understandable, given the mass of information that was being presented to the media from various sources. It is inevitable that the highest profile and most authoritative spokesperson will be given the highest profile in the media. There is an argument to say that the highest profile spokesperson should give out a range of important advisory messages at available opportunities.
- 8.17 **The Metropolitan Police Service is the lead agency for communicating with the media. As a result, its messages tend to focus on police-related issues. Given their lead role in communicating with the media and the public, and the prominence which tends to be given to their messages, the police are well placed to communicate authoritative messages to the public about non-policing issues, such as advice on the use of mobile telephones and advice about schools.**
- 8.18 Andy Trotter, Deputy Commissioner of the British Transport Police, doubted that the public would have heeded advice to reduce their use of mobile telephones even if it had been given a higher profile in the media. We have seen no actual evidence to suggest that this would be the case. On the contrary, the London Ambulance Service's request that the public restrict 999 calls to emergencies resulted in a 30 per cent reduction in the numbers of calls compared to any other weekday in London. We have also heard about numerous examples of Londoners helping in whatever way they could on 7 July. What is certain is that if the advice is not given, it will not be followed.
- 8.19 **It is inevitable that, in the event of a major incident in London, the use of mobile phones will massively increase, as people try to track down their friends and family. This surge can be managed to some extent by the telephone operating companies using technical fixes, as was done on 7 July. Demand could also be managed by asking the public to restrict their use of mobile**

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<sup>79</sup> Transcript of Committee meeting, 1 December 2005, Volume 2, page 71

<sup>80</sup> Transcript of Committee meeting, 1 December 2005, Volume 2, page 87

telephones. This was not effectively done on 7 July – telephone operating companies attempted to get their message across via the media, but their voices were lost in the mass of communications that were taking place on the day. Important messages to the public such as this might be more effectively passed on via established authoritative spokespeople such as the Metropolitan Police.

*Recommendation 43*

**We recommend MPS news statements include key pieces of advice and information relating to broader issues, including advice on the use of mobile phones in the event of network congestion. We recommend that the Metropolitan Police Service, in consultation with resilience partners, develop a standard list of issues to be covered in early news conferences in the event of a major incident. We request that the Metropolitan Police Service report back to us in November 2006 to tell us what action has been taken towards this end.**

### **Facilities for the media on 7 July**

- 8.20 A media centre was set up at the QEII Conference Centre. The decision was taken to set up a media centre at the first Gold Co-ordinating Group meeting, at 10.30 am. The centre opened at 1.30 pm. The emergency services found the centre convenient and considered it to have been a great success. News editors were positive about the Centre, once it was up and running. The location worked well from the point of view of geographical location and some of the facilities available at the centre. Media representatives found it useful to have access to spokespeople from the key services at one location.
- 8.21 Overall, the feedback from the media about the facilities at the QEII centre was positive. However, there are some lessons to be learnt. One news editor suggested that it would have been useful had there been a permanent police public affairs presence at the centre.
- 8.22 Some news editors commented that it would have been useful had the centre been up and running earlier in the day – the first despatch from there by ITN, for example, was not made until 3.30 pm. Until that point, journalists and TV and radio crews were reporting direct from the scenes, and from receiving hospitals. Dick Fedorcio, Director of Public Affairs for the Metropolitan Police Service, suggested that this was '*a bit unfair*'.
- 8.23 Other criticisms of the centre focused on the technical facilities that were on offer, some of which were not functioning properly during the day, and some of which were unsuitable for the purposes of the media. Oliver Wright, from the Times, commented that from the print media point of view, it would have been useful to have had the centre open into the evening rather than closing at 6pm. Ben Taylor, from the Daily Mail, wrote to give his views on the facilities provided at the Media Centre.

*'From the media's point of view, there was some frustration in the facilities provided at the QEII centre. While they were initially impressive – telephones and coffee were provided – they were often withdrawn at odd moments without any notice. QE staff were often unaware of our requirements or unhelpful. Phones would mysteriously stop working and equipment, including reporters' laptops, were collected and taken away for "security reasons" even though they had already been scanned etc. After several days, they were withdrawn altogether which was probably fair enough because the initial flurry of activity had slowed.*

*It seems to me you either have a facility there or you don't. If you do, it has to be run like a proper press room – ie with easy access and good phone links with straightforward internet connections'.<sup>81</sup>*

- 8.24 **The fact that plans were in place to establish a media centre was the result of work done by the Media Emergency Forum following 11 September 2001. The success of the QEII centre shows the value of involving the media in emergency planning. However, there are lessons to be learnt.**

*Recommendation 44*

**We recommend that the Metropolitan Police Service, in consultation with the London Media Emergency Forum, produce a guidance document on the establishment and running of an effective media centre that meets the needs of the media, building on the lessons to be learnt from their experience on 7 July.**

### **Communications with businesses**

- 8.25 Like everyone else, employers' main source of information was the radio, TV and internet news. This is particularly the case in relation to small and medium sized enterprises, who are unlikely to have elaborate business continuity plans in place or be plugged in to e-mail or pager alerting systems. Businesses need further information and advice in relation to business continuity and the welfare of their staff.
- 8.26 When a major incident occurs, businesses are looking for information, from whatever source. Under the Civil Contingencies Act, local authorities are responsible for communications with businesses. In reality, of course, life is not that simple. A multitude of organisations advise businesses about continuity in the event of a major incident in London. Local authorities and the police run a variety of local alerting systems (pager, e-mail and, in the City, a conference call facility).

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<sup>81</sup> Written submission from Ben Taylor, Daily Mail, Volume 3, page 271

- 8.27 Some elements of the City of London Police's initiatives to communicate with businesses could be applied elsewhere in London. Indeed, some local authorities are working with the Metropolitan Police Service to put in place similar alerting systems and training/awareness-raising initiatives.
- 8.28 The need for a more co-ordinated and consistent mechanism for communicating with businesses is acknowledged, and we understand the London Resilience Forum is working on the development of a solution. Local authorities are waiting to see the outcome of this work before deciding whether to invest in it.
- 8.29 **There is a risk that, unless a standard package is developed soon, local authorities will continue to develop their own individual systems for communicating with local businesses. This will result in inconsistency across London, and an inability for the systems to be used in a co-ordinated way in the event of a major incident. There is an opportunity for the London Resilience Forum to take the lead in developing a standard communications package for use by local authorities, including the internet, pager alerting systems, 'buddying' schemes and possibly conference call facilities, such as are in place in the City of London and some London boroughs.**

*Recommendation 45*

**We recommend that the London Resilience Forum work with local authorities and business organisations to produce a standard communications package to facilitate effective communications between local authorities and businesses. We request that the London Resilience Forum provide us with an update on progress by November 2006.**

**Other channels of communication with the public – official websites**

- 8.30 On 7 July, official websites, especially Transport for London and Metropolitan Police Service, experienced a huge upsurge in the numbers of people logging on to their sites. Transport for London recorded 600,000 visitors compared to the usual number of around 100,000.<sup>82</sup> Transport for London sent out more than 600,000 e-mails on 7 July between 3 pm and 5 pm to people registered on its e-mail alerting system, and more than 50 per cent of these were opened within an hour.<sup>83</sup> The Metropolitan Police Service updated its website 27 times during the day, and received 1.5 million 'hits'.

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<sup>82</sup> Transcript of Committee meeting, 3 November 2005, Volume 2, page 27

<sup>83</sup> Transcript of Committee meeting, 3 November 2006, Volume 2, page 58

- 8.31 This exceptional volume of visitors to Transport for London and MPS websites demonstrates the degree of public reliance on the internet as a source of information. **We would like to record the remarkable achievement by both Transport for London and the Metropolitan Police Service in maintaining their systems despite the peaks in the numbers of visitors to their websites.** Other emergency services also experienced increased numbers of visitors to their websites. For example, the London Ambulance service had four times as many visitors than would be expected on a normal working day.







**The following week** - bereaved people and friends  
and family of survivors **9**

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## The following week- bereaved people and friends and family of survivors

- 9.1 It took ten days for all those who were killed on 7 July to be formally identified by the police. The identification process was managed at the Resilience Mortuary, which was set up at the Honourable Artillery Company in the City of Westminster. This venue – a private company - was identified only after the originally intended location had been found to be unsuitable because it was a military base which might have been needed in the event of a need for a military contribution to the response. We understand that the Honourable Artillery Company had not been approached prior to 7 July to develop contingency plans and agree costs. The cost of using the venue was £3 million by January 2006.<sup>84</sup>
- 9.2 We understand that a review is now taking place to identify a number of alternative sites across London for any Resilience Mortuary that may need to be established. Once these potential sites have been identified, preparatory discussions will take place between local authorities, the London Resilience Team, and the venues, so that plans can be put in place in advance rather than having to draw up a contract and agree costs at short notice.
- 9.3 This was the first time a Resilience Mortuary had been set up in the UK.<sup>85</sup> The Mass Fatalities Plan had only been completed a few weeks before 7 July. Given these facts, the establishment of the Mortuary by 10 pm on 8 July was a remarkable achievement. The correct identification of the deceased was a highly complex and sensitive task, and this was completed within 7 days.
- 9.4 During that 7 days, those who were waiting for news of their loved ones needed first of all to register them as potentially involved. The Casualty Bureau is the first port of call for members of the public wishing to register someone as potentially involved in the incident. However, it is not their only port of call, and it cannot and does not meet all their needs.
- 9.5 Families and friends need a reception centre to provide a central contact point, when hospitals and other authorities identify survivors. Such a centre could also provide facilities and practical support. Rick Turner of the Metropolitan Police Service himself acknowledged this need.<sup>86</sup> Currently, worried friends and relatives will gravitate towards receiving hospitals, either by phone or in person.
- 9.6 This reception centre can also help families and loved ones from outside London. As they arrive, their main requirement is information about the whereabouts and welfare of

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<sup>84</sup> Transcript of Committee meeting, 11 January 2006, Volume 2, page 122

<sup>85</sup> Transcript of Committee meeting, 3 November 2005, Volume 2, page 49

<sup>86</sup> Transcript of Committee meeting, 3 November 2006, Volume 2, page 54

their friend or family member. However, they also need practical support and assistance, for instance in finding somewhere to stay.

- 9.7 The Family Assistance Centre that was set up in the days following 7 July evolved into a service that would have met these needs. However, in the first few days following 7 July, it is fair to say that it was not designed to meet these needs. The decision to set up a Family Assistance Centre was taken at 9 pm on 8 July. With excellent co-operation from the private and voluntary sectors Westminster Council, the Metropolitan Police Service and the London Resilience Team managed to open the centre by 2 pm on Saturday 9 July.
- 9.8 This was the first time a Family Assistance Centre had been set up following a major incident in the UK. Plans were still in draft, and those responsible for setting up the Centre were therefore working practically from scratch to set up the facility. There are some key lessons to be learnt from the experience of establishing the Family Assistance Centre.
- 9.9 The primary function of the Centre in the first few days was to act as a face-to-face extension of the Casualty Bureau. Its focus was on gathering information: personal and forensic details of people who were potentially injured or killed in the attacks, to assist in the identification process.<sup>87</sup> This met the needs of the Metropolitan Police Service in conducting their investigation and identification process. Counsellors were available from voluntary organisations; but broadly speaking it is fair to say that the Centre in the early days was not geared up to provide for the practical and other needs of survivors or people searching for their loved ones. In particular, the Centre was not prepared to give out information, only to collect it. People searching for their loved ones have one primary need: information. They may also have practical needs, but their main concern is to find out the whereabouts of their loved one. They may not need bereavement counselling in the first few days – the need for information is paramount.
- 9.10 Some survivors were put off contacting the Family Assistance Centre because its name led them to believe that it was for bereaved people rather than survivors. We discuss this further in Section 10.
- 9.11 Given the absence of prepared plans, the establishment of the Family Assistance Centre in the days following 7 July was quite an achievement in itself. But there are lessons to be learnt about the provision of reception facilities for people looking for missing loved ones on 7 July, and providing effective sources of information and support in the first few days.

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<sup>87</sup> Transcript of Committee meeting, 3 November 2005, page 53

*Recommendation 46*

**We recommend that the London Resilience Forum review its emergency plans to ensure that they include provision for the establishment of a reception centre for people looking for missing loved ones following a major incident. This should provide for their basic needs, including up-to-date information on progress in locating missing people, and practical assistance, such as help in finding accommodation if necessary. We believe that this function could be fulfilled by the Family Assistance Centre – its role should be expanded and developed to include explicitly these roles as well as its police evidence-gathering role.**



**The Following Weeks - support for survivors** **10**

## The following weeks - support for survivors

- 10.1 Survivors of the 7 July attacks told us of their needs in the weeks and months following 7 July. Some of these needs are common between those who were severely injured and those who were less seriously physically injured but suffering from psychological trauma. Others are specific to particular groups of survivors, because they were at the same site, or suffered similar injuries, or were at the same hospital. In general, survivors may need some or all of the following categories of advice, assistance or support, beyond the obvious need for medical treatment of their physical injuries:
- a. protection from unwanted media intrusion (this applies especially to people in hospital or those who are interviewed or photographed by the media during or immediately following the incident);
  - b. contact with other survivors from the same incident;
  - c. support for psychological trauma;
  - d. advice on sources of financial assistance;
  - e. advice on long-term health risks arising from the incident, such as post-traumatic stress disorder, or respiratory conditions that may arise from inhalation of smoke or noxious substances;
  - f. legal and administrative advice and support.
- 10.2 The foundation stone for all this advice and support is the collection of contact details of survivors at the scene of the incident, and the effective management and sharing of those details among the relevant authorities. And, for those whose details have not been collected, the authorities must make efforts to contact them via the media, internet, and other channels to make them aware of the support that is available. On both these counts, the support to survivors following 7 July was patchy and in some cases non-existent.

### Collection and management of contact details of survivors

- 10.3 As we have already discussed, there was a failure to collect the details of survivors on 7 July. There was also a systems failure in the management of those details that were collected on 7 July and afterwards. As a result, people dropped out of the support and advice network, or were not captured by it in the first place.
- 10.4 The details of some survivors were not lost; these survivors have been kept informed. George, for example, survived the Russell Square explosion. His details were taken by someone at Russell Square station on 7 July. He was subsequently contacted by the police, who then suggested he contact the 7 July Assistance Centre, which he did. He said, *'I can't speak too highly of the 7 July Assistance Centre ... I can only speak from my own experience, and it has been very positive, and continues to be so'*.

- 10.5 In general, those who were hospitalised seem to have had more chance of their details being kept and of being contacted subsequently by official bodies offering support and advice. For example, Carol, who was severely injured in the King's Cross/Russell Square train, said, *'I couldn't fail to be in the system – I was already there. The Family Assistance Centre have always kept in touch with me. They always write to me and invite me to their meetings every month'*.
- 10.6 We have heard of several examples of people who registered their details with one authority or another either on or after 7 July, but never heard from anyone official again. For example, Kirsty, who was in the sixth carriage of the King's Cross/Russell Square train, told us that after giving her details to a police officer at King's Cross station, *'I never heard anything from anybody. I was not contacted by anybody, despite having given this officer my phone number and all my details'*.<sup>88</sup>
- 10.7 Rachel, who survived the King's Cross/Russell Square explosion, made her own way to hospital, in a cab, whereupon her details were taken. Rachel told us that she had subsequently given her details to official bodies on at least 12 occasions, but that she had still not received any official contact or information in the weeks and months following 7 July, other than to give her police statement.
- 10.8 Jane told us how her details and those of other survivors were apparently lost when the Family Assistance Centre closed down and was then effectively re-opened as the 7 July Assistance Centre.

*'Due to having mucked up some data protection issues in the original set-up, they could not contact anyone who had met them as the Family Assistance Centre, because the database and the list of names were literally lost; they could not be transferred over.'*<sup>89</sup>

- 10.9 M, who was on the bus in front of the bombed Number 30 bus at Tavistock Square, told a similar story. He went to the Family Assistance Centre on the day it closed (it re-opened as the 7 July Assistance Centre immediately afterwards). He gave his details, but was never contacted again. He contacted the Centre again months later, but still heard nothing. He contacted them again in March 2006. He subsequently received a letter advising him of a Victim Support meeting which had been held five days' previously.

*'As for being left in the lurch, I mean, this is the 21<sup>st</sup> century, it's not the 19<sup>th</sup> century. We have computers; don't these computers back the information up? When you give these details, in my job if I lost data like that, it would be a sackable offence. It would honestly be a sackable offence if I lost data because it's unprofessional. That's a failure on a duty of care.'*<sup>90</sup>

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<sup>88</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 30

<sup>89</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 26

<sup>90</sup> Transcript of interview with M, 18 April 2006, Volume 3, page 218

- 10.10 When we tried to contact survivors ourselves to ask them to contribute to our review, we were surprised to find that there was no definitive comprehensive list of survivors in existence. We would have expected there to be an agency with a definitive list of people caught up in the attacks. The most obvious possible agencies are the 7 July Assistance Centre (which took over the role from the Family Assistance Centre in December 2005), the Metropolitan Police, or the Department for Culture, Media and Sport, which is the lead government department for the care of bereaved families and survivors of major incidents affecting UK citizens. There is no such agency, and no such list.
- 10.11 The impact of this failure to collect and manage the contact details of survivors is that hundreds of people have not had any contact with the police or the Assistance Centre. Jane said, *'When I had given my police statement, I was told that on my Tube there were between 700 and 900 people. We know what happened to the tragic 26, and we probably can guess that about another 50 or so were seriously injured and taken to hospital. That leaves 600 people out there, walking around London, on their own with no support; no-one was reaching out to them ... There was no list of names, and no-one helping people.'*<sup>91</sup>
- 10.12 **The collection and management of contact details of survivors has been haphazard. Some of those who were not seriously injured on 7 July, in particular, told us how their details had been lost several times, and they had therefore not been kept informed about available support, guidance and information.**

*Recommendation 47*

**We recommend that the London Resilience Forum identify one lead agency responsible for collating details of survivors and maintaining a definitive list. This lead agency should then act as the main channel of communication with survivors. We consider that the Assistance Centre would be the most appropriate body to collate and manage this information. In particular, plans must be put in place to address any data protection issues that are likely to arise in relation to the sharing of details among relevant authorities.**

- 10.13 The Metropolitan Police Family Liaison system supported the severely injured to a remarkable degree. We received universally positive feedback on Police Family Liaison Officers, who fulfilled wide-ranging roles, often going well beyond the call of duty to provide practical assistance and advice to those in their care. They also acted as a very effective channel of communication of information to survivors and their families. For instance, Joe, whose wife Gill was severely and permanently injured in the King's Cross/Russell Square bomb, said:

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<sup>91</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 26



*'We also received tremendous support from the police. I think it is fair to say, and it needs to go on record, that the Metropolitan Police in particular seemed to have learned an awful lot in the wake of things like the Stephen Lawrence Inquiry. We were immediately assigned two Family Liaison Officers. Indeed it was the Family Liaison Officer who found me – they did not know who I was, but they knew there was a me – on the night of 7 July, and raced me to the hospital, because we all thought I was simply going to her bedside, attempting to get me there before she died. They remained with us throughout, and we are still in contact with them. We would count them as friends. That help was extraordinary.'*<sup>92</sup>

- 10.14 The Family Liaison Unit of the Metropolitan Police Service has also shown a considerable degree of openness and willingness to learn lessons from their response to the 7 July attacks. Following our meeting with survivors on 23 March 2006, we received a telephone call within three hours from a senior Family Liaison adviser who advised us that they had already identified action points on the basis of what they heard at the meeting.
- 10.15 **The feedback we received about the Police Family Liaison system was overwhelmingly positive. We heard accounts from severely injured survivors who were helped immeasurably by Family Liaison Officers in a variety of ways. We would like to record our congratulations to the Metropolitan Police Service Family Liaison Officers.**

### **Protection from media intrusion**

- 10.16 Survivors told us some disturbing tales of unwanted media intrusion following 7 July. For example, Joe told us about his experiences:

*'The hospital was very good in, for instance, stopping those people who arrived with bunches of flowers pretending to be relatives, or wrote us letters in wobbly handwriting to try to pretend that they were relatives so that their messages would get through. Those were all intercepted, and the phone calls from people who pretended to be from medical records to get medical details of Gill's condition. In Australia, we will never find out who it was, but I can tell you that somebody phoned her family and pretended that she had died in order to elicit a response from them.'*<sup>93</sup>

- 10.17 Survivors in hospital, and those who were photographed or interviewed on 7 July, have told us how much they valued the protection they received against unwanted media intrusion. In some cases, this was unfortunately not the case. For example, Paul told us how his local newspaper printed his address, after an image of him was shown across the world and became an iconic image of the day. He called his local police to express

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<sup>92</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 46

<sup>93</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 46

concern about this, having heard that his name was now appearing on terrorist websites. He was advised to call '999' if he saw anything suspicious.

### Contact with other survivors

- 10.18 The survivors we spoke to all talked about the potential value of contact with other survivors of the same incidents. In some cases, groups of people have found each other through coincidence or design. In other cases, people are still looking for others who were there on the day.
- 10.19 One group in particular has had particular success in establishing a group of survivors: King's Cross United. King's Cross United is a group, currently with around 100 members, established by some survivors who happened to have some expertise in setting up secure websites, devising communications strategies and organising a network. Jane, who was instrumental in the establishment and running of King's Cross United, told us about the impact on her of meeting other survivors:

*'I really did not know what to do with myself. I knew about the bereaved; I knew it had been a horrible tragedy. It was only through a friend who said, "I know someone else who was there," and pointed me in the direction of Rachel. She worked with her. Rachel invited me along to a pub meeting with about six or seven other people who had been on the King's Cross Tube. We met in a pub, as the British do, and, at the end of that meeting, felt so much better. It felt like I was not a freak with nightmares just hearing screams in the middle of the night. Everything I was going through, the fear of public transport, walking back and forth to work on the Strand, because I was too scared to get on a bus – I have lived in London my entire life; it was incredible to hear people reflecting my same experiences ... People could talk by e-mail, and it is a great relief, sometimes, when you get an e-mail through and it is someone going "God, I have not slept for three days. I am having nightmares", and you realise you are not alone. This feeling of alone is something that official bodies have let us down on – feeling alone down in the Tube, but the feeling alone afterwards is something that will stay with me'.<sup>94</sup>*

- 10.20 Kirsty, also a King's Cross United founder member, told us about her first meeting with fellow passengers at a meeting of King's Cross United. She said, *'That for me was a huge moment of relief .. to come across other people who had been through the same thing. I really thought that I was going mad, and that I should just be getting on with my life and, "what on earth was wrong with me?". To suddenly sit in the pub and talk to a whole lot of other people who were equally as terrified as me whenever they heard a siren, or could not get into lifts etc, was a huge, huge relief'.<sup>95</sup>*
- 10.21 Rachel wrote a diary for the BBC news website in the week following 7 July. As a result of that, she was contacted by a number of other survivors, who between them decided

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<sup>94</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 25

<sup>95</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 30

to establish King's Cross United. She described powerfully the complete lack of support she had received in establishing and running the group:

*'It strikes me that, from the moment the bomb went off, I and other people on my train have looked after each other in the dark. We have pretty much been in the dark ever since.*

*We have comforted each other; we have found each other; we have tried to help each other get legal help, psychological help, counselling, medical help, medical advice. We found out about [post-traumatic stress disorder]; we found out about the [Criminal Injuries Compensation Authority]; we found out about the London Bombing Relief Charitable Fund. We set up a database, very effectively, which we have not lost. We have managed to keep an email database of each other; we are in regular contact; we have set up a website. We were under massive media attention, so we set up a media strategy. We have had about 1,000 media enquiries; we have done a carefully targeted series of interviews, in which we have managed to control the copy and what we have said to simply get the message out to other survivors that we existed. Hence, we talked to BBC North London local radio because we knew passengers lived in that area; we did not talk to the New York Times.*

*We have dealt with hundreds of messages from well-wishers, from weirdos, conspiracy theorists, journalists, students, researchers, all by ourselves, all whilst suffering from PTSD, in many cases – all whilst, in most cases, holding down full-time jobs. We have had no money; we have had no grant; we never asked for any money. Someone, somewhere, must have a job title, and a salary or a grant, that indicates that they are responsible for looking after us. I would like to know who that person is or who those people are. We have looked after each other since the bomb went off; we are looking after each other still. I think it would be nice if someone else could try to help us out now.'*

10.22 Members of King's Cross United spoke about the value of web-based contact among survivors. Others pointed to the potential for websites and e-mails to be used as effective means of communication with survivors by official and support bodies. Kirsty commented that, *'The interaction is amazing. It seems to me that if a bunch of people like us can have that amount of success, the people whose job it is to do that, and who are being paid to look after people who were involved, should be doing it a damn sight better than we are. Quite clearly, they are not.'*<sup>96</sup>

10.23 The success of King's Cross United is due to the actions of a few individuals who happened to be on the train that day. They happened to have expertise that enabled them to set up a secure website, develop a media strategy, and organise meetings and the effective dissemination of information. As Rachel said at our meeting on 23 March 2006:

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<sup>96</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 54

*'the next time a bomb goes off, you cannot rely on the fact that you will have a Jane, who knows how to set up a website, that you will have a Rachel, who knows how to write stories and handle the media on that train. It is actually not really fair on Jane and I or any of the other passengers that we should be in this situation'.<sup>97</sup>*

This is borne out by the fact that there is apparently no self-organised survivor group, with websites or e-mail circulation lists as well as meetings, for those who survived the Aldgate, Tavistock Square or Edgware Road bombs.

- 10.24 Other informal networks of survivors operate besides King's Cross United. For example, people have made contact through being in the same hospital after 7 July, or sustaining similar injuries. Each of these groups has slightly different needs and interests. There are meetings organised by the 7 July Assistance Centre, and there are other websites, such as London Recovers. The key lessons emanating from all these groups is that there is a lack of effective facilitation of and support for survivor contact.
- 10.25 This is important because it has placed an unfair burden on a few individuals, themselves survivors, who have taken the initiative and responsibility of organising their own groups. This carries a significant administrative burden. It is also a big responsibility, and can be highly stressful and distressing, both from the point of view of providing support to other survivors, and from the point of view of handling media enquiries and unwanted attention from people not caught up in the attacks.
- 10.26 The Family Assistance Centre, now the 7 July Assistance Centre, arranged some meetings for survivors. Several of the survivors we spoke to told stories indicating a remarkable lack of appreciation of their needs. For example, one of the first meetings that was arranged at the Family Assistance Centre included both survivors and bereaved families. Joe told us, *'It became clear very quickly, and shockingly, that we felt very differently, for instance, from the bereaved families in the room'.<sup>98</sup>* The lesson has now apparently been learnt that this is not appropriate from either group's point of view – this must be built into future plans so that the same mistakes are not made again.
- 10.27 Another meeting was arranged to take place on the 17<sup>th</sup> floor of a tower block, *'where the only way you can get up is by lift, that some people are still too scared of enclosed spaces to get in that lift, and walked up 17 floors to get there ... it was just a disgrace, to be honest'.<sup>99</sup>*
- 10.28 We had some discussion as to the best way for the Government to respond to this lesson. Would it be appropriate for a government body to run survivors' groups? We think probably not. **The success of King's Cross United is partly due to its independence, and the fact that it is run by survivors for survivors. The gap in provision of support services was that there was no readily available advice on how to go about setting up a support group, and there was no official body that actively put survivors in touch with one another if they wished to be in**

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<sup>97</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 59

<sup>98</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 47

<sup>99</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 27

contact. The survivors we have spoken to tended to want informal contact, led by themselves but effectively supported by people with experience of running survivor groups, and with expertise to provide appropriate support and guidance.

*Recommendations 48 and 49*

**In future, any Assistance Centre that is set up following a major incident should have explicitly within its remit the provision of tools and guidance for setting up survivor groups, and where requested should act in a supporting / facilitating role. In particular, it would be useful to provide advice and support in the following areas:**

- **How to establish and run a secure internet site;**
- **How to ensure that survivor groups are not infiltrated by journalists, conspiracy theorists, or voyeurs;**
- **Practical advice on sources of information and support available to survivors;**
- **Guidance on health risks to be aware of, including post-traumatic stress disorder and any other conditions likely to be experienced by survivors of the incident in question;**
- **Support in the form of counselling and advice for people who emerge as leaders of the group.**

**We recommend that the Department for Culture, Media and Sport conduct a review of the lessons to be learnt from King's Cross United, by talking to those involved, with a view to developing guidance for people who may want to set up survivor groups in the future. We request that this guidance be published by November 2006 so that we can consider it as part of our follow-up review.**

## **Psychological support**

10.29 Most of the survivors we spoke to had undergone counselling or specialist treatment for post-traumatic stress disorder. In some cases, this support was forthcoming at the appropriate time, in an appropriate way, and to positive effect. In other cases, individuals encountered difficulties and delays in gaining access to appropriate support. We know from figures provided to us by the NHS that as many as 1,000 people and 2,000 of their children are likely to be suffering from psychological trauma as a result of their experiences on 7 July.

10.30 The 7 July Assistance Centre provides counselling and other support services to survivors and bereaved families. Some survivors have told us that they have benefited greatly from the counselling and other support provided by the Assistance Centre.

Unfortunately, others have recounted stories of less helpful encounters with the Assistance Centre.

- 10.31 Kirsty told us about the difficulties she faced in trying to gain access to support in recovering from her post-traumatic stress. She went to her GP, who prescribed tranquilisers, but she felt she needed more support than that, so she went to the Assistance Centre. Her visit was not a success.

*'I then decided, having heard good reports from other people about the 7 July Assistance Centre, to go and visit them. I rang them up and was told that I could come in at any time, talk to anybody I want; there would be trained people there to help me. I went in one afternoon and was obviously quite nervous about it; it was the first time I had really talked to anyone professional about this. I went and sat in a room on a comfy sofa, sitting opposite a lady, and I started to tell her what I was going through and how lost and desperate I felt. Gradually, the conversation started to dry up and I was not really getting much feedback from her. I began to wonder what on earth I was doing there. When the awkward silences got too much, eventually she put down her cup of tea and said, 'I am really sorry, but it is my first day, and I really do not know what to say'. I left, and have not really been back there since for any sort of support, although I have still been in touch with them'.<sup>100</sup>*

- 10.32 One of the services offered by the Assistance Centre was a 24 hour helpline. Kirsty told us about her experience of calling the 24 hour helpline that was advertised on the Family Assistance Centre website:

*'I woke up screaming and shouting and I could not breathe. I was obviously pretty terrified. I had a recollection of the 7 July support website advertising a 24-hour helpline. In my panicked state in the middle of the night, I got on the internet, found the website, found the number, which was clearly advertised as 24-hour, phoned it and got a recorded message telling me to call back at 09.00'.<sup>101</sup>*

- 10.33 For people suffering from post-traumatic stress disorder, non-specialist counselling may not be the most appropriate or effective treatment. Some will benefit greatly from specialist trauma therapy, such as is provided by the NHS trauma service.

- 10.34 Seven weeks after 7 July, London's mental health services convened to organise a co-ordinated plan to identify, assess and treat those traumatised by their experiences on 7 July. They had to do this, because there was no plan in place prior to 7 July, and they had not been involved in emergency planning up to that point in time.

- 10.35 The NHS trauma service caters for people who meet the diagnostic criteria for a specific condition (post-traumatic stress disorder). They have so far had 692 referrals and

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<sup>100</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 31

<sup>101</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 31

treated 146 people, most of whom meet these criteria, or have been diagnosed with travel phobia. We received very positive feedback from survivors who have undergone a programme of therapy provided by the NHS trauma service. For example, Hannah, who survived the King's Cross/Russell Square explosion, said:

*'I was sent contact details for mental health care should I need it. I contacted the mental health team in November and after an assessment was referred to the trauma screening team within a couple of weeks. The psychological help I have received has been fantastic and I have been seen almost weekly by a psychologist since December. I have nothing but praise for the organisation and care that has gone into this element of my recovery.'*<sup>102</sup>

10.36 The diagnostic tool for post-traumatic stress that is sent out to survivors by the clinic, is a questionnaire relating to individuals' symptoms over the past week. Kathy, a survivor of the Edgware Road bomb, told us that this was insufficiently sophisticated for her purposes and that, because she had not had a bad week, she therefore did not qualify for the therapy programme. Kathy did not find the counselling offered by the 7 July Assistance Centre helpful, because she felt it was not sufficiently specialist to deal with her symptoms of trauma. Essentially, Kathy's needs were not met by either service, and she has been left without any appropriate source of help or support.

10.37 The Assistance Centre put Kirsty in touch with the NHS post-traumatic stress clinic. She received a letter months later offering her an appointment, but by then she had managed to find a private psychiatrist, and felt she was making progress with him. Kirsty told us, *'I am still seeing a psychiatrist and paying for it out of my own pocket, because the help that was offered to me came far too late as far as I was concerned'*.<sup>103</sup>

10.38 Kristina encountered similar problems in gaining access to professional psychological support. It took several months for her to find someone able and willing to help.

*'I can understand everything takes time; however ... when something like this happens, and you think you are at the end of your rope, and you do not know if you can get up the next day, to wait four, five months for some help, and for someone to give you coping mechanisms – I just think it is too long'*.<sup>104</sup>

10.39 The NHS has told us that when they reviewed trauma services following 7 July, they found that waiting lists were up to 12 months in some cases, well beyond the 13-week target. This explains why some survivors had such difficulties in getting access to treatment.

10.40 A number of survivors told us that they had only found out about the Assistance Centre and/or the NHS trauma service by accident or through word of mouth – they were not contacted directly by the NHS. For example, Jane told us, *'I do not need a lot of care and attention, but everything I have found, whether it is about being invited to the 1*

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<sup>102</sup> Written submission from Hannah, Volume 3, page 232

<sup>103</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 31

<sup>104</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 50

*November service, whether it is finding out about [the 23 March meeting of this Committee], whether it is finding out about the Charlotte Street post-traumatic stress clinic, has been information I have received from either other members of King's Cross United, or just one person gets contacted and then passes it on'.<sup>105</sup>*

- 10.41 Kirsty suggested to us that people whose details are collected should be contacted by the Assistance Centre within a month.<sup>106</sup> We consider that this would be a useful starting point in identifying some basic standards of care that ought to be provided to survivors of major incidents.
- 10.42 Survivors we spoke to suggested various means by which they could have been made aware of the available support services: leaflets to local GP surgeries along the routes of the affected Tube lines; leaflets in Tube stations; use of Underground advertising space; contact with Oystercard holders.
- 10.43 The NHS trauma service did instigate an outreach programme, but they have told us that their efforts to identify and contact survivors had been hampered by the fact that they were not entitled to obtain contact details of survivors because of data protection legislation. Emergency services are, under the Civil Contingencies Act 2004, allowed to share information about people involved in major incidents, but trauma services do not have such access. We gather that the 7 July Assistance Centre faced similar problems.
- 10.44 There are also cost pressures and long-term funding issues which threaten the NHS trauma service – the trauma service for 7 July survivors only has secure funding until September 2006. Given that there are so many survivors still to be found and assessed, and the fact that post-traumatic stress can surface several months after an incident, there is likely to be a need for this service for at least another year.
- 10.45 Several survivors of 7 July told us that they did not consider approaching the Family Assistance Centre in the months following 7 July because its name led them to believe it was meant for families of the deceased rather than survivors. For example, Jane, who was on the Piccadilly Line train, said:

*'I thought – that is not for me – the Family Assistance Centre. Rightly so, that is for the bereaved; that is for the people who really need it, the friends and family ... I really think there were hundreds of people, who should have gone, who were on those Tubes, who just because of the name did not go; who were put off and did not know what was going on, and did not know there was a resource there for them ... it was great, but no-one knew it was there, because of a simple, branding, naming issue. That was a simple thing that anyone in London who works in advertising or marketing as I do could have thought of in five seconds, or at least dealt with or discussed'.<sup>107</sup>*

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<sup>105</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 27

<sup>106</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 32

<sup>107</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 26



Kristina was also put off by the name, thinking the Centre must be for bereaved families.<sup>108</sup>

- 10.46 **The name 'Family Assistance Centre' was a misnomer, and it led survivors to believe that the Centre existed only to provide support for bereaved families. This prevented survivors who heard about the centre from making use of the services it provided.**
- 10.47 The isolation felt by survivors is all the more intense for those who live outside London, away from the Assistance Centre and some of the specialist trauma support that is available in the capital. M told us, '*people outside the M25 have just been left. Certainly I would doubt very much that anybody where I live would have even any clue as to where I was or what even I am going through*'.<sup>109</sup> Ben said, '*all the support is centred in London. I have had some counselling from my local GP, which was a godsend at the time, because it was somebody to talk to. I am working from home at the moment, and I have changed job completely, and various life changes are happening because of the 7<sup>th</sup>. Once or twice a week, I am essentially forced to come into London to receive treatment, taking time off work to do it and the expense of coming in. I realise it is unrealistic to have centres everywhere for everybody, but it does seem somewhat ironic that I have to come to the heart of London in order to get treated for what happened here*'.<sup>110</sup>
- 10.48 **Survivors living outside London told us that they felt particularly isolated and excluded from the psychological and other support services that were available.**
- 10.49 We have found that the provision of psychological support following 7 July has in some cases been excellent, whilst in other cases there have been unacceptable delays. The available services seem to have been poorly co-ordinated – if at all – and information about them seems not to have been disseminated effectively among survivors.
- 10.50 Following 7 July, there was a failure to ensure that survivors were (a) aware of the risk and symptoms of post-traumatic stress disorder, and (b) aware of and given access to appropriate professional support.
- 10.51 We understand that NHS trauma services are not involved in emergency planning. The NHS London Development Centre told us that, '*In London current emergency planning does not take into account how to treat the possible emotional, spiritual and psychological needs of people affected by future possible incidents*'.<sup>111</sup>
- 10.52 **The failure to plan for the care of hundreds of people who are likely to have suffered psychological trauma having survived the 7 July explosions is completely unacceptable.**

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<sup>108</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 40

<sup>109</sup> Transcript of interview with M, 18 April 2006, Volume 3, page 216

<sup>110</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 63

<sup>111</sup> Written evidence from NHS London Development Centre, Volume 2, page 249

- 10.53 **Plans for responding to major incidents should include plans that extend into the months following an incident, setting out how survivors will be informed of any health risks, including post-traumatic stress disorder, and what support will be provided to them and by whom.**
- 10.54 **Plans for humanitarian assistance centres should include clear plans for marketing and advertising any services that are set up, bearing in mind the location and nature of the incident and the people likely to have been involved. Clearly, NHS trauma services should be involved in the emergency planning process on an ongoing basis.**

*Recommendations 50 to 52*

**The London Resilience Forum should invite NHS trauma services to join its meetings. Having done that, the London Resilience Forum should develop detailed plans for the care of survivors in the immediate aftermath and the months following any future major incident. These should include plans for making survivors aware of the support services that are available through a variety of channels. They should also include explicit plans for caring for those who live outside the city (this element of the plans should be drawn up in consultation with the Association of Chief Police Officers and other relevant partners). We request that the London Resilience Forum report back to us on progress that has been made in this regard by November 2006.**

**Any assistance centre that is set up in response to a major incident in the future should simply be named '[date or location of incident] Assistance Centre'. The name 'Family Assistance Centre' was misleading and resulted in survivors not coming forward for assistance.**

**We recommend that the London Resilience Forum urgently find a way to resolve the problems that have prevented the NHS trauma service from having access to details of survivors, so that those who are known to the police or other authorities can be contacted by the NHS trauma service. We request that the London Resilience Forum report back to us in July 2006 to tell us what action has been taken.**

## Medical follow-up

10.55 Some survivors told us about their concerns about the health implications of having been in the tunnel where the explosions took place. Kirsty told us in March 2006, '*I know there is a lot of worry at the moment that a lot of people have got chest infections and chest problems, and everybody is very concerned about smoke inhalation – what we were breathing in. It may be just that we are all run down and we are catching everything that is going round, but there is nothing to put anybody's minds at rest about that. It is just another worry that we do not need at the moment*'.<sup>112</sup>

10.56 Kristina commented:

*'there seems to be nothing to oversee and to monitor people's health. It seems a bit strange. We were told that there was no bomb, which there was; we were told that there was nothing to worry about in respect of what we breathed in. The first thing they told us was wrong, so how do we know that the second is not? We do not know if we are being monitored, how we are being monitored, and if we are going to be told any information, because we have been given scant information up to now. Will we be given any in the future? Your guess is as good as mine*'.<sup>113</sup>

10.57 **Survivors we spoke to had outstanding concerns about the possible health implications of the smoke they inhaled in the tunnels. They had not yet heard from any official body about the possible risks and any arrangements for ongoing monitoring of their health.**

### *Recommendation 53*

**The Assistance Centre should take on the role from the outset of being the main channel of communication with survivors. It should provide regular updates, including information and advice about any ongoing monitoring of health impacts of the incident.**

## Legal advice and administrative support

10.58 Anyone injured in a major incident faces a great deal of administrative work. They must fill in forms for the Criminal Injuries Compensation Authority, and for the London Bombings Charitable Relief Fund. They must complete applications for disability-related benefits, and various other forms. Joe told us that it would be helpful in future if the Assistance Centre provided administrative support to help survivors deal with the mountain of administration. He said, 'even an hour a week from somebody who knew how to do this stuff would have taken so much pressure off us, and it would have been

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<sup>112</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 33

<sup>113</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 40

so much easier to set that thing up than some of the more useless kinds of support that were eventually on offer'.<sup>114</sup>

- 10.59 The application forms for compensation from the Criminal Injuries Compensation Authority were a particular cause of confusion and frustration among survivors. Ben told us, '*Having the energy to deal with what happened, day by day, is draining, but then you get the administration, and you look at the form, and partly you do not want to fill it in because you have to think about events of the day, and partly you cannot fill it in because it is nonsensical*'.<sup>115</sup> The forms themselves were inappropriate to the incident. For example, they included questions about whether the perpetrator of the crime is known to the applicant, and whether the incident has been reported to the police.
- 10.60 A number of survivors who gave us their views told us that they had suffered problems at work as a result of their post-traumatic stress. Some employers have been very supportive. Others have not, and when that happens survivors need advice and support about their rights and what options are available to them. Kirsty told us that she asked the Assistance Centre for advice, and they said they would get back to her but never did.
- 10.61 Some survivors have had the benefit of pro bono legal advice from a group of London law firms. Joe told us about his experience of this support.

*'Through the Family Assistance Centre, we were immediately put in touch with a top firm of London solicitors, who gave us extraordinary pro bono support and continue to do so. That has been invaluable. The one thing, not only if you have been badly injured but if, like me, you are severely traumatised, dealing with administration is very very difficult indeed... We were given incredible legal support, that clearly other people here have not received, and we are very grateful for that'*.<sup>116</sup>

- 10.62 **Survivors who had benefited from pro bono legal advice reported to us how immensely valuable it had been. However, access to this advice seems to have been inconsistent.**
- 10.63 **Overall, those who were severely injured on 7 July gave us positive feedback about the support that was made available to them through the Assistance Centre, the Police Family Liaison Service and other channels. But there seems to have been a complete absence of planning for the large numbers of people who were not seriously physically injured but were traumatised by their experiences. The survivors who came to give their views and share their experiences with the Committee were motivated by a desire to make things better for others caught up in a major incident in the future. The lessons we**

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<sup>114</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 46

<sup>115</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 62

<sup>116</sup> Transcript of Committee meeting, 23 March 2006, Volume 3, page 45

have identified on the basis of their experiences must be incorporated into future emergency plans.

*Recommendation 54*

**We recommend that the London Resilience Team, in consultation with all the members of the London Resilience Forum and with survivors of 7 July, produce a guidance document setting out how the needs of survivors of a major incident will be addressed both during, immediately after, and in the months that follow. We request that the London Resilience Team provide us with a progress report by November 2006.**





Conclusion **11**

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## Conclusion

- 11.1 This report provides an analysis of some of the lessons to be learnt from the response to the 7 July attacks on London. Many of these lessons will be applicable to any major incident in any large city.
- 11.2 Throughout the review, we have taken the perspective of an informed layperson, and considered the issues from the point of view of the people involved in the response and those caught up in the attacks. This perspective has revealed some key lessons for the future. Overall, London's emergency plans must be recast to take account of the needs of the individuals involved, rather than focusing solely on impersonal 'incidents'. In particular, there is an urgent need to put in place plans to support those who are bereaved, and those who survive, both in the immediate aftermath and in the weeks and months that follow.
- 11.3 The plans, systems and processes that are intended to provide a framework for the response to major incidents in London must be revised and improved. Communications within and between the emergency services did not stand up on 7 July. As a result, individual emergency service personnel at the affected Tube stations and at Tavistock Square could not communicate effectively, in some cases with each other, and in other cases with their control rooms.
- 11.4 It is essential that London's emergency services are equipped with digital radio equipment so that they no longer have to rely on mobile telephones to communicate between the scenes of major incidents and the control rooms.
- 11.5 It is unacceptable that the emergency services, with the exception of the British Transport Police, are still not able to communicate by radio when they are underground, 18 years after the official inquiry into the King's Cross fire recommended action to address this problem. The Committee has been told that this problem will be resolved by the end of 2007. We will be asking for regular progress reports, in public, and if there are any delays we will be asking why.
- 11.6 The most striking failing in the response to the 7 July attacks was the lack of planning to care for people who survived and were traumatised by the attacks. Hundreds of people were left to wander off from the scenes. An estimated 1,000 adults and 2,000 of their children are likely to have suffered from post-traumatic stress as a result of their experiences on 7 July. 3,000 others are estimated to have been directly affected by the explosions. The majority of them are still not known to the authorities, are not part of any support network of survivors, and have been left to fend for themselves. Those who are known to the authorities in some cases received excellent care and support following 7 July. Others registered their details but received no follow-up contact, and no advice or information about the support that was available.
- 11.7 We met survivors from each of the four explosions, and were struck by their fortitude and their desire to improve the response to major incidents in the future. The insights they were able to offer have informed every aspect of our report. Their views and the information they provided were invaluable to us in building up a picture of what



happened on 7 July. We are pleased to see that the Government is now finally talking to survivors, albeit belatedly and behind closed doors. Survivors and bereaved people between them possess a vast wealth of experience and knowledge, and we can learn an enormous amount from them.

- 11.8 The Committee would like to record its thanks to those who took the time and effort to contribute to our review. We hope that as a result of those contributions, this report and the recommendations we make will improve the effectiveness of the response to any future major incident in London, or indeed any other city. We received a huge amount of information and a wide range of views from organisations and individuals affected by the 7 July attacks. We would direct you to the transcripts of our meetings and private interviews, and to the written submissions we received, all of which are published in volumes 2 and 3 of this report.
- 11.9 This report is not the end of our examination of these issues. We invite those who read it to respond in writing to us at [7july@london.gov.uk](mailto:7july@london.gov.uk) by 30 September 2006. We will consider all the responses we receive when we conduct our follow-up review in November 2006, when we will be asking the authorities for progress reports on the implementation of our recommendations.
- 11.10 We would conclude by paying tribute to those who lost their lives on 7 July, those who survived the attacks, and the hundreds of individuals who on 7 July showed such tremendous bravery, initiative and compassion as they worked to rescue the injured, protect the public, and ensure a speedy return to order in our city.





## Findings and Recommendations

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## Findings and recommendations

There is an overarching, fundamental lesson to be learnt from the response to the 7 July attacks, which underpins most of our findings and recommendations. The response on 7 July demonstrated that there is a lack of consideration of the individuals caught up in major or catastrophic incidents. Procedures tend to focus too much on incidents, rather than on individuals, and on processes rather than people. Emergency plans tend to cater for the needs of the emergency and other responding services, rather than explicitly addressing the needs and priorities of the people involved.

We argue in this report that London's emergency plans should be re-cast from the point of view of people involved in a major or catastrophic incident, rather than focusing primarily on the point of view of each emergency service. A change of mindset is needed to bring about the necessary shift in focus, from incidents to individuals, and from processes to people.

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### The First Hour – establishing what happened

A range of circumstances could create the urgent need for passengers to communicate with the train driver and vice versa. A large proportion of Tube trains do not currently have a facility for passengers and train drivers to communicate with each other in an emergency. This represents a significant weakness in the safety of the Tube for passengers, and limits the ability of the emergency services to respond rapidly and effectively to any incident that might take place. These facilities must therefore be put in place as quickly as possible, in the interests of the safety of passengers in the normal course of events, and in particular in the event of a major emergency.

- 1. We recommend that London Underground, Tubelines and Metronet, as part of the review of the Public Private Partnership to be completed in 2010, negotiate a more rapid rollout of facilities for passengers and train drivers to be able to communicate in the event of an emergency.**

**We would draw the attention of the Public Private Partnership Arbiter to this recommendation and others relating to the review of the Public Private Partnership.**

Communications from the trains to the London Underground Network Control Centre and the emergency services were inadequate or non-existent on 7 July. As a result, transport and emergency service workers had to run from the trains to the platforms and back again to communicate with their colleagues and supervisors.

Given the importance of communications in the minutes following any sort of emergency on a Tube train, we consider that the timeframe for the rollout of the new radio system must be significantly reduced from the current projection of twenty years. In the meantime, an interim

solution must be identified to provide a robust and resilient form of communication between drivers and their line controllers.

2. **We recommend that, as part of the review of the PPP to be concluded in 2010, London Underground, Metronet and Tubelines seek to speed up the rollout of the new radio system to enable train drivers to communicate with their line controllers.**
3. **In the meantime, we recommend that Transport for London conduct a study of possible interim solutions to increase the reliability and resilience of radio communications between train drivers and line controllers. We request that Transport for London provide us with an update on progress in time for our November 2006 follow-up review.**

Metropolitan Police Commissioner Sir Ian Blair told us that he regards the inability of the emergency services to communicate underground as *'a significant problem for London'*.<sup>117</sup> We agree with his assessment. The inability of the emergency services to communicate underground is not a new or novel problem. It has been recognised as a major weakness for the past 18 years, ever since the official inquiry into the King's Cross Fire in 1988. Since then, there has been a failure by successive governments to take the necessary action to install underground communications for the transport and emergency services.

There can be no excuse for failing now to deliver facilities to enable underground radio communications by the end of 2007, which was the target date given to us by the emergency and transport services in November 2005.

We intend to monitor progress towards this deadline in November 2006, May 2007 and November 2007, and will be publicly asking the emergency and transport services to provide us with update reports setting out the progress that has been made and explaining any delays.

4. **We recommend that Transport for London provide an update on progress in rolling out the CONNECT project in November 2006, May 2007 and November 2007, so that we can monitor the delivery of the contract. The timely completion of this project is essential to enable all London's emergency services to communicate underground.**
5. **We recommend that the Metropolitan Police Service, London Fire Brigade and London Ambulance Service provide us with an update on the rollout of digital radio systems within their services in November 2006, May 2007 and November 2007, so that we can monitor progress towards full implementation of TETRA-based radio communications across London's emergency services.**

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<sup>117</sup> Transcript of Committee meeting, 1 March 2006, page 17

It is going to take at least another 18 months to implement digital radio communications underground. In the meantime, an emergency system of underground communications needs to be available, which is capable of being put in place much more quickly than a leaky feeder cable. So far as we can gather, no serious consideration has been given to alternative technologies as an interim measure pending the rollout of CONNECT and Airwave, or as a back-up measure in the longer term.

- 6. We recommend that Transport for London conduct a feasibility study to assess the costs and effectiveness of Personal Role Radios and other available technologies to enable communications for emergency and transport services in underground stations and tunnels. We request that Transport for London provide an update on work in this area by the time of our follow-up review in November 2006.**

### **Site by site: Aldgate**

It is clear that the initial deployment of the emergency services to Aldgate station was rapid, and it was quickly established that there had been an explosion on the train. All the emergency services were aware of the explosion at Aldgate East by 9.14 am. A major incident had been declared separately by the London Fire Brigade, the London Ambulance Service and the police, by 9.15 am, 25 minutes after the explosion.

### **Site by site: Edgware Road**

It took longer at Edgware Road than at Aldgate for the emergency services to establish and communicate to each other that there had been an explosion. It is not clear to us why this should be the case, given that the train stopped only 50 yards into the tunnel, and London Underground workers alerted their Network Control Centre to the incident within minutes. The Network Control Centre called the emergency services to the scene at 8.59 am, but the first Fire Engine did not arrive until 9.18 am, 19 minutes later, and the Metropolitan Police did not declare a major incident until 9.32 am, followed two minutes later by a declaration of a major incident by the London Fire Brigade.

We can only conclude that communications at the scene, and between the scene and control centres, was less effective at Edgware Road than it was at Aldgate. This could be a result of the emergency services focusing on the incident at Aldgate, which was reported just a couple of minutes before the incident at Edgware Road.

### **Site by site: King's Cross/Russell Square**

Communications problems made it difficult for the emergency and transport services to establish what had happened to the passengers emerging from the tunnel at King's Cross station.

The initial deployment of ambulances and fire engines to Russell Square was much slower than at the other sites, and it took longer to establish what had happened. The first 999 call was not received until 25 minutes after the explosion, and a major incident was not declared until 9.38 am.

- 7. We recommend that emergency plans be amended so that, when an incident takes place in an Underground tunnel, the emergency services are deployed to the stations closest to the train in either direction.**

The London Underground Emergency Response Unit is a crucial element of any emergency response on the Tube. It is regularly required urgently to attend life-threatening incidents. Emergency Response Unit vehicles should be automatically exempt from the congestion charge, and should be allowed to drive in bus lanes. They should also have blue lights. These measures would help the unit to get to the scenes of emergencies on the Tube much more rapidly.

The Emergency Response Unit works mostly on the Tube network. It is therefore a cause for concern that they do not have radios that function underground.

- 8. We recommend that Transport for London lobby the Government to obtain blue light status for Emergency Response Unit vehicles. This would, amongst other things, exempt Emergency Response Unit vehicles from bus lane restrictions and the Congestion Charge.**
- 9. We recommend that, in the meantime, Transport for London grant the Emergency Response Unit automatic access to bus lanes and an automatic exemption from the Congestion Charge.**
- 10. We recommend that the Emergency Response Unit obtain Airwave radios to be able to communicate underground once the CONNECT project is completed.**
- 11. We recommend that the Emergency Response Unit consider the feasibility of obtaining an interim/back-up solution to enable its staff to communicate underground, such as Personal Role Radios.**

## **Establishing what happened - findings**

There is room for improvement in communications between the emergency services and the London Underground Network Control Centre.

The London Fire Brigade's debriefing report identifies communications between the emergency services as a point for further consideration. From the information we have seen, we believe that more effective communications between the emergency services in relation to each scene, and overall, could have reduced the duration of the period of uncertainty about the location and nature of the incidents and enabled the emergency services more rapidly to put in place a co-ordinated emergency response.

The London Emergency Services Procedure Manual sets out in broad terms how the emergency services will respond to major and catastrophic incidents. It clearly states that a major incident can be declared by any of the emergency services, the implication being that this will be done on behalf of all the services. On 7 July, each of the emergency services arriving at the scenes of the explosions separately declared major incidents within their own service. It is not clear to us why each of the emergency services found it necessary separately to declare major incidents.

It is common sense that one declaration of a major incident, by whichever service is first at the scene, ought to automatically mobilise units from 'all three' services - police, fire and ambulance – and activate major incident procedures within all the services. It is difficult to envisage a major incident, especially on the Tube, which would not necessitate the attendance of the fire, ambulance and police services, at least in the first instance until the situation has been assessed and the emergency response fully mobilised.

- 12. We recommend that the London Resilience Forum review the protocols for declaring a major incident to ensure that, as soon as one of the emergency services declares a major incident, the others also put major incident procedures in place. This could increase the speed with which the emergency services establish what has happened and begin to enact a co-ordinated and effective emergency response.**

## The First Hour – rescue and treatment

### Reliance on mobile phones

It ought to have been predictable that in the event of a major incident in London, mobile telephone networks would become congested and it would become difficult to make or receive telephone calls. It happens every year on New Year's Eve. It happened on a larger scale after the 11 September attacks in New York. London's emergency services nevertheless relied to varying extents on mobile phones to communicate internally among their senior officers. This led to some major communications problems on 7 July.

The rollout of new Airwave digital radio communications across the emergency services will alleviate this problem up to a point. We will be closely monitoring progress in meeting the target of the end of 2007 for the rollout of Airwave, as we consider it to be an essential element of effective communications within and between the emergency services above and below ground.

In the meantime, there is an urgent need for a wholesale review of how senior officers within the emergency services communicate with each other in the event of a major incident. At the moment, each of the services is reviewing its own communications, internally. There would be some benefit in the services cooperating to identify possible solutions, rather than each of them independently reinventing the wheel.

The decision to switch off mobile telephone networks to the public, enabling a small number of key people to communicate using specially-enabled telephones, is based on an assessment of the balance between the extent to which the public interest will be best served by providing a continuing public telephone network or closing it down to facilitate an emergency response to an incident. The tension on 7 July was between the belief that this is a strategic decision, because it is broadly in the public interest, or an operational decision, given that it applies only to a localised area. We are not in a position to second-guess whether it was the right thing to do from an operational point of view to invoke ACCOLC on the O<sub>2</sub> network around Aldgate on 7 July. We were not party to discussions at the Gold Coordinating Group where the decision was made that ACCOLC should not be invoked. However, there are important lessons to be learnt from the experience.



- If ACCOLC is to be maintained as a system, it is essential that the relevant authorities ensure that at any given moment the right personnel are in possession of ACCOLC-enabled telephones. There is no point in a technical facility if the relevant authorities do not make sure that the right people have the equipment to use it.
  - The current command and control structure provides that only the Gold Coordinating Group can decide to turn off the mobile phone networks to the public. The City of London Police acted outside this framework. This should not be allowed to happen again; the command and control structures that are put in place in the event of a major incident exist for good reasons, not least because the individual services are not in a position to assess the potential impact of ACCOLC on other services involved in the emergency response. To be effective, these structures must be observed by all concerned.
  - Protocols for operating companies to verify requests should be consistent with whatever decision-making framework is in place.
13. **We recommend that the London Resilience Forum, as a matter of priority, co-ordinate a review across London's emergency services of communications between managers at the scenes of major incidents, their respective control rooms and the Strategic Co-ordination Centre. We request that the London Resilience Team provide us with the results of this review in November 2006.**
  14. **Members of the London Resilience Forum should put in place regular checks to ensure that key senior officers are equipped with ACCOLC-enabled mobile phones. We request that the emergency and transport services provide us with details of their plans to conduct such reviews, showing what will be done, and how frequently, to ensure that the technology can actually be effectively used if necessary.**
  15. **The protocols which require mobile telephone operating companies to verify instructions to activate ACCOLC should be amended, so that any instructions are verified with the Gold Co-ordinating Group rather than the authority issuing the instructions. We recommend that the London Resilience Team review these protocols and report back to us by November 2006.**
  16. **All the authorities involved in the response to a major or catastrophic incident must operate within the established command and control structure. This is essential for the effective strategic management of the response. The City of London Police must provide the Committee with assurances that, in future, it will operate within the agreed command and control structures in the event of a major or catastrophic incident in future.**

## **Communications within the London Ambulance Service**

We are in no doubt whatsoever that individual members of the London Ambulance Service, along with the other transport and emergency services, worked extremely hard, under exceptionally difficult circumstances, on 7 July. Their many individual acts of courage, skill and initiative led to the saving of many lives that may otherwise have been lost. All four sites were 'cleared' within three hours, during which time almost 200 vehicles and 400 staff and managers

were deployed, and 404 patients were transported to hospital. The fact that there were four separate incidents across London, and that three of them were in tunnels underground, made the emergency response very complex and difficult to manage systematically and effectively.

Even allowing for the difficult circumstances that prevailed on 7 July, those on the front line were let down to varying degrees by a significant breakdown of communications within the London Ambulance Service. London Ambulance service personnel at the Tube stations and at Tavistock Square were unable to communicate with the control room. Their requests for further ambulances, supplies and equipment did not get through. They did not know what was happening at the other incidents. They could not receive instructions as to which hospitals were still receiving patients. This breakdown in communications led to a failure to deploy the right numbers of ambulances to the right locations; a lack of necessary equipment and supplies at the scenes; delays in getting some of the injured to hospital; and a failure to manage strategically the despatch of ambulances from the scenes to hospitals around the city.

We welcome the steps the London Ambulance Service is taking to address the problems it experienced with its radio systems on 7 July.

The experience of 7 July showed the London Ambulance Service's lack of capacity to deliver equipment and supplies to the scenes of major incidents at multiple sites. As a result of this, there was a lack of basic equipment, such as stretchers and triage cards, and a lack of essential supplies, such as fluids, at the affected Tube stations and at Tavistock Square. We welcome the London Ambulance Service's acknowledgement of this problem, and its statement of intent to address it.

There was a general failure to maintain records of the response of the emergency services on 7 July. It is understandable that emergency services personnel will be inclined to attend to the urgent and immediate priorities of rescuing the injured, but it is important that records are kept so that lessons can be learnt from the response. It may also be important from the point of view of any investigation or inquiry following a major incident.

There is a perception among some survivors that emergency services personnel were prevented from entering the tunnels to rescue the injured. We have not been able to establish the extent to which this happened, or why it may have happened, because of the lack of records of the response.

- 17. We request that the London Ambulance Service provide us with an update on progress in reviewing and improving its communications systems in time for our follow-up review in November 2006.**
- 18. We request that the London Ambulance Service provide us with details of its plans to increase its capacity to deliver supplies and equipment to the sites of major incidents in time for our follow-up review in November 2006.**
- 19. We recommend that the London Ambulance Service and London Underground review the potential for storing rescue and medical equipment at stations. We request that they report back to us by November 2006 telling us what progress has been made in conducting this review, and what options are under consideration.**

20. **We recommend that the London Emergency Services Liaison Panel review its emergency plans with a view to identifying a lead agency for maintaining accurate records of the response to major incidents. At each scene, there should be a nominated individual who is responsible for carrying out this task.**

## **Notification of hospitals in the vicinity of the incidents**

Staff from Great Ormond Street Hospital played a crucial role in the rescue and treatment of the injured at Russell Square, even setting up a field hospital. It is reasonable to anticipate that staff from hospitals close to a major incident will be likely to volunteer their assistance. On 7 July, Great Ormond Street Hospital was not notified of the incident at Russell Square, and only found out about it when paramedics arrived asking for equipment and assistance. The lesson to be learnt from this is that hospitals in the vicinity of a major incident need to know about it as soon as possible, and would benefit from guidance as to how to respond.

21. **We recommend that emergency plans be amended to provide for the notification of all hospitals in the vicinity of a major incident, even if they are not designated hospitals with major accident and emergency departments.**

## **The First Hour – the uninjured and walking wounded**

In the minutes following the explosions on the Tube, passengers outside the affected carriages did not know what had happened, whether they were in danger, or what they should do. Those who thought about evacuating the train via the doors did not know whether or not the current was still turned on. Passengers were afraid that the smoke would be followed by fire. They did not know whether anyone knew they were there or if help was on its way. Communication from an official source is essential under these circumstances, to provide reassurance and evacuation instructions, and to protect the safety of the passengers trapped underground.

22. **We recommend that London's emergency plans be revised to include an explicit provision for communication with people affected by a major incident as soon as possible after the arrival of emergency or transport service personnel at the scene.**
23. **We recommend that Transport for London review the communications systems that are in place to enable station staff and/or the emergency services to communicate with passengers on trains that are trapped in tunnels. We request that Transport for London provide us with a report on how it plans to take forward this work, in time for our follow-up review in November 2006.**
24. **We recommend that Transport for London conduct a feasibility study on alternative forms of emergency lighting for new/refurbished rolling stock, and report back to us by May 2007.**

We recommend that Transport for London review the potential for providing torches in drivers' cabs for use in the event of loss of lighting and failure of emergency lights.

25. Transport for London/London Underground should produce a plan for provision of basic first aid kits on trains and at stations, in time for the 2007/08 budget-setting process.
26. Transport for London should also consider whether it would be practicable to carry basic first aid kits on buses, and Network Rail operators should produce plans for provision of first-aid kits for public use (and for use by qualified first-aiders) at mainline railway stations and on trains. We recommend that Transport for London and Network Rail report back to us on this issue by November 2006.

Passengers need to know what to do in the event of an emergency on a Tube train. They need to know, for example, that evacuations will normally be carried out through the end of the train rather than carriage doors. This was not clear to passengers trapped in the bombed Underground trains on 7 July.

27. We recommend that Transport for London install clearly visible safety notices inside the carriages on all Tube trains, instructing passengers what to do in case of emergency. We request that Transport for London provide us with a plan, by November 2006, showing the timescale for the installation of safety notices in all carriages on Tube trains.

## **The First Hour** – reception of the uninjured and walking wounded

We have found that there was no systematic establishment of survivor reception areas on 7 July. As a result, many survivors simply left the scenes of the explosions, without having given their personal details to anyone or received any advice or support.

28. We recommend that the London Resilience Forum identify a lead agency for the establishment of survivor reception centres at the sites of major incidents in the initial stages before handover to local authorities. We believe this task would most appropriately fall to the Metropolitan Police Service, which is already responsible for the collection of personal details of survivors.
29. We invite the London Resilience Forum to report back to us in November 2006 to tell us which agency will take the lead, and what plans have been put in place to ensure that survivor reception centres are set up close to the scene of any major incident in future.

- 30. We recommend that London Underground Limited, train operating companies and Transport for London identify, in consultation with local authorities and the emergency services, at least two potential survivor reception centres close to Tube stations, overground rail stations and major bus stations in central London. They should then liaise with the owners/occupiers of those sites and involve them in emergency planning processes and exercises.**

A total of 946 injured people have given statements to the police - less than a quarter of the number of people who are estimated to have been directly caught up in the attacks.

In the absence of an individual charged with the responsibility of collecting details of survivors at the scenes, it seems that the collection of contact details of survivors of the 7 July attacks was carried out in an unco-ordinated, piecemeal fashion, where it was carried out at all.

It is understandable that the immediate priority for the emergency services personnel working at the scene is to tend to the most seriously injured. Nevertheless, the failure to collect and collate the details of those who walked away from the trains and bus had significant implications for the care of survivors in the weeks and months that followed 7 July. It will no doubt have hampered the efforts of those at the Casualty Bureau to establish who was involved in the incidents. It may also have had implications for the police investigation that followed 7 July.

The London Ambulance Service has itself acknowledged that there was inadequate tracking of injured patients on 7 July. This problem causes unnecessary distress to the injured and their loved ones, and can result delays of several hours, and in some cases days, before families are notified of the whereabouts of their missing relative or loved one.

- 31. We recommend that the Metropolitan Police Service establish protocols for ensuring that personal details are collected from survivors at the scene of a major incident. We request that the Metropolitan Police Service report back to us on what action it has taken by November 2006.**
- 32. We recommend that the London Ambulance Service review its mechanisms for finding out and recording the identity of seriously injured patients who are able to give their names and any other details at the scene of a major incident. We request that the London Ambulance Service come forward with possible solutions in time for our follow-up review in November 2006.**
- 33. We recommend that the London Resilience Forum coordinate a review across the emergency services of protocols for identifying survivors of major incidents and ensuring that their names, once taken, are passed on to the Casualty Bureau and receiving hospitals.**

## The First Hour – communication with the wider public

Clearly, there is a balance to be struck when engaging with the media, and it is important to clarify the basis for any engagement in emergency planning. But there is a clear public interest to be served by involving the media as fully as possible in emergency planning processes and exercises.

- 34. We recommend that future resilience exercises include senior representatives from the media as participants rather than simply as observers.**

A senior Metropolitan Police Service officer should take the primary responsibility of providing accurate, timely advice and information to the public throughout the day.

In a major emergency, a tension inevitably arises between the desire of the media to obtain information as quickly as possible and the need for the emergency services to establish all the facts before making public announcements. When this balance does not work it results in a loss of credibility on the part of the emergency services, who begin to be seen as unnecessarily secretive. On 7 July, in the first two hours following the explosions on the Tube, there was a clear gap between what was known by the media and what the Police were prepared to confirm publicly.

- 35. We recommend that the Metropolitan Police Service, in consultation with the London Media Emergency Forum, revise its plans to provide basic advice, as opposed to detailed information, for the public within an hour of a major incident if at all possible.**
- 36. We recommend that in the event of major incident in London, the Metropolitan Police Service should appoint a senior officer, with appropriate skills, to act as the police spokesperson throughout the day. That person's primary responsibility would be to communicate with the public, via the media, to pass on accurate and timely advice and information.**

## The rest of the day – searching for friends and family

The Casualty Bureau was set up too slowly because of an avoidable error. This caused distress to many people who were trying to track down their loved ones and unable to get through on the published telephone number. We trust that the lessons have been learnt and this will not happen again.

The volume of calls received by the Casualty Bureau could never be handled within the Metropolitan Police Service. New technology is being put in place that will enable calls to be redirected to Casualty Bureaux outside London, and we understand that the Metropolitan Police is working with the Home Office to identify other ways to manage the initial large volumes of calls to a Casualty Bureau.

The Casualty Bureau should not have been a profit-making venture for any telephone company. However, we recognise that this lesson has already been learnt, and the profits made from the '0870' (national rate) telephone number donated to charity.

37. **We request that the Metropolitan Police Service provide us with an update on the implementation of the new 'Casweb' Casualty Bureau technology, and any other measures that might be identified to manage the initial high volume of calls to a Casualty Bureau, in time for our follow-up review in November 2006.**
38. **We recommend that the Metropolitan Police Service:**
  - a. **review the technical protocols for establishing a Casualty Bureau to ensure that errors and technical problems do not delay the establishment of a Casualty Bureau in the future.**
  - b. **ensure the use of a free-phone number for any future Casualty Bureau that may be set up.**
  - c. **prepare standard public information about a Casualty Bureau, to include instructions as to its purpose and information about sources of advice and information for people who do not need to report missing persons.**
39. **We request that the Metropolitan Police Service report back to us on progress against these recommendations, in time for our follow-up review in November 2006.**
40. **We recommend that the London Resilience Forum develop plans to establish a public information line as well as a Casualty Bureau in the event of a major incident. The plans should provide for the information line to be integrated with the Casualty Bureau and any support services that are set up in the immediate aftermath of an incident, so that callers can be transferred on to an information or support service having called the Casualty Bureau.**

## **The rest of the day – communication with the wider public**

The message to '*go in, stay in, tune in*' was replayed on the broadcast media for some time after it should have been withdrawn. This led to unnecessary confusion.

41. **We recommend that the MPS establish a process whereby advisory messages are explicitly time-limited, and updated on an hourly basis, even if there is no change in the basic advice.**
42. **We recommend that the Metropolitan Police Service liaise with the Media Emergency Forum to establish a protocol for communicating publicly the time-limited nature of news statements during the response to a major incident.**

The decision to withdraw and subsequently reinstate the bus service in central London was difficult and based on potentially competing priorities. The decision must be taken at an operational, rather than political, level, on the basis of reaching a decision that will best serve the safety of people in London. We are satisfied that the right decisions were taken on 7 July. The withdrawal and reinstatement of the bus service in London was an enormously complicated

and challenging undertaking. That the network was back in operation by 5 pm is a remarkable achievement, and one for which Transport for London staff deserve congratulations.

The Metropolitan Police Service is the lead agency for communicating with the media. As a result, its messages tend to focus on police-related issues. Given their lead role in communicating with the media and the public, and the prominence which tends to be given to their messages, the police are well placed to communicate authoritative messages to the public about non-policing issues, such as advice on the use of mobile telephones and advice about schools.

It is inevitable that, in the event of a major incident in London, the use of mobile phones will massively increase, as people try to track down their friends and family. This surge can be managed to some extent by the telephone operating companies using technical fixes, as was done on 7 July. Demand could also be managed by asking the public to restrict their use of mobile telephones. This was not effectively done on 7 July – telephone operating companies attempted to get their message across via the media, but their voices were lost in the mass of communications that were taking place on the day. Important messages to the public such as this might be more effectively passed on via established authoritative spokespeople such as the Metropolitan Police.

- 43. We recommend MPS news statements include key pieces of advice and information relating to broader issues, including advice on the use of mobile phones in the event of network congestion. We recommend that the Metropolitan Police Service, in consultation with resilience partners, develop a standard list of issues to be covered in early news conferences in the event of a major incident. We request that the Metropolitan Police Service report back to us in November 2006 to tell us what action has been taken towards this end.**

The fact that plans were in place to establish a media centre was the result of work done by the Media Emergency Forum following 11 September 2001. The success of the QEII centre shows the value of involving the media in emergency planning. However, there are lessons to be learnt.

- 44. We recommend that the Metropolitan Police Service, in consultation with the London Media Emergency Forum, produce a guidance document on the establishment and running of an effective media centre that meets the needs of the media, building on the lessons to be learnt from their experience on 7 July.**

There is a risk that, unless a standard package is developed soon, local authorities will continue to develop their own individual systems for communicating with local businesses. This will result in inconsistency across London, and an inability for the systems to be used in a co-ordinated way in the event of a major incident. There is an opportunity for the London Resilience Forum to take the lead in developing a standard communications package for use by local authorities, including the internet, pager alerting systems, 'buddying' schemes and possibly conference call facilities, such as are in place in the City of London and some London boroughs.



45. **We recommend that the London Resilience Forum work with local authorities and business organisations to produce a standard communications package to facilitate effective communications between local authorities and businesses. We request that the London Resilience Forum provide us with an update on progress by November 2006.**

We would like to record the remarkable achievement by both Transport for London and the Metropolitan Police Service in maintaining their systems despite the peaks in the numbers of visitors to their websites.

### **The following weeks – the bereaved and friends and family of survivors**

46. **We recommend that the London Resilience Forum review its emergency plans to ensure that they include provision for the establishment of a reception centre for people looking for missing loved ones following a major incident. This should provide for their basic needs, including up-to-date information on progress in locating missing people, and practical assistance, such as help in finding accommodation if necessary. We believe that this function could be fulfilled by the Family Assistance Centre – its role should be expanded and developed to include explicitly these roles as well as its police evidence-gathering role.**

### **The following weeks – support for survivors**

The collection and management of contact details of survivors has been haphazard. Some of those who were not seriously injured on 7 July, in particular, told us how their details had been lost several times, and they had therefore not been kept informed about available support, guidance and information.

47. **We recommend that the London Resilience Forum identify one lead agency responsible for collating details of survivors and maintaining a definitive list. This lead agency should then act as the main channel of communication with survivors. We consider that the Assistance Centre would be the most appropriate body to collate and manage this information. In particular, plans must be put in place to address any data protection issues that are likely to arise in relation to the sharing of details among relevant authorities.**

The feedback we received about the Police Family Liaison system was overwhelmingly positive. We heard accounts from severely injured survivors who were helped immeasurably by Family Liaison Officers in a variety of ways. We would like to record our congratulations to the Metropolitan Police Service Family Liaison Officers.

The success of King's Cross United is partly due to its independence, and the fact that it is run by survivors for survivors. The gap in provision of support services was that there was no readily available advice on how to go about setting up a support group, and there was no official body that actively put survivors in touch with one another if they wished to be in contact. The survivors we have spoken to tended to want informal contact, led by themselves but effectively supported by people with experience of running survivor groups, and with expertise to provide appropriate support and guidance.

- 48. In future, any Assistance Centre that is set up following a major incident should have explicitly within its remit the provision of tools and guidance for setting up survivor groups, and where requested should act in a supporting / facilitating role. In particular, it would be useful to provide advice and support in the following areas:**
- a. **How to establish and run a secure internet site;**
  - b. **How to ensure that survivor groups are not infiltrated by journalists, conspiracy theorists, or voyeurs;**
  - c. **Practical advice on sources of information and support available to survivors;**
  - d. **Guidance on health risks to be aware of, including post-traumatic stress disorder and any other conditions likely to be experienced by survivors of the incident in question;**
  - e. **Support in the form of counselling and advice for people who emerge as leaders of the group.**
- 49. We recommend that the Department for Culture, Media and Sport conduct a review of the lessons to be learnt from King's Cross United, by talking to those involved, with a view to developing guidance for people who may want to set up survivor groups in the future. We request that this guidance be published by November 2006 so that we can consider it as part of our follow-up review.**

## **Psychological Support**

The name 'Family Assistance Centre' was a misnomer, and it led survivors to believe that the Centre existed only to provide support for bereaved families. This prevented survivors who heard about the centre from making use of the services it provided.

Survivors living outside London told us that they felt particularly isolated and excluded from the psychological and other support services that were available.

The failure to plan for the care of hundreds of people who are likely to have suffered psychological trauma having survived the 7 July explosions is completely unacceptable.

Plans for responding to major incidents should include plans that extend into the months following an incident, setting out how survivors will be informed of any health risks, including post-traumatic stress disorder, and what support will be provided to them and by whom.

Plans for humanitarian assistance centres should include clear plans for marketing and advertising any services that are set up, bearing in mind the location and nature of the incident

and the people likely to have been involved. Clearly, NHS trauma services should be involved in the emergency planning process on an ongoing basis.

50. **The London Resilience Forum should invite NHS trauma services to join its meetings. Having done that, the London Resilience Forum should develop detailed plans for the care of survivors in the immediate aftermath and the months following any future major incident. These should include plans for making survivors aware of the support services that are available through a variety of channels. They should also include explicit plans for caring for those who live outside the city (this element of the plans should be drawn up in consultation with the Association of Chief Police Officers and other relevant partners). We request that the London Resilience Forum report back to us on progress that has been made in this regard by November 2006.**
51. **Any assistance centre that is set up in response to a major incident in the future should simply be named '[date or location of incident] Assistance Centre'. The name 'Family Assistance Centre' was misleading and resulted in survivors not coming forward for assistance.**
52. **We recommend that the London Resilience Forum urgently find a way to resolve the problems that have prevented the NHS trauma service from having access to details of survivors, so that those who are known to the police or other authorities can be contacted by the NHS trauma service. We request that the London Resilience Forum report back to us in July 2006 to tell us what action has been taken.**

## **Medical follow up**

Survivors we spoke to had outstanding concerns about the possible health implications of the smoke they inhaled in the tunnels. They had not yet heard from any official body about the possible risks and any arrangements for ongoing monitoring of their health.

53. **The Assistance Centre should take on the role from the outset of being the main channel of communication with survivors. It should provide regular updates, including information and advice about any ongoing monitoring of health impacts of the incident.**

## **Legal Advice**

Survivors who had benefited from pro bono legal advice reported to us how immensely valuable it had been. However, access to this advice seems to have been inconsistent.

## Support for survivors - findings

Overall, those who were severely injured on 7 July gave us positive feedback about the support that was made available to them through the Assistance Centre, the Police Family Liaison Service and other channels. But there seems to have been a complete absence of planning for the large numbers of people who were not seriously physically injured but were traumatised by their experiences. The survivors who came to give their views and share their experiences with the Committee were motivated by a desire to make things better for others caught up in a major incident in the future. The lessons we have identified on the basis of their experiences must be incorporated into future emergency plans.

- 54. We recommend that the London Resilience Team, in consultation with all the members of the London Resilience Forum and with survivors of 7 July, produce a guidance document setting out how the needs of survivors of a major incident will be addressed both during, immediately after, and in the months that follow. We request that the London Resilience Team provide us with a progress report by November 2006.**

## Follow-up

This report is not the end of our examination of these issues. We invite those who read it to respond in writing to us at [7july@london.gov.uk](mailto:7july@london.gov.uk) by 30 September 2006. We will consider all the responses we receive when we conduct our follow-up review in November 2006, when we will be asking the authorities for progress reports on the implementation of our recommendations.



**Annexes**

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## Glossary

**A&E:** Accident and Emergency

**ACCOLC:** Access Overload Control – the system whereby mobile telephone service providers can limit access to their respective networks and permit emergency services, local authorities, and other users with specially enabled telephones to have exclusive access to available channels.

**ACPO:** Association of Chief Police Officers

**Airwave:** A secure digital radio network (using TETRA technology – see separate glossary entry) for the exclusive use of the UK's emergency and public safety services.

**ATOC:** Association of Train Operating Companies

**Operation Benbow:** Joint working arrangements between Metropolitan Police, City of London Police and British Transport Police. These arrangements are frequently invoked, and were in place on 7 July.

**Bronze:** Within each service, the person responsible for operational implementation of the tactics set by Silver – see also separate annex giving explanation of command and control structure

**BTP:** British Transport Police

**CAD:** Computer-aided despatch – technical term for communications systems used by City of London and Metropolitan Police

**Call gapping:** Technical intervention which limits the number of calls passing through a local switch or exchange to prevent overload, giving a proportion of callers an 'engaged' tone or 'all lines are busy' message.

**Casualty Bureau:** The role of the Police Casualty Bureau is to provide a central contact for those seeking or providing information about persons who might have been involved in an incident.

**Catastrophic Incident:** a Major Incident (see separate glossary entry) where following the advice of the emergency services, the Designated Minister is of the opinion that it is of such magnitude that it will require a specific, or exceptional response from members of the London Regional Resilience Forum. Their strategic priorities will be to assist with both the immediate issues and achieving a return to normality. In doing so it is recognized that full Government involvement will be required.

**CBRN:** Chemical, Biological, Radioactive and/or Nuclear

**Centrecomm:** London Buses Command and Control Complex

**CICA:** Criminal Injuries Compensation Authority

**CLP:** City of London Police

**COBR:** Cabinet Office Briefing Room - the contingency mechanism in central government used to manage and coordinate responses to civil emergencies – sometimes referred to as COBRA

**CONNECT:** A secure, inter-operable digital radio system (using TETRA technology – see separate glossary entry) planned for installation on London Underground

**Countdown:** Computerised display system at bus stops used by Transport for London

**DCMS:** Department for Culture, Media and Sport

**DTI:** Department of Trade and Industry

**FAC:** Family Assistance Centre – later replaced by the 7 July Assistance Centre

**FCO:** Foreign and Commonwealth Office

**FLO:** Family Liaison Officer

**FRU:** Fire Rescue Unit

**GLA:** Greater London Authority

**Gold command:** Within each service, the person responsible for determining strategy – see also separate annex giving explanation of command and control structure

**GPRS/GSM:** General Packet Radio Service/Global System for Mobile Communications – standard systems for mobile telephone communications (does not include third generation – 3G – technology)

**HAC:** Honourable Artillery Company – used as the location for the resilience mortuary

**Half-rate encoding:** Technical fix which doubles the capacity of mobile phone networks by reducing call quality. O2 applied this across central London on 7 July.

**HEMS:** Helicopter Emergency Medical Service

**HPA:** Health Protection Agency

**ISP:** Internet Service Provider

**JESCC:** Joint Emergency Services Control Centre

**LA Gold:** Local Authority 'Gold' officer for London

**LALO:** Local Authority Liaison Officer

**LAS:** London Ambulance Service

**Leaky Feeder:** A type of cable which can be used to provide two-way radio traffic inside tunnels and buildings

**LEA:** Local Education Authority

**LED:** Light Emitting Diode – high-brightness, durable, low-power lighting system as used in aircraft emergency lighting

**LESPL:** London Emergency Services Liaison Panel

**LFB:** London Fire Brigade

**LFEP:** London Fire and Emergency Planning Authority

**LRT:** London Resilience Team

**LUL:** London Underground Limited

**Major Incident:** Any emergency that requires the implementation of special arrangements by one or all of the emergency services and will generally include the involvement, either directly, or indirectly, of large numbers of people.

**Media Emergency Forum:** A national (or regional) forum of media representatives, made up of regional forums, which are facilitated by the Government News Network under the Cabinet Office.

**MDT:** Mobile Data Terminal – communications equipment used to connect London Ambulance Service ambulances to the control suite.

**MetroComm:** Control centre for Metropolitan Police Service Traffic and Transport Branch

**MIMMS:** Major Incident Management and Support – a UK-wide NHS training programme

**MIO:** Medical Incident Officer – doctor to be deployed to manage emergency care at the scene of a major incident. The MIO has managerial responsibility for the deployment of medical and nursing staff at the scene and will liaise closely with the Ambulance Incident Officer to ensure effective management of resources. The London Ambulance Service maintains a Medical Incident Officer Pool and will invariably deploy doctors from this group when the need for an MIO and support becomes apparent.

**MPA:** Metropolitan Police Authority

**MPS:** Metropolitan Police Service

**Network Operations Centre:** London Underground's operations centre

**ODPM:** Office of the Deputy Prime Minister (now Department for Communities and Local Government)

**Operation Atlantic Blue:** Exercise run by London Resilience to test out scenarios of

multiple attacks on the London Underground.

**PITO:** Police Information Technology Organisation

**Project Griffin:** City of London Police training on security issues for businesses within the City.

**PTSD:** Post-traumatic stress disorder

**RCN:** Royal College of Nursing

**RVP:** Rendezvous Point

**SCC:** Strategic Coordination Centre

**Silver:** Within each service, the person responsible for determining tactics – see also separate annex giving explanation of command and control structure

**SIM:** Subscriber Identity Module – as in SIM cards for mobile phones

**SMEs:** Small and medium-sized enterprises

**SMS:** Short Message Service – mobile phone text messaging

**TETRA:** Terrestrial Trunked Radio – a secure, inter-operable digital radio system, operated under such names as 'Airwave' and 'CONNECT' (see separate glossary entries)

**TfL:** Transport for London

**TIEPF:** Telecommunications Industry Emergency Planning Forum

**TOCs:** Train Operating Companies

**UHF:** Ultra High Frequency – used for radio transmissions

**VHF:** Very High Frequency – used for radio transmissions

**VMS:** Variable Message Signs – traffic control devices used by Highways Agency and Transport for London to give real time messages to drivers.



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## List of those who attended meetings of the Committee

### 3 November 2005

#### **Transport for London:**

Tim O'Toole, Managing Director, London Underground

Peter Hendy, Managing Director, Surface Transport

Paul Mylrea, Director of Group Media Relations

Chris Townsend, Director of Group Marketing

#### **Metropolitan Police Service**

Assistant Commissioner Alan Brown

Deputy Assistant Commissioner Ron McPherson

Dick Fedorcio, Director of Public Affairs

Commander Chris Allison

Detective Superintendent Rick Turner

Superintendent Peter Smith; from the Metropolitan Police Service

#### **City of London Police**

Chief Superintendent Alex Robertson

#### **British Transport Police**

Deputy Chief Constable Andrew Trotter

Chief Superintendent Peter Hilton

#### **London Fire Brigade**

Assistant Commissioner, Ron Dobson

Rita Dexter, Director of Corporate Services

James Flynn, Head of Communications

#### **London Ambulance Service**

Russell Smith, Deputy Director of Operations

Angie Patton, Head of Communications

### 1 December 2005

#### **BT**

Mark Hughes, Group Security Director

David Corry, Head of BT Obligations and Emergency Planning Policy

#### **O2**

David Sutton, Network Continuity and Restoration Manager

Richard Bobbett, Director of Network Operations, O2 Airwave

#### **Vodafone**

Michael Stefford, Head of Technology Policy, Security and Assurance

Anne-Marie Molloy, Head of Business Continuity

**Cable & Wireless**

Keith Wallis, Business Continuity Manager

**Metropolitan Police Service**

Malcolm Baker

**London Chamber of Commerce & Industry**

Colin Stanbridge, Chief Executive

**11 January 2006****Local authorities**

David Wechsler, Chief Executive, London Borough of Croydon (Local Authority Gold on 7 July)

Anthony Brooks, Head of Community Safety and Emergency Planning Adviser, London Borough of Camden

Alex Cosgrave, Corporate Director, Environment and Culture, London Borough of Tower Hamlets

John Barradell, Director of Community Protection, Westminster City Council

**NHS**

John Pullin, Emergency Planning Lead, NHS London

Claire Grant, Emergency Planning Communications and Media Lead, NHS London

Dr Gareth Davies, Consultant in Emergency Medicine, Barts & the London NHS Hospital Trust

Judith Ellis, Chief Nurse at Great Ormond Street Hospital

Alan Dobson, Lead Nurse at Royal London Hospital, Whitechapel

Bernell Bussue, Director, Royal College of Nursing London Region

**Media**

Simon Bucks, Associate Editor, Sky News

Jim Buchanan, UK Intake Editor, BBC

Mike Macfarlane, BBC London

Geoff Hill, ITV News Network

Jonathan Richards, Editorial Director, LBC News & Heart 106.2

Pete Turner, Capital Radio and Chair of London Media Emergency Forum

David Taylor, Executive Editor (News), Evening Standard

Oliver Wright, Home News Editor, The Times

## **1 March 2006**

### **Mayor of London**

Ken Livingstone

### **Metropolitan Police Commissioner**

Sir Ian Blair

## **23 March 2006**

### **Edgware Road**

John (see also private meetings)

Ben

Tim

Paul

### **Aldgate**

Michael

### **King's Cross/Russell Square**

Jane

Kirsty

Beverli

Angela

Joe (see also private meetings)

Kristina

Rachel

## **Private meetings**

### **Edgware Road**

John (see also 23 March hearing)

Kathy

### **King's Cross/Russell Square**

Amy

Carol

George

Gill and Joe (see also 23 March hearing)

Ian

### **Tavistock Square**

Gary

M

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*Report into the London Terrorist Attacks on 7 July 2005*, Intelligence and Security Committee, Cm 6785, May 2006 ([www.parliament.uk](http://www.parliament.uk))

*Report of the official account of the bombings in London on 7<sup>th</sup> July 2005*, Home Office, HC 1087, May 2006 ([www.homeoffice.gov.uk](http://www.homeoffice.gov.uk))

*Secure in the knowledge: Building a secure business*, ACPO, the Security Service and London First ([www.london-first.co.uk](http://www.london-first.co.uk)).

*Strategic Emergency Plan: An overview of the strategic London response to emergencies; summaries and highlights of pan-London arrangements* (version 2.1), London Resilience Team, April 2005 (email: [enquiries-LRT.gol@go-regions.gsi.gov.uk](mailto:enquiries-LRT.gol@go-regions.gsi.gov.uk)).

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## Web resources

London Assembly – [www.london.gov.uk/assembly](http://www.london.gov.uk/assembly)

Home Office – [www.homeoffice.gov.uk](http://www.homeoffice.gov.uk)

MI5 – [www.mi5.gov.uk](http://www.mi5.gov.uk)

London Resilience Forum – [www.londonprepared.gov.uk](http://www.londonprepared.gov.uk)

Metropolitan Police Service – [www.met.police.uk](http://www.met.police.uk)

City of London Police – [www.cityoflondon.police.uk](http://www.cityoflondon.police.uk)

British Transport Police – [www.btp.police.uk](http://www.btp.police.uk)

London Fire and Emergency Planning Authority – [www.london-fire.gov.uk](http://www.london-fire.gov.uk)

London Ambulance Service – [www.londonambulance.nhs.uk](http://www.londonambulance.nhs.uk)

Transport for London – [www.fl.gov.uk](http://www.fl.gov.uk)

NHS Trauma Service – [www.londondevelopmentcentre.org](http://www.londondevelopmentcentre.org)

7 July Assistance Centre – [www.7julyassistance.org.uk](http://www.7julyassistance.org.uk)

Disaster action – [www.disasteraction.org.uk](http://www.disasteraction.org.uk)

London Recovers – [www.londonrecovers.com](http://www.londonrecovers.com)

Red Cross – [www.redcross.org.uk](http://www.redcross.org.uk)

St John Ambulance – [www.stjohnambulance.org.uk](http://www.stjohnambulance.org.uk)

London First – [www.londonfirst.co.uk](http://www.londonfirst.co.uk)

London Chamber of Commerce and Industry – [www.londonchamber.co.uk](http://www.londonchamber.co.uk)

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## Terms of reference of the Committee

At its meeting on 8 September 2005, the London Assembly resolved to establish an ad hoc committee, the London Resilience Scrutiny Committee, as an ordinary Committee of the Assembly. To avoid confusion with the London Resilience Forum, the Committee was subsequently referred to as the 7 July Review Committee.

The terms of reference of the Committee are:

To review and report with recommendations on lessons to be learned from the response to 7 July bomb attacks:

- How information, advice and support was communicated to Londoners,
- How business continuity arrangements worked in practice,
- The role of Broadcasting Services in communication,

The use of Information and Communication Technology to aid the response process.

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