

Coroner's Inquests into the London Bombings of 7 July 2005

Hearing transcripts - 8 February 2011 - Morning session

1 Tuesday, 8 February 2011

2 (10.00 am)

3 LADY JUSTICE HALLETT: Mr Keith?

4 MR KEITH: Good morning, my Lady. May I invite you to call

5 Geoffrey Dunmore, please.

6 MR GEOFFREY DUNMORE (affirmed)

7 Questions by MR KEITH

8 MR KEITH: Good morning. Could you give the court your full

9 name, please?

10 A. It's Geoffrey Dunmore.

11 Q. Mr Dunmore, you are the operational security manager

12 with London Underground Limited, are you not?

13 A. That's correct.

14 Q. You have been so since 2002, but you have many years'

15 experience with London Underground?

16 A. Yes.

17 Q. Judging by your witness statement, there appear to be

18 few jobs that you have not done with that organisation,

19 but latterly, you have been particularly concerned with

20 liaising with other agencies in respect of crime and

21 disorder matters that affect the Underground -- those

22 agencies include the Department of Transport, the

23 Security Service, British Transport Police and the

24 like -- and you have, in the past, also had particular

25 expertise in dealing with issues that were considered by

1 the London Resilience Team arising out of the events of
2 7 July?

3 A. Yes.

4 Q. You, yourself, were present in London on the morning of
5 7 July?

6 A. Yes, I was actually on the way in to London.

7 Q. I think you received on your pager messages concerning
8 the events in London that morning. You particularly
9 noticed, did you not, messages on your pager concerning
10 the possibility of power surges or power failures in the
11 Underground system?

12 A. Yes, I mean, there was messages coming through of
13 a major power problem that was affecting a very wide
14 area and quite a number of stations and, obviously, the
15 train service on those lines.

16 Q. Was that sort of disruption to the network and/or that
17 type of power problem a matter that would automatically
18 be brought to the attention of the operational security
19 manager: namely, yourself?

20 A. I mean, it sort of made me sit up and take notice on
21 account of -- where it's affecting a wide area, my first
22 thought was, "Is this affecting a bulk supply point? Is
23 there some problem around that and, therefore, is that
24 security-related?"

25 Q. You are not, of course, concerned generally with matters

1 such as bulk supply points or the supply of electricity
2 to the Underground. Were you notified because you are
3 a senior manager with London Underground limited and,
4 therefore, you would be automatically told of anything
5 of this magnitude, or were you told and did you receive
6 pager messages because there was a suspicion that
7 whatever it was that was happening in the Underground
8 was in some way connected to a terrorist attack?

9 A. No, I think initially this came up on the management
10 information system and that's paged out to a number of
11 senior managers in the organisation, but also, it goes
12 to operational managers as well. So, you know, I was
13 one of many that was receiving this information.

14 Q. The messages struck you as unusual, and so, did you
15 therefore contact the Network Control Centre yourself
16 and offer your assistance?

17 A. Yes, I mean, in itself the power problem wasn't that
18 unusual. We had experienced it before. But then to get
19 the reports of Edgware Road with a train supposedly
20 hitting a tunnel wall, with a person under a train, with
21 this other wide power problem just didn't seem right to
22 me, so I called in to see if I could offer any
23 assistance.

24 Q. What level of detail did you receive in your pager
25 messages? You've just referred to the report of

1 a person under a train at Edgware Road. We know that,
2 by the time you received these messages, there had been
3 reports received by the NCC, of course, of an explosion
4 or a bang between Liverpool Street and Aldgate. Was
5 that the level of detail that you also received?

6 A. Yes, very much so. I mean, you've got to understand, as
7 a pager message, it's going to be in summary form --

8 Q. Quite so.

9 A. -- but it gives you a fairly good picture of what you're
10 likely to be dealing with.

11 Q. When you called the NCC, to whom did you speak?

12 A. I spoke to Darren McCluskey who was the network duty
13 operations manager.

14 Q. Whose name we've seen on the transcripts as calling, in
15 particular, the duty operation managers at the
16 Line Control Centres.

17 A. Yes.

18 Q. Did you discuss with him, or with anybody else, the
19 possibility of the declaration of a Code Amber which
20 occurred around the time that you called in?

21 A. Yes, when I actually spoke to Darren, bear in mind I was
22 on a crowded train anyway, so I had to be a bit careful
23 of what I was saying because I didn't want to cause
24 other people any concern, but just said to him, you
25 know, "What's going on?", and he said, "We've actually

1 just had receipt of a report of an explosion at
2 Russell Square". So I said, "Okay, that's at least
3 three incidents you're dealing with, you need to
4 Code Amber", and that was basically it.

5 The whole idea behind that is, with Code Amber, it's
6 almost like the holding pattern that you would use in
7 airlines when you've got a problem with the airport, so
8 you just keep things safe, get trains to stations and
9 then you can make a decision from there as to what you
10 need to do.

11 Q. In addition to the obvious benefit of getting trains to
12 the nearest platform, to the nearest station, we heard
13 from Mr Barr yesterday an additional benefit is that you
14 will also disembark those trains at the platform.

15 So does it have the additional effect of being able
16 to relieve something of the crowding on the trains and
17 to get a certain amount of people out of the system and
18 out of the Underground?

19 A. Yes, I mean, to be fair, it's not something that you
20 would do lightly on the system because, you know, by
21 doing that, you are going to put a lot of people out on
22 the streets, and that creates problems of its own.

23 But definitely it's a "Let's get trains as close as
24 we can to the platforms". Whatever we are dealing
25 with -- and at that stage, we only knew the symptoms,

1 not the cause -- it gives us a platform then to work
2 from.

3 Q. We know from the documentation disclosed by Transport
4 for London that the plans designed to cater for such an
5 emergency or for a range of emergencies provide for
6 a particular person called "the security manager
7 on call".

8 A. Yes.

9 Q. That morning, it happened to be a gentleman called
10 Mr Vince Dardis. The plans make plain that the security
11 manager on call has the strategic responsibility or the
12 authority for authorising particular steps to be taken
13 in light of a security issue or a security emergency.
14 You were the security manager on call at the time
15 that you called in. When you called in, was Mr Dardis,
16 or your other colleagues who were at the NCC, already
17 contemplating a Code Amber?

18 A. My understanding was -- I'm not sure if I knew it at the
19 time, but I think I'd asked the question and was told
20 that Vince was on his way to Edgware Road.

21 At the time, of course, this wasn't a known
22 terrorist incident, we weren't sure what the cause was,
23 so I -- you know, I was calling in on the basis that
24 I had been involved in a number of emergency planning
25 exercises and table-top exercises and knew that that

1 would give us the sort of right way to go on from there.

2 But in terms of the SMOC needing to be directly

3 involved --

4 Q. The "SMOC", the security manager on call?

5 A. Yes, the security manager on call, needing to be

6 directly involved, it wasn't obvious at that time,

7 although I know from listening to the tapes and so on,

8 that there was a call through to Vince Dardis at 08.53

9 from the NCC. He was already aware or made aware of

10 there potentially is a problem here.

11 Q. There is a call -- in fact, it's TFL111 at 08.54 --

12 which shows a man called Jerry calling Vince Dardis, the

13 security manager on call --

14 A. Yes.

15 Q. -- and they discuss the reported explosions. So it's

16 very soon after the detonation of the bombs and it's

17 plain that they're contacting Mr Dardis in order to seek

18 his advice and suggestions as to what should be done.

19 A. Yes., I think they were calling him just to say "Be

20 prepared, because this may turn into something else".

21 Q. We cannot find any later transcripts of calls from him,

22 because he says, "I'll call you back on the SMOC

23 number", or somebody says, "I'll call you on the SMOC

24 number", and I don't think that's been recorded.

25 A. Yes, it has.

1 Q. It has?

2 A. Yes.

3 Q. Have you seen those transcripts?

4 A. Yes, I've actually listened to it as well.

5 Q. Were you surprised that, when you called in,

6 a Code Amber had not already been declared, because we

7 note that the Code Amber was declared almost immediately

8 after you called in, and I don't wish to embarrass you,

9 but there is a certain appearance here of you, with your

10 many years of experience, calling in and immediately

11 thereafter a Code Amber is declared.

12 A. Mm-hmm.

13 Q. One wonders whether or not, in fact, you, when you

14 became aware of the position, insisted that this was

15 a proper case for a Code Amber and so it was done, in

16 which case, might it have been done earlier if you or

17 the SMOC had been in the NCC?

18 A. I think, I mean, part of the problem in answering that

19 is I've got the benefit of hindsight now, but at the

20 time when I called in, they had just received,

21 I believe, the third call of the incident between

22 King's Cross and Russell Square. I don't believe --

23 Q. Concerning smoke in the tunnel?

24 A. Yes, smoke in the tunnel and reports of a bang or

25 explosion, I think it was.

1 Given that, and there had been another report of an
2 explosion or a bang at Aldgate/Liverpool Street, I think
3 then was probably the right time to declare the
4 Code Amber. I don't think, had I been in the room, that
5 I would have probably called it before that time. It
6 was the third one, I think, was the tipping point for
7 me.

8 Q. Did you speak to Mr Dardis, who was the security manager
9 on call --

10 A. No, I never managed to speak to Vince that day.

11 Q. -- before the Code Amber was declared?

12 A. No.

13 Q. But that is ordinarily the sort of decision in which he
14 would have been expected to be intimately involved?

15 A. Yes, but, to be fair, we had Andy Barr in the room,
16 who's a very experienced operational manager, and he
17 was -- had taken Gold control anyway, as far as I was
18 aware. In fact, the conversation I had with Darren was
19 very much, you know, "I'll speak to Andy", I think he
20 mentioned that "Tim O'Toole was our MD". I said, "Look,
21 I'll talk to anybody, I don't care, but you need to
22 Code Amber", and I think they were already in discussion
23 about what action they were taking anyway.

24 It wasn't -- you know, I don't think the Code Amber
25 was just because I called in. I think they were already

1 thinking about that.

2 Q. I think you're being very modest, Mr Dunmore.

3 Your statement goes on to deal with the Emergency
4 Response Unit. Could we address that for a moment,
5 please?

6 The Emergency Response Unit is a division of
7 Tube Lines and its function is to ensure that the
8 network is made safe and services are restored following
9 incidents such as fires and derailments, and it has
10 specialist equipment and specialist personnel.

11 Was the Emergency Response Unit called up very soon
12 after these incidents -- because that is all that they
13 were known as -- became known to London Underground?

14 A. Yes, as far as I can work out -- and I wasn't aware at
15 the time, but I believe they were called in response
16 initially to Edgware Road, and for that -- for the very
17 reason that we were thinking that we were dealing with
18 a derailment or a person under a train or a derailment
19 and a person under a train. Therefore, we would want
20 the ERU there because they have the expertise in dealing
21 with those sort of incidents.

22 Q. You plainly envisaged, or your colleagues envisaged,
23 that the Emergency Response Unit would be used to
24 provide immediate assistance. It wasn't there to
25 perhaps address faults in the tunnel, if there were

1 faults in the tunnel, or damage to the infrastructure
2 hours later. You obviously had hoped that they would be
3 able to get to Edgware Road as soon as possible and
4 address the immediate causes, whatever they might be?

5 A. Yes, I mean, the inference of looking at the structure
6 and so on came a little bit later, to be fair, once we
7 knew the full extent of the problems. So it was the
8 initial, yes, get there and assist with the derailment.

9 Q. Exactly. That's why I think the chronology is that the
10 Emergency Response Unit was requested at 09.02.11 to
11 attend Edgware Road immediately after the NCC received
12 a report of a person under the train.

13 A. Yes.

14 Q. But the logs unhappily show that thereafter they became
15 stuck in traffic, did they not? I think in
16 Bishops Bridge Road.

17 A. Yes.

18 Q. In the end, they were forced to call for a police escort
19 to get them through the London traffic and, at 09.40,
20 the duty manager called in to the NCC, the duty manager
21 for the Emergency Response Unit, saying that the unit
22 was still waiting in Clapham for a police escort. By
23 contrast, the Emergency Response Unit for Aldgate got
24 there in very good time.

25 A. Yes.

1 Q. Were steps taken by London Underground, after 7/7, to
2 address this obvious problem, which was the difficulty
3 in getting the Emergency Response Unit, which is your
4 main front line response to an incident, in terms of
5 getting it to the location?

6 A. Yes, I mean, first of all, when you say that our "main
7 front line response", that already exists on our
8 stations and on our trains, that's our operational
9 staff. They fulfil that function initially. This is
10 a specialist response that can deal particular types of
11 incidents.

12 Q. Plainly, Mr Dunmore, the staff in the station don't have
13 the specialist expertise to deal with derailments --

14 A. No, that's correct.

15 Q. -- or perhaps persons under a train or some other
16 emergency in a tunnel?

17 A. Yes, that's correct.

18 Q. The operational staff at the station can provide support
19 and they can communicate what has happened --

20 A. Yes.

21 Q. -- but they can't provide that level of expertise?

22 A. Yes, that's correct.

23 Q. All right.

24 A. So following on from these incidents, we did actually
25 lobby the Government to obtain blue light status for the

1 Emergency Response Unit. Unfortunately, this wasn't
2 followed through, in terms of not allowed by the
3 Government and, in fact, was left to ACPO, the sort of
4 police --

5 Q. The Association of Chief Police Officers.

6 A. Yes, to sort of make a decision on it.

7 We can, as I said in my statement, call for police
8 to give them an escort on blue lights, but we haven't
9 actually got the blue light status itself.

10 Q. You were able I think to secure, though --

11 LADY JUSTICE HALLETT: You still haven't?

12 A. Not for the Emergency Response Unit, no.

13 MR KEITH: You also asked, did you not, or
14 London Underground asked, for automatic access to bus
15 lanes, which had been previously denied to
16 London Underground, and also for exemption from the
17 charging system. Those two latter requests were,
18 however, granted?

19 A. Yes, absolutely. I mean, in a way, one of them's purely
20 administration and should never have got in the way, if
21 it truly did, to be honest.

22 The second one, if they really were an emergency,
23 then I don't think anyone would have had a problem with
24 them using the bus lanes at the time.

25 Q. Is it still the view of London Underground Limited that

1 blue light status would significantly assist in ensuring
2 that Emergency Response Units get to the scene of an
3 emergency speedily?

4 A. Yes, I think it would certainly help. We haven't
5 changed our view on that, but it still sits with ACPO.

6 LADY JUSTICE HALLETT: Wait a minute, I want to understand
7 more about this. What are the problems? I'm asking you
8 to be devil's advocate, if you would, Mr Dunmore. What
9 are said to be the problems as to why you shouldn't have
10 blue light status?

11 A. I think it's probably -- and I don't honestly know the
12 full detail behind it, I'd need to check that, but it's
13 probably on the basis of safety and having a civilian
14 aspect actually using blue lights. You know, there are
15 a lot of safety implications of doing that.

16 LADY JUSTICE HALLETT: So a civilian driver --

17 A. Yes.

18 LADY JUSTICE HALLETT: -- being allowed to drive through the
19 streets of London --

20 A. On blue lights.

21 LADY JUSTICE HALLETT: -- on blue lights?

22 A. Yes, so I think, yes, it's something that would
23 certainly help when we're going to incidents and events,
24 but you've also got to consider the safety aspects of
25 that as well.

1 LADY JUSTICE HALLETT: Isn't that just a question of
2 training the drivers?

3 A. Yes, it would be a question of training the drivers,
4 yes.

5 MR KEITH: Mr Dunmore, would it be fair to say that the
6 suggestion that a civilian organisation,
7 London Underground, should receive blue light status was
8 not greeted with unalloyed pleasure by those emergency
9 services who already have blue light status?

10 A. No, but to be fair, they've got the experience and
11 history of dealing with it.

12 Q. All right.

13 LADY JUSTICE HALLETT: Could we just go back to why it's
14 with ACPO? ACPO is an organisation of senior police
15 officers all around the country. This is a matter
16 presumably of law. So why is it ACPO rather than, as it
17 started off, with Government? Because we're talking
18 about blue light status is breaking speed limits, which
19 is a question of law. ACPO represents chief officers on
20 matters of policy and -- they can't change the law.

21 MR KEITH: No, my Lady, I think the paperwork that we've
22 seen indicates that there was quite a wide consultation
23 process, and one of the consultees to that process was
24 ACPO. There were many others. I think that's right,
25 Mr Dunmore?

1 A. Yes, I believe that is.

2 MR KEITH: The others included other representative
3 organisations, representing the interests of the other
4 emergency services, not just the police.

5 A. Yes.

6 MR KEITH: Then it all formed part of an overall submission,
7 I think, to the Government, who did have the ability to
8 change the law in this regard. So I think ACPO was only
9 one aspect of it.

10 Is that right, Mr Dunmore?

11 A. I believe so, yes.

12 LADY JUSTICE HALLETT: The reason why I was asking was I've
13 noted an answer by you, Mr Dunmore, "It still sits with
14 ACPO", therefore, I wasn't quite sure whether --

15 A. That's as I understand it. That was the sort of --
16 the --

17 MR KEITH: The consultation process?

18 A. Yes.

19 MR KEITH: But I don't think you think or you suggest that
20 they are the final arbiters in this matter?

21 A. I don't believe so.

22 MR KEITH: No.

23 LADY JUSTICE HALLETT: Obviously an influential voice.

24 A. Absolutely.

25 MR KEITH: Could we then turn to the issue of

1 communications, please, which you addressed at some
2 length in your witness statement?

3 We will explore the issue of the radio system with
4 other witnesses in addition to yourself, and through the
5 particular eyes of, not just London Underground, but
6 British Transport Police, City of London Police and the
7 Metropolitan Police.

8 From the standpoint of London Underground, it is now
9 generally acknowledged, isn't it, Mr Dunmore, that there
10 were quite severe difficulties with the communications
11 on 7 July 2005, overall, in terms of the amount of the
12 emergency services to communicate with each other on
13 that morning?

14 A. Yes, I mean, I guess there's two aspects of it, and it's
15 quite clear to me that the problems that we had with
16 communication from each of the scenes directly from the
17 trains was due to the loss of train radio affected by
18 the blast, and particularly where it's taken out the
19 battery feed to the radios.

20 The emergency services at the time, the London Fire
21 Brigade and British Transport Police did have radio
22 communication at station level, underground, which would
23 have taken them to the edge of the platform, but it
24 wouldn't have extended into the tunnels at that time.
25 Similarly, our station radio that our staff had at

1 each Underground station couldn't communicate actually
2 in the tunnel and couldn't communicate directly to the
3 train by radio.

4 Q. As we'll hear from other witnesses, the new systems in
5 place -- the CONNECT system in the London Underground
6 network used by you --

7 A. Yes.

8 Q. -- and the Airwave system used by all police forces and
9 almost all the emergency services -- now permit --
10 although they're not interoperable, for other reasons
11 that we'll explore later -- a wide range of people to
12 speak simultaneously?

13 A. Yes.

14 Q. So if there is a problem or if damage is done to an
15 existing communications system in the cab or in the
16 tunnel, perhaps the telephone tunnel system, there is
17 another means by which a driver can communicate with the
18 outside world.

19 That other means, alternative means, wasn't
20 available on 7/7. The driver was forced to use the
21 tunnel telephone or a signal box once the cab radio had
22 been put out of action.

23 A. Yes, I mean, the additional means they've got now is
24 a handheld portable --

25 Q. Indeed.

1 A. -- that every driver has, but in addition, as you've
2 said, they have the tunnel telephone system, signal post
3 telephones and, you know, at the extreme, walk to the
4 station and raise the alarm there. Most of our stations
5 are not that far apart.

6 Q. But the old system, prior to the introduction of CONNECT
7 in the Underground, was an old -- I think it was an
8 analogue system --

9 A. Yes.

10 Q. -- with a single channel and it depended on these wires,
11 called leaky feeders, which were spread around the
12 Underground system and, if they were damaged, as they
13 occasionally were, there could be no communication on
14 that single channel in that area. Would that be right?

15 A. Yes, the difference between now and then is, as you
16 said, yes, you had leaky feeder cables, but we still use
17 those today, because that's the -- that gives you the
18 ability to communicate anyway.

19 But it was very much -- if you look at each line,
20 they all had different radio systems. Some ranging to
21 over 20 years' old, and, therefore, you know, not as
22 stable as we would have liked.

23 In addition, station radio systems were fairly, you
24 know, more modern, about 14, 15 years' old, and were
25 fairly robust for the time.

1 What CONNECT gives us is the ability for -- you
2 know, you can literally talk to anybody anywhere, but
3 it's also got far more resilience built in. So, you
4 know, even if you did lose --

5 Q. A base station?

6 A. -- a base station, you know, from one station, the other
7 one would come in and still work.

8 Q. Indeed.

9 A. Even if that wasn't available, you would still have
10 a degraded mode where you could still talk locally, even
11 though you may not be able to talk to the outside world.

12 Q. On 7/7, one of the backup systems, the tunnel telephone
13 system, worked, I think, in all the sites, except for --
14 I'll be corrected if I'm wrong -- Aldgate, or was it
15 Edgware Road, where both Mr Orr, who was a member of
16 London Underground travelling on the train, and the
17 driver were unable to get a line through to the line
18 controller using the tunnel telephone system.

19 A. Yes, that was actually King's Cross/Russell Square --

20 Q. Thank you very much. King's Cross.

21 A. -- where the driver had train tried it and then Mr Orr
22 had tried it, apparently.

23 Q. Is there a vulnerability there because the tunnel
24 telephone system relies upon cables in the tunnel which
25 can themselves be damaged in the course of an accident

1 or a derailment or an explosion?

2 A. Yes, I mean, the -- I think the thing to understand is
3 that, even though traction current may be discharged by
4 a short-circuit, it doesn't mean that some telephone
5 wires will not work. They're fed separately and they're
6 fed by battery from the substations, and, you know, we
7 know for certain that they didn't work at
8 King's Cross/Russell Square.

9 We believe, however, the eastbound tunnel, where
10 Mr Orr went, did actually work because it registered at
11 the other end.

12 Q. It tripped, because he went through the bolt-hole into
13 the other tunnel --

14 A. Absolutely, yes.

15 Q. -- and managed to find the wire on the other side of the
16 wall?

17 A. What probably happened is he didn't get the immediate
18 response that he was expecting, so we know it was
19 working, but he didn't get the opportunity to
20 communicate to somebody.

21 Q. There are some concerns expressed in TfL
22 documentation -- I won't take you to them -- to the
23 effect that the tunnel telephone system on occasion was
24 not as robust as might ideally have been the case, for
25 the obvious reason that the wires are in the tunnel.

1 Has the introduction of the new CONNECT digital
2 radio system meant that whatever pre-existing
3 vulnerabilities there were in the backup tunnel
4 telephone system are of less import, less significance,
5 now because the digital radio system is so useful and
6 effective?

7 A. Yes, very much so. Even at the time, if the TT, tunnel
8 telephone wires, weren't working, we had contingency
9 arrangements in place, but as you quite rightly say,
10 with CONNECT, it almost removes all of those problems
11 because you've got that far greater ability to
12 communicate.

13 Q. My Lady has heard -- and we are aware, of course -- that
14 two of the most important recommendations made by
15 Sir Desmond Fennell's report into the King's Cross fire
16 were that the radios used by London Underground and the
17 emergency services should be compatible, and also that
18 there should be public address PA equipment on all the
19 trains used by the crews and the line controller so that
20 drivers and the line controller could speak to the
21 passengers on the train in the event of an emergency.
22 The material indicates that London Underground had
23 started moving towards the CONNECT system even before
24 7 July 2005.

25 A. Yes.

1 Q. But it hadn't quite finished in terms of the
2 compatibility of the infrastructure with Airwave above
3 ground used by the emergency services. Do you have any
4 knowledge as to why it took so long, if indeed it was
5 a long time, between the recommendations of
6 Sir Desmond Fennell and 2003 and thereabouts when
7 CONNECT started to be introduced into the
8 London Underground system?

9 A. Yes, okay, I seem to recall the Fennell recommendation
10 was actually that the police and London Fire Brigade
11 radio systems should be compatible, and that was
12 explored, but I understand was at the time not fulfilled
13 because of the -- you know, there was no desire from
14 both of those agencies to have compatible radios.

15 Q. In fact, the recommendation -- it's page 137 of the
16 Fennell report -- was that London Underground and each
17 of the emergency services must be compatible. I'm less
18 concerned with ...

19 Let me put it another way. London Underground
20 plainly changed its system after the Fennell report, but
21 it took a very long time, relatively speaking, from 1988
22 to 2003, for the changes to be implemented. Was that
23 due to the technical difficulties concerned in the
24 installation of the infrastructure or because the debate
25 as to whether or not it should be installed took so

1 long?

2 A. No, I mean, the -- you know, as I recall, by 1991, for
3 all the 125 Underground stations we had station radio in
4 place that could also be used by British Transport
5 Police and the London Fire Brigade as well as our own
6 staff, of course. It was never, at that time, made
7 compatible and I think that was partly to do with this
8 debate about whether or not that was desirable from
9 a Command and Control aspect.

10 But when we then looked at the tunnel systems, as
11 I mentioned earlier, they were all diverse systems for
12 each line, and it wasn't until the CONNECT PFI was
13 finally signed in 1999 that we had a clear way forward
14 to improve the tunnel system as such.

15 Q. That's the private finance initiative that provided the
16 funding for this huge investment?

17 A. Exactly, huge investment and a huge contract as well,
18 and, you know, just to understand that and put it in
19 context, at the time it was one of the biggest PFI
20 contracts going. We had a similar one with our power
21 supply and, as I say, CONNECT came along around the same
22 time.

23 The part of the problem was that there was a number
24 of legal challenges around, also, the public/private
25 partnership, and, therefore, that delayed the actual

1 starting of the CONNECT project as such. But it got
2 kick-started by 2004 with a -- you know, a four-year
3 programme to do the whole of the Underground network for
4 CONNECT which would give the Underground communications.
5 At the same time, we were in discussions with the
6 Home Office and the police around the system that they
7 would require to give them Underground communications as
8 well and, at the time we were looking at that, it was to
9 try to link it to the Airwave system that they were
10 commissioning for all of the emergency services.
11 But it's true to say, I think, that 7 July provided
12 an impetus to get that up and running a lot quicker, and
13 so we were able then to use the CONNECT infrastructure
14 to help with the Airwave Underground system and
15 incorporate then communication for all the emergency
16 services underground.

17 Q. The current position now -- and we'll hear a little bit
18 more from Mr Collins, the chief operating officer for
19 London Underground -- London Underground therefore has
20 CONNECT, as you've said --

21 A. Yes.

22 Q. -- which is a digital -- it's called a TETRA-based
23 system.

24 A. Yes.

25 Q. All the emergency services and the police have access to

1 a nationwide Airwave system above ground?

2 A. Yes.

3 Q. Which is also digital-based, TETRA, and it uses to

4 a great extent the same infrastructure that you have

5 underground, which is a base station in each of your

6 underground substations --

7 A. That's correct.

8 Q. -- as well as your deep level stations. But for reasons

9 that are quite beyond me, in terms of my ability to

10 explain it, because your system is not encrypted but the

11 Airwave system is --

12 A. It is.

13 Q. -- and because your system uses frequencies in

14 a commercial band or a range of channels or frequencies,

15 and theirs doesn't, and because there are aspects of the

16 infrastructure that do differ, it has not been possible

17 to make your underground digital, TETRA-based CONNECT

18 system compatible with the above-ground, digital-based

19 Airwave system. Is that the nub of it?

20 A. That's correct.

21 Q. Has there been any exploration as to whether it is, in

22 fact, feasible to bring the two systems together, given

23 that they have a common base, in terms of the fact that

24 they are both TETRA, terrestrial, trunked radio systems?

25 A. Yes, I think in terms of the technology, clearly it

1 would be possible. It may take a bit of work to
2 actually get it to work that way, but I think it's more
3 than the technical capability.

4 It's also whether it would give you any real
5 benefits of having that, because, quite simply, if we
6 needed someone from the emergency services -- an
7 example, as we've had with 7 July, to talk to a member
8 of our staff down a tunnel -- we could simply give them
9 a CONNECT radio at the station for them to do that.

10 Q. You, I think, in the London Underground system, have now
11 thousands of CONNECT handsets, I think I've seen
12 reference to 1,700 handsets somewhere.

13 A. It sounds about right, yes.

14 Q. So in the same way that, in the olden days,
15 a London Underground staff member could hand over
16 a handset from the station narrow radio system --

17 A. Yes.

18 Q. -- to a member of the emergency services, now you can
19 just hand over one of the CONNECT handsets and they can
20 also make available to a member of the
21 London Underground an Airwave radio handset upon which
22 they operate. Is that what you're saying?

23 A. That could work quite easily.

24 Q. All right. So there is an element of piggy-backing upon
25 each other's systems?

1 A. Yes.

2 Q. Turning now to the public address system, the position
3 in 2005 was that neither the Circle Line nor the
4 Piccadilly lines had any equipment that allowed
5 passengers to speak to the driver, although on some deep
6 lines, except for the Victoria Line, the line controller
7 could speak back to the passenger?

8 A. That's not quite correct. The Piccadilly Line did have
9 talkback facility, so the passengers could talk to the
10 driver.

11 Q. Could the driver speak back to the passengers?

12 A. Yes.

13 Q. Right.

14 A. But the Circle Line certainly couldn't.

15 Q. They couldn't?

16 A. No.

17 Q. Has the position altered since 2005, in terms of the
18 ability of the passengers to speak to the driver and to
19 tell them what has happened in a particular carriage,
20 and then, if necessary, for the line controller and the
21 passengers to communicate?

22 A. Right, the situation now is that on all of the
23 Tube lines there's the capability for the talkback, with
24 the exception of the Victoria Line currently, but that's
25 being replaced and will be fully replaced by 2011.

1 The District Line now has talkback facilities and
2 that was finally installed as part of a refurbishment of
3 that stock in 2008, and that leaves, then, the Circle --
4 sorry, Hammersmith & City Lines, which is the Circle,
5 Hammersmith to Barking and the Metropolitan lines, that
6 still have PA systems from the driver to the passengers
7 but no talkback facility currently.

8 Q. So if there's an emergency in a carriage, the only
9 solution is to allow the train to continue to the
10 platform where there can then be a direct access between
11 a passenger and a driver?

12 A. We would always try to deal with any incidents at
13 a station, at a platform, it's far easier to deal with.

14 Q. We're all familiar with the notice on the Tube.

15 A. Yes.

16 Q. Is new stock being introduced into the Metropolitan and
17 the Circle, Hammersmith & City and District lines with
18 the new equipment?

19 A. Yes.

20 Q. But that is an ongoing process?

21 A. By 2013, all lines will be covered and have talkback
22 facilities.

23 Q. The Bakerloo Line, by contrast --

24 A. Sorry, I missed that one, yes.

25 Q. -- has given rise to, I think, greater difficulties and

1 the date for the full installation of a two-way PA
2 system is further away, is it not? I think 2020. Is
3 that right?

4 A. About 2020, yes, is the current programme.

5 Q. In essence, is there a reason why that cannot be sooner?

6 A. I mean, partly to do with the -- you know, the actual
7 contracts required to either refurbish rolling stock or
8 replace it, as we're doing on the surface stock trains
9 and the Victoria Line, is a very long lead time.

10 There's obviously investment issues with that,
11 alongside the fact of the complexity of actually being
12 able to either refurbish or replace. You know, in all
13 frankness, I doubt if we would be able to achieve it
14 much before 2020, if we made the decision to do it
15 today. But we still have PA on all of the trains, and
16 it works very well on all of the trains, which wasn't
17 necessarily the case at the time of the Fennell report.

18 Q. May we now turn to communications between
19 London Underground and emergency services in general
20 above and below ground?

21 In your statement, you describe as one of the
22 striking features of the evidence that you've heard --
23 because I know you've been sitting in court listening to
24 a great deal of the evidence that my Lady has heard --
25 that there were shortcomings in the communications

1 between parties at the scenes, the emergency services at
2 the scenes, which led to a lack of clarity on-site as to
3 the location and the nature of the incidents. That's
4 paragraph 34 of your witness statement.

5 Is it your belief now, however, that in light of the
6 new digital systems operated by, respectively, the
7 emergency services and yourselves, that the difficulties
8 that were encountered that morning -- in terms of
9 liaison between all the various bodies -- can be met now
10 because the new system allows for the talkgroups, of
11 which we've heard, to operate, which allow quite a large
12 number of people to speak in a single group
13 simultaneously on the same channel and, at the same
14 time, there can be other groups of individuals --
15 perhaps all the Silvers at the scene -- to speak on
16 another channel simultaneously in a way that means they
17 don't have to meet up face-to-face?

18 A. I think there's no doubt that the communications systems
19 helps with that particular issue. It doesn't resolve it
20 totally, and if you look at the -- I think the example
21 I pointed to was King's Cross in particular, where the
22 liaison didn't quite work, and this is nothing to do
23 with the communications system; this is people actually
24 going to the right place, talking to the right people,
25 to get the right information.

1 Now, you know, if we take King's Cross, you know, we
2 were equally -- had problems with that because our staff
3 at the control room didn't know what was going on,
4 partly because of the communication problem of getting
5 information from the tunnel, and the fact that nobody
6 had come back from the tunnel and told our staff what
7 was going on at that location.

8 But the -- I think the point I'm trying to make
9 there, it's more than just the communications system;
10 it's the act of seeking the right people to talk to, you
11 know, using the rendezvous point, as was mentioned by
12 Andy Barr yesterday, as the first port of call, but then
13 making sure we know where we need to go to talk to the
14 individual Silvers and so on.

15 Q. There needs to be a greater clarity, or there needed to
16 be a greater clarity, of who the scene Commanders were,
17 who Silver was or who Bronze was, so that one could
18 understand, if one arrived at the scene, who was in
19 charge and what information was available.

20 A. Yes.

21 Q. But presumably now, under the new system, the radio
22 system, if you were, for example, to attend a scene as
23 Silver and to take command there, you could receive
24 a message as soon as the control room knows that you are
25 to be the Silver saying, "Please go to channel X on your

1 CONNECT system", and on channel X you would find already
2 present, talking simultaneously, all the people who
3 needed to be in the loop for that particular scene,
4 perhaps the station supervisor, the duty operations
5 manager and a member of the Emergency Response Unit who
6 happened to be on the track --

7 A. Yes.

8 Q. -- so that you would immediately have access to the most
9 up-to-date information.

10 A. Yes.

11 Q. Is that how it is intended to work?

12 A. I mean, it certainly improves that ability to
13 communicate amongst ourselves, but you still need to
14 have that liaison at the point that the emergency
15 services arrive with our staff.

16 LADY JUSTICE HALLETT: Apart from anything else, you're
17 going to have to have the CONNECT handset handed over to
18 these people who have got their own system?

19 A. If they need to talk, but you can still do that through
20 Command and Control. That's the importance, then, of
21 the liaison at that point.

22 LADY JUSTICE HALLETT: What concerns me, after what I heard
23 from Mr Barr yesterday about there's meant to be, under
24 the emergency planning -- of which I'm told there's been
25 a great deal -- the idea is you have a rendezvous point

1 at every Underground station --

2 A. Yes.

3 LADY JUSTICE HALLETT: -- if not more than one, and that all
4 the emergency services will go to that rendezvous point.

5 Therefore, they should be trained in that. Then, at

6 that rendezvous point, according to Mr Barr,

7 a London Underground member of staff is meant to go and

8 make sure that all the first responders know exactly

9 with whom they're dealing and where they go.

10 A. Yes.

11 LADY JUSTICE HALLETT: I was trying to go through my notes
12 as to what actually happened at each of these sites.

13 Now, did that system work, as far as we can tell, at any
14 of the sites?

15 A. I think if you look at each site, it doesn't appear that

16 at King's Cross it worked very well, and there are

17 probably some understandable and good reasons for that.

18 When you compare King's Cross to, say, Aldgate,

19 Aldgate, there's one station entrance, it's very simple

20 there to have a member of staff posted and then either

21 direct people to where they need to go to talk to the

22 supervisor or the incident manager, whereas, with

23 King's Cross, the rendezvous point is up at street

24 level, you've got to go down at least one level of

25 stairs, if not two, to get to our control room, and

1 actually trying to explain to somebody where to go is
2 actually quite difficult. So you're then in the process
3 of saying, "Right, we'll take them there".
4 Now -- and it's very easy to criticise this in
5 hindsight and I'm really not criticising what people did
6 on the day, I think they did the best that they could
7 do, given the circumstances that they found, but
8 probably a better way was to have left somebody at the
9 rendezvous point with runners going backwards and
10 forwards with the emergency services taking them where
11 we needed them to go. But it's not a system we
12 particularly had set up very well on 7 July. We've done
13 a lot of work between now and then in training staff
14 about the importance of that initial liaison and taking
15 control of the situation.
16 But I think you've got to understand the whole
17 dynamics of it. You've got people coming in to our
18 system that may not be that used to it. You know, a lot
19 of the emergency services that attended on the day, it
20 wasn't their local neighbourhood so, therefore, they
21 wouldn't have been familiar with that particular
22 location, you know, you're never going to overcome that
23 in any terms of familiarisation, but what you can
24 overcome is the very clear, "You go to this point,
25 you'll then be taken to the next point of control".

1 LADY JUSTICE HALLETT: So you are, and have, since 7/7,
2 introduced a much better system of training. The front
3 line staff, not just the senior managers, it's the
4 people --

5 A. That's the point, it's the tactical level.

6 LADY JUSTICE HALLETT: It's the people who are going to be
7 faced with it, in the most horrific circumstances --

8 A. Yes.

9 LADY JUSTICE HALLETT: -- who need to be trained as to what
10 to do.

11 A. Yes.

12 LADY JUSTICE HALLETT: That's your staff. What about as far
13 as inter-agency training is concerned? Again, the front
14 line troops, not just the senior managers, the
15 policemen, the ambulance, the paramedics, who are
16 actually going to be there on the ground.

17 A. We've done that sort of training. Obviously, it's for
18 the other emergency services to say what training
19 they've actually done, but --

20 LADY JUSTICE HALLETT: No, what training have you done
21 together is what I want to know.

22 A. Sorry, I was just going to say that. But we do always
23 invite them, when we're doing what we call the
24 line-level, table-top exercises, which involve front
25 line staff, we invite them along to that as well, and

1 quite often that -- you know, they attend those and they
2 contribute to that.

3 So there's a lot more of that done at the tactical
4 level, but I think it is a work in progress, you know,
5 it never goes away, you've got to continue to do it.

6 MR KEITH: We've seen, Mr Dunmore, a particular book, TFL35,
7 a rule book, which sets out, for the benefit of people
8 who attend a London Underground station, where the
9 rendezvous points are, what they can expect from
10 London Underground and so on, but in your own statement
11 you acknowledge that, in the light of the evidence that
12 you've heard, you think that more could still be done in
13 addition to the table-top exercises which have been
14 carried out already --

15 A. Yes.

16 Q. -- to address the problems which the evidence has
17 revealed.

18 Does that mean more table-top exercises or closer
19 working relationships with the emergency services
20 insofar as London Underground is concerned, or what?

21 A. I think it's an element of both, and I think -- as
22 I just said, I think it's a work in progress and you can
23 never take your eye off that particular ball. But it's
24 certainly worth, in light of what we've heard, actually
25 having a review of the training that we give and the

1 inter-agency training that we give, and it doesn't
2 necessarily mean that we need to do it as inter-agency
3 training, you know, we can do it with front line staff
4 within our own organisations and our own agencies. But
5 it's getting the key points over to them about the
6 importance of, you know, these are the people you need
7 to find, this is what you need to do when you turn up
8 on-site.

9 Q. Another Fennell recommendation was that members of the
10 London Fire Brigade in particular should be familiar
11 with the layout of Underground stations, because, of
12 course, they are ordinarily expected to be the primary
13 responder who will have to attend your stations in the
14 event of an emergency.

15 Do you feel that enough is being done by
16 London Underground and the London Fire Brigade to
17 familiarise individual officers of the Fire Brigade in
18 attending London Underground, and assisting them in
19 telling them where the station control rooms are, where
20 they might find a station supervisor, where the
21 electrical panels are, whatever it might be that they
22 will have to attend to deal with? Is enough being done
23 in that area, do you think?

24 A. I believe so. I mean, if you just consider for a moment
25 the overall response to 7 July, a lot of what we had in

1 place, in terms of emergency planning and training and
2 things like rendezvous points, is a direct outcome of
3 Fennell. It's in almost everything that we do in terms
4 of our operation safety management system and training.
5 So it's -- you know, it's almost a bible to us today.

6 Q. But with respect, some of the things that went wrong on
7 7/7 --

8 A. Yes.

9 Q. -- were direct reflections of issues identified by
10 Fennell which had not been corrected or addressed fully
11 by the time of 7 July.

12 A. Yes, but the -- and I think this is where the difference
13 was there -- if we're talking about, you know, an
14 ambulance turning up to deal with an injured customer or
15 the Fire Brigade turning up to report of a fire incident
16 at a station, then normally you're dealing with the
17 local Ambulance Service or the local Fire Brigade, where
18 they have -- and still do today -- go to the station
19 quite regularly and get familiar with it.

20 You know, it's -- they still continue that, places
21 like King's Cross, I know for a fact they'll still come
22 down as a crew and actually go round the station with
23 our staff to understand where the key aspects are.

24 Q. Right.

25 A. So it still continues today and I think it's been

1 reinforced by 7 July. And that deals with, typically,
2 the local Brigade and the local station, and when we're
3 talking about Fire Brigade. The problem, when you get
4 something like 7 July, is that you get people coming
5 from far and wide, you know, quite rightly, to assist,
6 and they may not be that familiar with that location,
7 but as long as the key people are and the station
8 officer in particular is, then you've got that Command
9 and Control aspect already set in.

10 Q. May I, in this area, raise one further issue, one last
11 issue, please?

12 The material from the witnesses who will be giving
13 evidence on behalf of British Transport Police and the
14 Metropolitan Police, indicates that there might be
15 a limitation in the above-ground Airwave system because
16 of the limit on the number of base stations which could
17 be physically built into the Underground system, and
18 that limits the number of simultaneous conversations or
19 simultaneous use of channels that can be carried out on
20 the digital, above-ground and below-ground Airwave
21 system.

22 Is the London Underground CONNECT system similarly
23 limited, in that in some places in the Underground
24 network, in particular some stations, there are fewer
25 transmitters, base stations, limiting, therefore, the

1 number of simultaneous conversations that can take place
2 on your CONNECT system?

3 A. Okay, the lowest number of simultaneous conversations we
4 can have is seven at any location. That's a fair amount
5 of capacity, I would say, because, you know, the simple
6 fact is that, if you had seven people using the system
7 simultaneously, as soon as one stops their call, the
8 next one can go on, you know, it's automatic, it's
9 like --

10 Q. The limit is not seven simultaneous callers; it is seven
11 separate channels in use at any one time?

12 A. Yes.

13 Q. So you could have twenty Silvers, for argument's sake,
14 on one channel and you could have all the station
15 supervisors on another channel, and there would be seven
16 channels in total?

17 A. Absolutely.

18 Q. Right. So it appears, then, that in the CONNECT
19 system --

20 A. There's plenty of capacity.

21 Q. -- there is plenty of capacity.

22 A. Yes.

23 Q. All right. Lighting. It's your view, is it not --
24 although these matters are entirely for her Ladyship --
25 that the lighting system generally worked as expected on

1 7/7, because although the lighting fittings in the
2 carriages themselves that were bombed were destroyed,
3 the emergency backup supply worked for the other
4 carriages, and the way in which the system works is that
5 all the lights are normally powered by the traction
6 current, but if the traction current goes off, the
7 batteries will continue to supply some of the lights, so
8 the lights don't change, it's just the number of lights
9 that remain on that changes.

10 A. Yes.

11 Q. And they worked?

12 A. Yes, typically, about one in five, yes.

13 Q. The tunnel lighting worked, and you made a point, did
14 you not, that the lighting in the tunnel is, in fact,
15 six times stronger than the lighting ordinarily
16 recommended for emergency lighting in offices?

17 A. In a building, yes.

18 Q. In a building.

19 Torches. A number of witnesses spoke of a lack of
20 torches, in particular how some of the torches that they
21 had ran out of batteries, the battery power failed,
22 I think two witnesses in particular at Aldgate spoke of
23 how the batteries in their Dragon lamps, is it --

24 A. Yes.

25 Q. -- failed within a surprisingly short period of time.

1 Has more been done now to ensure that the batteries on
2 the Dragon lights do last or are properly charged so
3 that that doesn't happen?

4 A. I mean, there's a requirement for the supervisor at each
5 location where we have Dragon lights that they check
6 them weekly -- sorry, daily, that (a) they're there and
7 weekly to check that the charge is maintained.

8 You've got to remember that Dragon lights have
9 a particular purpose and that is for search. They're
10 not designed to provide a light source that you would
11 need to sort of operate with, as such, on -- as we saw
12 on 7 July.

13 Q. Why are they particularly designed for that purpose?

14 A. They're a very powerful light and give a very strong
15 beam, but it is for things like, you know, if we have an
16 incident in a tunnel and you're searching under a train,
17 it's particularly valuable for that sort of thing.

18 Q. Drivers have something called Bardic lamps?

19 A. Yes.

20 Q. What's the difference?

21 A. The Bardic lamp has dual purpose, one is obviously
22 a form of emergency light, but also it has coloured
23 lights on it as well. So you can give a red and a green
24 signal with a Bardic lamp.

25 Q. I think Health and Safety material indicates that the

1 Bardic lamp isn't terribly good for searching tunnels.

2 A. It's not particularly designed for that, which is why we
3 had the Dragon lights.

4 Q. All right. Is there some way in which the system can be
5 simplified so that there is a standard lamp, a standard
6 torch, that is useful for any possibility or eventuality
7 encountered by a driver?

8 It seems rather extraordinary, with respect, that
9 there should be different lamps, and the drivers have
10 Bardic lamps, and the station might have Dragon lamps,
11 and one needs recharging and one doesn't.

12 A. The problem with a Dragon lamp is it's big, it's a very
13 big light, and, therefore, for a poor old driver having
14 to carry that in his bag everywhere, or her bag
15 everywhere, would be quite difficult. The Bardic lamp
16 is very portable.

17 Q. All right, we have your assurance, do we, that this is
18 an issue that is kept under constant review by
19 London Underground?

20 A. Yes.

21 Q. First aid equipment and training you address in some
22 detail in your witness statement, and I don't propose to
23 go through every paragraph. In essence, on 7 July,
24 there was basic first aid at every station, there was
25 a first aid box?

1 A. Yes.

2 Q. The box, as we've heard, was usually in the supervisor's
3 office or station control room and some stations had
4 more than one box?

5 A. Yes.

6 Q. King's Cross, for example, a large interchange section.
7 There was usually one stretcher and carry sheets.

8 A. Somewhere like King's Cross would -- in fact, I think
9 the evidence was they had about five stretchers on the
10 Underground station itself.

11 Q. They had more than one, indeed. Hence, I say there was
12 usually one stretcher, but there were, on occasion,
13 more.

14 A. Yes.

15 Q. The evidence appears to indicate, particularly from the
16 debrief material, that London Underground staff itself
17 thought that some of the first aid boxes were
18 ill-equipped, the location was poor in certain stations,
19 difficult to find, and this is an issue that was
20 reviewed at some length by London Underground after 7/7.

21 A. Yes.

22 Q. Is the current position now that there are not just
23 first aid boxes but multicasualty kits --

24 A. Yes.

25 Q. -- at, I think, around 170 stations, depots and control

1 rooms, at 170 locations, and there are also
2 defibrillators now installed at certain places?

3 A. Yes.

4 Q. Is oxygen supplied?

5 A. No.

6 Q. Has consideration been given to having a ready supply of
7 oxygen, so that if the emergency services attending
8 don't have sufficient oxygen supplies, the numbers can
9 be made up?

10 A. Yes, I mean, basically, again, we didn't review this
11 alone, we reviewed it with colleagues from the emergency
12 services, particularly the NHS in this case, and the
13 view was that they would bring the oxygen with them and
14 you know, there are issues around storage, and so on,
15 that would create more problems for us on stations.

16 Q. You have also now emergency dressing packs, so large
17 bandages and dressings. Is that right?

18 A. I mean, the multicasualty kit has the large dressing
19 packs in them.

20 Q. I see.

21 A. In addition to that, we've got the National Health
22 Service pods that are about four times the size of the
23 multicasualty kits and have even larger dressing packs
24 as well.

25 Q. So there is now a very distinct difference between the

1 position now and the position before 7/7?

2 A. Absolutely.

3 Q. In terms of first aid training, has the position altered
4 at all?

5 A. Yes, quite immensely, and in two areas. We've always
6 had the first aid certification training, which is open
7 to all members of staff, and we give an allowance for
8 staff that undertake that training as well.

9 At the time, we had about a thousand staff that had
10 been first-aid-trained, certified as first aiders.

11 We've increased that to over 2,000 now.

12 In addition to that, all station supervisors had
13 a module basic first aid training, and so that's another
14 1,700 staff on top of the 2,000.

15 The reason we picked supervisors is we -- you know,
16 we knew we would always have a supervisor at a location.

17 Q. Mr Collins will address the issue in greater detail, but
18 thought has been given, has it not, to carrying first
19 aid boxes on trains?

20 A. Yes, we did consider that and also, in discussion -- we
21 had meetings with a number of the survivor groups from
22 the 7 July, and had similar discussions with those. The
23 basic problem of trying to retain first aid kits on our
24 trains is: one, an issue of space, but probably more
25 importantly is the storage conditions are not ideal for

1 that sort of health-related equipment.

2 Q. You mean a lack of space or difficulty getting access or
3 what?

4 A. You know, you could fit one in an emergency pod, for
5 example, but we know that the problem with anything that
6 we try to store on the train like that, that's in
7 a sealed emergency pod, it will get dirty, and although
8 the sealing is inside, it's not an ideal place to have
9 it.

10 The other problem is --

11 Q. Can I pause you there, what's in an emergency pod now on
12 a train?

13 A. Carry sheets, which I think were mentioned particularly
14 at King's Cross, if I recall, Russell Square, and
15 they're held in every train cab so you've got at least
16 two or three in every train.

17 You've also got other emergency equipment that would
18 be used for things like lifting the shoes that pick up
19 the power and so it's essential equipment that we need
20 there.

21 In terms of --

22 Q. That's equipment designed primarily for the driver, who
23 has the expertise to be able to use it.

24 A. Yes.

25 Q. You've heard the evidence, Mr Dunmore --

1 A. Yes.

2 Q. -- about how courageous and cool-thinking passengers on
3 the trains immediately started to try to tend to the
4 injured --

5 A. Yes.

6 Q. -- and were crying out for basic emergency equipment
7 such as dressings or tourniquets, although I don't
8 intend to delve into technical debate about when is
9 a dressing a tourniquet.

10 Would it not be possible to have on a train, perhaps
11 in a seat or some area in the main passenger part of the
12 Tube train, a simple supply of first aid equipment such
13 as a dressing, some sort of tourniquet, plasters,
14 whatever it is, which, to prevent vandalism, might
15 perhaps be opened by a driver on a direction from the
16 Line Control Centre or on his own initiative, with
17 a key, in the event that a Tube train gets stuck in
18 a tunnel, remains there, is perhaps derailed in
19 a tunnel, and there's no ready supply of equipment from
20 outside the tunnel?

21 A. Yes, I mean, it's certainly possible to do that.

22 There's absolutely nothing preventing us from doing
23 that, other than the fact that, unfortunately, with
24 anything of any value that -- we've found in the past it
25 doesn't stay there very long and we have to keep

1 replacing it. But that would be our problem, quite
2 frankly.

3 Q. In a locked seat, presumably presents some bar to
4 vandalism?

5 A. Well, other than in a lot of our -- particularly the
6 modern stock now, there is no space under the seats and
7 it's designed that way particularly.

8 But, you know, it's something that we would always
9 be prepared to review again, but, you know, it's not as
10 simple as just saying, "Let's put a first aid kit on
11 every train", and, you know, what would be the right
12 size of it? You know, there's some difficulties with
13 it.

14 Q. Mr Dunmore, I claim no special expertise in any of these
15 areas and, of course, you will have looked at these
16 areas and there are technical and financial
17 considerations well beyond our ability to comprehend,
18 but I think my Lady would be grateful for the assurance
19 that this is an issue that is kept under constant
20 review?

21 A. Yes, we would review.

22 Q. You, yourself, acknowledge in your statement that there
23 are always lessons to be learned and those lessons
24 continue to be learned.

25 A. Absolutely.

1 Q. The final issue I want to address, please, if I may, is
2 traction current. My Lady has heard evidence from some
3 witnesses who may have waited or have had to wait on the
4 platforms at the various stations whilst they waited for
5 confirmation that the traction current was off.

6 The position, we understand it, currently, is that
7 confirmation is generally sought from the line
8 controller that traction current is off and that
9 confirmation can then be passed down through the station
10 supervisor or other London Underground staff members --

11 A. Yes.

12 Q. -- to whomever needs to know?

13 A. Yes.

14 Q. Are there difficulties currently with the line
15 controller being able to turn off the traction current?
16 There are some suggestions in the TfL documentation as
17 to possible confusion or lack of certainty as to when
18 the traction current is off, and does the system work
19 well, so that if a person needs to know immediately that
20 traction current is off, they can get hold of the line
21 controller through the station supervisor or whoever to
22 find it out?

23 A. I mean, you know, there's -- I've never been aware of
24 problems getting confirmation that traction current has
25 been discharged, and it's something that any member of

1 staff, no matter what level they come in at, is trained
2 in how -- is trained in how to discharge traction
3 current in an emergency and the importance of talking to
4 the controller and confirming that current is off. So
5 it's trained in everybody that --

6 Q. But on 7/7, the Line Control Centres were flooded,
7 swamped with calls --

8 A. Yes.

9 Q. -- members of staff couldn't get through, the station
10 supervisor might have been elsewhere in the station, the
11 London Fire Brigade, in particular, sought on occasion
12 to get confirmation.

13 At Aldgate, they did find a member of staff who went
14 off to try to get the confirmation, but it took time.
15 You can't always guarantee that there will be a member
16 of staff there; there might be another emergency
17 elsewhere in the station requiring his or her
18 attendance. The system depends, does it not, on there
19 being somebody there to relay the information --

20 A. Absolutely.

21 Q. -- and the line controller answering the phone or the
22 radio?

23 A. Yes, and again, of course, CONNECT helps with that
24 today. Even at the time, there was a sort of priority
25 way of knowing that (a) traction current had been

1 discharged, that the controller would get an
2 audio-visual and an alarm and would then immediately go
3 to that telephone to answer it. So the process was in
4 place at the time. But there is no doubt CONNECT
5 actually does away with any of the sort of problems that
6 you were talking about there.

7 But it's always best, and we always say, for
8 confirmation that current is off, for anyone other than
9 our staff, is talk to our member of staff that's on the
10 scene who can get confirmation and can also, if it's at
11 a station, prove that the current is off, if need be,
12 and, if on a train or at a station, put
13 a short-circuiting device down that prevents current
14 from being recharged. It can't come back on once that's
15 on.

16 Q. London Fire Brigade make the point that their officers
17 are advised to seek confirmation from their own Brigade
18 Control who will themselves speak to the line
19 controller, because it has the additional advantage that
20 there is no chance of the system being reenergised after
21 the usual 7 minutes, which is what I think the paperwork
22 refers to, because it can't be reenergised, according to
23 them, unless the Brigade controller and the line
24 controller agree that it should be reenergised. It's
25 a failsafe to prevent it being reenergised whilst they

1 are on the track.

2 Is there a danger that if members of the emergency
3 services simply rely upon the member of staff at the
4 London Underground as opposed to seeking confirmation
5 from their own control room that, unbeknownst to them,
6 the traction current could be switched back on and, if
7 there's no short-circuiting device in place, the track
8 will reenergise and they will be electrocuted like
9 Dr Mackenzie was some weeks before 7/7?

10 A. Okay, there's -- this is a bit of an odd situation, so
11 they're relying on somebody that's far remote to give
12 them confirmation through a third or fourth party that
13 traction current is off --

14 Q. Yes, but --

15 A. -- rather than the person who's on-site who could
16 actually confirm it anyway.

17 Q. I think they would say that the safety lies in the fact
18 that, because they've introduced their own Brigade
19 control room into the relay system, and agreed with the
20 line controller that the system will not be reenergised
21 unless the two controllers agree, they're not at risk of
22 a reenergisation of the track.

23 A. But, as I say, the daft thing about all that is that we
24 will always refer them back to the local supervisor to
25 give them confirmation that current is off. We never do

1 it through the control room.

2 What we are doing, separately to this, is talking to

3 the Fire Brigade, and then with the other emergency

4 services, about coming up with a system that is done

5 locally that gives them the safe system that they

6 require to work with with their people as well.

7 The Dr Mackenzie incident is quite interesting

8 because short-circuiting devices were put down that

9 would have prevented the current coming back on, but

10 because it was the crossover, which actually is the same

11 crossover that we talked about on 7 July at

12 King's Cross, they put a third SCD down, which they

13 didn't need to do and shouldn't have done, which then

14 livened up the bit that they'd just secured safely, and

15 that's how he came to get the shock that he did.

16 We've addressed that because what we now say is, in

17 your procedures, you don't put an SCD too close to a set

18 of points.

19 Q. Could we have a look at [COLP204-9], please? This is

20 a particular page from the document I mentioned earlier,

21 which is the assistance given to emergency services if

22 they are attending a London Underground incident.

23 You'll see the note at the top:

24 "If traction current is switched off using this

25 method ..."

1 And this particular method on this page is using the
2 tunnel telephone on the head wall at the end of the
3 platform to speak to the line controller.

4 A. Yes.

5 Q. "... and no information is received by the service
6 controller regarding the switch-off, traction current
7 will be switched on again after 7 minutes."

8 There is an impression given there -- and it's not
9 an impression that I, for one, would want to risk my
10 life --

11 A. No, exactly.

12 Q. -- testing -- that this system will come back on
13 automatically after seven minutes if the head wall phone
14 is used to turn it off.

15 A. Right, that's only if --

16 Q. One can understand why there might be a concern at
17 reenergisation unless there is a link between the
18 emergency services' own control room who can verify that
19 the system will not be turned back on until everybody is
20 off the track.

21 A. Our supervisor or member of staff there, if they use
22 this means to discharge current or any other means, they
23 have to talk to the controller.

24 So, therefore, they're getting information to the
25 controller about why current has been discharged. If we

1 look at each of the scenes for 7 July, the controllers
2 knew that something was wrong, even though they may not
3 have known the exact cause, so there was no chance that
4 they would have recharged current in those cases.

5 But the other thing is, by putting
6 a short-circuiting device down, the current can't come
7 back on.

8 Q. But the Fire Brigade aren't permitted to put down
9 a short-circuiting device themselves.

10 A. No, but our staff can.

11 Q. What if they're not available?

12 A. We've actually done some training with the Fire Brigade
13 that enables them to do that.

14 Q. Right, so in truth, this should make clear that if there
15 is any request to turn traction current off in any sort
16 of incident --

17 A. Yes.

18 Q. -- the mere fact that there's been an incident will
19 prevent the system being reenergised?

20 A. The fact that the controller would be aware that
21 something is wrong, although they may not know the exact
22 cause, would mean that they wouldn't then recharge
23 current.

24 Q. All right.

25 LADY JUSTICE HALLETT: Sorry, can I just ask you about an

1 answer you gave Mr Keith a few minutes ago?
2 You said you're talking to the London Fire Brigade
3 and other emergency services about the system of getting
4 confirmation. That sounded as if it's present tense and
5 I wondered why, nearly six years after the event, when
6 we know they had problems getting confirmation, there
7 are still these discussions.

8 Is that because it's continual discussions improving
9 things or is that discussions to get in place a proper
10 system?

11 A. I think it's the continual discussion to improving
12 things. I mean, to be perfectly fair, until this
13 inquest, that didn't feature as an issue particularly
14 around the incidents around 7 July. It certainly didn't
15 come out in the other reports or reviews that I've seen.
16 But, as ever -- and, you know, we do work very well
17 with the Fire Brigade and, you know, we have to also
18 consider their safety for their personnel as well as our
19 own staff -- we wouldn't want to put them in a situation
20 of danger. It's as -- you know, as bad for us as it
21 would be for them. But clearly, we believe that we can
22 work with them and come up with a sensible solution that
23 meets all requirements.

24 LADY JUSTICE HALLETT: Thank you.

25 MR KEITH: Mr Dunmore, you have attended my Lady's

1 proceedings throughout and you've heard a great deal of
2 the evidence that's been given. I'm sure you've formed
3 your own views as to where the emergency planning
4 succeeded and where it failed, and I think we can
5 discern from your witness statement that you would say
6 that, by and large, it succeeded.

7 A. Yes.

8 Q. Where would you say the main failing, if there was
9 a main failing, occurred?

10 Judging by your witness statement, you seem to
11 accept that the issue of interservice liaison,
12 communications between the services, and perhaps, to
13 a certain extent, the management of the response, the
14 control structure, was the area in which perhaps things
15 did not go as well as they might. Would you agree with
16 that?

17 A. I think, when you look at the root causes here -- and
18 again, I think by and large it worked well. You know,
19 I don't think we could have asked more for our staff or
20 from the emergency services in their response. It was
21 magnificent, I think as other people said.

22 The root cause of a lot of the problems was the fact
23 that we couldn't get communication directly from the
24 trains to the outside world, including our own controls,
25 and we have addressed that with CONNECT and Airwave

1 underground for the emergency services that would
2 prevent that sort of thing happening in the future,
3 where we've got an incident and we can't find out what's
4 going on.

5 Of course, with these types of incidents, you can
6 never guarantee that a communications system will stand
7 up totally, but it is a lot more resilient than anything
8 we've ever had previously. So I believe that's been
9 addressed.

10 But, you know, we didn't come into this and I wasn't
11 coming to this court every day thinking, "Oh, we've done
12 everything, it doesn't matter what this inquest is going
13 to find, we know all the answers". You know, we have
14 been very open about this and we're willing to learn any
15 other lessons that may come from it. You know, there
16 has been different evidence that we may not have heard
17 before, and, therefore, we would take that on board.
18 But I think the key was that ability to communicate
19 directly to the scene.

20 Q. By and large, the individual responses -- the bravery
21 and the courage of the people in your own organisation
22 as well as others -- saved the day to a considerable
23 extent. People got into the carriages and the trains to
24 help and to do everything that they could, with or
25 without the system.

1 A. As did fellow passengers, without any doubt.

2 Q. As did fellow passengers.

3 Perhaps, Mr Dunmore, insufficient attention was paid
4 to the ability of individuals to respond in those
5 courageous ways and the system needs constant
6 improvement in order to give them the support that they
7 need.

8 A. I think you can never take your eye off the ball,
9 I think that's the key lesson. But when you consider
10 that the training we had given, which was actually
11 a legacy of Fennell around emergency planning, emergency
12 response, you know, the ability to deal with evacuating
13 large numbers of people from trains and stations safely,
14 actually stood us in good stead, and we have
15 concentrated very much since then in the lessons that
16 we've learnt and included that into training.
17 Our training is competency-based, and basically,
18 what we mean by that is we're not training people in,
19 you know, "With this type of incident, this is what you
20 do", but you train them in a range of scenarios and
21 a range of incidents so that they can use that wonderful
22 tool we've got called common sense and actually apply
23 the right measures at the right times.
24 You know, it isn't always going to go by the rule
25 book. It can't. But by giving them competency-based

1 training, you give them the tools to respond
2 appropriately, and I believe we've done that and
3 continue to do so.

4 MR KEITH: Thank you very much, Mr Dunmore.

5 LADY JUSTICE HALLETT: Mr Coltart?

6 Questions by MR COLTART

7 MR COLTART: Thank you. The thrust of my questions,
8 Mr Dunmore, will in a sense be concerned with that very
9 last point you've just been making about emergency
10 planning and the value which it can add, because, would
11 you agree with this proposition, that it is of no use or
12 no significant use unless lessons which are learned from
13 it are then subsequently put into action?

14 A. Yes, I'd agree with that.

15 Q. Do you recall, in September 2003, a live exercise which
16 was undertaken by all the emergency services and the
17 London Underground called Operation Osiris?

18 A. Yes, 7 September 2003, I remember it well.

19 Q. I'd like to consider that exercise briefly with you, if
20 I may, and the lessons which could have been learned
21 from it.

22 As you will recall, this was an exercise which took
23 place on a Sunday, on 7 September 2003, at Bank
24 Underground station.

25 A. Yes.

1 Q. The hypothetical scenario was that a chemical attack had
2 taken place on an Underground train disabling the driver
3 and a number of the passengers in the process. That's
4 correct, isn't it?

5 A. Yes.

6 Q. For the purposes of conducting the exercise, I think
7 London Underground had provided a Tube train which was
8 positioned in the tunnel underneath the station.

9 A. That's correct.

10 MR COLTART: My Lady, in due course, a debrief report was
11 published by the London Resilience Team in relation to
12 this exercise. It contains quite a lot of information
13 about response to a chemical attack which isn't relevant
14 to my Lady's considerations and which I don't propose to
15 put into the public domain, so I'm not going to put the
16 document on screen, but I'll cite from it, if I may.
17 For my Lady's note and so my learned friends can follow
18 it's at COLP183.

19 So that we can seek to draw such parallels as we
20 properly can in relation to these proceedings, can
21 I just read out an extract from page 21 of the report,
22 which deals in a little more detail with what the
23 exercise involved and the challenges which it presented
24 to the emergency services:

25 "The exercise scenario was designed to test the

1 response to a key vulnerability identified in the
2 Department of Transport review of the response to
3 incidents on the London Underground: namely, rescue from
4 trains within deep tunnels.

5 "During the exercise, London Fire Brigade rescue
6 crews travelled some 400 metres to the train and an
7 additional 60 metres through the carriages to the front
8 of the train, a round trip of almost a kilometre.

9 Access and egress to the train required negotiating
10 dimly lit tunnel and track and final entry through the
11 driver's door, approximately 70 centimetres wide and one
12 and a half metres above the track surface. All rescue
13 personnel and casualties were required to pass through
14 this single point and careful management of crews was
15 required to avoid a 'bottleneck'.

16 "Rescue crews were working at maximum operating
17 capacity, but successfully rescued all casualties from
18 the train."

19 There were about 60, I think, in the exercise:

20 "Ambulant casualties were led or assisted to surface
21 level and non-ambulant casualties were strapped to
22 lightweight stretchers and carried or wheeled to surface
23 level. High levels of professionalism and commitment to
24 task were noted in the London Fire Brigade responders.

25 The exercise demonstrated the considerable and specific

1 challenges presented by rescue from a contaminated
2 Underground environment and endorsed the need for
3 continued work to identify and develop alternative
4 rescue solutions."

5 Plainly, there were some specific ingredients of the
6 exercise that related to a chemical attack; so, for
7 example, the protective equipment which had to be worn,
8 but it shared a number of the same characteristics,
9 didn't it, which were subsequently present on 7 July,
10 and it's right, isn't it, that one of the main concerns
11 which arose out of the exercise subsequently was the
12 inability of the emergency services and the Underground
13 staff to communicate with each other? Do you recall
14 that?

15 A. I don't recall that particular issue directly, the
16 reason being that I was very focused on, at the time,
17 the ability for emergency services to rescue a train
18 full of passengers with this type of scenario and,
19 therefore, we did a lot of work around that. But we
20 also knew at that time, of course, that CONNECT was on
21 its way and I know we were having discussions, and
22 I think I referred to them earlier, with an organisation
23 called PITO, which became the National Police -- IA?

24 Q. NPIA. I'm sure someone will --

25 A. "Improvement Agency", I think it is.

1 Q. Another acronym for our --

2 A. And we were in discussion with their predecessors about
3 how we could incorporate Airwave on to our system.

4 Q. I'm going to come on to deal with that specifically in
5 a moment, if I may. But just to remind you -- and in
6 fairness to you, this is now some time ago, this
7 exercise. This was part of the findings in the report
8 at page 21:

9 "Communications presented significant difficulties
10 throughout the exercise, despite preparatory work
11 on-site. Sub-surface radio communications presented
12 particular problems and work is required to address the
13 problems that arose with interference.

14 "Responders in gas tight suits had difficulty
15 communicating verbally with casualties and other
16 agencies ..."

17 So that was a specific chemical issue?

18 A. Yes.

19 Q. "Additionally, the Metropolitan Police Service currently
20 has no sub-surface communications capability and, as
21 a result, the MPS Silver Commander was not able to
22 communicate directly with the specialist EXPO officers
23 operating in the hot zone. Individual recommendations
24 addressed these issues more fully and this information
25 will be fed into existing projects to improve emergency

1 services' radio communications."

2 Then there was further detail given later at page 29

3 of the report under the heading of "Radio

4 Communications":

5 "During the exercise, sub-surface radio

6 communications were intermittent at best. Current radio

7 communication equipment did not allow direct radio

8 communication between agencies either above or below

9 ground. There were continual problems with all

10 agencies' radio communications on all channels probably

11 due to the amount of radio traffic being transmitted

12 around the exercise site. Good inter-agency

13 communications are vital at incidents of this nature

14 when relaying information about changes in the

15 environmental conditions as indicated by detection,

16 identification and monitoring equipment."

17 It goes on to give some detail about specific

18 external interferences including media satellite links

19 and the police helicopter:

20 "The British Transport Police had purchased

21 specialist equipment to enable sub-surface radio

22 communications between umpires during the exercise,

23 however it was also subject to severe interference by

24 external factors and did not fulfil the criteria. This

25 was despite a rigorous programme of testing which had

1 taken place prior to the exercise at and around the
2 exercise site. Testing was carried out above and below
3 ground and a communications system established for the
4 running of the exercise to include safety officers and
5 support staff."

6 So those were the findings of the London Resilience
7 Team later and a recommendation was made in the report
8 that the London Underground, the London Fire Brigade and
9 the British Transport Police were to work together to
10 find a solution to the problems which had been
11 identified on that day.

12 Now, the question is what had been done between that
13 date -- September 2003 and July 2005 -- in order to give
14 effect to the solution, to find the solution to these
15 problems?

16 A. Okay, I think the sort of -- and the background again
17 I refer back to the CONNECT PFI that had been signed in
18 1999, which really got kick-started shortly after this
19 in 2004. So that's one aspect.

20 But I also know and recall that we worked with LFB
21 and BTP and they had a -- an emergency leaky feeder
22 system that they would deploy in the event of an
23 incident such as this, and in fact, I think they did
24 deploy it at Russell Square, if I recall correctly,
25 although a bit later in the incident.

1 Q. Well, they did, and we'll hear, I suspect, in due
2 course, from Chief Inspector Short in relation to that,
3 but I think it didn't arrive until about 1.15 that
4 afternoon.

5 A. I wasn't aware of that, I'm afraid.

6 Q. I think it had to arrive from Chesham or Amersham or
7 somewhere in Buckinghamshire, and it arrived a bit after
8 the event.

9 But after 7/7, interim solutions were quite quickly
10 found, weren't they, by the London Underground and by
11 the British Transport Police and others to provide
12 communication from tunnels to surface and so on, but
13 what consideration was given to those interim solutions
14 being put in place in the light of this exercise
15 conducted in 2003?

16 A. Well, I think it's exactly as I said, that they had this
17 provision for -- to bring along this leaky feeder system
18 that they could drop transmitters and receivers down
19 along the tunnel so it gave them that form of
20 communication.

21 Q. I'm sorry to cut across you, but I don't want you to be
22 answering this question on a false premise. I think
23 we'll hear in due course that that contract with Airwave
24 with O2 for that leaky feeder system, for an interim
25 solution, was still in negotiation in July 2005, and

1 Airwave did assist on the day and the leaky feeders
2 arrived at about lunchtime, but as far as I'm aware --
3 and I will be corrected if I'm wrong about this -- that
4 contract hadn't yet been concluded.

5 So what other efforts had been made by July 2005 to
6 provide some sort of interim solution to this quite
7 significant problem?

8 A. I think the -- I mean, the other aspect, sort of putting
9 that to one side, was the -- I can't remember whether
10 it's just before or just after that, but certainly
11 around that time where we made provision for any
12 emergency services that turned up at any of our stations
13 to be -- if they didn't have radio communications, as
14 LFB did and BTP did, on our stations, to be given one of
15 our station radio handsets, and that particularly
16 applied for the Metropolitan Police, if I recall. But
17 I think that may have been before this particular setup.
18 But the whole inability to communicate wasn't just
19 at one site. We had 125 Underground stations with,
20 obviously, the tunnels associated with those, so it was
21 never going to be a simple interim solution to deal with
22 this problem.

23 But the one I described earlier, and the one you've
24 described with O2 and Airwave was one such interim
25 solution.

1 Q. With the immeasurable benefit of hindsight, with which,
2 of course, we're all blessed in these proceedings, is it
3 now, as far as the London Underground is concerned,
4 a matter of some regret that it took so long to conclude
5 the PFI contract or to provide some sort of interim
6 solution to this problem which had been identified?

7 A. I think that is a bit unfair question, to be perfectly
8 honest. I mean, yes, with the benefit of hindsight, we
9 would love to have had CONNECT in place well before
10 2005. The actual fact of the matter is we didn't
11 through a number of reasons that were beyond our
12 control, I would say, at the time.

13 But, you know, again to be fair, once, from 2003
14 onwards, a lot of good efforts were made to get CONNECT
15 and then, eventually, Airwave underground in place and,
16 in fact, when you consider that this really got
17 kick-started in 2004, which is probably part to do with
18 this as well, I would argue, from September 2003, and it
19 was all installed and working fully by October 2008,
20 when you consider that you have to find space at each
21 location for the base receivers, you've got to lay
22 this -- you know, the cable and the infrastructure,
23 that's quite a feat in itself when you look at the size
24 and complexity of our network.

25 But, you know, yes, would we have liked it in 2005?

1 Of course we would.

2 Q. Can I ask questions about one further topic? It's much
3 shorter. In fact, it's almost a one-question issue.

4 You've talked about lighting, which is another one
5 of the issues which my Lady is enquiring into, and in
6 particular in relation to the tunnel lighting, and
7 you've told us that it was six times brighter than would
8 be the case in an office building, but can we just have
9 a look very briefly, please, at [TFL1000-45]?

10 This is part of the debrief material that we've
11 received from London Underground or from Transport for
12 London. Under the heading "Inadequacies of current
13 evacuation/detrainment procedures" was one of the issues
14 raised during the course of that process that, if we
15 look at (g), halfway down the page:

16 "Emergency lighting arrangements in trains and
17 inadequate lighting in tunnels."

18 A. Yes.

19 Q. So have Transport for London looked into the possibility
20 of increasing even further the power of the lighting in
21 those tunnels?

22 A. I think the -- yes, we considered that. I think the
23 answer to that -- and it isn't just a simple "yes" or
24 "no" -- is that, when you consider the evidence that
25 we've heard here and the evidence that we'd heard

1 previously, you know, with survivors and staff involved
2 on the day, it was quite clear that part of the problem
3 with visibility was caused by the clouds of dust that
4 had been thrown up by the blast, and we know from
5 experiences of incidents such as Chancery Lane, when we
6 had a derailment there, that you get that effect and it
7 takes a long time for that to settle down, and it
8 doesn't matter how good your lighting system is, it will
9 not penetrate that cloud of dust.

10 Now, we've also got to take into account that to put
11 additional lighting in is no mean feat when you've
12 actually got a fairly good, robust system in place, and
13 we're not sure what else you would have gained that
14 would have survived the sort of effects that we saw on
15 7 July.

16 Q. So in fairness to you, does it come down to this: that
17 you've looked into it but, in terms of investment, on
18 the one hand, and reward, on the other, it doesn't stack
19 up?

20 A. There's not a very good case for it.

21 MR COLTART: Thank you.

22 LADY JUSTICE HALLETT: I'm going to take a break at some
23 stage, Mr Saunders.

24 MR SAUNDERS: I'm going to be very, very short, my Lady, so
25 I needn't wait, I hope.

1 Questions by MR SAUNDERS

2 MR SAUNDERS: Mr Dunmore, you were asked by her Ladyship in
3 relation to the Emergency Response Units and the
4 facility of having blue light facility. Can we just
5 assist her Ladyship in this way: there are, in fact,
6 four depots in London that have the Emergency Response
7 Units?

8 A. Yes.

9 Q. But in terms of numbers, her Ladyship made the very
10 point: namely, you could train those drivers to be
11 competent, as with the other blue light services?

12 A. Yes.

13 Q. The position is this, that there are five teams. Each
14 team has a van and a lorry.

15 A. Yes.

16 Q. Of those five teams, it's three that are on call, so you
17 don't even have all of the teams on call all of the
18 time. But those are the sort of numbers of drivers that
19 would have to be trained, and obviously with shifts and
20 rotas, but we're looking at about a dozen rather than
21 hundreds?

22 A. Yes, oh, yes, it's not a great number of people.

23 Q. Can I then just deal with one of the other topics that
24 I have, which is first aid and equipment and, in
25 fairness to you, I think at the very bottom of your

1 paragraph 51 you say that Mr Collins is probably the man
2 to deal with this because he's chief operational
3 officer?

4 A. Yes.

5 MR SAUNDERS: Then I have nothing else for you at this
6 stage. Thank you, my Lady.

7 MS SHEFF: My Lady, I also just have two questions.

8 LADY JUSTICE HALLETT: Very well, thank you.

9 Questions by MS SHEFF

10 MS SHEFF: You acknowledge, Mr Dunmore, helpfully, in your
11 statement, the evidence suggesting the problem relaying
12 information that was available to the NCC. Sorry,
13 paragraph 36.

14 It arises partly out of the communication
15 difficulties through the radio system, but also the
16 problem arises from those who were on the ground in the
17 station giving information back to the NCC.

18 A. Yes, I mean, and I think the evidence yesterday was that
19 there were so many calls coming in --

20 Q. There was overload?

21 A. -- the light system they had at the time, it was
22 difficult to pick out a particular call and say, "Oh,
23 I need to speak to that person sort of immediately".

24 So, yes, there were some issues there with the volume of
25 calls and the equipment available at the time which, had

1 it been today, would have been quite a bit different,
2 I would suggest.

3 Q. So the important information was not being picked out,
4 that of the bomb damage effectively?

5 A. Well, I'm not sure in all cases that bomb damage, as
6 such, was being reported from each scene initially.

7 Q. Whether there was information that would have put the
8 NCC in a better position to understand what was going on
9 at the scene, some of that was certainly coming from
10 eyewitness accounts, which was not feeding through?

11 A. But to be fair, there were also people, including
12 passengers and staff, that were actually on the blast or
13 bombed carriages themselves that didn't realise it had
14 been bomb damage.

15 It wasn't until much later that some of the other
16 emergency services turned up, that we got the first
17 reports coming through via the emergency services of
18 bomb damage. But it wasn't -- certainly from none of
19 the witnesses that I recall a direct, "You know, this is
20 definitely bomb damage that we've got here". It was
21 "explosions", "We've heard a bang", you know, "We've
22 got", eventually, "injured people", and so on. But
23 nothing about bombs directly.

24 Q. We certainly heard "explosions" from the train driver at
25 Aldgate himself, Timothy Batkin?

1 A. But then "explosion" is not necessarily the same as
2 a bomb.

3 Q. And the belief that this had been as a result of a bomb
4 to his train and the same with the Edgware.

5 A. I don't believe the Aldgate driver actually said that.

6 Q. We've heard evidence about that. Be that as it may, the
7 issue that I'd like to deal with with you is simply
8 this: that the consequence of the NCC not having all
9 that information relayed to it was, of course, it
10 shifted the problem down the line. So for any
11 organisation that was reliant on the NCC for
12 information, they were also starved of that information;
13 for example, CentreComms, they would be reliant on NCC,
14 would they not, to find out from their source of
15 information what was happening on the Tubes?

16 A. But they were told what the NCC knew at the time.

17 Q. Exactly, which was not the entire picture.

18 A. But the NCC didn't have the entire picture at the time.

19 Q. That's the point, isn't it, Mr Dunmore?

20 A. But they weren't -- even if they had radio communication
21 to the scene, they still weren't getting at that stage,
22 "This is exactly what we've got here". So I'm not sure
23 of --

24 Q. But do you accept that, in fact, CentreComm were getting
25 all the information that you had?

1 A. Yes.

2 Q. Do you think that there was sufficient contact between
3 the two agencies at the time to enable CentreComm to
4 make a full assessment of what was happening on the Tube
5 system?

6 A. Yes, at the time they were.

7 Q. Have there been any table-top or inter-agency
8 discussions as to maintaining good relationships in
9 these sorts of emergency situations between these
10 agencies?

11 A. Almost every table-top exercise you do that, you involve
12 the different agencies in that.

13 Q. So there are training sessions which regularly keep all
14 the other transport agencies up to date, are there?

15 A. It's not just the transport agencies. It's the
16 emergency services, local authorities and utilities.

17 So, you know, we involve all of those. We actually hold
18 a network table-top exercise every year which involves
19 all those agencies, looking at different types of
20 scenarios.

21 Q. So you would be confident, would you, that in a similar
22 situation in the future, CentreComm would be fully
23 informed of all issues which may affect them as soon as
24 the NCC had that information available?

25 A. But they were.

1 Q. Would you be confident that would occur in the future?

2 A. If it occurred on 7 July, it would occur now.

3 Q. Well, we may have a difference of opinion as to whether
4 that occurred at the time. But you're content that that
5 would happen in the future as a result of inter-agency
6 training sessions, table-top exercises and regular
7 communications between the agencies?

8 A. Yes, absolutely.

9 MS SHEFF: Thank you, Mr Dunmore.

10 LADY JUSTICE HALLETT: Thank you, any other questions?

11 Ms Boyd?

12 Questions by MS BOYD

13 MS BOYD: Mr Dunmore, can I just ask you a couple of
14 questions for clarification?

15 You've been asked about the LFB policy in relation
16 to isolation or confirmation of isolation of power and
17 their policy is similar to British Transport Police
18 whereby confirmation is obtained through their own
19 control as Mr Keith outlined.

20 If we could just look at Inspector Scott's statement
21 because his statement's going to be read to the court,
22 that's [BTP427-2], second paragraph. If we can zoom in at
23 the top, halfway down that second paragraph:

24 "The BTP Control room obtains this information from
25 the line controller and then radios the information to

1 the officers deploying to the scene.

2 "Officers can also obtain this information from the
3 senior member of London Underground staff on scene. The
4 control room at each station has an emergency number to
5 the line controller. Even where the confirmation is
6 given of traction current status at the scene, BTP
7 officers generally obtain confirmation from their own
8 control room also."

9 Is it right that in fact the issue relating to
10 confirmation of the isolation of power isn't limited to
11 the London Underground, because, of course, there are
12 many network railways and infrastructure which give rise
13 to issues of traction current and obtaining confirmation
14 that it's off?

15 A. Yes, I think that's -- and that's probably the issue
16 more for the Fire Brigade and British Transport Police
17 generally, is that, although there will always be
18 a member of staff at our locations, except for one
19 scenario I can think of -- and it was mentioned around
20 the Bank exercise -- that the problem generally with the
21 National or Network Rail stations is there may not be
22 a member of staff there and you've got vast differences
23 and areas to deal with there. So --

24 Q. So one can't look at London Underground in isolation?

25 A. In terms of Network Rail and National Rail, I can fully

1 understand why they would have to go through Control,
2 because there is no alternative.

3 Q. So you'd agree that the emergency responders need to
4 have a clear, consistent, coordinated policy so that
5 they have systems of work which can be adopted and
6 individual members of staff are not put at risk?

7 A. No, I mean, exactly, but I mean, you know, the simple
8 thing that defines from us the others is the thing
9 called the roundel, so it is pretty obvious they're
10 normally going into an Underground station, but I accept
11 there are some issues that we need to address to make
12 that safe.

13 Q. Secondly, in terms of leaky feeders, in 2005, I think
14 the London Underground had an analogue system, as we
15 know --

16 A. Yes.

17 Q. -- which worked sub-surface on the leaky feeders, but
18 the leaky feeders, in 2005, ran out at the end of the
19 platform. They've since been extended into the tunnels.

20 A. We had leaky feeders for the train radio, which was
21 actually separate for the station radio, that's correct.

22 Q. As I think you've stated in paragraphs 29 and 30, the
23 London Underground experience was that the radios
24 continued to function on the leaky feeders at platforms
25 including King's Cross?

1 A. Yes, that's correct.

2 Q. As I say, those leaky feeders have now been extended for
3 the London Fire Brigade into the tunnels.

4 A. Yes, I mean, it's the transmission system, not just the
5 leaky feeder, of course, but, yes, that's correct.

6 Q. Finally, in relation to the RVP, at Aldgate, which you
7 explained obviously Aldgate only has one entrance and
8 it's a lot simpler, but is it right that the system of
9 the RVP did appear to work there, certainly so far as
10 the evidence given by Sub-Officer Clarke for the
11 Fire Brigade? He explained how he was escorted to the
12 track, or to the platform, I should say, by a member of
13 staff, and it's at that point he then declared a major
14 incident.

15 At King's Cross, as you've fairly pointed out,
16 although certainly members of the Fire Brigade went to
17 the control room, the difficulty was the lack of
18 communication from the bombed carriage, so that the
19 control room staff weren't able to give any details as
20 to the incident.

21 A. Yes, I mean, I would say that, even though they didn't
22 know the details of the incident, they would have known
23 that traction current was discharged, and so on, and
24 could have directed them down that, but of course there
25 are other reasons that they couldn't go at that time.

1 Q. But of course, any information that's handed over at the
2 RVP doesn't obviate the need for each emergency service
3 to undertake their own assessment of the scene.

4 So you're not suggesting that, at an RVP, the
5 London Underground can give all necessary information?

6 A. No, the RVP is simply a meeting point and then they are
7 taken to -- I mean, in our terms, it would be either the
8 supervisor initially in charge of the incident or, later
9 on, a duty manager as Silver control. But it could be
10 the supervisor as Silver as well.

11 Q. Then each service undertakes their own assessment to
12 decide what resources and how they're going to manage
13 the incident?

14 A. Yes, because they've got their specific requirements
15 that they have to take into account, that's
16 understandable.

17 MS BOYD: Thank you very much, Mr Dunmore. Mr Morton?

18 MR MORTON: I'm going to be very, very quick, my Lady, so if
19 you'd like me to press on, I will.

20 LADY JUSTICE HALLETT: Thank you.

21 Questions by MR MORTON

22 MR MORTON: Mr Dunmore, just a handful of questions, please,
23 covering two topics.

24 Topic one. The new CONNECT radio system, you told
25 my learned friend Mr Keith that the minimum number of

1 channels available at any one location is seven.
2 A. That's for London Underground staff.
3 Q. For London Underground.
4 A. Yes.
5 Q. What's the maximum number available at other locations?
6 A. I believe it's 15, maybe 14.
7 Q. Thank you. What determines the number of channels
8 available?
9 A. I mean, typically, it's the size and complexity of
10 a station that would determine -- so King's Cross, for
11 example, would have 4 base receivers, therefore
12 a greater number of channels.
13 Q. Thank you. Topic 2 is the response of
14 London Underground to Sir Desmond Fennell's
15 recommendations which you were asked about by my learned
16 friend Mr Keith.
17 You may have given the impression -- and if you did,
18 can I ask you if this is what you intended -- that the
19 introduction of CONNECT radio was the response to the
20 Fennell recommendations. So the recommendations in 1998
21 (sic) and the CONNECT contract is let in 1999. Is that
22 correct or did something else happen in between?
23 A. No, I think I said that --
24 Q. What did I say?
25 A. 1988.

1 Q. Thank you very much. I meant 1988.

2 A. I mentioned at the time of the King's Cross fire and
3 then the subsequent Fennell report, we did have train
4 radio systems, but they were quite diverse. What we
5 didn't have were any station radio systems of note; ie
6 we had a few back-to-back systems and so on.

7 But by 1991 -- and I think I actually said this --
8 we did have station radio systems for all the section 12
9 regulation, that's the Underground stations, and so it
10 covered the 125 stations at the time.

11 That also could be used by British Transport Police
12 and the London Fire Brigade, but it wasn't
13 interoperable.

14 Q. No. But that was the direct response to Sir Desmond's
15 recommendations.

16 A. Absolutely.

17 Q. Or in part his recommendations?

18 A. Yes.

19 Q. Can I just ask you finally this: in relation to the
20 recommendations made, it was put to you that
21 Sir Desmond Fennell recommended that radio
22 communications used by London Underground should be
23 compatible with those used by the emergency services,
24 and, indeed, it's right that in chapter 16, paragraph 26
25 of his report he did say that, but in fairness to you,

1 Mr Dunmore, you pointed out, I think, that you didn't
2 think that featured as a recommendation at the
3 conclusion of the report, and I'm not sure -- my Lady,
4 I'm not sure that the report itself appears on Lextranet
5 but the recommendation at 111 was, I think, as you
6 recalled, that the radio equipment in Underground
7 stations for the British Transport Police must be made
8 compatible with that used by the London Fire Brigade?
9 A. That's correct.

10 MR MORTON: Thank you.

11 MR KEITH: If it assists, my Lady, on that point it's quite
12 right that, although Sir Desmond Fennell described
13 intra-operability between the London Underground and the
14 emergency services as essential in the body of the
15 report -- the reference I gave earlier -- it didn't, for
16 a reason that we are unable to discern, appear in the
17 summary of recommendations at the conclusion of the
18 report.

19 LADY JUSTICE HALLETT: Thank you. Right, those are all the
20 questions we have? Thank you very much indeed,
21 Mr Dunmore. Are you staying to see the conclusion?

22 A. I am.

23 LADY JUSTICE HALLETT: Thank you.

24 (11.55 am)

25 (A short break)

1 (12.08 pm)

2 MR KEITH: My Lady, may I invite you to call Howard Collins,
3 please?

4 MR HOWARD PAUL COLLINS (sworn)

5 Questions by MR KEITH

6 MR KEITH: Good morning. Could you give the court your full
7 name, please?

8 A. Yes, my name is Howard Paul Collins.

9 Q. Mr Collins, you are now the chief operating officer for
10 London Underground Limited, are you not?

11 A. Yes.

12 Q. In July 2005, however, you were the service director
13 sub-surface railway responsible for the delivery of
14 train and station services to customers which involved,
15 no doubt, a number of areas including performance,
16 quality, safety, security and targets. I don't think
17 you were involved directly in the response on behalf of
18 London Underground to the events on 7 July, were you?

19 A. I was in Central London, but someone has to hold
20 themselves back and deal with the recovery operation and
21 I was allocated very quickly to deal with the job of
22 post-incident recovery.

23 Q. Now, as chief operating officer, you are responsible for
24 all aspects of the day-to-day running of the network?

25 A. That is correct.

1 Q. So you carry ultimate responsibility for many of the
2 issues that my Lady has been addressing in the course of
3 these proceedings?

4 A. That is correct.

5 Q. I'd like to ask you, first, if I may, about the
6 particular relationship between Transport for London and
7 London Underground, because I, for one, have erroneously
8 used the expressions or referred to the entities
9 interchangeably.

10 The position is this, is it not -- and we can see it
11 at page 2 of your statement, which is TFL996 [TFL996-2], if we
12 could have that on the screen, please -- Transport for
13 London was created on 3 July 2000 and was part of the
14 Greater London Authority, and it has a number of wider
15 functions than London Underground --

16 A. Yes.

17 Q. -- including implementation of the Mayor's transport
18 strategy and to manage transport services across London
19 generally. Is that right?

20 A. Correct.

21 Q. London Underground forms one of the transport services
22 in London?

23 A. Yes.

24 Q. Transport for London is divided into two main
25 directorates, we can see, and London Underground falls

1 into one of those directorates?

2 A. Yes.

3 Q. But in July 2003, London Underground became itself
4 a wholly-owned subsidiary of TfL, accompanied with
5 a certain amount of disruption, I think we can recall
6 political and fiscal terms at that time.

7 A. Absolutely.

8 Q. As a result, TfL is now responsible for the operation
9 and management of the Underground network directly?

10 A. Yes.

11 Q. You set out there how, formerly, there were a number of
12 business units which comprised the individual lines?

13 A. Correct.

14 Q. But now the system has changed, and so perhaps one level
15 of management responsibility has been done away with,
16 there is now a direct reporting structure from the lines
17 to you?

18 A. Correct.

19 Q. The statement sets out at paragraph 9 [TFL996-3] some of the
20 figures in connection with the transport of passengers
21 in London. Could you perhaps give us some idea of the
22 number of passengers carried every day by the
23 London Underground network and the number of stations
24 that there are?

25 A. Yes, it ranges between 3.5 million and 4 million. We've

1 achieved a record of 4 million passengers last December.
2 We serve 275 stations on ten different lines and cover
3 over 250 miles of track.

4 Q. We've heard from other witnesses, in particular Mr Barr,
5 that there were, on 7 July, an estimated 250,000
6 passengers on the Underground network at that moment,
7 around about 9.00.

8 A. Correct, yes.

9 Q. In broad terms, did London Underground succeed in
10 evacuating all of them within a relatively short period
11 of time?

12 A. I believe so, I believe that was a very successful
13 operation in view of the complexity of the system and
14 the numbers involved.

15 Q. You've set out in your statement the main changes in
16 London Underground's operating procedures and in its
17 infrastructure after 7 July. The evidence indicates
18 that the main change which has been introduced is that
19 of the TETRA-based, the terrestrial, trunked radio
20 digital system, which is now used by
21 London Underground --

22 A. Yes.

23 Q. -- known as CONNECT. You describe in your statement how
24 the project CONNECT was already in hand when
25 London Underground was transferred across to Transport

1 for London in July 2003, two years before 7/7, but you
2 indicate that there were some delays or there had been
3 some delays prior to that time in the progress of that
4 particular project.

5 Can you give us some idea, please, of the approach
6 taken by London Underground in 2003 to advance the
7 project and to make up such delays if they had occurred?

8 A. Yes. When we joined Transport for London, we reviewed
9 the management structure and we appointed a new team
10 with emphasis on dealing with this very complex
11 contractual, legal process, this public finance
12 initiative, with the emphasis of ensuring that we can
13 deliver the project across the network within the
14 timescales.

15 The programme was four or five years, it was a very
16 complex piece of physical work, installing it on
17 a current, running, operating railway.

18 Q. It was not only, as you say, a complex process because
19 of the required installation of transceivers, and base
20 stations at each of the Underground stations, as well as
21 all the cabling and the rolling out of the handsets
22 themselves, but the project had been borne out of a PFI
23 initiative, and, therefore, the financial structure
24 behind the project had to be completely re-examined and
25 readdressed at the time of the transfer of

1 London Underground to TfL?

2 A. Yes, I understand. I'm not an expert on this, that
3 involved financing, bank loans, all sorts of legal
4 arguments, who was accountable for what. It was
5 supported by three or four different major suppliers
6 rather than one manufacturer, and there was
7 a relationship, obviously, between those suppliers.

8 Q. The position now, Mr Collins, is that there are, as you
9 described, some 12,000 users of the CONNECT system in
10 the London Underground network.

11 A. Correct.

12 Q. There are 7,500 or so handheld radios, and each of the
13 cabs in the trains have their own CONNECT-based radio?

14 A. It is, it's ironically called a fixed mobile, but it is
15 actually the fixed bit of equipment in your cab, not to
16 be confused with the hand-portable radio which each
17 driver and members of staff and even myself carry.

18 Q. So across the entire network, there is now a new system
19 which you describe as being clearer in terms of the
20 ability to hear and understand what is being said. It's
21 mobile because members of staff, both management and
22 train operators, by way of example, can carry them
23 wherever they are, it works obviously underground, and
24 it allows simultaneous holding on different channels of
25 groups of people as well as point-to-point, that is to

1 say one-to-one calls?

2 A. Yes, that may perhaps be all those, plus almost an
3 additional feature is that you can dial in to the
4 portable from the automatic telephone system, our own
5 system, so that you can contact directly from any
6 telephone in London Underground, provided you know that
7 number, and we do use that on a regular basis. In fact,
8 that's how I often get contacted when I'm deep
9 underground, to ensure that I'm in contact with any
10 situation on the Underground.

11 Q. The way in which the reception for the digital system
12 works is that there are base stations, as you've
13 described, at each station, which allow for coverage
14 around that station and through the tunnels towards the
15 next station and the next base station, but is the
16 system configured so that, if one particular base
17 station is put out of operation perhaps by an explosion,
18 some other form of damage, then the adjacent base
19 stations will provide a backup coverage so that not all
20 system use is lost?

21 A. That is correct. There is a sort of leak-over, as they
22 call it, between two base stations, and certainly it has
23 been demonstrated under test, and under one or two early
24 failure conditions, that it provides sufficient coverage
25 to ensure those areas are covered.

1 Q. You've heard Mr Dunmore describe how, although there are
2 common features to the two systems -- CONNECT, the
3 London Underground system, and Airwave, the emergency
4 services and police above-ground system -- it's not been
5 possible to connect the two. One is encrypted, one is
6 not, they use different frequencies in the TETRA-based
7 band of frequencies, and there are security issues.
8 But have protocols been developed both to allow
9 users of Airwave to use CONNECT by way of receipt of
10 a handset, and also to allow members of the other system
11 to join talkgroups in the other system?

12 A. Certainly there are protocols to ensure that the loaning
13 of handsets can happen. Often those handsets look and
14 function in the same way, but as you said earlier,
15 I think the issue for us is that the police and
16 emergency services network is a secure, encrypted, high
17 secure system and certainly our system uses the
18 commercially available bands and, whilst it's
19 technically possible, perhaps, to bring those two
20 together, I would imagine, certainly from my experience
21 in British Transport Police, that you would want -- you
22 would not want London Underground employees to be
23 directly having their own Airwave-encrypted handsets.

24 Q. In light of the capacity and the robustness of the new
25 CONNECT system, has it been thought unnecessary to have

1 any kind of backup system other than the continued use
2 of the tunnel telephone and the use of signal lines in
3 the tunnels themselves?

4 A. Yes, if you consider the CONNECT radio system has
5 a great deal of what they call diversity, even within
6 the control rooms, each of the main base stations are
7 powered and controlled by different locations, but there
8 are backup systems to communicate, as you say, the
9 tunnel telephone system, the railway automatic telephone
10 system, and obviously other means of communication.
11 But it has proved, since installation -- and
12 certainly performance recently has shown that it is very
13 diverse and provides a good level of assurance.

14 Q. Has the system been subject to constant upgrade since
15 its initial installation, I think in 2008?

16 A. Yes, like all technology, whilst the main technology of
17 the TETRA digital system remains, there have been, over
18 time, software improvements which improve the quality
19 even further, and some diversity, and it is very similar
20 in terms of its operation and robustness to the Airwave
21 system.

22 Q. Turning to another topic, which is communications with
23 passengers on page 7 of your statement, you set out what
24 the position was in 2005 by comparison to the
25 introduction now into the Tube network of more

1 sophisticated PA systems that allow passengers to speak
2 to drivers --

3 A. Yes.

4 Q. -- and, ultimately, the line controller.

5 Is there any system now by which, in the event of
6 a train becoming trapped in a tunnel, possibly as
7 a result of an explosion or some similar event, whereby
8 somebody outside the tunnel in a control room or at the
9 NCC can speak to either the driver or the passengers?

10 A. There is a function called talk-through. If the driver
11 collapses on the deep level Tube locations, the line
12 controller has the facility to speak to the customers.

13 I think if you look at, though, this incident or these
14 incidents, obviously where the bombs damaged the battery
15 feeds and the PA systems, that would still not have
16 functioned.

17 But certainly, as far as the customer interaction
18 with the driver, as you can see, we are and have
19 installed a number of systems to allow two-way
20 communication between our trains, which always have
21 a driver on board, and also the passengers and, as we
22 roll out more rolling stock or refurbish that rolling
23 stock, we will install more of those features which only
24 now not exist on a few lines.

25 Q. So the new features allow passengers to speak from the

1 carriages to the driver's cab?

2 A. Correct.

3 Q. They're being rolled out across the network, with the
4 Bakerloo Line being the final line for the installation
5 of such a device in 2020, but, also, the line controller
6 can speak to the passengers, presumably, what, through
7 a speaker in the cab, if the driver becomes
8 incapacitated?

9 A. In some trains -- and it is connected with the operation
10 of the one-person operation service at deep level
11 Tube -- there is a what they call a talk-through as
12 opposed to a talkback function, where in an emergency --
13 for example, the driver has a heart attack and
14 collapses -- you can -- the alarm is sent and then the
15 controller can then talk to the passengers to say
16 someone will be arriving soon to rescue the train.
17 But in terms of communication, the CONNECT radio
18 system gives the driver not only ability to communicate
19 in the cab, but now, with the hand-portable radio, they
20 can keep in constant contact with the line controller
21 and also the line controller can monitor all
22 hand-portables available in that area.
23 So, for example, if there was a duty manager on
24 board that train, if there was a manager in the
25 vicinity, you could look on what we call the dispatcher

1 and see where those portables are live and working.

2 Q. Then, presumably through the talkgroup system, somebody
3 in the control room could send a message to the driver
4 and his handset, the duty operation manager in the
5 carriage on his handset and another member of staff in
6 the tunnel and speak to them all simultaneously?

7 A. Yes, they can either be dialled on a one-to-one basis
8 like a telephone, or they can be put on a -- as I say to
9 go to incident channel number 1 and then they can
10 operate in that group. It's certainly a huge
11 improvement compared with the previous systems, and of
12 course I, as you can see from my service, have been
13 around where we did not have any station radio function
14 and a very old radio system on all lines right up until
15 after the Fennell inquiry.

16 Q. We are aware, of course, that the 7 July Review
17 Committee made a number of recommendations insofar as
18 communications were concerned. By and large, were those
19 recommendations then addressed after 7/7 and after the
20 committee had reported?

21 A. Correct, yes.

22 Q. To a very great extent, the recommendations were met by
23 the introduction of CONNECT and all the facilities that
24 it brought with it?

25 A. That is true.

1 Q. One recommendation, not in terms of communications but
2 concerning lighting, was made, but not, in fact, acceded
3 to, which was the possibility of lighting strips on
4 carriage floors.

5 A. Mm-hmm.

6 Q. My Lady has heard evidence in the course of these
7 proceedings how, in the immediate aftermath of the
8 explosion, the dust and the debris were such that it
9 simply wasn't possible for the tunnel lights to
10 illuminate the inside of the bombed carriages.

11 Has consideration been given to an additional light
12 source in that way?

13 A. Well, I have certainly experienced firsthand (a) getting
14 to site on that day and subsequent days, plus also other
15 terrorist attacks on the Tube, where the phenomenon is,
16 in layman's terms, the initial explosion creates --
17 dislodges years of dust from the environment, so you get
18 this first, very thick, dark fog in the tunnel. It
19 takes a while to settle and, when it settles, it's
20 almost like a sort of quarter-inch or half-inch layer
21 of -- you can only describe it as black snow. So any
22 floor lighting, certainly within trains, is likely to be
23 covered by the dust which has been disturbed and then
24 settled.

25 So when we considered floor lighting, we didn't

1 believe it was a suitable recommendation. Plus, also,
2 there were these fittings in the train and certainly
3 were illuminating in other carriages which provided the
4 emergency lighting.

5 Q. Light from adjacent carriages --

6 A. Adjacent carriages.

7 Q. -- illuminated, to some extent, the damaged carriage?

8 A. And also the tunnel lighting which, yes, initially was
9 difficult to see because of the dust being disturbed,
10 but subsequently obviously allowed people to see where
11 they were in the tunnel.

12 Q. Has consideration been given in the course of the
13 introduction of new rolling stock to larger windows and
14 larger openings at the ends of the carriages such as to
15 allow a better influx of light from adjacent carriages?

16 A. Correct, there's two reasons. One, from, I believe, the
17 1992 stock on the Central Line, we provided wider
18 doorways between carriages to allow for wheelchair and
19 also emergency access, but also in the very recent
20 S stock, which has just been introduced on the
21 Metropolitan Line there are no intercommunicating doors.
22 The train in its eight cars is one long tube, in effect,
23 which you can walk from one end to the other.
24 And, you know, the lighting levels on these newer
25 trains are even more improved and the battery life

1 obviously longer.

2 Q. Did London Underground consider, after the 7 July
3 committee had reported, and perhaps after 7/7 itself,
4 that there were an insufficient number of torches
5 available either in stations or on the Tubes themselves?

6 A. I heard the earlier evidence about, you know, the
7 difference between Dragon lamps, Bardic lamps, the one
8 the driver carries, and just to emphasise, obviously,
9 the Bardic lamp which provides the means of a driver to
10 signal other trains, emergency stop, green, also
11 provides some form of very limited illumination and
12 assists if you're walking in a darkened area. Whereas
13 the Dragon lamp is a search lamp, which is obviously
14 kept on the stations.

15 We have considered this, and I think it's something
16 which again, in hindsight, in the report, we -- you
17 know, the provision of hands-free torches are provided
18 in the emergency equipment on trains, but the difficulty
19 I think, in my own experience over many, many years, of
20 providing equipment directly for customers to access has
21 proved very difficult.

22 I give you one example: fire extinguishers, which
23 were regularly used as missiles, thrown out of windows
24 and damaged, would you believe? People did such things,
25 and, therefore, our concern was providing torches, other

1 equipment, on an Underground train, they would
2 immediately disappear or would actually, you know, not
3 be there when we needed them.

4 Q. But the trains do carry now emergency pods in the
5 driver's cab?

6 A. They do, with lighting.

7 Q. Is it not possible to have, perhaps, more than one
8 hands-free torch in the emergency pod, so that if there
9 is an emergency involving more than one injured
10 customer/passenger, that whoever is tending to them,
11 assuming the driver is around to be able to get access
12 to the pod, can have access to a number of torches so
13 that each helper can have some means of illuminating the
14 person upon whom they are working?

15 A. I understand your point. The driver obviously has his
16 own torch, there is obviously a second facility provided
17 in the emergency pod. It is something we may wish to
18 consider in provision. It obviously requires regular
19 maintenance. But obviously that's, you know,
20 a possibility that we could provide additional torches
21 in that pod.

22 The difficulty, as I think Mr Dunmore explained, is
23 we've got a lot of equipment in there now, and if we add
24 a lot more equipment in a very limited Tube environment,
25 it's often more practical to have those at stations

1 where we can regularly access those, and I understand
2 a number of my staff who attended the incident on the
3 first response brought with them a number of lamps and
4 other facilities.

5 Q. They did, but the sheer number of casualties, as you're
6 aware, and the delay, the understandable delay, in
7 having members of London Underground actually get into
8 the carriages themselves meant that the passengers were
9 left without any kind of means of assisting the injured
10 and the dying medically.

11 Whereas, of course, if there was equipment on the
12 train, then assuming the driver can access the pod, then
13 it can be immediately distributed.

14 A. Yes, it obviously -- as you say, assuming you can access
15 it. It was, if I recall on the Piccadilly Line, quite
16 difficult, once you got past that, you know, first
17 point, to get access to those unfortunate people who
18 were in there.

19 Q. You heard what Mr Dunmore said in relation to the
20 possibility of first aid boxes on the trains and you've
21 just addressed that in terms of your analogous reference
22 to fire extinguishers.

23 Is that something my Lady may wish to know that will
24 be kept under review and explored further in light of
25 these proceedings?

1 A. I think we certainly will keep it under review. Our
2 experience is, as Mr Dunmore suggested, that it isn't
3 a very good environment to keep such equipment. It is
4 very limited. Obviously, under normal circumstances,
5 the emphasis is for the driver to get the customers to
6 the place of the station where they can receive medical
7 attention, and being a -- you know, a former first aider
8 myself, I think obviously I would, you know, emphasise
9 again people did amazing things, as you would do, to try
10 and save people's lives and the first aid equipment
11 would have -- even if we'd had it on that train, would
12 have run out very quickly and I would have done, like
13 everyone else would have done, improvise and use
14 whatever you've got available to actually try to
15 preserve people's lives.

16 Q. Plainly better to have the equipment there than having
17 to improvise.

18 Was the view of London Underground that the
19 provision of first aid boxes on the trains might leave
20 London Underground open to vandalism, a point made to
21 the 7 July Review Committee, because they recommended,
22 no doubt having heard from your colleagues and perhaps
23 yourself that there should be first aid boxes carried on
24 trains?

25 A. I think certainly in the public environment, in our

1 experience with the fire extinguishers and other
2 equipment, even in locked areas, which is subject to
3 vandalism, it is a sad reflection that often this
4 equipment does get disturbed or damaged or taken away by
5 persons unknown.

6 Q. But if that was a point made to the 7 July committee,
7 they no doubt considered it, but made the recommendation
8 nevertheless?

9 A. I understand that, but I think our experience certainly
10 suggests that it is an increasing problem certainly in
11 our environment.

12 Q. At page 13 of your statement, you turn to another issue
13 which is the review of the emergency plans that was
14 carried out after 7/7, and you record how the then
15 procedure known as Na100, was rewritten and replaced by
16 a rule book 2, which you hoped had simplified the
17 procedure for dealing with network-wide incidents?

18 A. Yes.

19 Q. Was there a general perception, after 7/7 and after the
20 7 July Review Committee had reported, that the
21 procedures and plans in place were bedevilled by jargon
22 and phrases and words that were not clear and could
23 have, in fact, had multiple meanings, depending on who
24 was reading those plans?

25 A. I think the Na100 document was obviously developed

1 alongside and -- subsequent consultation with other
2 emergency services, but it's true to say, certainly,
3 during that time, that all rules and procedures were --
4 you know, the railways always, subject to a lot of --
5 you've probably heard many of it -- technical speak and
6 three-letter acronyms and all sorts of stuff, so we did
7 have a good look at this to try to, you know, get it
8 into simpler terms, into more plain English that people
9 could understand and certainly the production of
10 rule book 2 was designed to try to ensure that people
11 understood their roles.

12 Q. Has the process of table-top exercises also been
13 reviewed so that they are made more realistic, perhaps?

14 A. Correct. I've attended a number of table-top exercises.
15 Again, Mr Dunmore talked about the annual one.

16 I attended the last annual one, and I would say that
17 they are much more realistic.

18 They include many agencies, including parties who
19 were previously probably not involved, local
20 authorities, emergency planning officers, and now they
21 do form a realistic -- and I think the feedback given
22 from all emergency services and other parties has been
23 very positive about the way we conduct and operate those
24 table-top exercises.

25 Q. The national events of later this year and next year are

1 outside the scope of these proceedings, but may we take
2 it that London Underground, with reference to your
3 planning, your emergency planning, your table-top
4 exercises and your security arrangements, is addressing
5 the possible demands and contingencies that might arise
6 out of events this year and next year?

7 A. I will answer that very shortly by saying we have
8 special teams, I have appointed a senior manager to deal
9 with those issues. We intend to be collectively,
10 together, along with our Transport for London
11 colleagues, in one location and certainly I think there
12 is a real emphasis in a joined-up approach to dealing
13 with future events as you describe.

14 Q. Have you set out in your statement some of the extra
15 resources that are now being made available to deal with
16 security and responses on the Underground?

17 A. Particularly, for example, Mr Barr, whom you have, I'm
18 sure, spoken to and met, is involved in only dealing
19 with the Olympic and the events of 2012, and also other
20 people have been released full-time to work with the
21 Olympic delivery authority and also all the emergency
22 services, particularly British Transport Police.

23 Q. One particular issue to which my Lady made reference
24 earlier was the fact that Emergency Response Units don't
25 have blue light status. Might that be an issue that is

1 pursued again? Because we understand that, although
2 recommendations were made by the 7 July Review Committee
3 to allow the Emergency Response Units quicker access to
4 the scenes of incidents, that, whilst they have
5 exemption from the parking charging system and access to
6 the bus lanes, they do not have blue light status?

7 A. Correct. I believe, as mentioned earlier, that with the
8 adequate training, with the support of other emergency
9 services, we would benefit from attending incidents,
10 which the Emergency Response Unit does almost on a daily
11 basis, where lives may be, you know, supported by their
12 actions, it would be beneficial to us.

13 I do understand, though, with my other hat on as
14 a British Transport Police authority member, we must
15 make sure those people are correctly trained and
16 monitored to ensure the safety of those people who
17 obviously are travelling on London's roads when these
18 vehicles are operating under those conditions.

19 Q. You are aware of the Emergency Response Unit coming from
20 Croydon to try to attempt to reach the Edgware Road
21 bombsite on 7 July, stuck in traffic in south London,
22 waiting for a police escort, and arrived, not just after
23 the golden hour, but many hours later.

24 A. I would also say that our communication with British
25 Transport Police colleagues certainly has been enhanced

1 and improved subsequently and I think maybe prioritising
2 the requirements is certainly I see as something that
3 either myself or one of my senior colleagues would be
4 talking to British Transport Police and their
5 Metropolitan Police colleagues, who obviously control
6 the roads, to assist us in providing a high priority
7 escort. But at the time of 7 July, it was very
8 difficult to provide a level of service because of the
9 nature of those incidents going on at the time.
10 So I would certainly pursue the ability for those
11 drivers of the Emergency Response Unit to consider the
12 use of blue light status.

13 MR KEITH: Thank you, Mr Collins. Those are all the
14 questions that I have for you.

15 LADY JUSTICE HALLETT: Mr Saunders?

16 Questions by MR SAUNDERS

17 MR SAUNDERS: Mr Collins, as I prefaced with Mr Dunmore,
18 I think you are the person more able to deal with first
19 aid and kits, and Mr Keith has touched on some of it.
20 Can I simply ask you to confirm that, subsequent to
21 2005 -- and her Ladyship has heard evidence already that
22 in fact now with a major incident, so far as the London
23 Ambulance Service is concerned, there's the automatic
24 deployment of some 20 ambulances to a scene such as the
25 ones we've got here.

1 A. That is correct.

2 Q. In terms of medical equipment and supplies, the
3 emergency dressing packs -- again, her Ladyship has
4 heard something about those -- are now in place at all
5 of the key rail terminals, and at some 36 specific
6 Underground stations?

7 A. Correct.

8 Q. We've also heard evidence of stretchers. They have now
9 been changed, I think, in the year following this --

10 A. That's correct.

11 Q. -- inquest we're hearing of in 2006. Now they're all
12 replaced with new stretchers and, in fact, where
13 her Ladyship has heard there are different levels of
14 stations, the system has now been dealt with so that
15 there are stretchers on each level, so that wherever
16 there is an incident, there is at least a stretcher, if
17 not more, depending on the size of the station again.

18 A. Yes, and obviously there are one or two stations where
19 we've got improved access through lifts and step-free
20 access.

21 Q. Thank you. Can I then move on to something that
22 Mr Dunmore touched on, and that is having first aid
23 kits, and you, again, touched on that.

24 Has thought been given to using, not just the
25 emergency pod that her Ladyship has heard about in the

1 driver's cab, but we have also heard over the last four
2 months about cavities within the seats.

3 Is that a possibility, that those sort of cavities
4 could be used to store first aid kits?

5 A. On some trains, it may well be possible. I think the
6 challenge for us is, on the newer stocks and also the
7 deep level Tube locations, to give passengers more
8 space, the seat bay areas, which traditionally may have
9 had some room in them, are now very confined and contain
10 a lot of important equipment.

11 So it would be very difficult for me, at this stage,
12 to say whether it was feasible to install such
13 facilities under seats, but it's certainly something we
14 may wish to explore further.

15 Q. Because whilst one understands the difficulty with they
16 can get dirty and contaminated, clearly it's one
17 possibility; for example, having vacuum-sealed emergency
18 kit?

19 A. Correct, and we do -- other equipment is sealed in that
20 way and I'm sure it is possible that it is a very dirty
21 environment and often these bags, after a few months,
22 are, you know, encrusted in dirt and have to be cleaned
23 off on a regular basis.

24 Q. Whilst we understand the first and foremost position of
25 an operator is to bring the stock into a platform,

1 exactly what happened here, where trains couldn't be
2 moved, and obviously a driver then could make available
3 first aid to those who, on the Tube -- and her Ladyship
4 has heard numerous examples of either those who were
5 trained in first aid or, even better, qualified doctors
6 who, if they had the kit, went into action. So that is
7 obviously something that you very much had in mind.

8 A. I understand that and I think obviously, during this
9 inquiry, that has been quite clear and that is why I've
10 said that we will consider a review, if at all possible,
11 of this provision.

12 Q. Of course, the fact that a driver may be required to
13 open -- whether it's within a seat or not -- because he
14 or she now has the handheld radio, if a Code Amber
15 changes or in a situation where that train is expected
16 to move on to a station, the driver can now always be
17 contactable wherever he is on his train?

18 A. I think so, although, you know, our emphasis is to
19 ensure that, especially when rescue is anticipated,
20 that, if at all possible, the driver, you know, at least
21 migrates back to that point so he can receive the rival
22 rescue party or find someone who is appropriate to
23 actually sit in that cab while he makes other
24 arrangements.

25 MR SAUNDERS: My Lady, I don't pursue that any further.

1 Thank you very much indeed.

2 MS SHEFF: No thank you.

3 LADY JUSTICE HALLETT: Mr Morton?

4 Questions by MR MORTON

5 MR MORTON: Mr Collins, just two very short points, if
6 I may.

7 First of all, my learned friend Mr Saunders has
8 asked you about the space under seats and you've
9 explained that on newer stock, in fact, that's been
10 removed and you've explained in part the reasons for
11 that.

12 Is it also right that, in fact, the removal of the
13 cavities or the space below the seats on which we all
14 sit is in part itself also influenced by security
15 considerations?

16 A. Yes, that is the case. We have had in the past -- and
17 people may know -- devices placed under those seats, in
18 a terrorist activity. That's why we provided the
19 lockable and secure seat mechanism and also seat bay
20 alarms on certain stock so we know when those seats have
21 been opened.

22 Q. I think, in fact, the 1991 IRA bomb, about which my Lady
23 heard something yesterday, that is exactly where the
24 bombs were placed, or bomb?

25 A. Correct, and we spent, I remember, three days searching

1 under every seat to see if we could find any further
2 devices.

3 Q. Finally this: my learned friend Mr Saunders has very
4 helpfully taken you through a number of the changes that
5 have been made in relation to first aid equipment, and
6 I don't want to list them all, but do you have your
7 witness statement in front of you?

8 A. I do, yes.

9 Q. Simply for my Lady's note, it's TFL996-10. If you've
10 got it in front of you, Mr Collins, perhaps you could
11 just confirm that this is right? Between paragraphs 43
12 and 48, do you there set out in summary form all of the
13 improvements that have been made --

14 A. That is correct.

15 Q. -- in relation to the provision of first aid equipment?

16 A. That is correct.

17 Q. Then finally this: my learned friend Mr Keith asked you
18 about the provision of additional torches in the
19 emergency pods in the driver's cab, the emphasis being
20 on additional torches. But are there, in fact, any
21 torches provided now in those pods?

22 A. We are, I believe, embarked in a programme providing
23 hands-free head -- what we call headset torches which
24 are provided in those emergency pods.

25 MR MORTON: Thank you. Having asked a rather obvious

1 leading question yesterday, I thought I shouldn't today,
2 but in fact, at paragraph 37 of your witness statement,
3 you set that out. Thank you very much indeed.

4 LADY JUSTICE HALLETT: Mr Collins, you mentioned reviewing
5 the emergency plans and trying to remove jargon and the
6 appalling use of English, for which I applaud you --
7 there's a surprise -- but have you given any thought to
8 simplifying your hierarchy?

9 As somebody who's never played any kind of part in
10 London Underground, I'm thinking of myself as the person
11 who arrives from outside to a London Underground station
12 trying to work out who's senior to whom and who's the
13 kind of person who has the responsibility that I want to
14 know about if I'm going to liaise with them effectively,
15 and I confess I haven't found your organisational
16 structure terribly easy to follow as to who does what
17 and who's senior to whom.

18 I think having somebody called a "multifunctional
19 assistant" isn't exactly --

20 A. All I can say, my Lady, is that it was certainly a lot
21 more complex many years ago, and even -- I think we had
22 23 grades of one booking clerk. But I think the
23 important thing here is to emphasise that we do, and
24 certainly reemphasise with training, follow the LESLP
25 Gold, Silver, Bronze process. We do put a lot of

1 emphasis on the responsibility of the station supervisor
2 whom we have at every station, and we certainly have
3 simplified, even since the terrible atrocity
4 of July 2005, some of those grades. In fact, as talked
5 about earlier, even in the senior management hierarchy
6 we're trying to keep that as simple as possible.
7 But I think it does emphasise the importance -- us
8 railway folk have been here all our lives -- to avoid
9 the use of jargon when meeting even what you assume are
10 the emergency responders who would understand some of
11 that.
12 But for many years, I think we have tried to adopt
13 and follow the Gold, Silver, Bronze structure so that
14 people know who to identify with and contact with at
15 those locations.
16 LADY JUSTICE HALLETT: Thank you. Any other questions for
17 Mr Collins?
18 Thank you very much, Mr Collins. That's very
19 helpful, and those are all the questions that we have
20 for you.
21 MR KEITH: My Lady, may I invite Mr Hay, through you, to
22 call Chief Inspector Gosden?
23 CHIEF INSPECTOR BRIAN RICHARD GOSDEN (sworn)
24 Questions by MR HAY
25 MR HAY: Good afternoon. Could I ask you to give your full

1 name to the court, please?

2 A. Brian Richard Gosden, Chief Inspector, British Transport
3 Police.

4 Q. Chief Inspector, may I start as we did with Transport
5 for London by acknowledging the response of the
6 individual officers from whom we've heard from British
7 Transport Police and also those from whom we have not
8 heard?

9 You are a chief inspector of the British Transport
10 Police?

11 A. I am, yes, sir.

12 Q. Between August 1997 and June 2006, you were the officer
13 in charge of the central control room which we know as
14 MICC?

15 A. I was, yes, that's correct.

16 Q. Can I start first with the communication infrastructure
17 which British Transport Police had in place on 7 July
18 before turning to its operational effectiveness on that
19 day? Can we start with the control room? Where is that
20 based?

21 A. The MICC is based at 55 Broadway, the same building as
22 London Underground's Network Control Centre.

23 Q. Are they literally in rooms next door to one another?

24 A. They are next door to each other, yes.

25 Q. In addition to the MICC, is there a specific incident

1 room which the British Transport Police has?

2 A. There's a fallback control room, so an alternative
3 control room for the facility at 55 Broadway, should
4 that fail. It was also used for operating special
5 events outside of what we would call business as usual,
6 so daily routine activity; typically, a large football
7 match, a demonstration, a special event such as
8 Notting Hill carnival, New Year's Eve.

9 Q. Was that specific control room known as Alpha Zulu?

10 A. The call sign was Alpha Zulu. The function, so the
11 role, could actually be contained within the control
12 room at 55 Broadway, but it could also be at the control
13 room at Tavistock Place, it was a role rather than
14 a location.

15 Q. On 7 July, was that specific incident room already up
16 and running prior to the bombs being detonated?

17 A. It had been open since the previous day, yes.

18 Q. Why was that?

19 A. It had been open since the previous day for the G8
20 conference in Scotland. The control room there was
21 supporting our control room in Glasgow and also my staff
22 who were in Tayside Police control room for the G8
23 conference. So effectively, it was operating in the
24 Scottish area, even though it was in London.

25 Q. Can I turn now, to the radio systems which were

1 available to the British Transport Police on 7 July and,
2 above ground, the British Transport Police were
3 operating Airwave at that time, is that right?

4 A. We were operating Airwave. We still had our legacy
5 analogue system live as well at that time.

6 Q. You were the only emergency service who had Airwave
7 rolled out for all of its officers at that point. Is
8 that correct?

9 A. In London, that's correct, yes.

10 Q. Is it right that the City of London Police had some
11 Airwave handsets available but it wasn't something which
12 they actually used across their service?

13 A. My understanding is that, yes.

14 Q. We've heard and seen various documents from the
15 Metropolitan Police Service's CAD system which also the
16 City of London Police operated. Did British Transport
17 Police operate a similar system?

18 A. We operate our own Command and Control system, I think
19 in the documentation it's referred to as NSPIS, but it
20 was really just called Command and Control. We also
21 operate with the Metropolitan Police CAD system,
22 therefore also the City of London Police.

23 So our control room uses both systems to ensure
24 there's an effective interface between the three police
25 forces.

1 Q. How are those systems joined up in any way?

2 A. They aren't joined up in terms of we can export data
3 from our system to their system. It requires double
4 keying.

5 What actually happens is, in the control room at
6 55 Broadway and at the Tavistock Place control room, you
7 actually have the Metropolitan Police CAD terminals
8 alongside our own Command and Control terminals and
9 operators are dedicated to monitoring the two systems.

10 Q. Is the reason why you don't actually share -- I'm sure
11 there may be many reasons, but is one of the reasons why
12 you don't share a CAD system with the
13 Metropolitan Police and the City of London Police that
14 the British Transport Police cover an area outside of
15 London?

16 A. Ordinarily, police forces have different Command and
17 Control systems that are quite independent. They might
18 be from the same supplier, but they are independent. In
19 other places, we might exchange data from one -- from
20 our system on to another police force. In London, we do
21 it by actually using the CAD system, and that's been in
22 place since 2002.

23 Q. Can I ask you now about below-ground radio
24 communications?

25 On 7 July, British Transport Police had something

1 which was an analogue radio system known as channel 2.
2 Is that correct?
3 A. That's correct, that was the underground system.
4 Q. Which British Transport Police officers had access to
5 channel 2 handsets?
6 A. Officers that were stationed on the L area so our
7 London Underground area, all had channel 2 sets.
8 Officers based at the mainline terminals had access to
9 some handheld sets. I think in the order of 10 to
10 a dozen were available at each of those sites.
11 Q. Channel 2, in the sense of where it worked within the
12 Underground, it worked at stations and on platform
13 levels but didn't work in the tunnels on 7 July?
14 A. It didn't, no.
15 LADY JUSTICE HALLETT: Is that even deep platforms?
16 A. It worked on all the platforms, my Lady, yes.
17 MR HAY: So both sub-surface and deep level stations?
18 A. It did, yes, and when they surfaced, they could talk
19 direct to the control room on a surface channel by
20 switching channels. So it wasn't unique -- it wasn't --
21 the radio set wasn't dedicated solely to underground.
22 They could change to above-ground communication.
23 Q. We heard this morning about the recommendations which
24 were derived from the Fennell report and one of those
25 recommendations was that the British Transport Police

1 and the London Fire Brigade should have compatible radio
2 handsets underground. That wasn't in place on 7 July,
3 was it?

4 A. It wasn't, no.

5 Q. Can you help us with why that recommendation hadn't been
6 implemented?

7 A. I can't comment on the history of that as to why it
8 wasn't implemented. It would -- the channel 2 was
9 implemented following the King's Cross fire, and BTP
10 have used it until -- or fairly recently.

11 I can't really comment why that wasn't implemented
12 along with London Fire Brigade, although London Fire
13 Brigade had their own system that they could use when
14 they were under at Underground stations, but it wasn't
15 interoperable with ours.

16 Q. So those two systems couldn't communicate with one
17 another?

18 A. Our system couldn't communicate with London Fire
19 Brigade's system. But they were able to communicate
20 underground.

21 MR HAY: My Lady, I'm about to turn to the events on the
22 day, so I don't know whether or not that's a convenient
23 moment.

24 LADY JUSTICE HALLETT: Very well. 2.00, please.

25 (12.58 pm)

1 (The short adjournment)

2