1	Monday, 14 January 2013
2	(9.00 am)
3	(Proceedings delayed)
4	(10.08)
5	THE CORONER: Thank you very much. Ladies and gentlemen,
б	welcome. These inquests which we are starting today
7	concern the tragic deaths of six people who died in
8	a fire in July 2009 in Lakanal House in Camberwell in
9	south London. Those who died are Catherine Hickman,
10	Dayana Francisquini, Thais Francisquini, Felipe
11	Francisquini, Helen Udoaka and Michelle Udoaka.
12	This room does not look like a conventional
13	courtroom. However, you must bear in mind that it is
14	deemed to be a courtroom for all purposes and the same
15	rules apply in this room and in the adjacent areas as
16	apply in courtrooms and buildings in England and Wales.
17	All of the front rows have microphones. If you wish to
18	speak then please make sure your microphone is on.
19	MR HENDY: Madam, I think there was a problem with your
20	earlier words. I could hear it very well but I'm not
21	sure it was being relaid to the back. I think the PA
22	might have gone off.
23	THE CORONER: Thank you very much. In that case I will
24	begin again and explain that these inquests that we are

25 dealing with today are dealing with the tragic deaths of

six people who died in a fire in July 2009 in 1 2 Lakanal House in Camberwell, south London. Those who died are Catherine Hickman, Dayana Francisquini, Thais 3 Francisquini, Felipe Francisquini, Helen Udoaka and 4 Michelle Udoaka. This room does not look like 5 a conventional courtroom but it is deemed for all 6 7 purposes to be a courtroom, and the same rules apply 8 within this room and in the adjacent areas as apply in 9 courtrooms and buildings throughout England and Wales. 10 I have mentioned the microphones. If you wish to speak, please make sure your microphone is switched on. 11

12 I begin by reminding you all that no-one is 13 permitted to use any recording device or any camera of any sort. Mobile phones must be switched off. If there 14 15 is any member of the public who wants to use a live text-based communication then he or she must make 16 17 an application to me for permission to do so. If you wish to make such an application, please speak to Mr Ken 18 Clark, who is the coroner's officer. Is Mr Clarke in 19 20 court? He was the man who very kindly introduced me when I came into the room. There is only one exception 21 22 to that point which I have made concerning -- sorry, has 23 the microphone gone off again? MR MAXWELL-SCOTT: The microphone has gone off again. 24

25 THE CORONER: Is that better? No. Right, is that better?

1 MR MAXWELL-SCOTT: No. Perhaps it needs to be pressed down.

2 I am not sure.

3 THE CORONER: Is that better? It is.

4 MR MAXWELL-SCOTT: Yes, it is.

5 THE CORONER: Thank you very much.

6 A representative of the media who wishes to use live 7 text-based communication may do so without permission 8 from me but that applies only to representatives of the 9 media. These proceedings are being recorded. 10 A transcript will be prepared and this will be put on 11 the Lambeth website. Robin and Jonathan who are sitting 12 doing the transcription need everybody please to speak

13 slowly and clearly so that they can make an accurate 14 recording.

My plan is that we aim to finish by the end of March. We shall sit every day from Monday to Friday, beginning at 10 o'clock, having a break at lunchtime between 1 o'clock and 2 o'clock, and then finishing in the afternoon at about 3.30 or 3.45. We shall have a break mid-morning.

I do aim to start on time every day, so strictly at 10 o'clock. My apologies for the late start this morning, but there were some matters which it was necessary to deal with before we could begin. Please look round and take note of where the fire exits are.

You will see that there are double doors on that side of 1 2 the room, as I am facing on the left hand side of the 3 room. If the fire alarm sounds then please make sure 4 that you leave this room and leave the building as quickly as you can following the instructions of the 5 6 Lambeth staff, who will explain what to do. I am told 7 that there will be a fire alarm test at 11 o'clock this 8 morning. This is a routine test so provided -- are you 9 able to hear me at the back without the microphones? 10 This will be a routine fire test at 11 o'clock, Good. so provided it is a test which runs only for a very 11 12 short time there is no need to evacuate the building. 13 If the test runs for any length of time, then please treat it as a real fire alarm and leave the building. 14

15 Let me just explain about Lakanal House. This is a 14-story residential block. It consists of 98 16 maisonette flats, each spread over two floors. The fire 17 began in a bedroom within flat number 65 on the west 18 side of the 9th floor of the building. The fire spread 19 20 quickly within flat 65 and then on to some other flats in the building. The fire took hold in flat 79, where 21 22 a young woman, Catherine Hickman, was living. She died 23 from the effects of the fire. The fire also spread to flat 81. Five people took refuge in flat 81. They were 24 Helen Udoaka and her baby daughter Michelle -- Michelle 25

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was then 20 days old -- together with Dayana

Francisquini, her daughter Thais aged 6 and her son
Felipe, who was aged 3. All of those also died from the
effects of the fire.

The Fire Brigade was called as soon as the fire 5 6 began in flat 65. However, they were unable to rescue 7 the victims in time. Paramedics attended but they were 8 unable to resuscitate the victims. The inquests into 9 these six deaths were formally opened on 15 July 2009. 10 I was appointed assistant deputy coroner on 14 July 2010 to replace Sir Thayne Forbes who had previously been 11 12 acting as assistant deputy coroner. A pre-inquest 13 review hearing was held by Sir Thayne Forbes in December 2009. I have held pre-inquest review 14 15 hearings on 8 December 2010, 16 December 2011, and 16 9 July 2012.

Since these inquests were formally opened, extensive 17 investigations have been carried out, initially by the 18 Metropolitan Police Service and subsequently by others. 19 20 The Crown Prosecution Service announced in late May 2012 that they had conducted a full review of the case papers 21 22 provided by the investigators and had concluded that there was insufficient evidence to offer a realistic 23 prospect of conviction against any individual or 24 corporation for an offence of homicide in relation to 25

these tragic deaths. We have now reached the position
 where the inquests can be concluded.

Section 8, subsection 3, subsection D of the 3 Coroner's Act of 1988 applies where there is reason to 4 suspect that the death occurred in circumstances the 5 6 continuation or possible recurrence of which is 7 prejudicial to the health and safety of the public or 8 any section of the public, and given that that section 9 applies I have arranged for a jury to be summoned. 10 Mr Abi Oyenigba, the jury officer, summoned a large number of potential jurors. Some 55 people attended 11 12 a pre-selection meeting on 17 December 2012. Those 13 present on that day were Mr Oyenigba, Mr Ken Clark, the coroner's officer, Mr Iain Graham, the jury usher. 14 15 Miss Sue Lord, the coroner's officer at Westminster Coroner's Court, was present to assist. I was present 16 17 that day merely to observe. I played no part in that 18 pre-selection process.

Some of those who attended on that day were excused further attendance and the remainder were told that they should attend today and that a jury would be selected at random from that number. Some of those who had been summoned did not attend on 17 December, but they have had the same opportunity to be given the same information this morning as those who attended on

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1 17 December were given.

2	We are now, therefore, at the point where we would
3	like to select the jury, so please could I hand over to
4	you, Mr Graham. I believe that all potential jurors are
5	in the back of the court; is that right? All of you
6	understand that these inquests are going to last for
7	some ten to 12 weeks. I shall draw names at random.
8	(The jury were empanelled)
9	THE CORONER: Thank you very much. That gives us 11 jurors.
10	Can I invite all those whose names have been read out to
11	come to the jury box. The rest of you who have been
12	called for jury service today are now discharged and you
13	are free to leave the building. You are welcome to stay
14	if you would prefer. Thank you very much for coming.
15	Members of the jury, thank you very much for coming.
16	We are about to arrange for you formally to be sworn in
17	as jurors and then we shall continue and I shall give
18	you quite a lot of explanation, but we need first to
19	swear you in. So I am just waiting for the officers to
20	come back to do that.
21	Mr Atkins, I might ask you whether you can see if
22	you can locate the jury officer so the jury can be
23	sworn, thank you.
24	(The jury were sworn)
25	THE CORONER: Thank you very much. Well, members of the

jury, welcome and I look forward very much to working
 with you all.

Let me begin by explaining to you what a coroner's 3 inquest is. It is unlike all other court proceedings in 4 England and Wales. An inquest is an investigation. It 5 is an attempt to establish facts. No-one is on trial, 6 7 there is no prosecution, there is no defence. 8 An inquest is not about apportioning guilt or blame or 9 about awarding compensation. Unlike other court 10 proceedings, there are no parties as such. There are, however, a number of people who have a particular 11 12 interest and I have given these people what is called 13 "properly interested person status". Those who have 14 properly interested person status in these inquests are 15 members of the families and Catherine Hickman's partner, the London Fire Brigade, together with the London Fire 16 and Emergency Planning Authority, the London Borough of 17 Southwark, Apollo Group Services, Symphony Windows, SAPA 18 Building Systems, Trespa UK and Harvard International. 19

The purpose of these proceedings and the evidence which is given at an inquest is to ascertain the following four matters: who was the deceased? When, where and how did each of the deceased die? Neither the coroner nor any juror is permitted to express an opinion on any other matter; only those four matters. Service

1 as a juror is a very important part of your civic duty. 2 It is part of the life of this country, and you have a very important role to play in these inquests. I as 3 a coroner and you as jurors have different roles. I am 4 the judge of the law and you are the judge of the facts 5 and opinion. It will be helpful if, over the next 6 7 couple of days, you choose one of your number to be 8 a jury foreman. I say "foreman", but you are free to 9 choose any one of you. It can a man or a woman. Please decide between you who that person should be. 10

After we have heard all of the evidence, I shall ask 11 12 you to assist me in completing a form, which is called 13 an inquisition in relation to each of the deceased. I think it might be helpful if you see now the form 14 15 which, at the very end of the proceedings, we are going to be dealing with. So if I could just ask someone, 16 17 please, to kindly hand you each a blank form. I am giving you these now just so that it gives you an idea 18 of what it is you are going to be asked to do at the end 19 20 of the process. There is no need to start to try and fill it in now. In fact, please do not do so. Please 21 22 wait until the end and I will give you full directions 23 on that.

The evidence that you are going to hear over the next few weeks will help you in your task. Before I ask

you to consider your verdicts, I shall give you detailed
 directions.

Over the coming weeks you will hear evidence given 3 by a number of different people. Some will be giving 4 factual evidence about events. Some whom we call expert 5 witnesses will give their opinions on various matters. 6 7 In some cases, a witness will not come here but we shall 8 read to you the statement made by that witness. I shall 9 call each witness in turn. Mr James Maxwell-Scott is 10 a barrister and he is counsel to the inquests. Either Mr Maxwell-Scott or his colleague Mr Mike Atkins will 11 12 ask questions initially of witnesses on my behalf. Can 13 I just ask Mr Maxwell-Scott to stand up.

14 MR MAXWELL-SCOTT: Yes. Good morning.

15 THE CORONER: And Mr Mike Atkins.

16 MR ATKINS: Good morning.

17 THE CORONER: Thank you. After either Mr Maxwell-Scott or 18 Mr Atkins has taken a witness through questions, then 19 all of those who have a particular interest will be 20 permitted to ask questions. Finally, I shall give you, 21 the jurors, the opportunity to ask questions. I decide 22 whether a question is relevant or not.

I think I should warn you that some of the evidence is upsetting. If you are distressed and need a break then I hope I shall notice, but if I do not please make

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sure that that is drawn to my attention.

2 Your duty as jurors is to listen carefully to all of 3 the evidence. After all of the evidence has been given 4 I shall sum up the case for you and ask you to go back 5 to your private room to consider your verdict on each of 6 the deceased. I shall explain that to you in much more 7 detail when the time comes.

I hope that you have in front of you pen and paper. Please feel free to make any notes that you would like to help you in your task. Those notes must be taken back to your jury room at the end of every hearing and every break and can be brought back into this room, but must not be taken outside this building or anywhere, in fact, other than your room and in this hall.

15 Now that you have been sworn in as jurors, you have undertaken some solemn duties and I need to give you 16 some very clear warnings. One of the duties which you 17 have as jurors is not to discuss the inquests with 18 anyone at all outside the jury. You have a duty of 19 20 confidentiality to these inquests, to the properly interested persons, and to one another. When you leave 21 22 this hearing room during any break, or when you go home 23 at the end of the day, you must not discuss the evidence with anyone. This means that you must not talk about 24 these inquests to your friends, to your family, or 25

indeed to someone you trust, however much you trust 1 2 them. You must not consider any information which has not been dealt with in the evidence which you hear in 3 this room. You must not carry out your own research. 4 You must not search the internet for information, even 5 б in idle curiosity. You do not search, for example, 7 Twitter, Facebook, YouTube, MySpace or any other similar 8 website or social networking site. You must not make 9 your own private visit to the area. The only people 10 with whom you are permitted to discuss the case are your fellow jurors, and then only when you are all in your 11 12 private room together, and all discussion must involve 13 you all.

14 If you disobey these rules, you will be at risk of 15 prosecution, and the punishment can include being sent 16 to prison. So this is a duty you must take very 17 seriously.

There is a reason why we impose these rules. 18 You can see that there would otherwise be an obvious risk 19 20 that when you met together as a jury you would take with you not only your own view about these matters but 21 22 someone else's as well, and that must not happen. It is 23 you, the jury, who will hear all the evidence, and these are matters for you as jurors and for you alone. It is 24 no-one else's business. If you were to obtain 25

information from some outside source, then neither the advocates nor I would know about it. If we do not know about it, we cannot comment on it, and that would not be fair to those who are participating in these inquests or indeed the public whom you represent.

6 Is that clear to you all? Do any of you have any 7 questions on that? Thank you very much. The duties 8 which I have explained to you are duties which you owe, 9 members of the jury, both as individuals and 10 collectively as a group of 11 people. If at any time anyone tries to talk to you or contact you about the 11 12 case and will not immediately take no for an answer, 13 then you must report this to me straight away. If any of you become aware that someone else in the jury is not 14 15 sticking to these rules, then you must tell me immediately. If at any time you are concerned about any 16 aspects of the inquests, you must say so straight away 17 or it will be too late to help. If you need to tell me 18 something, then please inform Mr Iain Graham, who is the 19 20 jury usher who swore you in a moment ago, or give him a note and he will pass this to me. 21

22 During the course of the inquests, I may hear 23 evidence which leads me to believe that an action might 24 be taken to prevent future deaths. If so, then after 25 the inquest has finished I am able to inform a person or

an authority who has the power to take action. That is
 something which is available to me and not to you as
 jurors.

You are going to hear a great deal about 4 Lakanal House, the building in which these tragic deaths 5 б occurred. We plan to arrange for you as jurors to visit 7 the building on Friday. We shall arrange transport for 8 you from this building to Lakanal House and back. The 9 previous day we will explain in detail the arrangements 10 which will be made for the visit on Friday, but in the meantime it is necessary for us to organise some safety 11 12 gear for you. You will need to wear safety shoes in the 13 building, for example, so I shall ask Mr Graham at the break to get that detail from you so that we can pass it 14 15 to those who will be organising the visit.

16 I mentioned a moment ago that we have a number of 17 properly interested persons, and what I would like to do 18 is to ask the advocate for each of those properly 19 interested persons to introduce himself and his team. 20 So shall I start with you, Mr Hendy?

21 MR HENDY: Good morning. I am assisted by Mr Christopher
22 Edwards. My name is John Hendy, and we are representing
23 Mbet Udoaka, Rafael Cervi and Philip Hickman.

24 THE CORONER: Thank you very much. Mr Dowden.

25 MR DOWDEN: Yes, I am Andrew Dowden, and I represent

1 Fernando Francisquini

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2	THE CORONER: Thank you. Miss Al Tai.
3	MS ALTAI: Good morning, my name is Zara Al Tai and
4	I represent Mark Bailey, who you see here next to me.
5	I'm assisted by Marcia Willis-Stewart and Sarah
6	Flanagan.
7	THE CORONER: Mr Walsh.
8	MR WALSH: My name is Stuart Walsh and together with Sarah
9	Naqshbandi who sits next to me, I represent the London
10	Fire Brigade.
11	THE CORONER: Mr Matthews.
12	MR MATTHEWS: Good morning. I am Richard Matthews, I am
13	assisted by Eleanor Sanderson and together we represent
14	the London Borough of Southwark.
15	THE CORONER: Mr Compton.
16	MR COMPTON: Good morning. My name is Ben Compton and
17	I represent Apollo Property Services.
18	THE CORONER: Mr Leonard.
19	MR LEONARD: Good morning, my name is James Leonard and
20	together with Robert Dickason, who sits next to me, I
21	represent Symphony Windows.
22	THE CORONER: Thank you very much. Miss Canby.
23	MS CANBY: Good morning, I'm Fiona Canby and I represent
24	SAPA Building Systems Limited.
25	THE CORONER: Miss Petherbridge.
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1 MS PETHERBRIDGE: Good morning, my name is Bridget

Petherbridge and I represent Trespa UK Limited.
 THE CORONER: Mr Kay.

MR KAY: Good morning, members of the jury. My name is 4 Dominic Kay. I am assisted by Ms Hazel Padmore on my 5 б right and we represent Harvard International limited. 7 THE CORONER: Thank you very much. Now, members of the 8 jury, you will be given a file of documents which we 9 hope will assist you. Mr Maxwell-Scott will explain in due course what is in that file, and from time to time 10 we shall be asking you to add documents to the file. 11 The same rules apply to that file as with any notes that 12 13 you make. Please take your file will you to your jury room. I think you will find it helpful to have it here 14 15 in the hearing room when we are hearing evidence, but you must not take it anywhere else and certainly not 16 outside the building. Thank you very much. 17

Well, I hope that that covers all of the 18 administrative and background matters that we need to 19 20 deal with, so unless anyone has any other submission to make or any issue to raise, I am proposing to hand over 21 22 to Mr Maxwell-Scott and we will begin the evidence. 23 Bearing in mind, Mr Maxwell-Scott, that we probably have a fire alarm in a few minutes, but let us make a start. 24 MR MAXWELL-SCOTT: Certainly, madam. May I just check 25

whether this microphone is working and whether everybody 1 2 can hear me. Thank you. Madam, the first witness is Dr Peter Mansi. 3 4 THE CORONER: Thank you very much. Is Dr Mansi in court? 5 Would you like to come forward, Dr Mansi. б DR PETER MANSI (sworn) 7 THE CORONER: Thank you, Dr Mansi. Do sit down. 8 Questions by MR MAXWELL-SCOTT 9 MR MAXWELL-SCOTT: Good morning, Dr Mansi. I will be asking 10 you questions on behalf of the coroner. Can you give the court your full name. 11 12 A. Yes. Is this working? My name is Peter Mansi. 13 Q. And your occupation? 14 A. I am a forensic fire investigator. 15 Ο. In terms of qualifications, is it right that you have 16 a PhD in fire investigation methodology? A. Yes, that is correct. 17 Q. You currently work in the private sector, but you 18 previously worked for the London Fire Brigade? 19 20 A. Yes, that is correct. How long did you work for the London Fire Brigade? 21 Q. 22 A. Just over 30 years. 23 Q. Did you work as a forensic fire investigator --A. Yes, I did. 24 25 Q. -- for the London Fire Brigade. You are the author of

1		the London Fire Brigade's fire investigation report?
2	A.	I am, yes.
3	Q.	At the time that you wrote it, you were serving with the
4		London Fire Brigade?
5	A.	Yes, I was.
6	Q.	So that the members of the jury know, you are scheduled
7		to give evidence twice in the course of the inquest?
8	A.	Yes.
9	Q.	Today you will be providing the jury with
10		an introduction to the facts of the fire?
11	A.	Yes.
12	Q.	This is going to fall into three parts. In the first
13		part, you will take the jury through a computer
14		presentation of the layout of the building of Lakanal
15		House?
16	A.	Yes.
17	Q.	The members of the jury will then each be provided with
18		their own bundle and you will help us and them by going
19		through the contents of it?
20	A.	Yes, I will.
21	Q.	And in the final part of your evidence today, you will
22		take the jury through a computer presentation of
23		an outline of the events of the fire?
24	A.	Yes, I will.
25	Q.	I turn then to the computer presentation of the layout

1 of the building.

2	THE	CORONER: Members of the jury, can I just check, are
3		your monitors all showing you something?
4	MR	MAXWELL-SCOTT: Can I check, members of the jury, that
5		your monitors are showing the same map of London that
6		you see on the large screen. Dr Mansi, is your monitor
7		working as well?
8	Α.	Yes, it is.
9	Q.	Thank you. So this is a map of London which shows the
10		location of Lakanal House in the Camberwell area.
11		This is a much more detailed map of the
12		Sceaux Gardens estate which shows in pink, in
13		approximately the middle of the page, Lakanal House, to
14		the left of it Fontenelle another building that
15		formed part of the Sceaux Gardens estate and to the
16		right, Marie Curie House, again part of Sceaux Gardens
17		estate?
18	Α.	Yes.
19	Q.	This is an aerial photograph showing a very similar area
20		to that which we saw in the map on the previous image.
21		In approximately the middle of the page, marked with
22		an arrow, we have Lakanal House. Marie Curie House to
23		the right is a black of flats of a similar size and
24		a similar height; is that right?
25	A.	That is correct.

1 Q. And Fontenelle is not as high?

2 A. That is correct.

Q. I am now going to play a 3D animation of the layout of Lakanal House. I am going to play it straight through first without asking you to comment on the contents or pausing it, and it will take just over two minutes to play. I am then going to play it again, pausing it from time to time to give you the opportunity to comment on some of the features shown.

10 (The video was played to the Court) 11 Madam, that is the end of the presentation, I hear 12 the fire alarm is just about to go off. (Pause) 13 THE CORONER: Yes, thank you.

MR MAXWELL-SCOTT: Thank you. Dr Mansi, I am now going to 14 15 play it through again, pausing it from time to time to give you the opportunity to comment on what you can see. 16 A. Okay. This is a representation of Lakanal and 17 Marie Curie, and they are clearly labelled. And you can 18 see that the orientation of Lakanal runs from north to 19 20 south, and that's where the main central corridor which feeds all the flats runs, north to south. 21

Q. So the members of the jury in the course of the case will quite often hear people referring to the north corridor or the south corridor or to the west side of the building or the east side of the building.

1	Α.	This shows the ground floor of Lakanal, which have no
2		accommodation. There were no flats on the ground floor.
3		There was a plant room and other storage rooms. It
4		shows the ground floor of the central staircase
5		single staircase that went from the ground floor, as
6		you will see, up to the 14th floor.
7	Q.	Can we see the central staircase itself in blue, where
8		I am putting the white arrow?
9	Α.	Yes.
10	Q.	Is that right?
11	Α.	That is correct, and where the label says "central
12		stairwell entrance", that is from the ground floor on
13		the east elevation of Lakanal that takes you up to the
14		internal central staircase. Where it says "lift lobby
15		entrance", that is access from the west elevation of
16		Lakanal that brings you into the staircase and the lift
17		lobby.
18	Q.	Thank you.
19	Α.	Okay, here you can see the central staircase going from
20		the ground floor right the way up to the 14th floor with
21		a landing level on every single floor. The two lifts
22		that you can see there depicted in blue on the right
23		only stop on the odd floors, because it's the odd floors
24		that has access to the flats. The even floors don't
25		have access to the flats, but you will see that as we

1 carry on.

2 On each lift lobby, on every odd floor, there's an outlet which is called a dry riser outlet. A dry 3 riser is a fixed empty pipe that runs the whole height 4 of the building and it allows the Fire Brigade to 5 б connect their appliance and the water in at ground floor 7 level into the inlet for the dry riser, fill the pipe 8 full of water, and then the firefighters can go to any 9 of those floors where the outlet is and connect their 10 hosepipes into it and then attack the fire. They are also on every odd floor, which is the floor where the 11 12 lift doors are and also the access corridors to the 13 flats.

Now, you can see the central corridors on all the odd floors: 1, 3, 5, 7, 9, 11 and 13. That's where the front doors to the flats are. That's how you access the flats. Then when you go in the flats you can then go upstairs, because they're maisonettes, they're on two floors.

20 Now, we can see from the west elevation the main 21 entrance to Lakanal which takes you to the staircase or 22 to the lift lobbies. That is also where the dry riser 23 inlet is for the Fire Brigade to connect to.

24 On the roof of Lakanal there is a plant room which 25 contains the electronic motors to work the lifts, and

there are also two large fans. One was being used and one is a standby fan. Basically, they suck the air out of the bathrooms throughout Lakanal and discharge out to the open air, out of the west face, and just at the bottom of the fan you can see a purple-coloured square coming out of the building. That's where it blows the air out of.

8 So this diagram shows the air flowing from the 9 bathrooms up into the ductwork which takes it up to the 10 roof level and then through the fan and out into the 11 atmosphere, into fresh air.

12 What you're looking at here is the way that the 13 flats -- they're all identical, whether they're on the west face or the east face. The blue flats here face 14 15 out predominantly to the west, so the two bedrooms look out to the west. You go up the stairs and there is 16 17 a kitchen and a lounge upstairs that spans both sides of 18 the flat. So you can see east and west from upstairs of all the flats, but on the west face, the bedrooms 19 20 downstairs depicted in blue and those that look out east 21 depicted in green on this diagram.

You can see on the even floors there are escape
balconies that run the length of the outside of the west
elevation and the east elevation. So you go through the
central corridor into the front door of the flats. You

1 can then go upstairs and on all the flats you can either 2 go out of a door on the west escape balcony or the east 3 escape balcony. That will then take you to a door that 4 has a push-bar that takes you to a central staircase and 5 out of the building.

б MR MAXWELL-SCOTT: We are going to look at that in more 7 detail with some more close-up 3D images in an moment. 8 So this 3D image shows a typical configuration of 9 a west-facing flat -- in other words, one that has its 10 front door on the west side of the central corridor -and then, on the lower of its two floors, it has two 11 12 bedrooms. On the upper of its two floors it has 13 a kitchen on the west side and a lounge on the east side. So what we are looking at here, if one remembers 14 15 the previous video image of the blue and green flats interlocking -- we are looking here at one of those blue 16 flats; is that right? 17

18 A. We are, yes.

Q. We are now going to look at one of the green flats, one with a front door off the central corridor on the east side of the building. What one primarily can see in this image is the kitchen on the east side, the lounge on the west side, and below the kitchen area there is a bedroom, and also on that east side at the lower level there is another bedroom and a bathroom; is that right?

1 A. That is correct.

2	Q.	Now, I am going to play a short video that illustrates
3		this point further.
4		So Dr Mansi, what we see at the end of that is the
5		central corridor in blue on the lower level?
б	Α.	Yes.
7	Q.	No central corridor on the upper level?
8	A.	That's correct.
9	Q.	And where my white arrow is, that is an external balcony
10		on the upper level; is that right?
11	A.	That is correct.
12	Q.	Do you see the black door that I am pointing the arrow
13		at? Black in this image?
14	A.	Yes.
15	Q.	Can you just tell the members of the jury what that is?
16	A.	Yes, that is the fire escape door at the end of the fire
17		escape balcony, which can't be accessed from the
18		stairwell side but from the balcony side there's
19		a push-bar that will then release the lock and open the
20		door. So you can open it from the escape balcony side
21		only.
22	Q.	What I will do is I will just play that video again so
23		one can see before it starts, we are looking at
24		a west-facing flat?
25	A.	Yes.

- 1  $\,$  Q. And then what is going to come moving into the picture
- 2 more clearly and interlock with it is an east-facing
- 3 flat; is that right?
- 4 A. That is correct.
- 5 Q. I will play it again.
- Now this shows the layout on the lower floors, theodd-numbered floors, showing two flats?
- 8 A. Yes.
- 9 Q. One on the west side of the central corridor and one on 10 the east side of the central corridor?
- 11 A. That is correct.
- 12 Q. Each of them on that lower floor has two bedrooms?
- 13 A. Yes.
- 14 Q. With windows looking either over the west side or the 15 east side?
- 16 A. Yes.
- 17 Q. And a bathroom?
- 18 A. Indeed, yes.
- 19 Q. One can just make out, where my arrow is, the word 20 "stairs" and one can see the stop of a set of internal 21 stairs in the flat; is that right?

A. That is correct. It's worth just pointing out there when you walk through the front door, whether you're on the west face or the east elevation, the staircase is always to the left of the door. So you walk in the

front door and the staircase is to the left that takes 1 2 you up to the upper level. Q. If I take you now to the upper level, so the same image 3 4 just one floor above. On the left where my arrow is, we 5 are looking at part of the flat that had its front door б and bedrooms on the east side; is that right? 7 A. That is correct. Q. So what one sees in the smaller image in green? 8 9 A. That is correct, yes. Q. Then on the right hand side of that image we are seeing 10 the lounge and the kitchen of the flat that had its 11 12 front door and bedrooms on the west side? 13 A. That is correct. That's the flat that we see in blue in the smaller 14 Q. 15 picture? 16 A. Yes. Q. Back at the lower level, one can see where the central 17 corridor runs? 18 19 A. Yes, you can. 20 Q. Moving to the corridor itself rather than just an individual flat or pair of flats, the central 21 22 corridor that we just saw in blue now has red arrows in 23 its place; is that right? A. That is correct. 24 25 Q. They say: 27

1		"Fire errors woute clong control convider "
1		"Fire escape route along central corridor."
2		So on the lower level of each flat, on the
3		odd-numbered floors, there is a fire escape route out of
4		the flat into a central corridor and from there to the
5		central stairwell?
6	Α.	That is correct, yes.
7	Q.	And then the route out of the building itself would be
8		to walk down the central staircase?
9	Α.	Yes, it would.
10	Q.	If we look now at the equivalent on the upper floors
11		so these are the even-numbered floors there is no
12		central corridor, but there are fire escape routes along
13		the balconies
14	Α.	Yes, there is.
15	Q.	on both the east and the west sides of the building?
16	Α.	Yes.
17	Q.	And they take one towards the central staircase area?
18	Α.	Yes.
19	Q.	Is it right that there is a route from the balcony
20		through a door into first a lobby area and then into the
21		central staircase itself?
22	Α.	Yes, there is. That is correct.
23	Q.	The route then to escape from the building is to walk
24		down the central staircase?
25	A.	Yes, that is correct.

1 Q. So in terms of the route to get out of the building 2 completely, there are a range of routes out of each flat but all of them in the end involve walking down the 3 4 central staircase? A. That is correct. 5 б This diagram is intended to bring together the different Q. 7 escape routes from an individual flat from both the 8 lower floor and the upper floor; is that right? 9 A. That is right, yes. Q. So what we are looking at here is a blue west-facing 10 flat rather than a green east-facing flat in this image; 11 12 is that right? 13 A. Yes, we are. Yes, what's on the plan there, correct. So where my arrow is, that is the front door into the 14 Q. 15 west-facing flat; is that right? A. Yes, that is correct. 16 Q. Into the hall, bathroom on the right, and two bedrooms 17 on that floor? 18 19 Α. Yes. 20 In blue where my arrow is, there's a set of internal Ο. stairs in the flat? 21 22 A. Yes. 23 Q. Can you help us with what one can just make out where my arrow is in the area under the stairs, where there is 24 25 a white arrow pointing out into the central corridor?

1 A. Yes, that is another escape route which can be accessed 2 from bedroom 1 on the lower floor of the flats. All these flats had a cupboard under the stairs which you 3 4 could pass through, and then there was another door that would take you out. So if there was a fire in the 5 б hallway, for instance, and you couldn't get out of the 7 bedroom, you could come out through that door underneath 8 the stairs.

9 There was also a small door as well that joined 10 bedroom 2 to bedroom 1 which was specifically designed 11 as an escape route.

Q. We will be looking at photographs later which show both
the front door and the escape door under the stairs.
A. Yes.

Q. Then if we imagine walking up the internal staircase, one has the lounge and the kitchen. On the lounge side, there is a door shown in blue with an arrow coming out of it, and that leads onto the east side escape balcony; is that right?

20 A. Yes, that is correct, yes.

Q. On the other side of the building, there is a similar door leading from the kitchen onto the west side escape balcony?

24 A. That is correct.

25 Q. As we discussed, each of those corridors as they are

1		described in this image the west balcony corridor,
2		the central corridor and the east balcony corridor
3		would lead one to the central staircase and a potential
4		route to walk down to ground level?
5	Α.	That is correct.
б	Q.	This is a computer image now looking at the west side of
7		Lakanal House from ground level, outside the building;
8		is that right?
9	Α.	That is correct, yes.
10	Q.	The areas shown in pink show bedrooms at the
11		odd-numbered floors and, above, kitchens on the
12		even-numbered floors of all the flats that have a front
13		door and their bedrooms on the west side of the
14		building?
15	Α.	That is correct, yes.
16	Q.	All of those flats on the west side of the building have
17		odd numbers?
18	Α.	Yes, they have.
19	Q.	They are numbers 1, 3, 5, 7 and so on.
20		Then in grey we have the lounges of flats which have
21		their front doors and bedrooms on the east side of the
22		building?
23	Α.	Yes.
24	Q.	The reason why the numbers are shown on a floor one
25		floor above the pink flats is because the area in grey

of those even-numbered flats is the only part of those 1 2 flats that extends to the west side of the building; is that right? 3 4 That is correct. Α. 5 Q. So all of those flats with front doors on the east side б and bedrooms on the east side have even numbers: 2, 4, 7 6, 8 and so on? A. That is correct, yes. 8 9 Q. This is an image looking from essentially the same 10 place, showing what the building looks like to the observer who doesn't have the benefit of the previous 11 12 image with the flat numbers all marked in the correct 13 places; is that right? A. That is correct. 14 15 Ο. This shows the location of flat 65, west-facing, with 16 bedrooms on the 9th floor. Is it right that the fire started in a bedroom in flat 65? 17 A. Yes, that is correct. 18 Q. Which bedroom did it start in? 19 20 A. It started in bedroom 1, which is where the arrow is now, which is below the kitchen. 21 22 Q. Is it right that the cause of the fire was investigated 23 and that it was concluded that the fire started in a item of electrical equipment? 24 25 A. That is correct.

1 Q. This image shows the locations of flats 79 and 81, which 2 are the flats in which, as we have heard, people sadly died? 3 That is correct, yes. 4 Α. Q. So flat 79, directly above flat 65? 5 б Α. Yes. 7 Q. And flat 81, next to and further long the corridor from flat 79? 8 9 A. Yes. Q. Now, you mentioned --10 THE CORONER: Mr Maxwell-Scott, before we start looking at 11 12 the detail of that, would that be a convenient moment to 13 have a short break? 14 MR MAXWELL-SCOTT: Madam, the remainder of this part of the 15 presentation will take about five minutes. 16 THE CORONER: Right. In that case, carry on. MR MAXWELL-SCOTT: Dr Mansi, you mentioned that the flats 17 are essentially all identical. 18 19 Α. Yes. 20 Q. However, it's right, is it not, that some of them, including some of those that we will be focusing on in 21 22 this inquest, had had some modifications? 23 A. That is correct. Q. This final set of images before the break is intended to 24 25 illustrate that. So this image here is, as it says,

- 1 intended to show the original flat layout?
- 2 A. Yes.
- 3 Q. This now shows flat 65 as it was at the time of the 4 fire; is that right?
- 5 A. Yes, that is correct, yes.
- б The differences are quite subtle to spot, so this image Q. 7 should assist by showing the area of the relevant modifications. So if I remind everybody then of the 8 9 large layout, which is there, and then go to flat 79, 10 where the modification is more obvious, we can see that the internal wall that separated one of the bedrooms 11 12 from the internal staircase have been removed? 13 A. That is correct. Q. And that image shows in red the area of the 14 15 modification. Then finally, flat 81, this shows how it was before 16 the fire? 17
- 18 A. That is correct.
- 19 Q. This image shows the area in which there had been 20 modification?
- 21 A. That is correct, yes.

Q. Is it right that it is in the hall and bathroom area
that one tends, as one looks at flats in the block, to
see a less standard set up and more variation?
A. Yes, that is correct.

MR MAXWELL-SCOTT: Madam, that is the end of that first part 1 2 of three of Dr Mansi's evidence and, may I suggest, a suitable moment for a short break. 3 4 THE CORONER: All right. Thank you very much. Thank you, 5 Dr Mansi. б Members of the jury, thank you for listening so 7 patiently and carefully. We'll have a short break now, 8 so can I invite you please to go with Mr Graham and he 9 will show you where to go. Could you be back in your places, please, for 11.45 at the latest. Thank you very 10 much. If you would like to go with Mr Graham now. 11 12 (In the absence of the Jury) 13 THE CORONER: Thank you. So 11.45, please. 14 (11.30 am) 15 (A short break) 16 (11.45 am) THE CORONER: Whilst we are waiting for the jury to come in, 17 can I just ask whether this microphone is working? No? 18 MR MAXWELL-SCOTT: No. 19 20 (In the presence of the Jury) THE CORONER: Yes, thank you. 21 22 MR MAXWELL-SCOTT: Thank you. 23 Members of the jury, you should now each have your own copy of the jury bundle on the table in front of 24 you. I see you nodding. Dr Mansi, you should have 25

1 a copy as well.

2 A. Yes, I do.

We are going to go through and explain the contents. 3 Ο. Ιf 4 I may just explain, members of the jury, these are the contents that we think will assist you by way of 5 6 an introduction to the case. You will see that there 7 are additional tabs which don't have documents behind 8 them at the moment, and there is space in the bundle for 9 more documents. What we will do as the case progresses 10 is to add selected particularly relevant photos or documents to the bundle, but this will serve as 11 12 an introduction at this stage.

13 So there is an index at the beginning of the bundle explaining and describing the 13 tabs that are there at 14 15 the moment. Behind the first tab there is a list of advocates. In the left hand column, you can see the 16 identity of the properly interested person and in the 17 right hand column who their advocate or advocates are. 18 Just to help everyone keep track, over the page, still 19 20 within tab 1, there is a seating plan. You can see where your tables are, members of the jury, you can see 21 22 where the coroner is and the witness box and you can 23 work out from the plan who is sitting in which row in case you need to refresh your memory. 24

25 Turning over to tab 2, this is going to be a long

case lasting many weeks but it is important always to 1 2 remember that what it is actually about is six people who tragically lost their lives in this fire, so we have 3 4 included photographs in the bundle. In the first photograph, you see Mr Rafael Cervi. He is in court, 5 б and he is a properly interested person. Also in the 7 photograph you can see his son Felipe, his wife 8 Dayana Francisquini and his stepdaughter Thais 9 Francisquini, all three of whom died in the fire.

10 Over the page is a photograph of Catherine Hickman 11 who died in the fire, taken in her flat. Over the page 12 is a photograph of Helen Udoaka, and in the page behind 13 that her daughter Michelle Udoaka, both of whom died in 14 the fire.

15 If it isn't in already, if you could insert the 16 inquisition form that was handed out to you earlier 17 behind tab 3, that would be very helpful. Behind tab 4, 18 there is a still from the animation that you saw earlier 19 which helpfully gives flat numbers. Later on in this 20 bundle, as you will see, there are some other stills 21 from the 3D animation that we saw earlier.

22 Behind tab 5, there is a list of residents or 23 occupants and their flat numbers. You will quickly see 24 that it's not a list of every flat, not all 98 of them, 25 or every resident. The focus is on the witnesses that

you will hear from and the names that you will hear in
 the course of the inquest.

If you stay in the same tab and turn over the page, 3 this is a diagram that is intended to summarise what 4 happened to people in each of the flats and what they 5 did. So where the flat is shown in white without any 6 7 specific colouring, that is because nobody was in the flat at the time of the fire. Where a flat number is 8 9 shown in grey, it's because it's not known whether 10 anyone was in the flat or not at the time of the fire, and that might be because they were given the 11 12 opportunity to answer a questionnaire but no 13 questionnaire was returned.

The flat numbers shown in green show flats where the 14 15 occupants left without assistance from firefighters. 16 The flat numbers shown in yellow show flats from which persons were escorted out of the building by 17 firefighters. That might be for a range of reasons. 18 As we will hear, it might be something that would be more 19 20 naturally characterised as a rescue from the flat itself, or it might be that the occupant had begun to 21 22 make their way out of the building and was then assisted 23 part of the way by firefighters. Either of those types of circumstance are illustrated in yellow on this 24 25 diagram.

1 The red indicates the flats in which, as we've 2 heard, people died. Flat 82 is shown with a red line 3 around it. That is because Helen Udoaka and Michelle 4 Udoaka were occupants of flat 82, but as we hear in fact 5 died in flat 81.

6 Turn over to tab 6. This is a one-page document 7 that lists the different roles of uniformed staff within 8 the London Fire Brigade as at 3 July 2009, the date of 9 the fire, starting with the most senior and then 10 progressing down the hierarchy. We will all, I am sure, 11 become familiar with the abbreviations that one sees in 12 the right hand column.

13 Over the page in tab 7, there is a list of incident commanders, all members of the London Fire Brigade, and 14 15 as you will hear, as a fire becomes more serious and more appliances, fire engines, are called to the scene, 16 the policy is that a more senior person becomes the 17 incident commander. Because of the size of this fire 18 and the number of appliances called to it, there were 19 20 five changes of incident commander, and so all six incident commanders are listed on this sheet. 21

If you turn over then to tab 8. This is a two-page list of selected London Fire Brigade units who attended the fire and the members of their crews. So again, as with the list of residents at tab 5, this is not a list

of every unit that attended the scene. The focus, 1 2 again, is on the witnesses that you will hear from and the units that you will hear about in the course of the 3 inquest. If one looks down the left hand column, for 4 example in the second box, E351, that's the code number 5 6 of a pump ladder, which we'll explain more of in 7 a moment, from the Old Kent Road fire station, and then 8 in the right hand column you see five names. They are 9 the names of the members of the crew who attended the 10 scene riding on that pump ladder. When one looks at abbreviations, firstly you have WM John Howling -- so 11 12 watch manager John Howling -- and then the names of four 13 firefighters, with the abbreviation "FF".

14 If you turn then to tab 9. This is a glossary, so 15 it lists some of the technical terms which you will or 16 may hear used in the course of the inquest and it gives 17 an explanation of what is meant by that term. If 18 I might, with the assistance of Dr Mansi, draw your 19 attention to some of those terms.

20 On the first page, Dr Mansi, "breathing apparatus".21 Just explain briefly what that is.

A. Breathing apparatus is the equipment that firefighters
will wear to enable them to breathe in normally
unbreathable atmospheres such as smoke or any gases. It
contains compressed air in an cylinder which will give

1 them approximately half an hour working duration with 2 a full face mask. There's a picture to show you what that looks like when the firefighter has that on. 3 4 Is it right that there are two types of breathing Ο. apparatus: one standard duration breathing apparatus, 5 б which we see at the bottom of that page, and then 7 secondly extended duration breathing apparatus, which we 8 see at the top of the next page?

9 A. Yes, that is correct. The standard duration breathing 10 apparatus, as it says on the document, gives about 24/25 minutes' working duration. The extended duration 11 12 breathing apparatus extends that to about 47 minutes and 13 is a larger cylinder to carry more air, basically. You have given an estimate there of the working 14 Q. 15 duration, how long you can work when you are wearing one 16 of these sets of breathing apparatus. Does it depend 17 upon the nature of the task you are carrying out, how arduous it is, for example? 18

19 A. Yes, absolutely. If you're working very hard or walking 20 upstairs while you're breathing through this, carrying 21 equipment in very hot environments and the work load is 22 increased dramatically, then you're breathing air in 23 a lot faster and you'll get through the set a lot 24 quicker.

25 Q. Will there be some variations depending upon the

1

individual's health and fitness and so on?

2 Yes. Some people have more stamina and capacity than Α. others but -- all the firefighters will be fit enough to 3 4 wear these, but obviously if some are working harder 5 than others, then one may use up the air a bit quicker 6 than the person they're with, for instance. But they 7 always stay together, so they would come out together. Q. At the bottom of the second page, there's reference to 8 9 "bridgehead". Can you explain what that is? Yes, a bridgehead is a location which is normally 10 Α. established two floors below the fire floor. So if the 11 12 fire's on the 9th floor, the bridgehead would be 13 established on the 7th floor. This is where the 14 breathing apparatus control board would be set up, where 15 the crews would set into the dry riser to then go up to attack the fire on the 9th floor. 16 Q. What is the reason, in simple terms, for why the 17 bridgehead is set up below the fire floor? 18 It's so that there can be clean air for the breathing 19 Α. 20 apparatus wearers to start their sets up, so when they put their mask on and turn on their cylinder, they are 21 22 not doing it in a smokey environment; they're doing it 23 with fresh air. It's a safety margin between the fire floor and the established control point. 24

25 Q. You mentioned breathing apparatus entry control point,

which you said would be in the bridgehead area; is that right?

3 A. Yes.

Can you just explain what the entry control point is? 4 Q. 5 Yes. When firefighters wear breathing apparatus, there Α. б needs to be strict control over when they go into 7 a scene and the time calculated roughly when they should 8 be coming out of the scene. So if they don't, if 9 they're not back at the entry control point in the time 10 that's been calculated, then we would take it -- the breathing apparatus central control officer would take 11 12 it that there was a problem and perhaps initiate 13 emergency procedures. So it's a safety control measure for the crews that are working inside the fire scene. 14 15 Thank you. Then if we turn over to page 3. You just Ο. 16 mentioned the dry riser, so let me ask you about that 17 first.

18 A. Okay. I explained in the diagram that you saw and the
19 animation that the dry riser is a steel solid pipe that
20 is empty of water. It's about four inches,

21 100 millimetres diameter, and it runs the whole height
22 of the building, from the ground floor right up to the
23 14th floor. On the ground floor level there will be two
24 inlets for the fire engine to connect to and pump water
25 into that pipe so that it fills the whole pipe up to the

14th floor. So when the firefighters go up to any of 1 2 those odd level floors where the outlet is they can connect a hose into that and then start fighting the 3 4 fire. So they could go right to the 13th floor, connect into the outlet, open the valve, and then they have 5 б water. Because it would be extremely difficult and time 7 consuming to run a hose all the way up the staircase to 8 the 14th floor, and that's the purpose of it. 9 Thank you. We'll see a photograph of a dry riser Ο. 10 a little later. Above that, on the same page, there's reference to 11 12 "brigade control"? 13 Yes. Α. Just explain what that is. 14 Q. 15 Α. Yes, brigade control is the control centre where -- if 16 you make a 999 call and it goes through the telephone exchange to our brigade control, the operators there 17 would then take the details from you. They are then 18 mobilising, as they're talking to you, the nearest fire 19 20 engines. They also receive the messages that come in over the radio from the fire engines and from other 21 22 scene officers that are there. They're a communication 23 point and a mobilising centre for the incident and all other incidents that are going on. 24 Moving down to some terminology that's used about stages 25 Q.

1 of fires themselves. Can you explain what flashover is? 2 Yes, flashover is a transition phrase where there's Α. 3 a fire -- in simple terms, it's when a fire in a room 4 becomes a room on fire. So you'll have perhaps a settee that catches fire and that would spread to the curtains 5 and then another bit of furniture, and as the room gets 6 7 hotter and the hot layer in the room radiates heat down 8 onto the carpet and other furniture that may be away 9 from the original seat of fire, they all suddenly burst 10 into flames at the same time. So it's a transition phase where the whole room is now engulfed in flame. 11 12 Moving down towards the bottom of that page, there's Q. 13 reference to "make pumps", so for example the phrase "make pumps eight ". What would that mean? 14 15 Α. What this means is if the incident commander deems that 16 he or she requires eight pumping appliances there to deal with this fire, they may already have four fire 17 engines there and they would send a priority message: 18 "Make pumps eight", which actually means: "I need 19 20 another four so the total is eight." So if it's "make pumps 10" and I have eight there, I need another two, or 21 22 it might be: "Make FRUs [which are fire rescue units] 23 two or four." So that's the purpose of that and it's always sent as a priority message. 24

25 Q. Just turning over the page then, there's reference to

1		the concept you have just described, priority message.
2	A.	Yes, basically, if a priority message is being sent over
3		the radio, then all other radio communications would be
4		asked to wait and it's treated as what it says. It's
5		a priority. It needs to be actioned straight away.
б	Q.	It's sent from the scene of the fire to brigade control?
7	Α.	Yes, it is.
8	Q.	Brigade control being that central location that you've
9		already described?
10	Α.	Yes.
11	Q.	And from where they will make contact with perhaps other
12		fire stations and mobilise other appliances; is that
13		right?
14	Α.	Yes, that is correct.
15	Q.	Just above "priority message", we see the phrase
16		"persons reported". Can you explain what that means?
17	A.	Yes, this is a message that is sent to advise those of
18		an attendance or control that people may be involved in
19		this fire, may be trapped there, and it will
20		automatically dispatch an ambulance and a fire
21		investigation unit to the scene.
22	Q.	Moving now to "smoke-logging", another description used
23		about what's happening in a fire at the scene. Can you
24		help us with what that means?
25	A.	Well, smoke-logging is when the smoke enters

a compartment or an area that makes it difficult to see,
 perhaps difficult to breathe, if not impossible to
 breathe, but it certainly indicates that there is smoke
 somewhere in that compartment.

Then finally if I ask you about "tactical mode Oscar"? 5 Q. As part of the health and safety and the control of б Α. 7 a fire ground, the incident commander should declare what their actions are. So if the incident commander 8 9 declares the incident is in tactical mode Oscar, it 10 means it's in offensive firefighting, so almost aggressive firefighter, making their way forward to 11 12 attack the fire.

By comparison, if we looked at tactical mode Delta, that would be defensive, where they may just be surrounding a fire and stopping it from spreading outwards but not advancing on it. So tactical mode Oscar is offensive firefighting.

Q. If I could ask you then to turn to tab 10. We have here 18 a four-page document with some photographs giving 19 20 information about the different types of London Fire Brigade appliances that attended the Lakanal House 21 22 fire. So on the first page there's a photograph of 23 a pump ladder and below it a pump, which to my eye look identical or virtually identical. Can you assist with 24 what the difference is between a pump ladder and a pump? 25

1 Α. I can, yes. If you look at that sheet, you will see the 2 call sign for this particular one is Echo 35, and that indicates the fire station that it comes from. The "1" 3 4 denotes that it's a pump ladder, which means it carries a larger ladder and it carries different equipment on 5 б there -- slightly different -- for road traffic 7 collisions, extrication equipment and, as I say, 8 a 13.5-metre ladder.

9 Below you'll see an appliance from the same fire 10 station but it has a "2" after it, denoting it's a pump, 11 and it has a slightly shorter ladder on it and not the 12 road traffic extrication equipment. But they are 13 identical bodies and chassis.

14 Q. Thank you. Then reference at the bottom of that page to 15 an "aerial ladder platform", and there's a photo of it 16 at the top of the next page.

17 A. Yes, you can see that the aerial ladder platform, as it 18 says, there reaches about 100 feet up into the air, but 19 that's if it's right beside a building, it can go up 20 about 100 feet. If it's parked away from the building, 21 it then has that reach to get over, so it can't go so 22 high. As it reaches over it starts to lower the 23 effective height it can reach.

Q. Just to put this in effective context with the 14 floorsof Lakanal House that the jury have heard about and that

- we've seen in the images, would an aerial ladder 1
- 2 platform be able to reach and rescue someone who was on a 12th floor balcony? 3
- 4 A. No. As I said, it's about 100-foot height so if it was 5 right beside Lakanal it would probably reach about the б 10th floor. If it was some distance away from Lakanal, 7 perhaps 15/20 feet, it then has to reach across, so it 8 would probably come down. I'd hazard about the 9th 9 floor, perhaps, as a maximum.
- Q. So in summary, those who live on the 11th and 12th 10 floors or the 13th and 14th floors, they are out of 11 12 reach of an aerial ladder platform if they are on the 13 12th floor balcony or the 14th floor balcony?
- Yes, that is correct. 14 Α.

15 Ο. Then two more types of appliances I want to ask you 16 about. Firstly on this page, "command unit"? A. Yes, the command unit is used at larger fire scenes to 17 exercise more control over the incident. They carry IT 18 19 equipment, maps, more radio equipment than we have on 20 the fire engines, and they're used as a communications and control centre by the incident commander. It 21 22 doesn't pump water or supply water.

23	Q.	Finally over the page, in the middle of the page,
24		there's reference to a fire rescue unit, or FRU for
25		short?

49

1	Α.	Yes, the fire rescue unit, particularly relating to
2		Lakanal, would have been used to carry the extended
3		duration breathing apparatus that I spoke about earlier,
4		and the firefighters that wear the extended duration
5		breathing apparatus are specially trained to do so.
б	Q.	So does it follow that the firefighters who came on the
7		pumps and the pump ladders that we've looked at would
8		have used, if they used any breathing apparatus,
9		standard duration breathing apparatus?
10	Α.	Yes, that's what they would have used.
11	Q.	So it's only those who arrived on fire rescue units who
12		would have used extended duration breathing apparatus?
13	Α.	Yes, that's right.
14	Q.	If you turn to tab 11, members of the jury, you will
15		recognise these as still images from the 3D animation
16		that was played before the break. So going through them
17		relatively quickly, there's an image of the west side of
18		the building showing flat numbers; the same view but
19		specifically showing flats 65, 79 and 81; on page 3
20		a map of London showing the location of Lakanal; on
21		page 4, a closer up aerial diagram showing the location
22		of Lakanal House on Sceaux Gardens; page 5, essentially
23		the same view but this time an aerial photograph.
24		Page 6 shows the escape route along the central corridor
25		to the central staircase on the lower floors, so the

1 odd-numbered floors. Page 7 shows the same but for the 2 even-numbered upper floors, where there's no central corridor but there are escape balconies on both the east 3 and west sides of the building. Page 8 is a view of the 4 west side of Lakanal House which doesn't give the flat 5 б numbers. Page 9 shows the location of flat 65. Page 10 7 shows the locations of flats 79 and 81. Page 11 is the 8 still showing the lower floors of two flats, one with 9 the front door and bedrooms on the west side and one 10 with a front door and bedrooms on the east side. Page 12 shows the upper floors of those same two flats. 11 12 Page 13 shows a single flat, both the upper and lower 13 floors. You will see, as we've seen already, that on the lower floor the flat is on one side of the building, 14 15 the west side, whereas on the upper floor it extends not only onto the west side of the building but also onto 16 17 the east side.

Page 14 shows a typical flat which has its front 18 door and bedrooms on the east side of the building. 19 20 Page 15 summarises and brings together all of the different possible escape routes from a single flat, in 21 22 this case a flat with its front door and bedrooms on the 23 west side of the building. Page 16 is a still from the video that shows how the flats that are predominantly on 24 the west side and the flats that are predominantly on 25

the east side interlink. Page 17 shows the original layout of flat 65 on the lower floor level, the area where there was modification, and, at the bottom, how it was laid out at the time of the fire. Page 18 does the same for flat 79, and page 19 does the same for flat 81.

I am going to ask you to skip over the contents of 6 7 tab 12, because it is related to the second computer 8 animation that I'm going to play a little later today. 9 So if you move on to tab 13, we have here our 10 photographs of the building. As far as possible, we've tried to choose photographs and images that show and 11 12 represent what the building was like before the fire. 13 I'm going to show these on the monitors and the big 14 screen as well.

Firstly, we have a location map. One with see where I I'm moving the white arrow in the middle of the screen, that is Lakanal House. This is a close up view using essentially the same map. You can more clearly see Lakanal House there in the middle of the page.

This is a slightly different aerial view which gives street names. So Lakanal House, again, is in the middle of the screen, the middle of the page, where my arrow is now, and this will be an useful diagram when we hear evidence from firefighters and policemen who describe where they arrived and what they did outside the

1 building.

2 Page 4 is a closer up aerial photograph of Lakanal
3 House in the middle of the screen.

Page 5 is a view of the west side of Lakanal House,
obviously taken after the fire. We weren't able to find
a photograph that showed the entirety of the building
before the fire.

8 Page 6 shows the single central staircase entrance 9 to Lakanal House. This is on the east side of the 10 building. That's the view looking up at the beginning 11 of that main central staircase.

12 This is now, number 7, at ground floor level but on 13 the west side where the lift lobby was. What we can see in this photograph is one lift that was operational at 14 15 the time of the fire closer to the camera, and further in the distance a second lift that is blocked off with 16 metal work and was not operational at the time of the 17 fire. Between the two of them and slightly higher up on 18 the wall there is an image, a sign, which we'll look at 19 20 in the next photograph as a close up. So what we have here on number 8 is the same sign that we can see just 21 22 by the lifts on the ground floor but close up.

Then going up the central staircase, this is the first floor sign on the wall in the central staircase, number 9. Number 10 is a close up of that sign that we

1 just saw in number 9.

2		Photograph number 11 shows a door onto one of the
3		corridors and to the left of the door handle there is
4		an entry panel which we see in close up on number 12.
5		So there we have buttons to press for each of the flats
б		on that corridor and a speaker-phone just below. There
7		are eight flats on that corridor, which means that it is
8		the south corridor; is that right, Dr Mansi?
9	Α.	Yes, that is right.
10	Q.	Dr Mansi, is it always the case that the south corridor
11		had eight flats on it and the north corridor had six
12		flats on it?
13	Α.	Yes, on each odd floor.
14	Q.	Because the central staircase wasn't exactly in the
15		centre of the building?
16	A.	No, it wasn't.
17	Q.	If we go back to photograph 11, Dr Mansi, is it right
18		that the grill that we see in the door was open to the
19		air?
20	Α.	Yes, it was open to the air. It was to allow cross
21		ventilation through the whole corridor, the length of
22		the corridor, from the north end right the way through
23		to the south end.
24	Q.	Dr Mansi, if you look where my cursor is towards the top
25		left of the door, above the entry panel, you see some

1		red writing. Do you see a rectangular box with some red
2		text?
3	A.	That's for emergency access by the Fire Brigade. You
4		use a drop down key like when you get people out of
5		lifts, put the key in and open it, and it releases the
б		door.
7	Q.	Thank you. Then photograph 13, this shows an equivalent
8		door onto a corridor, this time the north corridor?
9	A.	Yes.
10	Q.	And in the foreground of the picture that is the blocked
11		off lift shaft; is that right?
12	A.	Yes, it is. That's correct.
13	Q.	Photograph 14 is a close up of that same door entry
14		panel we saw in photograph 13. Here there are six
15		buttons with numbers, so six flats on that corridor, and
16		therefore the north corridor; is that right?
17	A.	Yes, that's right.
18	Q.	Photograph 15 is the door off the central staircase at
19		second floor level; is that right?
20	A.	Yes, that's right.
21	Q.	Photograph 16 is the third floor sign. I describe it in
22		that way for a reason: because it's right, isn't it,
23		that it was not exactly on the third floor level? It's
24		on the stairs as you walk up to the third floor?
25	A.	Yes, that's right. If you were standing on the second

1		floor level looking to walk up the stairs, this sign was
2		on the stairs, indicating that the next floor up was the
3		third floor. You may have considered that you're
4		actually on the third floor looking at that, but it was
5		the next floor up, because it was on the staircase.
б	Q.	Photograph 17 shows a corridor in this case, the
7		south corridor on the third floor looking back
8		towards the central lobby area where the lifts are?
9	Α.	Yes.
10	Q.	We can see a ceiling, and that is a suspended ceiling
11		with a cavity above it with pipework in it; is that
12		right?
13	Α.	Yes, that is right.
14	Q.	At the time of the fire, all of the corridors would have
15		looked like this?
16	Α.	Yes, they would have done.
17	Q.	This photograph is a photograph taken after the fire,
18		where one of those suspended ceilings has been removed.
19		This isn't fire damage; it's a suspended ceiling
20		deliberately being removed after the fire for the
21		purposes of the investigation. Is that right?
22	A.	Yes, that's right.
23	Q.	One can see pipework and cabling running in what would
24		have been a cavity above the suspended ceiling?
25	A.	Yes.

1 Q. Photograph 19 shows that same suspended ceiling area, 2 the top of a front door, and a wooden panel above the front door? 3 A. Yes, that is correct. 4 5 This is the same panel with the photograph taken from Q. б inside the flat, looking out into the corridor; is that 7 right? That's right, so the other side of that panel would be 8 Α. 9 the void with all the service pipes in it and cables. Q. So if we go back just to see that. That's from the 10 corridor. You can see the top of the panel above the 11 12 door in the suspended ceiling area? 13 Yes. Α. That's the same panel looking from the other side? 14 Q. 15 Α. Yes, that's right. 16 THE CORONER: On photo 19, could you outline with your cursor the panel, please? 17 Q. That's the top of the panel, and then it comes down. 18 Where I'm moving across, that's all the panel. Then the 19 20 panel then goes down above the door. THE CORONER: Thank you. 21 22 MR MAXWELL-SCOTT: Is that right, Dr Mansi? 23 A. It is. Thank you. Photograph 21 is a photograph of a bathroom. 24 Q. 25 As it happens, it's the bathroom of flat 16 on the third

floor. As we discussed earlier, it's in the bathrooms 1 2 that one gets the greatest variation of set ups within Lakanal House. 3 4 A. Yes, that's correct. Q. Photograph 22 is taken, as it happens, in flat 24 from 5 б the third floor, and it is taken from one of the 7 bedrooms of flat 24. We see glazed windows, and below 8 the windows, one can see a paneled area; is that right? 9 A. Yes. Q. Staying in the same flat but looking at the other 10

- bedroom, photograph 23, again, the same three windows
  with a panel below the windows?
- 13 A. Yes.
- Q. Photograph 24 is in a different flat. It's in one of the bedrooms and it shows the escape door under the stairs. So there's a small door which is open, which is leading in to an area underneath the internal stairs in the flat; is that right?
- 19 A. Yes.
- 20 Q. Then if one looks through that door in the distance, one 21 can see another door; is that right?

22 A. Yes, and that leads out onto the corridor.

- 23 Q. So that's the escape door into the central corridor?
- 24 A. Yes, it is.
- 25 Q. So that and the front door are the two escape routes on

- 1 the lower level for each flat?
- 2 A. Yes, that's right.
- 3 Q. Back in flat 24, this is a photograph taken from the top4 of the internal staircase looking down?
- 5 A. Yes.

Q. Photograph 26 is in a different flat where the flat has
been stripped down and the internal wall of the
staircase has been removed and one can see the shape of
the staircase, how it turns towards the top and takes
one up to the lounge.

11 A. That's right.

Q. Photograph 27 was taken in a corridor where the suspended ceiling has been removed and it shows, where my cursor is, a feature which, members of the jury, you'll hear described as "boxing in". Dr Mansi, is that in the area where the internal stairs in the flat are going up to the lounge?

18 A. Yes, the internal stairs, when they turn to go up into 19 the lounge, cut through the concrete slab of the 20 structure, so this boxing in is put around the underside 21 of the staircase to protect it from fire attack from the 22 outside.

Q. That boxing in, am I right, is always above the escapedoor rather than the front door?

25 A. Yes, it is, the escape door.

 $\,$  Q. So what we see the top of is the escape door.

2		Photograph 28 is on a different floor. Again, this is
3		showing investigatory work after the fire rather than
4		fire damage. There you can see the suspended ceiling
5		partly in place and partly removed; is that right?
б	A.	That is right.
7	Q.	Above the blue front door one can see some boxing in?
8	A.	Yes, that's the escape door.
9	Q.	I apologise; you are right. Above the escape door is
10		some boxing in, and this is a close-up, on
11		photograph 29, of the same blue escape door and the same
12		boxing in going up into the suspended ceiling area, the
13		cavity above the suspended ceiling?
14	A.	Yes, that's right.
15	Q.	Thank you. Photograph 30 takes us back into flat 24,
16		just using it as a typical flat to show the layout.
17		Members of the jury, this is a flat you will go in on
18		your site visit on Friday.
19		This is a photograph of the lounge taken at the top
20		of the internal stairs?
21	A.	Yes.
22	Q.	This is now a closer-up view of the same door that we
23		saw in the previous photograph. Photograph 31, we see
24		a door from the lounge out onto the balcony?
25	A.	Yes.

- Q. With window glazing towards the top and a panel below
   the door handle level?
- 3 A. Yes.
- Q. Photograph 32 shows that same door but now partially
  open, so we can see what it looks like from the outside?
  A. Yes.
- Q. Photograph 33, we're in the same flat on the same upper
  floor but we're now looking at the kitchen. Photograph
  34 is a closer up view of that same door, now open so we
  can see what it looks like from the outside.

Photograph 35 is the view along the escape balcony, looking away from the central staircase. This is the view that you get if you walk out of the door that we've just been looking at?

15 A. Yes.

16 Q. Photograph 36 is taken from essentially the same 17 position but looking the other way, now towards the 18 central staircase?

19 A. Yes, and you can see the escape door at the end with the20 push-bar.

Q. Let me give you a close-up over the page, 37. That's
a close-up of the door you've just referred to?
A. Yes. So as you push on the bar it releases the locks
and the door will then open. You can also see
a self-closing mechanism at the top, so if someone goes

through that door the door will then shut and lock 1 2 again. Q. So for residents it's a one way door? 3 4 Α. Yes. 5 Q. Thank you. Photograph 38 has been taken to show the б balcony panels; in other words, the panel that is at 7 about chest height or waist height? A. Yes, about waist height. 8 9 Q. That, as it happens, is looking along the escape balcony 10 away from the central staircase? A. Yes, that's right. 11 12 Q. It's on the lounge side of flat 24. So if you come 13 through the lounge onto the balcony and look to your right, you look in that direction and you can see 14 15 essentially a dead end? A. Yes, that's correct. 16 Q. In the other direction you have the door to the central 17 staircase? 18 19 A. Yes. Thank you. Photograph 39 is a ventilation grill at the 20 Ο. end of one of the corridors? 21 22 A. Yes, there was a ventilation grill at the far north end 23 of each corridor and the far south end of each corridor to allow cross-ventilation through the corridor and 24 25 through those security doors with the grills in them.

1 Q. Photograph 40 shows some ventilation grills in the lobby 2 areas where the central staircase leads on to; is that 3 correct? 4 A. Yes, that's correct. The whole height of Lakanal had 5 these grills beside the lift lobby and where the escape б doors lead onto the central staircase, and you can see 7 that from the outside as well. There's a picture of 8 that. 9 Thank you. Photograph 41 is a view from the third floor Ο. 10 lobby looking down on a white door on the second floor? 11 Α. Yes. 12 That is the other side of the door that we were talking Q. 13 about from the balconies; is that right? That is right. That's the escape door from the upper 14 Α. 15 level of the first floor flats positioned on the second 16 floor. So if we go back to 37, you push through that door? 17 Q. 18 Α. Yes. 19 Q. You come out in the area that you can see there? 20 Α. Yes, and that would then take you onto the central 21 staircase. 22 Thank you. So the door we see in photograph 41 is the Q. 23 back of the equivalent door that we see in 37? 24 A. Yes. Thank you. We have seen a similar image to 42 before. 25 Q.

- 1 This is one of the doors at the central lobby end of 2 a corridor?
- 3 A. Yes.

4 Q. With a ventilation grill through which air can pass?5 A. That's right.

6 Q. What do we see in photograph 43?

7 Α. Okay, the dry rising main that I was explaining to you 8 that the Fire Brigade used to plug in and charge it full 9 of water is the red pipe that you see there marked "dry 10 riser", and in that box is an outlet that has a valve where the hosepipes can be plugged into, then the valve 11 12 opened and water will come through it. You can see that 13 they are padlocked because some of these get stolen. So they have to be secured behind a padlock so they're not 14 15 damaged so they work when the Fire Brigade use them.

16 On the left, you can see the electrical distribution 17 board for each floor, for each set of flats, but these 18 are on the odd floors only, where the lift lobbies are. 19 Q. So on the even-numbered floors, is it right that you 20 have the same vertical red pipe but you don't have the 21 red box?

22 A. Yes, that's right.

Q. So water can still flow up the dry riser but you can'tplug a hose into it?

25 A. That's right.

Q. Thank you. Photograph 44 is now taken from outside the
 building. It's taken from the corner of Dalwood Street
 and Sedgmoor Place. Photograph 45 is from the same
 place. It's a closer-up view. Photograph 46 is the
 west side of the building. It's difficult to see but
 there are some pigeon spikes.

7 If we end up with photograph 47. That's a close-up 8 or enlargement of the previous photo and you can see 9 there more clearly against the dark green background the 10 pigeon spikes?

11 A. Yes, that's right. If you go back one picture you can 12 also see -- to the left of that photograph, you can see 13 the grills in the lift lobby area that we saw from the 14 inside that span right the way up the building.

15 Q. This one is the inside?

16 A. Yes.

17 Q. Thank you. Then finally, photograph 48 shows some18 netting on a balcony?

19 A. Yes, the netting and the anti-pigeon spikes are to stop 20 the birds sitting on there and just making a nasty mess 21 everywhere.

22 Q. Thank you.

23 Madam, just so you know where we are, that is the 24 end of the second of three parts of Dr Mansi's evidence. 25 The third part will be to play a sequence of events

animation, but there is an explanatory introduction to it which will take some 15 minutes or so. So I could give that explanation now or after the lunchtime adjournment, as you wish.

5 THE CORONER: That's helpful. Is this microphone working?6 MR MAXWELL-SCOTT: Yes.

7 THE CORONER: Good. Thank you very much. I'm sorry that 8 there's been difficulty with my microphone before this. 9 Can I suggest that we go on to the next phase after 10 lunch. I understand that because the microphone wasn't working that some of the remarks that I made to the jury 11 12 weren't as clear or as easy to hear as I would have 13 wanted them to be, and given that I'm giving jurors some 14 important explanations and warnings, I think that it 15 would be appropriate if I repeated now what I said in 16 case some of it wasn't heard before because the microphone wasn't working. So I propose to do that now 17 and then we'll have a break for lunch and then we'll 18 continue with Dr Mansi's evidence after lunch. 19

20 So, members of the jury, I'm sorry that some of you 21 weren't able to hear everything that I said before we 22 began, and I hope that you're now all able to hear what 23 I'm saying. You're undertaking a very important role as 24 jurors, and in undertaking that role you're undertaking 25 some important duties and obligations. It's right that

1 I give you some very clear warnings about these. One of 2 the duties which you have as jurors is not to discuss the evidence or the inquests with anyone else at all 3 outside the jury. You have a duty of confidentiality to 4 5 the inquests, to the properly interested persons, and to one another. When you leave this hearing room, during 6 7 the break or when you go home at the end of the day, you 8 must not discuss the evidence with anyone. This means 9 that you must not discuss this with members of your 10 family, with friends, with anybody, however much you might trust them. You must not consider any information 11 12 which has not been dealt with in the evidence given to 13 you. You must not carry out your own research. You must not, for example, search the internet for 14 15 information, even out of idle curiosity. This means that you mustn't search for example on Facebook or 16 YouTube or Twitter or MySpace, or any other similar site 17 or social networking site. You must not make your own 18 19 private visit to the area.

The only people with whom you are permitted to discuss this case are your fellow jurors, and then only together when you're in your private jury room, and all discussions must involve you all.

If you disobey these rules, then you are at risk of prosecution, and that punishment can include

1

imprisonment. So you must take it very seriously.

2 I explained that there is a good reason for this. You'll be able to see that if it were not so, then 3 there's an obvious risk that when you meet together as 4 5 a jury, you bring with you not just your own views as to 6 what you heard but someone else's as well, and that's 7 something that must not happen. It's you as jurors who 8 will hear the evidence, and that is a matter for you and 9 no-one else. It's no-one else's business. If you were 10 to obtain information from other sources -- for example, from the internet or from reading somewhere else -- then 11 12 neither the advocates or I would know about it, and if 13 we don't know about it then we can't comment on it, and that would not be fair to those who are participating in 14 15 these inquests, or indeed to the public whom you represent. So can I just ask again: is that clear to 16 17 everybody? I see nods all round. Thank you very much.

Now, the duties which I've outlined again are duties 18 which you, members of the jury, owe individually and 19 20 collectively as a group of 11 jurors. If at any time anyone tries to talk to you about the case or to contact 21 22 you and won't immediately take no for an answer, then 23 you must report that to me straight away. If any of you become aware that one of your jury members, one of your 24 colleagues in the jury, is not sticking to the rules, 25

1 then again you must report that to me straight away. If 2 at any time you're concerned about any aspect of these inquests, then please raise it with me. Speak initially 3 4 to Mr Iain Graham, who's the jury usher who swore you in earlier this morning, and he will tell me, or you can 5 б give him a note and he will pass that to me. So I hope 7 that those warnings are clear, and the explanation for it. 8

9 So we'll have a break now. You're free to leave the 10 building during this lunchtime break, but I would ask everybody, please, to be back in their places for 11 12 a prompt start at 2 o'clock. Please remember to take 13 with you your jury bundles and any notes that you have made, and make sure that they stay safely in the jury 14 15 room if you leave the building, and then you'll find it 16 helpful to bring them back at the end of your lunchtime break. So we'll continue promptly at 2 o'clock, please. 17 Thank you very much. 18

19 (12.54 pm)

20

(The short adjournment)

21 (2.00 pm)

22 (In the presence of the Jury)

23 THE CORONER: Yes, thank you.

24 MR MAXWELL-SCOTT: Thank you, madam. Madam, we are now 25 going to move to the third and final part of Dr Mansi's

introductory evidence, which is going to be a sequence
 of events computer presentation.

Just before I turn to that, may I first make it 3 clear to the members of the jury that we've included in 4 their bundles images which show the modifications to 5 6 flats 65, 79 and 81. In the case of flats 65 and 81, 7 they're essentially for completeness only. They're not 8 something that you're likely to hear more about in the 9 course of this inquest. You may hear a little bit more 10 about the modifications to flat 79, but you're unlikely to hear more about the modifications to either flat 65 11 12 or 81.

13 THE CORONER: Thank you.

MR MAXWELL-SCOTT: Before playing this presentation, I need 14 15 to explain and have some assistance from Dr Mansi in 16 explaining what it is and what it isn't. So firstly, it is an outline of events; it's not a comprehensive 17 account of all the events from the start of the fire 18 until the six people tragically died and the fire was 19 20 put out. It's intended to be a framework to assist the jury. It's based only on contemporaneous evidence, by 21 22 which we mean evidence that came into existence at the 23 time. It may help if we look at some examples of the types of sources used when selecting what should go into 24 this presentation. One example is digital photographs 25

1 with times attributed to them. Another example is 2 telephone calls that were timed and in some cases tape-recorded. Another example is radio messages that 3 4 were timed and tape-recorded. Dr Mansi, if I can ask you firstly a few questions 5 б about 999 calls. Are all 999 calls tape-recorded? 7 A. Yes, they are. Q. Were efforts made when investigating this fire to bring 8 9 together times and tape recordings of all 999 calls to 10 the London Fire Brigade that related to the Lakanal House fire? 11 12 A. Yes, extensive work went into capturing all that data. 13 Were all the tapes of those 999 calls listened to and Ο. 14 typed up? 15 Α. Yes, they were. Every one of them was listened to and transcribed. 16 17 Q. "Transcribed" is just a lawyer's word for typed up, yes? A. I believe so. 18 Q. Just some examples of the types of phrases we're going 19 20 to see used in this presentation. Firstly we'll see reference to "appliances in attendance". What does that 21 22 mean? 23 Α. When a fire engine is dispatched from the fire station, that time will be recorded by control and by the 24 computer system. When the fire engine then arrives at 25

1 the incident, whoever's in charge of that particular 2 appliance will push a button to say that we're in attendance. Now, that may happen 30 seconds before or 3 it may be forgotten about for a minute or two, but it's 4 a good guide to when that appliance gets there. 5 Q. So when we see in the presentation reference to б 7 an appliance being "in attendance", what we're actually 8 seeing, to be more precise, is a reference to when 9 a member of the fire crew on that appliance pressed that 10 button? A. Yes, that's correct. 11 12 Q. You talked about when appliances are dispatched and they 13 leave their fire stations. Is that referred to by the 14 phrase "mobilised"? 15 A. Yes. Q. We have tended to use reference to appliances arriving 16 17 at the scene being in attendance. Sometimes some of the appliances don't have a time recorded for when they 18 arrived. In those cases we've used reference to when 19 20 they were mobilised to give an indication of times. Dr Mansi, the next phrase I want to ask you about is 21 22 "firefighter committed". Can you explain what that 23 means. When a firefighter has been committed to carry out their 24 Α. 25 work, it normally refers to when they've put on their

breathing apparatus and they've gone through the entry control point. So they've taken out their tally and put it in the breathing apparatus control board and they've committed to that incident.

5 Q. So it's a reference to the time that they pass the entry6 control point?

7 A. That's right, yes.

I need to ask you some questions now about the bodyguard 8 Q. 9 system. The breathing apparatus sets that you talked 10 about and explained earlier when we were looking at the glossary, is it right that they were fitted with 11 12 an electronic monitoring device called the bodyguard? 13 A. Yes. It is also called a distress signal unit and it's an electronic device that's activated by taking the 14 15 breathing apparatus tally out of the device. That then arms it, so to speak, and gets it working. So the time 16 in-built within the clock will be recorded as to when 17 that was activated. 18

19 THE CORONER: Sorry, Dr Mansi, do you think you could repeat 20 that?

A. Yes, it went a bit funny there. When the breathing apparatus tally, which is attached to the distress signal unit, is removed, that activates -- it's called a bodyguard. That's a manufacturer(?) distress signal unit. That then -- the time that is carried out is

activated within the unit itself. So that --1 2 THE CORONER: Sorry, your microphone has gone off again. 3 A. Has it? It's flashing at me again. There we are. 4 Third go. MR MAXWELL-SCOTT: Is it right the bodyguard device records 5 б certain information? 7 A. It does, yes. Q. After the event, it's possible to download that 8 9 information? A. Yes, it is. Information as to when it was activated, 10 when it was deactivated and the consumption rate of the 11 12 breathing of the wearer. 13 Q. So although there's no record of the exact times when 14 firefighters passed entry control and were committed to 15 fight the fire, the bodyguard system in some cases 16 provides a useful guide to when that happened; is that 17 right? A. Yes, it does, because the wearer would only take the 18 19 tally out when he or she was ready to pass through the 20 entry control, so perhaps within 30 seconds either side, it would be that accurate. 21 22 Q. So when, in the sequence of events, we see reference to 23 a firefighter being committed and a precise time being given, what we're actually seeing is the precise moment 24 in time when the wearer removed his or her breathing 25

1 apparatus tally key; is that right?

2 A. Yes, that's right.

3	Q.	That's the time the system records and as you've said,
4		they might remove it very slightly before or very
5		slightly after they actually pass the entry control
б		point?
7	Α.	Well they wouldn't remove it after they've passed
8		through it, but perhaps they one may have removed the
9		tally and handed it in while their team member is
10		finishing getting theirs ready and handing it in, so
11		you're normally talking about within a minute of each
12		other.
13	Q.	And as you explained earlier, the whole purpose of this
14		system is to help the firefighters in their task at the
15		time as a safety device?
16	Α.	Yes, it's a safety recording mechanism. The bodyguard
17		also activates if the firefighter stays still for
18		a period of time. It will then automatically activate,
19		so if they get into trouble and they can't move then it
20		will sound off and then other firefighters can hear that
21		and go to their assistance.
22	Q.	Now, as it happens, it hasn't been possible to establish
23		satisfactorily the time at which every firefighter
24		involved in the incident wearing breathing apparatus was
25		in fact committed; is that right?

1 A. That's correct.

2	Q.	There are a variety of reasons for that. If I can just
3		run through those with you. In some cases there was no
4		record of the identification number of the breathing
5		apparatus worn by a particular firefighter, and so it
6		was not possible to identify the device from which to
7		download their data?
8	Α.	I understand that to be true, yes.
9	Q.	In some cases, although the number of the breathing
10		apparatus set was known, the device did not in fact
11		record any data, and so there was nothing to download?
12	A.	That is correct.
13	Q.	In some cases, the battery of the bodyguard device was
14		changed after the fire but before the data was
15		downloaded, and because the device is unable to record
16		how long a battery change took, there's no independent
17		record of how long it took. In such cases, it's not
18		possible to calculate accurate times from the bodyguard
19		system?
20	A.	Yes, that's true.
21	Q.	There are also some cases where data download from
22		a firefighter was inconsistent with the data obtained
23		from other firefighters. So for example, there might be
24		witness statements from two firefighters saying that

76

25 they were committed at the same time but the data might

1		suggest they were committed, say, five minutes apart?
2	Α.	Yes, I understand that to be the case. I wasn't
3		involved with analysing the bodyguard data, but
4		I understand that to be the case.
5	Q.	Is it standard practice that firefighters would not
б		enter a building on their own?
7	Α.	That is true, yes.
8	Q.	So they would enter in pairs, or in groups of more than
9		two?
10	Α.	Yes.
11	Q.	So this sequence of events we're about to look at does
12		not include a firefighter in it unless his or her
13		downloaded data was not affected by any of the issues
14		already mentioned, and the data was corroborated by the
15		data for at least one other firefighter known to have
16		been committed at the same time. So in short there are
17		other firefighters whom you will hear evidence from but
18		don't feature on the sequence of events who entered the
19		building but whose data did not satisfy the conditions
20		I've just described, and are therefore not included in
21		the sequence of events. So the evidence from bodyguard
22		used in a sequence of events does not give
23		a comprehensive picture of all the firefighters who were
24		committed into the building?
25	Α.	That's right.

1 Q. Another important point, the evidence from bodyguard

2 doesn't provide any indication of where firefighters 3 went in the building?

4 A. No, it doesn't.

5 Q. And it doesn't provide any indication of what they did6 within the building?

- 7 A. No.
- 8 Q. Is it right that there is little contemporaneous

9 evidence of what firefighters did in the building, as in 10 notes recorded at the time?

11 A. No, just from their statements.

12 Q. We will hear evidence from firefighters themselves as to13 why that is.

Finally, let me mention one other obvious potential 14 15 limitation or feature of the sequence of events. One shouldn't automatically assume because evidence is 16 17 contemporaneous it must be accurate. So in other words, the fact that someone said something at the time of the 18 fire and that it was tape-recorded does not necessarily 19 20 mean that what they said was correct. It would probably be helpful if I could just give an example. So for 21 22 example, somebody might dial 999 and tell the operator 23 that there was a fire on the 13th floor, when in fact it is clear from all the photographs that the fire never 24 reached the 13th floor. So the approach that's taken in 25

the sequence of events you're about to see is not to attempt to correct any such errors but simply to summarise what was said at the time.

The times that you will see are sometimes given just 4 as minutes. So 16.45, for example, hours and minutes. 5 б Sometimes they are hours, minutes and seconds. The 7 reason for that is primarily to do with the computer 8 programming, in that if there were two events at the 9 same hour and minute it is needed to be able to 10 distinguish between them and so different seconds are given. 11

With that introduction, Dr Mansi, could we turn -members of the jury, do indicate if you can't her me, because I understand the microphone is sometimes going off even though it looks to me as if it's on.

Dr Mansi, we're starting at 16.15, so 4.15 in the afternoon of 3 July 2009. The first event recorded in this sequence of events is shown with a telephone handset icon. It's a telephone call from Jade Spence to Ann-Marie Banton. Records have shown that it's a call that lasted for 34 seconds. We'll be hearing evidence from Jade Spence.

23 The next event, a 999 call shown with a red 24 telephone handset icon. It's the first 999 call 25 relating to this incident, made by Jade Spence from

flat 65, and the call lasted for two minutes and five
 seconds.

16.21, first London Fire Brigade resources 3 4 mobilised. What would that mean, Dr Mansi? 5 That would mean that while Jade Spence was on the phone Α. б to mobilising control, giving them the address of the 7 incident, the operator would then dispatch the nearest 8 fire engines to attend that scene. 9 Q. The next event in this sequence, also at 16.21, is the 10 fourth 999 call, and it was made by Catherine Hickman from flat 79 on the 11th floor. Dr Mansi, is it right 11 12 that this call continued for almost an hour and that the 13 line was still open from Catherine Hickman to brigade control at the time that she lost consciousness and then 14 15 died? A. Yes, that is correct. 16 Q. So in this sequence of events there will be various 17 places where we see reference to this 999 call and 18

19 attribute particular times to it. Just to be clear,

20 it's all one 999 call?

21 A. Yes.

Q. But somebody has listened to it and timed it and is able to indicate how long into the call certain passages of communication took place?

25 A. Yes, I actually recorded the times.

1 Q. Thank you. So we're here now at the very beginning of 2 her 999 call, and she said she was in flat 79 and that there were flames coming out of the window of the flat 3 below. She said that smoke was coming into the flat. 4 The operator told her to shut the windows on the side of 5 the flat where smoke was coming in and to keep the 6 7 windows on the other side open. The operator then 8 advised her to put something across the bottom of the 9 door to stop the smoke coming in.

10 The next event, also at 16.21, was the fifth 999 11 call from Robert Kayode in flat 66. He stated that 12 there was a fire on the 11th floor. The operator asked 13 him whether he was able to leave his flat and he said 14 that he was already outside the building.

15 The next event, also at 16.21, another 999 call from 16 an unidentified person. The caller stated that the 17 glass of the window just collapsed in.

Also at 16.21, the seventh 999 call, from Mustapha Hydar of flat 57 on the 9th floor. He said that there was fire and smoke coming out of the building and that it was "really, really serious".

The next event we have selected in this outline is the 12th 999 call at 16.22 from an unidentified person. The caller reported a fire and stated that they were on the 9th floor. During the call sirens were audible and

then the caller said that the fire engine had arrived.
 The call ended with the caller saying that they would
 leave the building. So that is a very helpful
 indication of when the first fire appliances arrived.
 A. Yes, you could actually hear them in the background
 arriving.

Q. The next event at 16.23 is by now the 17th 999 call. The caller said that there was smoke coming out from flat 91 on the 13th floor. So one can look at the diagram and see this is a fire which started in flat 65, and by 16.23 there is a report on a taped telephone call of smoke coming out from flat 91.

13 The next event brings us back to Catherine Hickman's 999 call. It's now 16.23. She told the operator that 14 there was black smoke coming right up outside the window 15 and that she could hear a noise. She said that there 16 was "fire coming through my floorboards now, I mean 17 smoke". She asked, "What shall I do? Shall I get out?" 18 The operator told her to go into a room where there was 19 20 less smoke. Catherine Hickman said that she had moved upstairs and out onto the balcony. 21

Also at 16.23, the 19th 999 call. The caller was calling from flat 61 on the 9th floor. The caller said that there was fire going out over the roof of their flat. The operator asked whether the caller was able to

leave the building and the caller replied, "Yeah, we can get out. That's fine."

Also at 16.23, we see reference to pump ladder from Peckham fire station reporting in attendance at the incident. So Dr Mansi, that means that they have pressed the button on the fire engine that you described earlier?

8 A. Yes, although we could hear them in a earlier call
9 arriving at the scene. That's the point where they push
10 the button to acknowledge that they're there.
11 Q. At 16.24, the first incident commander was Crew Manager

12 Willett, and he sent the message: "Make pumps four." 13 You explained to the jury earlier what is meant by that. Yes, Crew Manager Willett knew that he had two fire 14 Α. 15 engines already there, but what he saw on his approach, 16 he believed that he needed another two fire engines to be in attendance to assist in dealing with this 17 incident, and therefore he sent the message: "Make pumps 18 four", meaning he needs an additional two fire engines. 19 20 Q. Also 16.24, a radio message from brigade control, and the name of the operator there is given, to E351, which 21 22 is a pump ladder from the Old Kent Road fire station, 23 stating that the smoke was at flat 79 and the caller was still on the line. Catherine Hickman, in other words. 24 The operator asked E351 to investigate on their arrival. 25

At 16.25, a telephone call from brigade control to
 the London Ambulance Service requesting their
 attendance.

At 16.26, the pump ladder from the Old Kent Road
fire station reported in attendance at the incident.

6 Also at 16.26, the pump from Peckham fire station 7 reported in attendance at the incident.

8 At 16.27, the pump from the Old Kent Road fire 9 station reported in attendance at the incident.

16.27, returning to Catherine Hickman's 999 call, 10 the operator asked her whether there was more smoke on 11 12 the balcony or in the flat. She replied that there was 13 more smoke on the balcony on the Havil Street side. The operator advised her not to go back inside if the flat 14 15 was full of smoke. Catherine Hickman said that she had "gone back into the flat because there was too much 16 smoke on the balcony". She then said that she had gone 17 to the balcony on the other side. She said that there 18 was smoke coming upwards and blowing towards 19 20 Havil Street and that there was raging smoke on the other side of the building. She asked whether she 21 22 should go downstairs or out into the corridor and the 23 operator said that she ought not to open the door because she did not know what was on the other side. 24 At 16.28, the 28th 999 call. This one was from 25

Beatrice Obanyano of flat 68 on the 9th floor. 1 She said 2 that she could not come out of her flat and that there was "smoke all about the place". She was advised to 3 open the windows. She described that there was smoke in 4 the corridor and was advised to keep the door closed and 5 б to put a towel by the door to stop the smoke coming in. 7 At 16.28, a radio message from brigade control to E355, Q. 8 the aerial ladder platform from the Old Kent Road fire 9 station, who offer to take a message to pass on to E351, the pump ladder from the Old Kent Road fire station. 10 The operator provided an update to her message at 11 12 16.25.45, so an earlier message, stating that the caller 13 in flat 79 was still on the line and apparently trapped. Had the Old Kent Road pump ladder E351 taken on 14 15 a particular role at this time as somewhere for messages to be sent to? 16 17 Α. It may have been that they couldn't get through to 18 Echo 351. Then 16.29, the aerial ladder platform we've just seen 19 Q. 20 reference to from Old Kent Road reported in attendance at the incident. 21 22 At 16.29, Watch Manager Howling took over from Crew 23 Manager Willett as the incident commander. So that's the first change of incident commander. Would that be 24 because of the increased number of pumps in attendance? 25

A. Yes, and also Watch Manager Howling is a senior officer
 to the crew manager.

At 16.30, back to the 999 call from Catherine Hickman, 3 Ο. 4 she told the operator that she had moved back inside because there was smoke both inside and outside the 5 6 flat, and that she was in the kitchen. She said, "It's 7 orange, it's orange everywhere", but she could not open 8 any windows. She said that there was smoke coming up 9 through the floorboards downstairs in the flat and on 10 both sides of the building. The operator told her to get down close to the floor and to put something over 11 12 her face to protect her from the smoke.

At 16.32, firefighters Fournier and Simons were committed. They were both members of the crew from Peckham fire station. So this is the point when, Dr Mansi, according to the bodyguard system, they removed the BA key tallies from the breathing apparatus?

19 Q. At the bridgehead. So on the 7th floor?

20 A. Yes.

Q. At 16.32, a second 999 call from Beatrice Obanyano, flat 68 on the 9th floor. She was calling from the sitting room upstairs in her flat. She said that she was worried by the smoke which was coming into her flat and that she could not breathe. She stated that they could

1 not leave her flat. She said that smoke had come in 2 through her windows and that she had now shut hem. She said that smoke was still coming into her flat even 3 though the windows and all the doors were shut. 4 The operator asked whether there was another room she could 5 6 move to but she said that all the rooms were full of 7 smoke. Her flat was on the same corridor as flat 65, 8 but it was one with a set of bedrooms on the east side, 9 whereas flat 65 had bedrooms on the west side; is that right? 10

11 A. Yes, that's right.

Q. At 16.33, a radio message from brigade control to the pump from Peckham fire station, stating that there was a caller on the line from flat 79 -- in other words, Catherine Hickman -- and that the smoke in flat 79 and flat 68 was bad and asking for this message to be passed on to the incident command pump. Just explain what an incident command pump is?

19 A. Yes, the incident command pump is a fire engine that 20 takes on the role of the communication centre for the 21 incident, so if another fire engine turns up to the 22 scene, they must go to the incident command pump and 23 hand in the board -- the nominal role board for all the 24 riders that are on that appliance, and what should be 25 set up at the back of the incident command pump is

1 an incident command wallet.

2		So all this information is there to control those
3		people the firefighters who are at the scene. If and
4		when a command unit comes along, that information then
5		gets transferred to the command unit and that then
б		becomes the command centre.
7	Q.	16.34, firefighters Belmont and Sanchez from
8		Old Kent Road fire station were committed. So again
9		from the 7th floor bridgehead?
10	Α.	From the 7th floor bridgehead, yes.
11	Q.	16.34, back to Catherine Hickman's 999 call, she said
12		that she could hear banging and that she thought it was
13		someone banging on the front door of the flat. The
14		operator said that she was checking where the crews
15		were. Catherine then said, "I can't open the door."
16		She then went upstairs. The operator told her to lie
17		down on the floor and to cover her face.
18		16.36, a 999 call from Mr Nuhu in flat 80 on the
19		11th floor. He said that he and his family were trapped
20		in their flat.
21		Also at 16.34, Watch Manager Howling, who was the
22		incident commander at the time, sent message: "Make
23		pumps six." There was also a radio message from brigade
24		control to E351 stating that the caller from flat 68,
25		Beatrice Obanyano, was trapped in her sitting room, and

that the caller from flat 79, Catherine Hickman, could not open the front here to leave the flat and that both flats were smoke-logged. So "smoke-logged" was the phrase that was used in the radio message?
A. Yes.
Q. Brigade control report that a call had been received

7 from flat 80 stating that that flat too was heavily 8 smoke-logged.

9 16.36, returning to Catherine Hickman's 999 call. At this point in time, she told the operator that there 10 was a lot of smoke and that she could not breathe very 11 well. A few moments later she said, "Oh my god, no, 12 13 listen, I can see flames at the door." The operator told her that if she could not get to a window she 14 should stay lying down on the floor. Catherine Hickman 15 said, "I'm getting really hot in here." 16

17 16.37, there is a second 999 call made by Mustapha
18 Hydar from flat 57 on the 9th floor. He's on the south
19 corridor, whereas the fire started on the north

21 A. That's correct.

corridor; is that right?

20

Q. He said that his neighbour had a young baby but that they could not get out because the corridor was full of smoke. He said that smoke was coming in through the front door. He was advised to put something up against

1 the bottom of the door to stop the smoke. He said that 2 the smoke was coming in through the window as well and 3 that the smoke was really thick. He said that his 4 neighbour's flat was full of smoke and that was why he 5 had told her to move to his flat. At the end of the 6 call, he said that he was going to leave the doors and 7 windows open.

8 This is the first photograph we will look at. 9 16.37. This is taken by a member of the London 10 Fire Brigade; is that right?

11 A. It is, yes. It was taken by one of my fire 12 investigators that had just arrived at the scene, and 13 what we do is start taking photographs and documenting 14 the events as they're going on.

Q. For the assistance of the members of the jury, you see the overhead plan of Lakanal House, which the arrow is over at the moment. You see that the "E" for east is in red. That indicates that this photo is taken from the east side of the building, so you're looking at the east side here. On each of the photos you're going to see, the side which is shown is marked in red.

16.38, this is a photo again from the east side of the building. What can you see here, Dr Mansi, just looking at this photo itself?

25 A. Could I ask you to go back to the previous photo,

- 1 please?
- 2 Q. Certainly.
- 3 A. What we can see --
- 4 Q. This is 16.37.09?

5 A. Yes, these times were verified as being accurate, and 6 this photograph shows smoke coming out of the -- if you 100k at the right hand flank wall of the building where 8 we saw those ventilation grills at the end of the north 9 corridor, you can see smoke coming out of the 9th, 11th 10 and 13th floors.

11 Q. Where my arrow is?

A. That's correct, yes, and more heavily coming out of the 9th floor at the north end. Looking at the lounge of flat 65, which is on the 10th floor, which is about -just about a bit -- about there, we can see smoke coming out. We can't see any flame coming out of that window at this time, and that is the lounge to flat 65, which is --

MR MAXWELL-SCOTT: Can you just repeat that, because the microphone was off.

A. Okay. What we can see there is the lounge windows and door to flat 65, which is on the 10th floor level. So that's the flat where the fire started. We can see heavy smoke coming out around that window but we can't see any flame at this point. If we move on to the next

1 photograph.

2 Q. This is 57 seconds later.

Α. 3 Yes. We can see flames penetrating the lounge door 4 which leads onto the east elevation escape balcony. So we can see the thick black smoke coming above those 5 6 flames up to the 12th floor escape balcony, which would 7 be where Catherine Hickman's lounge is. So what this is 8 showing is that the windows have failed and the upstairs 9 is now quite ventilated and has a lot of air to develop the fire on the upper floor of flat 65. 10

At 16.38, CU4 reports in attendance at the incident. 11 Q. So 12 that's a command unit. Is that the unit that would, in 13 due course, take over as the command centre from 14 whichever pump had been acting as the command pump? 15 Α. Yes, it would. We mentioned earlier the incident 16 command pump. So any information that the person that 17 was in charge of that incident command pump had, they would pass that over to the command unit, and then the 18 command unit would then be the central command point for 19 20 the incident commander and other communications. 21 Q. At 16.38, a photograph again of the east side? 22 Α. It is, and we can see here flames and smoke coming from 23 the lounge of flat number 65. They've subsided somewhat and the 12th floor escape balcony can now be seen to 24 have some smoke within it, with the lounge door to flat 25

number 79 on the 12th floor closed. If you look into 1 2 that photograph you can see that through the smoke. THE CORONER: Can you point that out with the cursor? 3 MR MAXWELL-SCOTT: Is that up there? 4 5 It is, yes. Α. б Thank you. Ο. 7 16.38, pump ladder from new crossfire mobilised. 8 16.39, this is the first photograph we've looked at 9 from the west side. A. Yes. This is where the fire investigator who had taken 10 those photos you've previously seen then walked round to 11 12 the west side of Lakanal and then took this photograph. 13 You can see lighter coloured smoke coming out of the north corridor. We can also see lighter smoke coming 14 15 out of the bedrooms of flat 65, which --Q. Is that where I have the cursor? 16 17 Α. It is, yes. 18 Q. Thank you. Yes, on the lower floors. 19 Α. 20 What's the significance of that sighting of lighter Ο. smoke? 21 22 The significance of the lighter smoke is normally Α. 23 an indicator when firefighting is going on, because they're putting water onto the fire and it's turning to 24 steam. So you will normally see the dark smoke changing 25

to a lighter colour once firefighting is in effect. But
 we can also see the panels in the upper level of flat 79
 on fire there.

4 Q. This is the same view a minute later?

Yes. What we can see is fire and thick black smoke can 5 Α. б be seen engulfing the kitchen area of flat number 65 on 7 the 10th floor level and bedroom 1 of flat number 79 on 8 the 11th floor level. Although the fire escape door to 9 the main staircase on the 12th floor level can be seen, there's heavy smoke staining to the ventilation grills 10 to the right of the smoke, indicating the wind moving 11 12 the smoke from south to north across the west elevation 13 of Lakanal. The wind was hitting the building on the west side quite strongly, and you'll see the photographs 14 15 where the smoke is sort of blowing south one minute and north the next and sometimes even blowing down. So it 16 17 was quite a strong gusty wind.

18 Q. Again, this is the west side, also at 16.40?

Yes, flames here can be seen burning around the 19 Α. 20 doorframe of the 10th floor west escape balcony door, which is where your cursor is. To the right of that, 21 22 you can see the ventilation grills that we looked at in 23 the lift lobby area that leads to the scare case. So as the smoke has blown southward across those grills, smoke 24 would have gone into the lift lobby area and the 25

1 staircase, and then, with the cross-ventilation down the 2 corridors, smoke would have travelled down those 3 corridors as well fairly quickly. We can see the panels 4 having burnt away in the bedroom to flat 79. That's on the 11th floor. 5 б THE CORONER: Sorry, could you just go back to that previous 7 one and just make it clear, Dr Mansi, where you say the 8 panels are burning? 9 A. We've got the fire around the fire escape panels --10 where which can see the flame, that's on the fire escape on the 10th floor on the west elevation and around the 11 12 fire escape door itself. 13 MR MAXWELL-SCOTT: Dr Mansi, the floor below that, we are 14 seeing the room where the fire started? 15 Yes, that's bedroom 1 of flat 65 on the 9th floor. Α. 16 Above that is outside the kitchen of flat 65 on the 10th 17 floor and obscured by thick black smoke is bedroom 1 in flat 79, where Catherine Hickman was sitting when she 18 saw the smoke coming up and made the first call. So 19 20 again, here we can see light smoke coming from the 9th floor north corridor ventilation grill. 21 Q. 16.41, pump from Brixton fire station reported in 22 23 attendance at incident. 16.42, returning to Catherine Hickman's 999 call, 24 she said that she was still down on the floor and that 25

her face was covered. She said, "Oh god, choking inside
 in here", and the operator told her to breathe really
 slowly and keep her face down.

4 16.42?

5 A. Yes, here we can see, again, steam in the room of origin, which is bedroom 1 of flat 65, and we can still see flames by the fire escape door on the 10th floor west elevation above it, which is outside the kitchen of flat 65, and we can see bedroom 1 of flat 79 with the fire spreading across the window panels northwards and starting to burn within the flat.

We can see the 12th floor escape balcony, which is outside the kitchen of flat 79, is fairly clear of smoke at this time, but what was happening was the smoke was sometimes blowing directly onto it and then clearing, so it was fluctuating between the grills to the right and the escape corridor above.

Q. 16.42, 999 call from Rafael Cervi. He said that he was 18 on the way back to his home, that the flat which was on 19 20 fire was just below his flat and that his wife and children were stuck in the flat. He said that his wife 21 22 had told him that they could not breathe and that the 23 fire was spreading to their flat. He told the operator that his flat was flat 81 on the 11th floor. He said 24 that he was about three to five minutes away from 25

1 Lakanal House.

2		16.44, telephone call from brigade control to CU4,
3		command unit at scene, stating that the callers from
4		flat 68 Beatrice Obanyano and flat 79 Catherine
5		Hickman were still on the line, that both were very
б		distressed, that there was a lot of smoke in both flats,
7		and that neither was able to get to their front doors.
8		Brigade control asks CU4 to ask crews to force entry to
9		those flats as a matter of urgency and CU4 agreed to do
10		so.
11		16.45, the incident commander, Watch Manager
12		Howling, sent a message stating:
13		"Residential block of 12 floors, 20 metres times
14		60 metres, 10 per cent of 9th, 10th, 11th and 12th floor
15		alight. Dry riser main in use. Tactical mode Oscar."
16		So just remind us, if you will, what he is implying
17		there by the phrase "dry riser main in use"?
18	A.	What he's doing is he's informing control so that any
19		monitoring officers that were listening can understand
20		what was happening at the scene. What the incident
21		commander is saying is that the fire engines have
22		connected to the dry rising main, they've connected to
23		the water and they are actively fighting the fire off of
24		that dry rising main.
	-	

25 Q. And tactical mode Oscar?

A. Is offensive firefighting. So they are progressing to
 put the fire out.

Q. 16.45, a 999 call from Helen Udoaka. The call lasted three minutes and 33 seconds. She said that she was in flat 82 and that she and her baby were trapped. She said, "There's so much smoke here." The operator advised her to use a towel or a blanket to try to stop the smoke coming in. She replied, "Everywhere is choked with smoke."

10 16.45, Catherine Hickman suddenly screamed. The 11 operator asked whether she was all right. She said, 12 "Something hot fell on me. It's falling from the 13 ceiling." The operator told her to crawl to a different 14 area. Catherine said that she had slid along so that 15 nothing else could fall on her.

16 16.45, pump ladder from Southwark fire station17 reported in attendance at the incident.

18 16.46, another photo of the west side of thebuilding.

A. What we can see is the fire escape panel on the 10th floor escape balcony is on fire, and bedroom 1 of flat 79 on the 11th floor above it has developed a partial flashover, and what I mean by that is that the contents and the front section of that compartment are now fully involved in the fire, and the reason that the whole

compartment isn't on fire is because in the back section there's probably not enough oxygen to take that fire to flashover at that point.

4 THE CORONER: Sorry, can we just have a break a moment.

5 (Pause)

6 MR MAXWELL-SCOTT: 16.46, a radio message from brigade 7 control to E351 stating:

8 "For your information, we've also got smoke going 9 into flat 57 on the 9th floor level. There's a young 10 baby inside the flat with persons. Please check flat. 11 They are upstairs in the flat."

12 THE CORONER: Could you just check your microphone is on.
13 MR MAXWELL-SCOTT: 16.47, another photograph of the west
14 side of the building.

15 Yes, in this photograph you can see that the bottom Α. 16 burnt out compartment is bedroom 1 of flat 65. Above it, on the 10th floor escape balcony, you can see that 17 18 that escape balcony panel has nearly been completely consumed by the fire. The smoke levels have subsided 19 20 a bit, but we can still see quite a lot of flame in the bedroom 1 of flat 79. Catherine Hickman was on the 21 22 floor above this on the 12th floor. This is what we 23 call when a fire starts going into decay phase, where it's burnt up a lot of its material, and certainly the 24 material at the front of that compartment, which is open 25

1 to the air, was consumed, where we saw those big flames 2 earlier, and then it starts to die down. 3 0. 16.47, a message from brigade control to E351 stating: "For your information, we've also got smoke into 4 flat 57 on the 9th floor level. There's a young baby 5 б inside the flat with persons. Please check flat. They 7 are upstairs in the flat. There is a young baby inside 8 with persons with smoke-logging." 9 16.48, a photograph showing the whole of the west 10 side of the building. We are now seeing something happening on a lower floor for the first time, where I'm 11 12 pointing the cursor. Can you help us, Dr Mansi, with 13 what's happening here? Yes, there's a fire starting to develop within flat 27 14 Α. 15 on the 5th floor of Lakanal. Smoke can also be seen in 16 flat 53 on the 7th floor, and that's two floors above. You can see the smoke from flat 37 blowing downwards. 17 This is the effect of the wind sheer hitting the side of 18 19 Lakanal. Some of the wind was going up over the top of 20 Lakanal and some of the wind was blowing the smoke and debris down and we can see that clearly in this 21 22 photograph. 23 Q. So, Dr, Mansi, we have here -- at fifth floor level, as you say, we can see downward movement of smoke. 24

25 A. Yes.

Q. Now, one of the themes that the jury will hear about 1 2 over the next few weeks is that some features of this fire were unusual. Is the downward movement of smoke 3 one of those features, in your view? 4 Yes, it is unusual. 5 Α. Thank you. The extent to which it is unusual is б Ο. 7 something that we will explore during the evidence. 8 But in this photograph, if you go up just two floors --Α. 9 that's it, where the cursor is there -- there is 10 actually smoke starting inside that flat as well, and you can see with these windows that are open on the side 11 12 hinges as opposed to some of the flats where they're 13 open on the bottom hinges. So that was a feature of these windows; you could select whether you wanted to 14 15 tilt the window back or open the window up on the side hinge, and both of these flats had windows open on the 16 17 side hinge.

18 Flat 79, the fire is still in partial decay and we
19 can see the flames just dying down a bit up there at
20 this time.

Q. 16.49. This is the last time at which it is possible to make out words spoken by Catherine Hickman on the recording of the 999 call.

Also 16.49, a photograph similar to the view we saw before. Can we now see a water jet being directed at

1

the fire in flat 37 on the 5th floor?

2	A.	Yes, that is correct. We can see a jet from the ground
3		being put into bedroom 2 of flat 37 on the 5th floor
4		level, and we can also see flames developing within
5		bedroom 1 of flat 53 on the 7th floor level. From this
б		photo, if it's possible to zoom in, we can actually see
7		fire developing towards the rear of bedroom 1 in flat
8		number 79.

## 9 Q. 16.49, the incident commander Watch Manager Howling sent10 the message: "Make pumps eight."

Also at 16.49, a telephone call from brigade control to CU4, asking whether there was any news about getting crews up to flat 68 and flat 79, was told that there were definitely crews up there. He passed on the information that the ceiling in flat 79 was coming down and informed CU4 that there had been calls from flat 80 and 82 and that there might be a baby in one of them.

18 16.50, a pump from Lambeth fire station reported inattendance at the incident.

Also in 16.50, this photograph on the west side ofthe building.

A. Yes, this photograph shows bedroom 1 of flat 79, where
Catherine Hickman had been. We saw earlier on what
I described as a partial flashover, where all the
materials in one section of the room had ignited, and

then the fire went into slight decay phase where it 1 2 burnt out. Then it reached the material at the back of the room and the ventilation conditions were ripe for 3 4 that to then ignite and this is complete flashover of 5 that compartment, and it would have involved the б staircase as well. 7 Q. 16.50, the 45th 999 call, from Emma Ball, calling from 8 the first floor. During the call she told the operator 9 that the fire was moving from the 7th floor down to the 10 third floor. The operator replied, "No, listen, the fire goes up, all right?" So, Dr Mansi, is the idea of 11 12 the fire moving down the building rather than up the 13 building another unusual feature --14 A. Yes, it is. 15 Q. -- in your view? And again, the extent to which it is 16 unusual is something which we will explore during the course of the inquest. 17 A. Yes, we will. 18 16.51. 19 Q. 20 Okay, this is less than one and a half minutes after the Α. previous photograph you saw. 21 22 Q. I'll go back just for comparison. Was it this one 23 you --24 Α. That's it, yes. Thank you. 25 Q.

- 1 A. So that's full flashover.
- 2 Q. At 16.50 and 29 seconds?

3	Α.	So as you can see, the fire in bedroom 1 of flat 79 can
4		be seen in what we call the decay phase. The materials
5		have been burnt and consumed. Smoke is starting to
б		develop from bedroom 2 of flat 79, and the mattress and
7		curtains in bedroom 1 of flat number 81 are still in
8		situ against the windows at this point, and there's no
9		visual heat damage to that window. So you can just see
10		the mattress there, sort of blue in colour, and the
11		curtains are still up.
12	Q.	16.52?
13	Α.	Yes, this is bedroom 1 of flat number 53 on the 7th
14		floor level. So we can see a fire taking hold inside
15		that flat as well now.
16	Q.	Could you just help us with the way in which the windows
17		are opening.
18	Α.	Yes. We can see the middle window is opened on its side
19		hinges, and the significance of that would be that any
20		falling debris may be able to enter that window. If it
21		was on its bottom hinges, it may deflect it.

22 THE CORONER: Sorry, can you repeat that?

A. Yes. The significance of the windows if that if the
windows were open on the bottom hinges, any burning
debris coming down could deflect off the window, but if

it's open on the side hinges, it could go straight into 1 2 the room. MR MAXWELL-SCOTT: Where the cursor is, is that an example 3 a window open in the other way that you've described? 4 5 A. Yes, yes. 16.55, a conversation between brigade control and CU4. б Ο. 7 The caller from brigade control stated that flat 79 was 8 the urgent concern because the caller from that flat, 9 Catherine Hickman, had stopped talking and the operator 10 could no longer hear her breathing. CU4 responded that they had that flat number written down and that it was 11 12 being dealt with as a matter of priority. 13 16.55, Station Manager Cartwright took over from Watch Manager Howling as incident commander. He's the 14 third incident commander? 15 A. Yes. 16 16.57, Group Manager Freeman reported in attendance at 17 Q. the incident. 18 16.59, firefighters Crowley and Green were 19 20 committed. 16.59, a second command unit from Islington, CU2, 21 22 reported in attendance at incident. 23 17.02, a fire rescue unit from Lewisham reported in attendance at the incident. Dr Mansi, those are persons 24 carrying extended duration breathing apparatus? 25

1 A. Yes, that's correct.

2 Q. 17.02?

3	Α.	What we can see is whilst the firefighters at ground
4		floor level are commencing an external attack on flat
5		number 53 on the 7th floor, bedroom 2 of flat number 79
б		on the 11th floor appears to have developed a flashover
7		phase. So we now have all the materials and
8		combustible materials inside bedroom 2 of flat 79 on
9		fire, and it's well ventilated, so we can see a lot of
10		flame. We can also in this photograph see that the
11		curtains in bedroom 1 of flat number 81 appear to have
12		been removed at this time and pulled back.
13	THE	CORONER: Can you demonstrate that with the cursor?
14	A.	Yes, it's through that smoke.
15	THE	CORONER: Yes.
16	A.	Okay, so with bedroom 2 of flat 79 on the 11th floor now
17		fully engulfed in fire, it can be seen that the mattress
18		and the curtains in bedroom 1 of flat number 81 have
19		been removed from the window area. So just to the left
20		of that flame, where the cursor is, is where a mattress
21		and curtains were, and they had been removed. I've gone
22		off again. Sorry, shall I repeat that?
23	THE	CORONER: Yes please.
24	Α.	Yes, the cursor where the cursor is there on that

25 window pane, there was a mattress up against that window

1 and there were some curtains along there and they've 2 been removed because of the concern that the fire was going to damage the window and perhaps come into that 3 4 room. 5 MR MAXWELL-SCOTT: 17.04, the incident commander, Station б Manager Cartwright, sent the message: "Make pumps 12, 7 aerials two." "Aerials" are a reference to aerial ladder 8 9 platforms? 10 A. Yes. Q. There was one there already and this was requesting 11 12 a second one, was it? 13 A. Yes. Q. 17.06, Crew Manager Ford and firefighters Hull, Stevens 14 15 and Field were committed. 16 17.09, we're now on the east side of the building. 17 What can you see here? A. This photo shows Mr and Mrs Nuhu trying to attract 18 attention to themselves on the east elevation escape 19 20 balcony. Q. Earlier in the sequence we heard that Mr Nuhu had made 21 a 999 call from flat 80? 22 23 A. Yes. Q. 17.10, a fire investigation unit reported in attendance 24 25 at the incident.

17.11, a pump ladder from Brixton fire station 1 2 reported in attendance. Also at 17.11 there was a telephone call from CU4 to brigade control requesting 3 4 the attendance of a local authority liaison officer from LBS -- by which we mean the London Borough of 5 б Southwark -- and stating that CU4 was aware of people in 7 flats 68, 79, 80 and 82. 8 17.12, two more appliances mobilised, one from 9 Greenwich, one from Wimbledon, both aerial ladder 10 platforms. 17.12, Deputy Assistant Commissioner Chidgey 11 12 reported in attendance at the incident. He was the most 13 senior person in attendance at the time that he arrived? 14 A. Yes, he was. 15 Ο. And in due course he would take over as incident 16 commander? 17 Α. Yes. Q. 17.13, hose-laying lorry from Beckenham fire station 18 reported in attendance at the incident. 19 20 17.13, pump ladder from West Norwood fire station reporting in attendance at the incident. 21 22 17.15, pump ladder from Greenwich fire station 23 reported in attendance at the incident. 17.16 --24 In this photograph, we can see that the fires within 25 Α.

flats numbers 65, 79, 37 and 53 have significantly 1 2 subsided and died down. We can see light smoke or steam coming out of flat 53. 3 4 That's where the cursor is at the moment? Q. 5 Α. Yes. Is that because you infer firefighters have been б Q. 7 tackling that fire? 8 A. It could be an indicator of that, yes. 9 Q. 17.19, Group Manager Freeman took over from Station 10 Manager Cartwright as incident commander. Also at 17.19, the new incident commander, Group 11 12 Manager Freeman, sent out a message stating: 13 "Block of flats of 12 floors, 30 metres times 10 metres. 20 per cent of 5th floor, 10 per cent of 7th 14 15 floor --" 16 THE CORONER: Your microphone. MR MAXWELL-SCOTT: The incident commander, Group Manager 17 Freeman, sent out a message stating: 18 "Block of flats of 12 floors, 30 metres times 19 20 10 metres, 20 per cent of 5th floor, 10 per cent of 7th floor, 20 per cent of 8th floor alight. Multiple 21 22 persons trapped. Multiple rescues being carried out. Two jets dry riser. Tactical mode Oscar." 23 What would "two jets dry riser" mean? 24 25 What that is saying is that the dry riser is being used, Α.

now charged with water, and that two jets are being used 1 2 off of that, and a jet -- two jets would be two lengths of hose with a nozzle at the end to control the water 3 flow to attack the fire by fire crews. 4 5 THE CORONER: Can we just stop for a moment. There seems to б be a different problem with the microphone. There seems 7 to be some interference. I'm not quite sure what's 8 causing that. Maybe if we have one running at a time. 9 If you try that. Shall I try now? Can you hear me? Is it echoing? 10 Does Α. it sound funny over there? Shall I turn it off? 11 12 THE CORONER: Mr Maxwell-Scott, if you just turn yours off 13 and maybe we'll try it without yours. MR MAXWELL-SCOTT: It doesn't go off. 14 15 Α. If I turn it off and speak louder, does that help? I'll 16 stand up. Can you repeat the question? I've lost my track. Oh, the dry riser. 17 MR MAXWELL-SCOTT: Two jets dry riser. 18 Two jets in the dry riser. What that means is the dry 19 Α. 20 riser is being used -- in other words, it's charged with water under pressure -- and two jets -- that's two 21 22 lengths of hose with different crews operating those 23 with branches which control the water flow -- are being used to attack the fire. So that is letting whoever's 24 listening to the radio know what is being used at that 25

1 fire scene.

2		Okay, this photograph is taken a minute and a half
3		after the previous photograph, and I don't know if it's
4		worth going back to that photo. There. So we can see
5		the left hand flank of Lakanal there, which is the north
б		end, where there doesn't appear to be much smoke coming
7		out of it, if any. It all looks like it's subsided and
8		the fires have died down, but if we then go to the
9		photograph that's taken a minute and a half later and
10		the reason this photograph was taken was because there
11		was a change in circumstances. So the fire investigator
12		was standing there, saw this smoke developing and took
13		the photograph. What that tells us is that is in the
14		11th floor north corridor, that there is a fire
15		developing in there and it's creating a lot of smoke,
16		that it creates what we call an overpressure. So the
17		smoke starts punching out of those grills at the end of
18		the corridor, and it's normally an indicator of
19		a significant fire developing within that corridor.
20	Q.	17.19, deputy assistant commissioner Chidgey took over
21		from Group Manager Freeman as incident commander.
22		17.21, crew manager Thomas and firefighter Gray
23		committed.
24		Also 17.21, another photo of the north end of the
25		building.

1	Α.	Yes, and this is taken again about approximately
2		a minute and a half after the previous photograph that
3		you saw, and you can see the rapid change and
4		development in the fire in this 11th floor north
5		corridor. To be producing that much smoke means that
б		the whole of the corridor is filled with thick smoke and
7		it's pushing out through the grills at the end.
8	Q.	I'll just go back to the previous one so you can
9		compare. That's 17.19.50. This is 17.21.22.
10	Α.	That's approximately three minutes after the photograph
11		that we looked at that north flank wall where there was
12		no indication of smoke coming out.
13	Q.	17.21, Deputy Assistant Commissioner Chidgey sent
14		a message stating, "Request one further FRU", one
15		further fire and rescue unit.
16		17.23, a fire and rescue unit from Clerkenwell was
17		mobilised.
18		Dr Mansi, that is 10 second video
19	THE	CORONER: Mr Maxwell-Scott, your microphone.
20	MR	MAXWELL-SCOTT: I'll try and keep my voice up. 17.25.
21		This is a 10-second video clip taken by a member of
22		a London Ambulance Service timed at 17.25. I'll play it
23		through. I don't think we'll hear any sound. We don't
24		need any sound. It starts in the wrong plane and then
25		the camera will switch so we see things vertically.

1 I'll play it through and then I'll ask you to comment on 2 it.

(The video was played to the Court) 3 What comment do you make about the smoke that is coming 4 Q. out of --5 If you play it again, I'll -- what you'll notice as 6 Α. 7 we're playing this is there doesn't seem to be much 8 smoke coming out of any of the flats that we've seen on 9 fire, but certainly quite a dynamic fire development 10 within the corridor of the north corridor of the 11th floor. You can see -- when it plays, you can see the 11 12 ferocity of the smoke punching out, showing how much 13 pressure there was within that corridor, and indeed parts of the grill and material starts falling away from 14 15 the frame. So quite a severe fire developing within the north corridor at that point. 16

Q. 17.25, Group Manager Andrews reports in attendance atthe incident.

19 17.26, a telephone call from brigade control to
20 Helen Udoaka. Helen Udoaka confirmed that she was in
21 the bathroom of flat 81 with her baby. She said that
22 she was finding it hard to breathe.

23 Moving on now to 17.27. This is the east side of 24 the building. The box marked in red on the larger of 25 the two photographs has then been enlarged into the box

1 which I'm showing with my cursor now.

2	Α.	This shows Mr Nuhu trying to make a makeshift escape
3		rope over the side of the balcony, because he was
4		considering lowering himself down the side to escape
5		from this balcony.
б	Q.	17.28, firefighters Baker and Keefe from Lambeth were
7		committed.
8		17.29, a telephone conversation between brigade
9		control and CU4. The operator at brigade control stated
10		that brigade control was concerned about flat 81 because
11		there was a woman and a young baby inside in the
12		bathroom. CU4 responded that they were aware of that
13		flat and that crews were going in there. CU4 agreed to
14		forward on the information that the occupants of flat 81
15		were in the bathroom.
16		17.33, Crew Manager Niblett and firefighters
17		Gedders, Gilbert, Hill and Towler were committed. Those
18		are all members of the fire and rescue unit from
19		Lewisham and so, Dr Mansi, would have wearing extended
20		duration breathing apparatus?
21	Α.	Yes, they would.
22	Q.	17.34, the incident commander sent the message: "Make
23		FRUs three."
24		17.38, a telephone call from someone unidentified to
25		Dayana Francisquini. The duration of the call is not

known. The reason it's in this sequence of events is
 that Dayana Francisquini did not make or receive any
 calls after this time.

17.42, the incident commander, Deputy Assistant 4 Commissioner Chidgey, sent out a radio message stating 5 6 that a hazardous area response team had been committed, 7 together with breathing apparatus crews. The hazardous 8 area response team -- it's in the glossary, members of 9 the jury. It's a special team from the London Ambulance 10 Service that is trained to wear extended duration breathing apparatus. 11

12 17.43, the incident commander sent the message: 13 "Make pumps 15 plus two additional station managers." 14 17.43, a telephone call to Helen Udoaka. The 15 duration of the call is not known. It's included in the 16 sequence of events for the same reason as the call to 17 Dayana Francisquini, which is that Helen Udoaka did not 18 make or receive any calls after this time.

19 18.19, Assistant Commissioner Turek took over the
20 role of incident commander. He was the sixth and final
21 incident commander.

18.47, the incident commander sent the message:"Make pumps 18, FRUs nine."

At 19.10, Dayana Francisquini was pronounced dead.
She had been found by firefighters in flat 81 at around

1 18.20. When she was found there were no signs of life. 2 Michelle Udoaka was pronounced dead at 19.16. She too had been found by firefighters in flat 81 at around 3 4 18.20. When she was found there were no signs of life. Felipe Francisquini Cervi was pronounced dead at 5 б 19.22. He had been found by firefighters in flat 81 7 also around 18.20. When he was found there were no signs of life. 8 9 This is the final photo in this sequence of events, taken at 20.10 hours, still daylight. It was close to 10 midsummer's day. Dr Mansi, what do we see here? 11 12 We can see the aftermath of all the fires that occurred Α. 13 in the four flats, and the --Flat 37, where the cursor is? 14 Ο. 15 Α. Yes, 37, 53, 65 and 79. We can also see the fire damage 16 at the north end of the 11th floor corridor. Q. Moving on 21.06 hours, this is the time of verification 17 of death of Thais Francisquini. She had been found by 18 firefighters in flat 81 at around 20.54. When she was 19 20 found there were no signs of life. 21.09, the time of verification of death of Helen 21 22 Udoaka. She had been found by firefighters in flat 81 23 at around 20.54. When she was found, there were no signs of life. 24 21.13, time of verification of death of Catherine 25

Hickman. She had been found by firefighters in flat 79
 at around 20.51. When she was found there were no signs
 of life.

4 Dr Mansi, that's the end of the computer5 presentation of the sequence of events.

Members of the jury, if you take up your jury 6 7 bundles and turn to tab 12. This is the tab I asked you 8 to skip over earlier. This is a printed copy of the 9 sequence of events we've just been going through, so if you look at it, the time is given, the exact same text 10 that appeared on your monitors is given, and if you move 11 12 on a few pages, for example to page 4, where you saw 13 a photograph on the monitor, there is a camera icon and then the photograph is reproduced on the page, together 14 15 with a small thumbnail diagram which shows the view of the building that the photograph shows. So at the 16 bottom of page 44, the red E showing that the photo is 17 of the east side of the building. 18

19 If you move forward to page 26, 17.25 hours, you 20 will recall that we played one video clip, there's 21 a video camera icon, and then there is a still image 22 from that video clip.

23 Our intention is to update this sequence of events 24 from time to time as we hear evidence and it's possible 25 to place more events within the sequence.

Thank you, Dr Mansi. That concludes my questions
 this afternoon.

3 THE CORONER: Does anybody have any questions for Dr Mansi 4 at this stage, bearing in mind of course he's going to 5 be returning?

б

## Questions by MR HENDY

7 MR HENDY: Dr Mansi, there are just four matters I wanted to 8 ask you about, if I may. First of all, at the beginning 9 of your -- I should explain to the jury, in case they 10 have forgotten, John Hendy. I represent Mr Cervi and 11 Mr Udoaka and Mr Hickman, who is not coming to the 12 inquest for reasons that one understands.

13 Dr Mansi, at the beginning of your evidence you said 14 that all 999 calls are tape-recorded and you've made --15 not you, but colleagues have made great efforts to bring the recordings together and extensive efforts to type 16 17 them up and so on. My client Mr Udoaka recalls making a phone call to 999 and it doesn't appear in the log of 18 the 999 calls that have been prepared for us. The jury 19 20 don't have it, they don't need it. Nothing turns on this, because we know that many, many calls were made to 21 22 999 and Mr Maxwell-Scott has pointed out some 19 by the 23 time that Mr Udoaka says that he made his call. I just wanted to be clear with you: it is presumably possible 24 that somebody makes a call that for some reason or 25

another it's not recorded, or if it is recorded it's not 1 2 transcribed, or if it is transcribed it doesn't enter 3 into the log in some way? Well the to answer that really -- it's outside of my 4 Α. area of expertise. What I would say is that I do 5 б understand that if, for instance, the Fire Brigade 7 system is being overwhelmed, I understand -- and I'll 8 stand corrected -- that it may go to another emergency 9 service, ambulance or the police. But all of the documents that I've got and all the phone calls that 10 I've got have been included in my report. 11 I'm very grateful, Dr Mansi. The second thing is 12 Q. 13 this -- and for all the other matters we just need this tab 12 of the jury bundle that Mr Maxwell-Scott just 14 15 took them to and records what we've been through. Could you just go to page 14, please. 16 17 This is something I know we're going to have expert evidence about, but I just wanted to confirm this with 18 19 you. In the photograph taken at 47 minutes and 35 20 seconds past 4 o'clock in the afternoon, we have there at the bottom flat 65, and then flat 79 above? 21 22 Yes. Α. 23 Ο. We can see that the material below the windows -- just look at number 65, the bottom flat in the picture. The 24

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material below the windows is a panel which is blue?

1 A. Yes.

2	Q.	In the one that's smoking but there's no flames visible,
	ý.	
3		or hardly any flames available, those panels have
4		disappeared. Is that because they've been burnt
5		through?
б	A.	Yes.
7	Q.	If you look at the panels of the balcony above, we can
8		see they're blue as well. Am I right in thinking that
9		we can see a panel actually burning there?
10	A.	Yes, you can.
11	Q.	Likewise, the panels to the left of the first bedroom of
12		flat 79 bedroom 1 is all on fire, and you explained
13		how the fire was dying down there, but to the left under
14		the windows, do we see a panel actually burning there?
15	A.	Yes, you do.
16	Q.	I appreciate this is absolutely common sense, but glass,
17		of course, doesn't burn, does it? It may fracture or it
18		may melt, but it doesn't burn?
19	A.	Yes.
20	Q.	But whatever these panels were made of was something
21		that did actually burn?
22	A.	Yes, you can see in the photo.
23	Q.	The penulatimate thing I wanted to ask you about was
24		this. If you look at page 23, please. The log recalls
25		a number of appliances in attendance at the incident,

1 and either you or one of your colleagues or 2 Mr Maxwell-Scott or part of his team have given us, at tab 8 -- no need to look it up, but they've given us the 3 name of all the people on most of the appliances --4 THE CORONER: Sorry, your microphone has gone again. 5 б MR HENDY: Yes, it's flashing, madam. It's been cured. 7 So we know the names of the people on various 8 appliances. Not all of them but most of them. Amongst 9 the appliances not in that list at tab 8 are three which 10 are listed at page 23, and I wondered if you could just help me with the number of crew that one would expect to 11 12 be on the particular units. 13 So going from the top, OK13, fire investigation unit, how many people would you expect there to be? 14 15 Α. There's normally one on a fire inspection unit. Normally one person? 16 Q. They don't take part in operational fire fighting. 17 Α. Q. Understood. H241, that's been listed. We know there 18 were four people on that. But at 17.12.23, we have 19 20 E225, aerial pump ladder. Would I be right in thinking that would normally have four people on board? 21 22 No, I believe there's only two on the aerial ladder Α. 23 platforms, yes. Thank you. And H345, which is also an aerial ladder? 24 Q. Would also have two. 25 Α.

- 1 Q. That would have two as well. Then we have E439,
- 2 a hose-laying lorry?
- 3 A. That would normally have one person that drives it.
- 4 Q. The driver -- he or she would be concerned after that in5 laying out hoses?
- 6 A. Well, there would be crews at the incident that would7 assist with that, yes.
- 8 THE CORONER: Dr Mansi, could you keep your voice up so the 9 jury can hear?
- 10 A. Sorry.

MR HENDY: The final thing is this: can we just go through the sequence of events, just taking out a couple of references first. Page 1 of the sequence. We know that the first call to 999 was just after 4.15 in the afternoon, from Jade Spence. 16.18, yes?

16 A. Yes, that's correct.

Q. And then after that we can see -- as I mentioned to you before, many, many calls were made, and by the time we get, on page 3, to 16.32.46, already 31 calls have been made.

If we go, please, to page 23 again, photograph 13 at 17.16, just a couple of minutes before an hour after the first call, you pointed out earlier there's no smoke on the left hand side coming from the corridor of the 11th floor?

1 A. As the photo shows, yes.

2	Q.	As the photo shows, whereas when we go to the next page,
3		page 24, three minutes later, four minutes later, we can
4		see that smoke is coming out, and a couple of minutes
5		after that, at page 25, smoke is coming out very, very
6		quickly. Would it be right to assume that there was
7		a flashover in the corridor of the 11th floor shortly
8		after 5.15?
9	A.	For a flashover to occur you need lots of oxygen, and it
10		would be clean burning, as we saw with flat number 79.
11		This is an indicator that there was a fire developed
12		within there, possibly within the false ceiling, that
13		suddenly broke through, and then we had a full
14		development of the fire in the corridor.
15	Q.	Putting it another way, is it likely that before 5.15 it
16		might have been as possible to get down to walk down
17		the 11th corridor, but after that time it was probably
18		impossible because of the volume of smoke?
19	A.	I'm not sure if I can answer that.
20	Q.	Okay. I don't want to push you further than is proper.
21	THE	CORONER: Mr Hendy, I think we shall have quite a lot of
22		evidence which might help to answer that.
23	MR	HENDY: Of course, madam, absolutely. I understand that.
24		At page 28, just so that the jury can understand
25		this, just to get the timings right, at 17.38, there was

1 a phone call which was answered by Dayana Francisquini, 2 and at 17.43.56 there was a telephone call which was answered by Helen Udoaka, which means that around 5.40, 3 4 both of those ladies were alive, yes? If we look further down at 19.10 and 19.16, we can see that the 5 б firefighters found Dayana Francisquini and Michelle 7 Udoaka at about 6.20. So in the space of 40 minutes 8 from their being alive, they were found unfortunately 9 dead? Yes. 10 Α. Thank you very much, doctor. 11 Q. 12 THE CORONER: Thank you. Does anybody else have any 13 questions of Dr Mansi at this stage? Okay. Members of the jury, do any of you have any 14 15 questions for Dr Mansi at this stage? All right, thank 16 you very much. Dr Mansi, thank you very much for your help today, and we look forward to having more evidence 17 from you later in the proceedings. Thank you very much. 18 (The witness withdrew) 19 20 THE CORONER: Yes. Mr Maxwell-Scott, anything else we need to cover today? 21 MR MAXWELL-SCOTT: No, madam, that concludes the evidence 22 23 for today. THE CORONER: Thank you very much. Well, members of the 24 25 jury, and indeed everybody in the room, I'm sorry that

we've had so much difficulty with microphones. I hope very much that the problems can be cured overnight and we won't have this irritation tomorrow. So I hope that that's the case.

Members of the jury, thank you very much for 5 б listening so patiently and carefully today. In a moment 7 I'll ask you to go with Mr Graham. Just two things, if 8 I may. The first is just to remind you of the warning 9 I gave that when you leave here you must not talk to 10 anyone about the case. It's going to be difficult, I do understand that, so I suggest that as you're making your 11 12 way home or wherever it is that you're going, you just 13 give some thought as to how you are going to answer the questions that inevitably people will be putting to you, 14 but you really must not discuss the case with anyone 15 except amongst yourselves and in the privacy of your 16 17 jury room.

Secondly, I mentioned this morning that we were 18 intending to have a site visit on Friday. Because of 19 20 the numbers of people involved, it looks as though the most sensible way of doing it will be to take about one 21 22 half of you in the morning on Friday and one half in the 23 afternoon on Friday, and that's necessary just because otherwise we should be too many people in too small 24 a space. If we split the group into two, it will give 25

1 you a better opportunity to see the features of the 2 building that we want to point out to you. So can I suggest over the next couple of days you give some 3 4 thought to whether it would be more convenient for each of you to come in the morning or to come in the 5 б afternoon, and that's something that you can decide 7 between yourselves. Just give some thought to that, and 8 if that helps you to plan your day on Friday, I hope 9 that that's of some assistance to you. 10 Unless anyone has any questions, then you're free to go for today. Thank you very much. 11 12 (In the absence of the Jury) 13 THE CORONER: Thank you. Mr Maxwell-Scott, before we finish, the plan for tomorrow? 14 15 MR MAXWELL-SCOTT: The plan for tomorrow is to call family 16 witnesses. We will have Mr Udoaka, Mr Cervi, Mr Francisquini, Mr Eno Udoaka and Mr Bailey. And 17 madam, you're proposing to read a short personal 18 statement from Mr Philip Hickman. 19 20 THE CORONER: Yes, thank you very much. 21 MR MAXWELL-SCOTT: That is all the evidence that's scheduled 22 for tomorrow. 23 THE CORONER: Thank you. Does anybody have any case management issues to raise before we finish this 24 25 afternoon?

MR HENDY: Madam, if I can. The question of transcripts. 1 2 You put forward a provisional protocol for dealing with 3 the transcripts. We respectfully suggested to you that 4 it might be possible to put the transcripts on the internet the same night with the proviso that of course 5 6 they couldn't be relied on because they hadn't been 7 edited, and we put forward an alternative that the 8 timetable for editorial corrections should be compressed 9 so that today's transcript should be corrected first 10 thing tomorrow morning and put on the internet thereafter. 11

I ask particularly because Mr Hickman, who is not here and really can't bear the thought of coming, understandably, is very, very keen to read the transcripts and there are other members of the family who also wish to do so.

THE CORONER: Yes, thank you very much. I appreciate that 17 whilst I made some proposals and I've had useful 18 submissions from a number of you, I have not actually 19 20 made a final ruling on that. My apologies, I've been slightly overtaken by other matters. I'll sort that out 21 22 overnight tonight, but I would suggest that so far as 23 today's transcript is concerned, unless anyone would like to suggest otherwise, it could actually go onto the 24 internet straight away. 25

1 MR HENDY: I'm very grateful, madam.

2	THE CORONER: Does anyone have any objection to that or any
3	point to make on that? Very well. Well, then today's
4	transcript can go straight away and I will deal with
5	a ruling on that overnight.
6	MR MAXWELL-SCOTT: I'm just being asked about the web
7	address to look at for those who wish to find the
8	transcript. It's on the London Borough of Lambeth's
9	website; is that right?
10	A. It is. I have not actually looked myself, so I can't
11	tell you from experience, but I believe that there's
12	a link which is marked "Lakanal". I believe that that's
13	the case, but I can't be confident about that.
14	Is there anything else that needs to be dealt with
15	tonight? In that case, 10 o'clock tomorrow morning,
16	please. Thank you very much.
17	(3.48 pm)
18	(The court adjourned until 10 o'clock the following day)
19	DR PETER MANSI (sworn)17
20	
21	Questions by MR MAXWELL-SCOTT
22	Questions by MR HENDY118
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